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Joint Costs: Evaluation Problems and Solutions

By Maria Silvia Avi

Abstract- Joint production is a particular type of production process that has as its output a plurality of goods that cannot separate. The production of one good also implies the production of the other goods output from the process. The joint production type poses two major valuation problems: the determination of the cost of the products obtained from joint production and the valuation of the inventories of these goods. The difficulties arise primarily because it is impossible to objectively allocate the common costs of the production process to the various products obtained from joint production. It will address these issues by analysing the hypothesis of joint costs that may occur following a block sale of tangible fixed assets at a lump sum price. When this hypothesis occurs, the problem arises of identifying the value of the individual assets constituting the block of fixed assets sold. It will also address this issue in the following pages.

Keywords: joint costs, joint production, valuation of closing inventories of joint products, bulk purchase and sale of tangible fixed assets: valuation issues.

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1) Joint Costs and Common Costs: Preliminary Remarks

The analysis of joint costs presupposes a prior clarification of the difference between common costs and joint costs.

For the accounting-decision-making tools to be fully understood, it is first necessary to illustrate the concept of common costs and their difference from special costs.

Company costs are defined as special (or specific) if they can be allocated objectively and thus without the need for questionable attributions to a particular company department/product.

An example is the labour costs of a department head or the depreciation of a machine used in a specific responsibility centre. Such costs are special to that centre. For such factors of production, the theoretical problem of allocation does not arise. It is evident how, since the elements are used in a particular department /centre, the cost of the factor must be allocated to that specific user centre.

While there are many costs specifically referable to a particular department/product of the company, there are numerous negative income components that, on the other hand, relate to several departments /products. These costs are termed common costs in that they affect, at the same time, a diversity of objects. Common costs are subdivided, in turn, into specialisable and non-specialisable costs. The first mentioned category consists of costs which, although

lacking a direct connection to departments/products, are attributable to the various objects of interest through sufficiently objective parameters. Consider, for example, the case of energy. If by hypothesis, counters were installed in the company, which allow the exact amount of input consumed by the various departments to be determined, the cost associated with energy consumption could be included in the specialised costs. However, numerous examples of negative income components are attributable to the various departments only as a result of the use of subjective and thus questionable parameters. The depreciation of a building, the general manager's salary, advertising, voluntary insurance, the cost of a plant manager, etc., are typical examples of such costs. The allocation of these income elements to specific departments and/or products could only occur by resorting to subjective criteria. These costs are, therefore, part of the so-called non-specialisable common costs, i.e. in the category of costs which, regardless of more or less discretionary 'rebates', cannot be apportioned precisely between the various company areas as they concern the company considered in its entirety and wholeness. The reader is referred to for a practical and theoretical illustration of the allocation of common costs in the following paragraphs.

To conclude these brief considerations, it should point out that the division between special and common costs is relative in that it strictly depends on the object under consideration. It is evident that as the size of the object increases, the amount of special costs also increase proportionally against a corresponding reduction in common costs. This implies that a cost that identifies a special negative income component for an object may become common if the analysis perspective is changed. If, for example, the reference object were the entire company, each cost would become special and, consequently, cancel the common cost category.

In addition, common corporate costs are characterised by the peculiarity that such costs are divisible in the sense that they can eliminate the common cost, e.g. by removing an asset produced by the company, without other assets being affected by this decision.

On the other hand, joint costs in the production sphere are costs that cannot stop the production of a single good without also stopping that of different goods that are, precisely, joint with the first one. The goods are thus simultaneously obtained from the same production process. Instead of only one good or several goods that

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can separate at the level of cost allocation, a set of products emerges whose cost is interconnected, i.e. affects each good simultaneously. In the case of joint products, it is therefore impossible to limit, modify or even stop the production of a single product without having a direct impact on the joint products, which will cease to be produced when joint production is stopped.

The difference between joint production and joint costs must be well understood to determine the correct product cost. Misunderstanding these costs inevitably leads to incorrect and misleading product costing.

2) *Joint Costs Relating to the Sale/Purchase of Tangible Fixed Assets*

This hypothesis occurs when an enterprise acquires a differentiated set of assets, usually multi-year investments, at a price determined as "a lump sum".

Specific identification only concerns the common cost determined by accounting support (purchase invoice or other documents).

In Italy, civil law requires, in Art. 2423 bis, item no. 5, those heterogeneous elements included in individual items must be valued separately.

Although this operative principle does not directly concern the issue of joint assets purchased at an overall determining cost, indirectly, it is helpful for understanding the rationale that obligatorily requires the separation of the joint cost between the various assets purchased.

Mainly if the assets subject to the purchase agreement are of a multi-year nature, the identification of the cost attributable to the individual asset becomes indispensable to correctly calculate the annual depreciation rate, which, as is obvious, depends on the use of each item for more than one financial year.

The circumstance of having a single cost concerning a summation of differentiated assets would therefore not allow, on the one hand, the determination of the exact qualitative composition of the company's assets and, on the other hand, the identification of the loss of value of each asset due to economic obsolescence and physical wear and tear. This applies to both the seller and the buyer even though the two parties, as we shall see in the following pages, have to deal with, in part, different issues.

The separation of the total cost arising from the purchase/sale on a lump-sum basis of several real estate assets is, therefore, a necessary step for financial reporting to be clear and correct and, consequently, to be legitimate and regular in civil law.

The doctrine agrees that the "allocation" of the overall cost to the various assets acquired en bloc must be accomplished by dividing the total cost of acquisition of the whole of the assets implemented based on the allocation parameter constituted by the market value of

the individual assets purchased by the company in a single solution.

The most frequent example of such bulk purchases concerns the acquisition of a plurality of buildings and/or assets. Consider, for example, the purchase of a building containing several fixed assets (plant, machinery, furniture, etc.) at a price determined 'in lump sum'.

Such a contract of sale and purchase imposes, on a substantive level, the use of the parameter of apportionment of the total cost on the various assets purchased based on their market value. The hypothesis of using other parameters, whether physical (e.g. volume of the goods, space occupied by the goods, number of goods, etc.) or economic, is not acceptable as it would lead to an allocation lacking the elements of economic correctness necessary for determining civil law values that are true.

This principle, which has always been unanimously shared by national and international doctrine, has also been adopted by the Italian national accounting standards issued by the National Council of Chartered Accountants and Accounting Experts. Principle No. 16 Tangible Fixed Assets states that:

"45 When a tangible fixed asset is an economic-technical unit, i.e. an assembly of assets coordinated with each other in a technical-productive logic (e.g. a production line or a factory), its purchase or production cost refers to the entire unit as a whole; in such cases, the values of the individual assets composing it must be determined to (a) distinguish assets that are subject to depreciation from those that are not and (b) identify the different lengths of their helpful lives. The value of individual assets is determined based on market prices, considering their condition."

Principle No. 16 Property, plant and equipment, cited above, also addresses the hypothesis that the sum of the market values of the individual assets being purchased/sold does not coincide perfectly with the figure agreed for the lump-sum purchase. Where there is a divergence between the sum of the market values and the agreed lump sum value, it is suggested that this allocation method be applied:

"46 Suppose the sum of the values attributed to the individual assets exceeds the cost of the entire economic-technical unit. In that case, the unique values attributed are proportionately reduced to bring the total cost of the whole unit. If, on the other hand, the sum of the values attributed to the individual assets is less than the cost of the entire unit, the difference is proportionally increased in the market values of the individual assets, provided that the resulting value is recoverable.

Having outlined the recommended methodologies for allocating an overall cost for a purchase/sale of a set of tangible fixed assets, one must ask oneself the fundamental importance of correctly determining these individual values.

The observations that can be made on this issue partly differ when considering the seller or the buyer, while they coincide perfectly.

Let us begin by analysing the issue that differentiates between the position of the buyer of the block of assets and the seller of such assets. One must ask oneself what the consequences might be of determining untrue and thus incorrect unit values of individual assets. The element of profound differentiation between the position of the purchaser and the position of the seller concerns the tax aspect of the transaction. For the seller, even if the values determined with reference to the individual assets were incorrect, there is no fiscal effect or problem because the sum of the capital gains and losses referred to each asset is identical whatever the value attributed to the individual assets. There are, therefore, no tax consequences for the seller in the event of incorrect determination of the values attributed to the individual assets. Profoundly different is the situation of the purchaser of the assets. For this person, the value attributed to the individual assets represents the figure indicated in financial reporting and on which it will calculate depreciation, which is tax-relevant. Should the values attributed to the individual assets be manifestly incorrect, it is evident that the determination of depreciation would also be manifestly untrue. Since, albeit with various differentiations, all the laws of the different countries generally assume that the starting value for the tax determination of income is the depreciation recognised in financial reporting (albeit with differences concerning the use of this data), it is evident that the recognition of untrue values of tangible fixed assets in the balance sheet leads to the determination of incorrect and therefore faulty depreciation, which can inevitably have severe consequences for tax purposes.

For the purchaser of the assets as a whole, it is therefore essential that the unit value attributed to each asset purchased en bloc is correct and accurate. In contrast, this problem, at the tax level, is less relevant for the seller.

At the time of the sale, this party discharges the values recorded in financial reporting. Even from the preparation of correct, valid and understandable financial reporting, determining any unit values associated with the individual assets sold in bulk has no particular impact on the seller's financial reporting. If any, an incorrectly attributed value will affect the individual capital gain or loss attributed to the various assets. Still, it will not affect the algebraic sum of the capital losses and gains connected to each asset.

Quite different is the situation of the purchaser. The person who acquires the assets must report the values in the financial reporting for the year as determined by the application of the allocation method used, illustrated in the preceding pages as the only method unanimously accepted by all doctrines. If the

values attributed to individual assets purchased en bloc were to identify an incorrect and untrue figure, untrue and potentially misleading values would inevitably be reported in financial reporting. If such a situation were to occur, financial reporting would certainly not be able to be described as fair, true and understandable, postulates that, despite the differences found in the various national laws and accounting standards, always represent the three basic reference postulates for the preparation of financial reporting for the financial year.

In such a situation, the acquirer's financial reporting would therefore be invalid and subject to challenge by third parties outside the company or shareholders. The methods of challenge vary from country to country, as does the time frame within which it must bring a challenge. Despite this inevitable differentiation, it can affirm that in all the laws of any country, the presence of incorrect values in financial reporting identifies a ground for challenging financial reporting as an illegitimate and invalid document.

In addition, it may also recall that if the incorrect allocation of values was carried out to deceive third parties or obtain an unfair profit for the person who carried it out, most nations' legislations provide that criminal regulations apply. False financial reporting or, in the formulation adopted by the Italian legislator, fraudulent corporate communications of a criminal nature entail, among other penalties, potential imprisonment. An identification of unitary values of assets resulting from a block sale carried out within illegal boundaries brings the transaction within the criminal field, with all the consequences that such a situation entails.

It can understand from the previous that it is essential that, in the event of a sale en bloc of tangible assets, the unit values of the individual assets are determined correctly. As we have already pointed out, the unanimously accepted benchmark is the market value of the individual assets based on which the lump-sum transfer price is allocated. In this regard, it should note that it is difficult to identify the market value of individual assets because tangible fixed assets sold in the bloc are always second-hand assets, and, consequently, no objective price lists are available for such assets. Therefore, the sales price assessment is a subjective evaluation by the party making the determination. Because this figure is correct as it directly impacts the apportionment of the total lump sum cost determined for the sale of individual assets en bloc, it should carry out appraisals as only an estimate can validate the market value of individual assets.

In this regard, it must be emphasised that there are three types of appraisals:

- a) Simple (or Straightforward) Appraisal
- b) Certified Appraisal
- c) Sworn Expertise.

A straightforward appraisal is a document written by an expert in the relevant subject matter in which the person sets out their opinion on a given issue. Where the subject of the appraisal is the market values of the assets being sold for a lump sum, the appraiser indicates the values that, in his experience, reflect the reality of those assets.

The characteristic feature of the straightforward appraisal is that it can draw up without observing special formalities concerning the document's form and substance. An expert in the field must issue such an appraisal after he has carried out research, examinations of the property to be sold, and in-depth studies that he deems indispensable to draw up the document he is called upon to draft. The expert signs the appraisal and, in the case of a simple appraisal, this person is not responsible for the truthfulness of the content of the assessment. Due to its characteristics, the simple expert's report does not require any formalities for its use. The simple expert's report does not need the expert to make any statements before third parties marked by a specific authority.

The straightforward appraisal does not explicitly require a particular type of expert to whom one can turn. The hypothesis of a block sale and the need to determine the market value of individual assets to implement the apportionment of the determined lump sum price could be a surveyor, engineer or architect. But there is nothing to prevent it also being a person other than those mentioned above who can vouch for experience gained in selling long-term fixed assets already subject to partial wear and tear.

Like the straightforward appraisal, the sworn assessment does not require the appraiser to make any statements before third parties marked with authority. The expert must draw up a written report without any particular formalities. In fact, the appraiser himself certifies the truthfulness and correctness of what is stated in the appraisal and the methodology used to determine what is required by the assessment. In the certification, the expert also declares the existence of his professionalism under his criminal responsibility. The expert assumes all civil and criminal liability for everything stated in the expert report. This declaration generally uses declaratory formulas recommended by notaries or lawyers. Since everything declared in the sworn appraisal is written under the civil and criminal liability of the appraiser, if the document contains material or ideological forgery, the appraiser shall be held civilly and criminally liable for what is declared and found to be false.

A sworn expert's report is defined because the expert takes full civil and criminal responsibility for what is written in the report by swearing an oath certifying the truthfulness and formal and substantial correctness of the report's contents. It must take the oath before a public official who may be a court clerk or a notary

public in Italy. The promise is characterised by a predefined formula that the expert must follow and established by law (art. 5 R. D. 1366/22 if made before a court clerk, or art. 1, R. D: 1666/37 if made before a notary). The formula to be used provides for the explicit affirmation of "having well and faithfully performed the task entrusted to him for the sole purpose of making known the truth". Since the appraiser assumes all responsibility, including criminal responsibility, for what he asserts, the law punishes the appraiser who makes a false statement with the offence of ideological forgery committed by a private individual in a public act. Therefore, in addition to being liable, civilly and criminally, for the content of the sworn statement, the expert has an additional liability due to the oath taken, punishable by imprisonment.

The previous shows that the safest and most complete expert report is the sworn report since it must follow the formality to validate that the statement is more significant than any other report. The consequence is that the certified expert's report has more excellent legal value and is the one that, in a possible trial, is assessed as more credible by the adjudicating body. This means that, in the event of a block sale of several assets with a lump sum price, the sale price of each asset, which is the parameter based on which each asset is awarded a certain value based on the lump sum price paid by the purchaser, should be based on valuations contained in a sworn appraisal. In this case, the values recorded in financial reporting by the purchaser will have more excellent reliability and certainty.

3) *The Valuation of Joint Product Costs and Inventories of Goods Output from Joint Production Processes*

The valuation of joint products obtained through a unitary production process presents significantly more problems than the valuation of jointly acquired goods.

One speaks of joint products if several goods are obtained from a single production process for the production of which costs are not objectively attributable to each product. Conjoint goods are thus goods simultaneously obtained with the exact input costs by a common process. Each has a considerably high sales value that none can be recognised as the top product. In joint products, the plurality of products obtained from a single product results from a conscious managerial decision and is not the consequence of a poorly planned process. If, on the other hand, good is also obtained from production, which is obligatorily derived from the process but is not the specific objective of production, we refer to so-called by-products, which we will discuss in the following pages and whose value is generally much smaller than that of the joint main goods.

The point in production at which goods are separated and identified as having their physicality different from other products is called the point of

separation. From this point onwards, the goods have a life of their own, different markets, different prices, or may undergo further processing, becoming work-in-progress of internal production to all intents and purposes. All costs incurred before the point of separation are considered as one overall cost and are generally referred to as joint costs.

In the oil, chemical, agricultural, and dairy industries, many examples of joint production pose the problem of valuing jointly produced goods. Since, in these sectors, the issue of determining the value of goods obtained through joint production is widespread and has considerable weight in the context of both the determination of product cost for making managerial decisions and the valuation of closing inventories, the issue in question has been and still is the subject of numerous scholars.

It may happen that, as a result of a single production run, one or more main joint products and one or more sub-products are obtained. These goods are almost production scraps or waste products of the primary process, but they have a market value despite their smallness. The by-product is a good that results from the production of other products and is characterised by a significantly lower economic importance than the main product (s). Again, the by-product may be sold or represent a work-in-progress of internal production.

It should note that the main joint products are often the subject of different processes to improve the goods, while the sub-products are sold exactly as they come out of production. There are cases where the sub-product if further processed, can be sold at relatively high prices. When this occurs, the by-product is further processed.

A substantial difference between main joint products and sub-products concerns the selling price of the goods, provided, as argued above, that the sub-product does not undergo further processing. If this is not the case, the sub-product price is lower than that of the main joint products.

In essence, therefore, it can be said that the joint main products represent management's production targets while the so-called by-products identify a by-product of the production process which, at times, may have a market value which, if any, is generally much lower than that of the joint main products.

Where there is a joint production with outputs of primary products and/or by-products, there is a need to identify the cost attributable to the individual assets obtained from the production process both to be able to make effective managerial decisions and to be able to evaluate the eventual final inventories of these assets.

Before analysing the methodologies for allocating costs to the output goods of joint processes and the valuation of joint goods, it should point out that

costing can be carried out using the traditional method by centres and the ABC methodology.

In works dealing with the issue of product costing, contrast is often made between so-called "traditional" and so-called "evolved" methods. Not infrequently, the first mentioned category is illustrated in such a way as to convey the idea that, fundamentally, it is an ancient technique. Inevitably, this permeates every one of its statements with a sense of 'overcoming any problem' when illustrating so-called 'evolved' methods. In the following pages, we will show how, for accounting data to be correctly understood by those who determine them and by the users, it is necessary to overcome the labels that have always accompanied the in-depth study of this subject.

For the time being, we intend to limit ourselves to illustrating the various calculation techniques, deferring to the paragraph mentioned above any consideration of the "goodness" or "insufficiency" of the methods examined and of the terminology used to identify the various costing techniques.

Concerning the methodology implemented according to the so-called traditional methods, the product cost is the result of the allocation of the company's costs to the centres, which, in turn, can be included in companies where work is carried out by order or by the process.

The two types of processing present substantial differences but, albeit with some relevant distinctions, it is possible to summarise the considerations regarding determining product cost cross-sectional for the two production realities. For this reason, while being fully aware of their respective specificities, we will summarise, in a compact manner, the critical points that can be identified in the calculation of production cost in the so-called traditional methods without making further theoretical subdivisions between observations concerning job order processes and considerations inherent to process processing.

In synthetic terms and, consequently, somewhat simplifying concerning the complexity of the business reality, it can state that the determination of cost per process is realised when a company produces large numbers of units of a single good/service or goods/services distinguished by similar characteristics. When, on the contrary, the goods produced are many and differentiated by quality/type, it is necessary to apply a system that allows the determination of cost per order. The difference between the two types of production appears, at this point, evident: in the first case, the product cost can be standardised while, in the second case, the unit cost must, of necessity, be derived from the consideration of the individual job order being determined quantitatively.

In calculating the job order cost, it is necessary to identify the individual materials, specific labour, and other costs associated with a particular order/goods

/service produced. At the same time, in-process production, it makes no sense to implement such a "specific identification" operation since each good/order /service placed on the market by the company is the same as all the others.

The determination of the unit cost of a product is more straightforward in the context of production by the process because the calculation of the individual costs inherent in the various and multiple orders complicates the work of those charged with determining the negative components of income that can be related to the individual goods/orders/services produced by the company.

An element that differentiates, in reality only partially, the two calculation methods also concerns the concept of "accumulation" of costs. Whereas in-process production by order, costs must be 'stratified' on the product, in-process production, negative income components are accumulated in various departments /centres from which they are subsequently 'passed on' to the different output products of the centre itself. From this assertion, it could deduce that the two methods of calculating unit product costs are characterised by such specificities that no cross-cutting consideration is possible. However, this does not correspond to reality since, despite the apparent differences, it can recognise a number of problems in the two methods, which, similarly, concern both production per order and production per process.

In the panorama of the many problems that an analyst/controller must solve to obtain meaningful accounting data, the issue concerning the allocation of fixed (special and/or common) costs to the individual objects of quantitative determination is of particular importance.

In process production, this calculation appears simplified concerning the technique of production by order in that all fixed costs are densified in a few selected centres. In reality, perhaps to overcome irresolvable problems and to facilitate the determination of the unit cost, such "agglomeration" is also often implemented in contract manufacturing. The issue, therefore, cuts across the two product types.

Simplifying the reality for the sake of expository clarity (and, consequently, leaving it to the analyst/contractor to transpose the following concepts into the variegated company realities), it is possible to state that, in general terms and, leaving aside the consideration of whether the individual cost is specific to job order or common to the entire process, the unit product cost derives from the summation of three essential elements variable unit cost + unit share of special fixed costs + unit share of common fixed costs = full cost.

Therefore, with the traditional methodology, whether production is by order or by process, costs

must be localised in the various centres and then subsequently allocated to the individual products.

The delimitation of the centres of responsibility serves a twofold purpose: on the one hand, the precise identification of the technical, and organisational characteristics of the processes that make up the complex business combination and, on the other, the precise definition of the areas of autonomy of responsibility assigned to each organisational subject.

The determination of the centres is indispensable because it is based on these 'organisational' elements that can identify the specific organisational methods of deploying production resources, which in turn form the basis for the definition of standard operating conditions.

The determination of product costs implemented according to the traditional methodology focused mainly on centres has evolved, leading to the identification of an innovative method based not on centres but on so-called activities.

In the context of a flexible production system, such as the one we have today, the great difficulty in calculating product costs is allocating indirect costs, mainly due to the lack of equipment dedicated to individual products or production lines. It should also note that in advanced production realities, labour is almost always indirect, which makes it challenging to allocate it to the various products with which the worker comes into contact. Often in advanced production realities, the only cost that can be directly allocated is the cost of raw materials, which, for obvious reasons, can always be directly assigned to the product itself.

The costing technique called Activity Based Costing (ABC) has been proposed as a solution to the problems induced by using the traditional accounting system in the modern, highly flexible production environment.

ABC should therefore be one of the most critical responses to the need to renew management accounting systems.

Also in this case, as in the traditional methodology, the ultimate objective is to determine the cost of the product.

ABC represents a full cost system in that it aims to allocate all costs to the various products through an allocation mechanism which, instead of being based on centres, is based on another concept, that of activities, which we will discuss in the following pages. Since one of the most widespread criticisms of traditional accounting is that it fails to reflect the actual use of resources in the production process and to use the volume of production as the basis of attribution for the determination of product costs, the ABC, by overcoming these problems, focuses its attention, not on the centres. Still, the activities carried out by the enterprises minimised the importance of the production volume implemented, since the imputation parameters, as we

shall see later, can be different from the volume produced.

The application of ABC, therefore, leads to the determination of a company's full cost, which is intended to direct many more cost items than in traditional systems. The full cost thus identified should, therefore, be characterised by greater objectivity in that the parameters applied, if well identified, identify the resources used to produce each good less subjectively than is the case with imputation to company centres.

We, therefore, speak of an innovative tool through which indirect costs are controlled, partially overcoming the product perspective to attribute a different meaning to the various activities used and developed to realise the company's production.

The ABC system is based on the following considerations:

1. All company activities are created to support the production and distribution of products and services. Consequently, the resources used by these activities must be related to that production process, and their cost must be included in the cost of the product;
2. All costs are considered variable and not fixed. As will be seen, variability is not a function of production volume but other parameters;
3. All costs are allocated to the activities performed by the enterprise. Therefore, an attempt is made to pass on to the activities all indirect costs, be they production, sales, and administration.

As can be seen, this approach is based on the identification of the so-called activity, which identifies an aggregation of elementary operations in the performance of which people, materials, technologies, structures and methodologies are combined to obtain output, products or services.

To conclude, some considerations must be made regarding the strategic use of information deducible through the application of the ABC methodology.

The doctrine has always emphasised that any accounting approach is meaningful if it can use for management and decision-making purposes. For this reason, it is essential to identify the decision-making scope of ABC.

According to the traditional approach of this methodology, ABC is not intended to provide information for operational control but to allocate overhead costs within the value chain to calculate the profitability of individual products, product lines, distribution channels and customers.

The information is intended to constitute what Kaplan calls the system of product measurements, i.e. the system of information intended to support decisions such as pricing, mixer, marketing, discontinuation of unprofitable products, etc. Other authors, e.g. Cooper,

extend the scope of the system to investment decisions and, in general, to all budget decisions concerning the level of operating costs in the production of different products.

Some authors emphasise that the ABC methodology can also be used to produce information for decision-making in developing new product designs. The costs determined according to the ABC methodology since they are also linked to the size of production batches, set-up activities and material management should induce the designer to take an interest not only in the intrinsic characteristics of the product but also in its production process, thus stimulating the integration of product and process design. In this case, the ABC system produces cost information that can also use in medium to long-term product decisions. Only in the medium to long term can the costs ABC considers variable be considered genuinely variable. That is to say, in the medium to long time, and it is possible to make decisions which modify the resources owned or acquired or which change the consumption pattern of the resources already available to the company.

In this context, it can say that ABC can be used as an accounting method characterised by a strategic orientation, i.e. as a methodology that can provide information that can use not only in the short term but also in the medium and long term. According to Kaplan, the strategic nature of costs within the ABC system would derive from the notion of long-term variability, which is one of the fundamental prerequisites of the methodology under investigation, and from its ability to provide helpful information for constructing the value chain within the company.

A strategic accounting system should, however, first and foremost support the process of strategy formulation and implementation. According to the cited author, this process can be divided into four elements:

- Strategy formulation;
- Communication of the strategy;
- Identification of the political tactics to implement the strategy;
- Monitoring the achievement of the set strategic objectives.

On the one hand, ABC produces useful cost information in the strategy process. But it should not forget that a strategically oriented accounting system must, of necessity, be based on calculation principles explicitly derived from a strategic decision-making perspective, a circumstance that does not seem to characterise ABC.

Furthermore, the suitability of the ABC in supporting certain product decisions cannot be considered a sufficient element to define the system as strategic since it must be capable of addressing all possible options and not only those of a specific

category. In other words, a costing system from a strategic perspective should be based on the variability of costs concerning the different possible strategic options for the company. However, the cost drivers used by ABC do not relate to strategic aspects but are exclusively connected to purely short-term operational elements.

Other authors also point out how attributing a presumed strategic orientation to ABC can reduce the importance of the products considered strategically most important by companies, i.e. those with a high innovation content and, consequently, lead to the reconsideration of product range expansion strategies because they are too costly.

To have relevant costs in the decision-making processes, it is incorrect to argue that changes in the business undoubtedly impact product costs. From this typically managerial point of view, it is necessary to determine differential costs caused by the different types of decisions under consideration. In other words, the emphasis placed on the role of the activity for costing purposes must be placed in a context of reference proper to financial reporting and not management control. According to this logic, costs, therefore, reflect the nature of the decisions under consideration, not the activity. Suppose companies using traditionally determined full costs are induced to assess the incorrect profitability of products. In that case, using full costs, based on a more reasonable allocation of general production, administration and marketing costs, offers no guarantee of having the most helpful information. In other words, the full cost determined by ABC logic is better than the full cost determined by traditional logic when pure knowledge inspires the calculation. On the other hand, the aim is to calculate costs relevant to a given decision; it is indispensable to identify a cost figure in the dimension deemed appropriate from a differential point of view.

There is no doubt, however, that the ABC system is aimed at determining product costs more accurately than the traditional methodology to support medium- and long-term strategic decisions. There is also no doubt that not all product decisions can be considered strategic. Therefore, it is not always correct to consider varying fixed or general costs in the calculation. This is only the case in the medium to long term. This means that the use of traditional marginalistic analysis techniques is definitely still valid for short-term decisions.

The fact that the traditionally employed accounting system and the ABC produce different types of information and are therefore not alternatives finds an authoritative consensus in doctrine. The ABC is thus interpreted as a complementary system, not a substitute for the traditional costing methodology.

In conclusion, it must recognise that the strategic scope of the ABC tends to be limited and,

above all, that this system is not suitable for supporting the strategic process in the context of production activity. It must be recognised, however, that an accounting system can hardly have such elements of flexibility within it to permit its use in evaluating strategic alternatives, which are very diverse. In this sense, an ABC-type approach, which is based on the analysis of the management of the activity and its cost drivers, can be of help concerning an accounting system that is rigid and tied in its structure to clear strategic choices made in the past but which may no longer have any use in the company's future.

As already emphasised in the previous pages, it is also possible in joint production to use either the traditional cost allocation method or the ABC methodology, depending on the characteristics of the production process itself. Depending on the aspects of the production process, which are output-providing joint products, it will be necessary to use either the traditional cost allocation method or the ABC method. Adopting one process is subjective and must be taken by the company management with accounting, strategic, and cost allocation methodology skills. Each company will opt for the methodology that best suits the production characteristics of the process under analysis. Regardless of the option, at the end of the chosen accounting methodology, a joint cost associated with the production process will be obtained, which will have to be divided between the joint products obtained from production.

The procedures that the doctrine has identified to subdivide the production cost of the production process between the products, main or sub-products, that result from the latter can be summarised as follows

1) *Allocation based on Revenues from the Sale of the Output Goods of the Production Process*

The allocation of the total joint cost to the various output goods of the process based on the sales value of the goods obtained from production identifies one of the main methods of allocating joint costs. This methodology attaches considerable relevance to the economic value of the goods obtained from the joint process. Based on this value, it divides the overall costs incurred to implement the entire process with a plurality of goods as output. An element that simultaneously represents both a strength and a weakness of this methodology is that the basic assumption of such an allocation is summarised in the concept that a higher cost corresponds to a higher value and that it is, therefore, correct to attribute more costs to an asset that has a higher market value. This does not always represent the reality, but, as we shall see later, the advantages obtained from this allocation method often exceed its conceptual limits and therefore, those who support this methodology, and accept allocate costs based on the market value of the joint assets, accept

the possibility that there is no perfect coincidence between the value of the costs absorbed by the individual products and the market value of the latter.

2) *Allocation of Costs to the Various Joint Products Based on a Quantitative Value*

The allocation of costs based on a quantitative value, i.e. according to technical quantities of production, rests its logical basis in the notion that the factors fed into the joint process have contributed to the creation of all the goods in a substantially similar manner obtained. This means that all units produced are assumed to have absorbed almost equally the costs of the joint production process. Adopting a quantitative value to allocate costs to the various products appears to be a simplification that sometimes borders on accounting absurdity unless the production is characterised by production peculiarities that make this logical methodology worthwhile. There are differences in applying this methodology: sometimes, the simple allocation of the total process cost according to the number of goods produced is used. It is evident that such a methodology can only be used in the presence of goods with a similar value. This can make it acceptable to determine an average cost from the simple division of the total cost of joint production by the number of goods produced. Another variant of the methodology under analysis is the apportionment of the total cost of a joint production through a physical measurement identified as the apportionment parameter. One can think, for example, of the weight of the goods obtained, the volume of goods obtained, or other quantitative measurements. Again, the application of such a methodology can be accepted if the physical quantity used as an apportionment parameter reflects a possibility of measuring the value of the good obtained. If, on the other hand, e.g. the weight of the goods obtained has no significance concerning the issue of the value of the joint products output of the production process, it is evident that the use of such a methodology appears to be inadvisable. If, for example, one thinks of a joint process that has as its output two products of identical weight but of completely different value, it is evident that the use of the criterion of allocating the costs of the joint process based on the weight of the goods obtained is not possible when such a production process occurs. Part of the doctrine, highlighting the limitations of the methodologies described above, has proposed calculating weighted quantities through a parameter to be determined subjectively by the management. Even in this case, the restrictions mentioned above of allocating a cost based on a quantitative value remain, and a further subjective assessment is added concerning determining the parameter with which to weigh the weights. For this reason, the latter cost allocation method does not seem advisable, just as all processes based on a quantitative

value have apparent limitations that discourage their application.

3) *Allocation of all Costs to a Single Product if two Goods Emerge from Production: The Main Product and a Discarded Sub-Product that is Eliminated as Unsaleable*

The application of such a methodology is straightforward, and the logic is obvious. Out of the process comes a primary product or products is a waste by-product that has no market. In this case, the waste by-product is given zero value as it will eliminate it, and all the costs of the joint production process will be attributed to the main product (s) output from the joint process. In the presence of a single primary product, the entire cost of the production process will be attributed to the product obtained; in the presence, on the other hand, of a plurality of primary products, it must allocate the costs through one of the methods described above.

4) *Allocation to the Sub-Product of a Cost Equal to its Presumed Revenue*

This criterion is applied when the production process produces the main product and a sub-product with a value that, however small, is identifiable. The total of the production costs of the joint process, reduced by the cost attributed to the sub-product, is either allocated to the main product or apportioned between the various main products according to the criteria of the selling price of the goods or based on quantitative values.

The four methods of allocating the costs of a joint process to the individual products all of production identify the main cost allocation methods. Alongside these methods, other forms of lesser significance are characterised by such a complex calculations that they are, in practice, unworkable. For this reason, we do not deem it appropriate to continue with the list of imputation methodologies which, due to their difficulty or their limited doctrinal diffusion, are irrelevant in the context of the topic analysed in this article.

In the preceding pages, we have highlighted the problems associated with determining the cost of the output products of a joint process and the solutions that can potentially apply for calculating the costs of joint products.

In addition to this issue is the valuation of the closing inventories of such goods. On this issue, there are diverse positions, not only at the doctrinal level but also within the accounting standards of the various countries and the IAS/IFRS international standards.

In summary, the valuation of joint assets is addressed in the following ways in Italian legislation, Italian national accounting standards and IAS/IFRS.

As far as Italian legislation is concerned, when reading the articles on financial reporting and year-end valuations, it can see that the legislation does not comment on the principles applicable to the valuation of

the closing inventories of joint products since Italian law provides that the national accounting standards issued by the Italian accounting body supplement and complete the civil law provisions, it is necessary to illustrate the content, concerning this issue, of the national accounting standards to understand what the Italian regulations provide.

The principle issued by the Italian accounting body No. 13 Inventories, taking up what is established by the Italian Civil Code and aligning itself with what is now unanimously accepted by all doctrine and practice worldwide, establishes that "inventories are valued in financial reporting at the lower of purchase or production cost and realisable value inferable from the market (Article 2426, No. 9, Italian Civil Code).

The valuation of inventories is carried out independently for each category of elements comprising the item..... (so that) 'the heterogeneous elements included in the individual items are valued separately.

As for all goods, including those not arising from joint production, Italian National Standard No. 13 Inventories states that "16 Assets included in inventories are initially recognised at the date on which the risks and rewards associated with the acquired asset are transferred.

The transfer of risks and rewards usually occurs when the title is transferred following contractually agreed terms.

If, under specific contractual provisions, there is no coincidence between the date on which the transfer of risks and rewards takes place and the date on which title is transferred, the date on which the transfer of risks and rewards prevails.

The date on which the transfer of risks and rewards took place. Inventories may include, but are not limited to:

- a) Inventories at the Company's factories and warehouses, excluding those received from third parties for viewing, trial, processing and/or storage, etc.
- b) Inventories owned by society at third parties on consignment, processing, trial, etc.
- c) Materials, goods and products purchased that have not yet been received but are in transit when, according to the terms of purchase, the risks and rewards associated with the asset purchased have already been transferred to society (e.g. delivery of the supplier's factory or warehouse)".

The purchase cost also includes incidental charges (such as transport costs, customs, and other taxes directly attributable to that material).

Returns, discounts, rebates and premiums are deducted from costs. The discounts mentioned are commercial ones."

Italian National Accounting Standard No. 13 Inventories specifies, in more detail than the code does,

that "production cost includes direct costs and indirect costs (so-called production overheads) incurred in the course of production and necessary to bring inventories to their present condition and location for the portion reasonably attributable to the product relative to the period of manufacture and up to the time from which the asset can use; using the same criteria, charges relating to the financing of manufacture, whether in-house or at third parties, can be added. It excludes distribution costs

The charges typically identifiable as components of the cost of production may be summarised, by way of example but not limited to, as follows:

Direct Costs

- Cost of materials used, including transport on purchases (direct material);
 - Cost of direct labour, including ancillary charges;
 - Packaging;
 - Costs for services directly related to the manufacturing process;
 - Costs related to production licences.
- General production costs
- Salaries, wages and related charges relating to indirect labour and costs of technical management of the plant;
 - Depreciation of tangible and intangible assets that contribute to production;
 - Maintenance and repairs;
 - Consumables;
 - Other costs incurred in the processing of products (methane gas, water external maintenance, security services, etc.).

Production overheads include all common production costs necessary to bring inventories to their current condition and location. Production overheads include production costs that are not directly attributable to products.

Without prejudice to the specific characteristics of the production process of each company, the allocation parameters that can use for the purpose of allocating common overheads are, by way of example but not limited to

- The direct labour hours;
- The direct labour cost;
- The machine hours;
- The prime cost (i.e. direct material and direct labour).

In some cases, it may be appropriate to use absorption percentages by department or groups of departments.

Production overheads can be either fixed or variable.

Fixed production overheads are those indirect costs of production that remain relatively constant as the volume of production changes, such as depreciation

and maintenance of plant and machinery and the costs of technical management of the plant.

Variable production overheads are those indirect costs that vary with production volumes, such as indirect materials and labour.

Fixed production overheads are allocated to each unit based on average production capacity.

The average production capacity represents the production that is expected to be realised on average during several financial years or seasonal periods under normal conditions, taking into account the loss of capacity resulting from planned maintenance; it is lower than the theoretical maximum capacity, as from it must be deducted the downtimes for repairs, unavailability of material or labour, other unforeseeable causes of interruption, etc. It may use the actual production level to allocate fixed overhead costs if this approximates the average production capacity.

The amount of fixed overhead costs allocated to each unit produced must not increase as a result of low production or idle capacity. Indeed, if, for various reasons, the average production capacity of a plant is not utilised, the allocation of fixed overhead production costs based on an actual level of the production below the normal levels for that plant would result in the allocation to inventories of higher costs due to the non-utilisation of normal production capacity. These higher costs not attributable to the products in stock are recognised as costs for the period.

In the case of utilising production capacity beyond the level considered normal, the allocation of fixed overhead costs to products is made based on actual production capacity to prevent inventories' value from exceeding the cost incurred.

Variable production overheads are allocated to each unit based on the actual production level.

Costs of an exceptional or abnormal nature are excluded from production costs; for example, the costs of moving a plant from one facility to another (unless they are necessary for the production process before a further production stage), repair costs of an exceptional nature due to fires, hurricanes, etc., or the costs of repairing a plant in the event of a fire or a hurricane.

Regarding the determination of the price of presumed realisation, with which it must compare the cost of production, Italian Accounting Standard No. 13 Inventories specifies that: "the realisable value that can infer from the market trend of raw and ancillary materials, goods, finished products, semi-finished and work-in-progress is equal to the estimated selling price of the goods and finished products in the normal course of business, having regard to information inferable from the market, net of presumed completion costs and direct selling costs (such as, for example, commissions, transport packaging). To determine the realisable value based on market trends, the rate of obsolescence and inventory turnaround times, among other things, must

be considered. In addition to general and administrative costs, distribution costs are excluded from the valuation of inventories."

If there are confirmed sales orders with a fixed price, this price is used to determine the realisable value based on the market trend of the corresponding inventories in the warehouse. Thus, inventory quantities relating to confirmed sales orders with a fixed price remain valued at cost, despite declining prices inferable from market trends. This is based on the assumption that it is reasonably sure that the agreed prices will be adhered to. Otherwise, the inventories are written down to their market-denominated realisable value in the same way as other inventories of that commodity."

After explaining the basic principle of the valuation of closing inventories, Principle No. 13 Inventories deals with the valuation of joint products.

Italian National Accounting Standard No. 13 Inventories addresses the issue of joint products by implicitly stating that such products are also subject to the general rule applicable to the valuation of all closing inventories. However, concerning allocating costs common to all joint goods, the accounting standard establishes a simplified principle concerning what is indicated for all other types of goods in inventories. Indeed, Standard No. 13 states that: "concerning products with non-divisible common costs, in cases where it is not technically possible to reasonably determine the share of the cost to be allocated to each product, it may be determined in proportion to the realisable value inferable from the market trend of the various products."

The cited principle also addresses the issue of the valuation of by-products and rejects a joint process. Concerning this issue, even if there is no unanimous consensus on the definition, it can state that almost all authors agree on the circumstance that while offcuts are, in general, materials used in processing that, precisely because of the characteristics of the finished product, represent elements that are not included in the final product, offcuts identify products or sub-products that, due to quality, processing inaccuracies, or production errors, are not saleable assets on a par with the company's primary product. Both offcuts and scraps can have various uses.

According to doctrine, each of these uses corresponds to a detailed assessment:

- Offcuts may be without recovery (e.g. small pieces of cloth from textile processing that have to be disposed of in landfills)
- Offcuts may have an internal recovery in production (e.g. sawdust used in the woodworking process to run boilers producing motive power): Their valuation must be done at the cost of the raw material from which they derive.

- Offcuts may be sold at low prices (e.g. sawdust sold to third parties at low prices): They are valued at a lower cost, and market value
- Offcuts may be unrecoverable (e.g. spoiled wood panels that have to be taken to landfill): The cost for disposal has to be added to the cost of producing the goods output of the production process
- Scrap may be resalable (low-quality wood panels that can resell at reduced prices): They are valued at a lower cost and market value
- Scrap can have an internal recovery in production (damaged wood panels that can be used in the production process in the boiler department): They are valued at the cost of the raw material they derive.

The Italian accounting principle no. 13 Inventories has addressed the issue of the valuation of by-products and offcuts by stating that "Without prejudice to the provisions of paragraph 37, by-products or offcuts of insignificant amount may be valued directly at their realisable value inferable from the market trend, provided that this value is deducted from the cost of the main product".

IAS 2 Inventories, first of all, emphasises that "This Standard applies to all inventories, except:

- a) [Deleted]
- b)
- c) Biological assets related to agricultural activity and agricultural produce at the point of harvest (see IAS 41 Agriculture).

This Standard does not apply to the measurement of inventories held by:

- a) Producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products, to the extent that they are measured at net realisable value in accordance with well-established practices in those industries.....".

Subsequently, it addresses the issue of the valuation of joint products. Even IAS 2, while noting the difficulties of allocating costs to the individual product outputs of joint production, does not consider it necessary to abandon the basic valuation principle that can use for all inventories.

IAS 2 emphasises that when the transformation costs of each product are not separately identifiable, they are allocated between the products according to a rational and uniform criterion. The allocation may be based, for example, on the relative sales values of each product, considered at the stage of the production process at which the products are separately identifiable or at the end of production. The International Standard, therefore, suggests that an attempt should be made to allocate common costs using the parameter that, in the context, may be recommended as "the most consistent and objective". As an example, it cites market value.

International Accounting Standard IAS two does not give any examples or further comments on this form of cost allocation. The doctrine unanimously holds that the application of the method of allocating costs based on the sales values of the products presupposes the definition of the total sales revenues of the individual joint products, the identification of the weighted weight of the revenues of each product obtained from the joint process concerning the total revenues of the output goods of that production, and the allocation of the common costs of the production process to the individual products based on the weight of the revenues of the products themselves measured on the total revenues.

It should be noted that scholars always point out that this method of allocating the common costs of the joint process results in the correct determination and allocation of common costs, especially if a similar profit margin characterises the joint products.

The allocation principle based on the product sales value method is only one example that IAS 2 performs. This standard does not define the required methods of allocating joint costs and, consequently, leaves the preparer of financial reports complete freedom to use other parameters should they be considered more valid than the one indicated by the international standard merely as an example.

Assuming that the criterion suggested by IAS 2 is used, the valuation of inventories of joint products would follow the general principles that can use for the valuation of inventories: obligation to choose the lower cost and market value.

The international accounting standard also addresses the issue of the presence of by-products or scrap in the joint process and states that "most by-products, by their nature, are immaterial. When this is the case, they are often measured at net realisable value and this value is deducted from the cost of the main product. As a result, the carrying amount of the main product is not materially different from its cost."

Therefore, the above international accounting standard points out that if by-products of processing and offcuts do not have a relevant value, the net realisable value method may be applied. This method assumes that the offcuts or derivatives of a primary product are assigned a cost equal to the value of the assumed selling price with fewer distribution costs. The deemed finished value identifies the total cost allocated to the joint process's main product output. Applying this methodology, a common cost share is attributed to the main product, which identifies the accounting difference between the total cost of the joint process and the market value attributed to the by-products and waste. As can be seen, the Italian national accounting standard 13 inventories transpose, concerning by-products and waste, as stated in IAS 2.

As pointed out in the preceding pages, IAS 2 does not address the issue of the valuation of agricultural products. Concerning these goods, IAS 2 states: “in accordance with IAS 41 Agriculture inventories comprising agricultural produce that an entity has harvested from its biological assets are measured on initial recognition at their fair value less costs to sell at the point of harvest. This is the cost of the inventories at that date for application of this Standard”.

As noted above, while IAS No. 13 makes no specific reference to joint products of an agricultural nature, IAS No. 41 highlights a particular valuation criterion that applies only to farm products. It should note that in IAS 2 Inventories and IAS 41 Agriculture. There is no specific reference to the fact that agricultural products can be considered joint products. The doctrine, however, agrees that agricultural production is often a 'textbook' example of joint production.

IAS No. 41 emphasises that the principle applies to agricultural products, i.e. products that represent the harvest of the enterprise's biological assets up to the harvest time. From that point onwards, IAS 2, Inventories, or any other International Accounting Standard as may be appropriate is applied. Therefore, IAS No. 41 Agriculture and the valuation criteria outlined

therein never apply to the post-harvest agricultural production process. For example, IAS No. 41 emphasises that the process that transforms grapes into wine by the winegrower who has grown the grapes does not fall within the specifics regulated by IAS No. 41 but must be considered an example regulated by IAS No. 2.

The International Standard emphasises that although such a process may be a logical and natural extension of agricultural activity and the events that occur may bear certain similarities to biological processing, it is not included in the definition of agricultural activity considered in IAS 41'. applied. Accordingly, this Standard does not deal with the processing of agricultural produce after harvest; for example, the processing of grapes into wine by a vintner who has grown the grapes. While such processing may be a logical and natural extension of agricultural activity, and the events taking place may bear some similarity to biological transformation, such processing is not included within the definition of agricultural activity in this Standard.”

The table below provides examples of biological assets, agricultural produce, and products that are the result of processing after harvest:

Table No. 1: Biological Assets, Agriculture Produce and Products that are the Result of Processign after Harvest, in IAS N. 41 about Agricultural Pro

Biological assets	Agricultural produce	Products that are the result of processing after harvest
Sheep	Wool	Yarn, carpet
Trees in a timber plantation	Felled trees	Logs, lumber
Dairy cattle	Milk	Cheese
Pigs	Carcass	Sausages, cured hams
Cotton plants	Harvested cotton	Thread, clothing
Sugarcane	Harvested cane	Sugar
Tobacco plants	Picked leaves	Cured tobacco
Tea bushes	Picked leaves	Tea
Grape vines	Picked grapes	Wine
Fruit trees	Picked fruit	Processed fruit
Oil palms	Picked fruit	Palm oil
Rubber trees	Harvested latex	Rubber products
Some plants, for example, tea bushes, grape vines, oil palms and rubber trees, usually meet the definition of a bearer plant and are within the scope of IAS 16. However, the produce growing on bearer plants, for example, tea leaves, grapes, oil palm fruit and latex, is within the scope of IAS 41.		

With regard, exclusively, to agricultural products as identified above, IAS No 41 points out that the general valuation principle of comparing cost and market value and then choosing the lower can be replaced by the following code: it shall measure agricultural produce harvested from the enterprise's biological assets at its fair value less estimated costs to sell at the time of harvest. This measurement is the cost at the date that IAS 2, Inventories or another applicable International Accounting Standard is applied.

Selling costs include commissions to brokers and agents, contributions from supervisory authorities and commodity exchanges, taxes and transfer charges. Selling costs exclude transport and other expenses necessary to physically bring the assets to the location where the sale occurs.

Calculating the fair value of a biological asset or agricultural product may be facilitated by grouping biological or agricultural products about specific significant characteristics, for example, age or quality. The company chooses these characteristics about those used in the market as a basis for price calculation.

Companies often enter into contracts to sell their organic assets or agricultural products at a future date. Contract prices are not necessarily relevant in assessing fair value, as fair value reflects the current market situation in which a willing buyer and a willing seller enter a transaction. As a result, the fair value of a biological asset or agricultural product is not changed due to the existence of a contract.

In conclusion, it should note that International Accounting Standard 42 emphasises that if the fair value of a biological asset and market values are not available and alternative estimates cannot be identified, the fair value should not be applied. When such a situation occurs, the biological asset, even the output of a joint process, can only be valued at cost less any depreciation and impairment losses created during production. It should recall that regardless of the reference value, selling costs must always be subtracted from the value that identifies the valuation of the final inventories of agricultural products, whether or not they are outputs of joint production.

CONCLUSIONS

After this summary concerning joint products, it can be seen that the various international and national accounting standards tend to converge on the basic principle of closing inventories, whereby goods must be valued at a lower cost and net market value. However, as we have seen in the preceding pages, this principle is subject to simplification or modification in the case of joint products, precisely because of the characteristics of the multiple goods that are the output of a joint process that cannot be objectively attributed

to the goods and by-products that emerge from joint production.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Adelberg A. H., (1979) A Methodology for Measuring the Understandability of Financial Report Messages, *Journal of Accounting Research*, Vol. 17, No. 2, pages 565-592.
2. Adelberg, A. H., (1983) "The accounting syntactic complexity formula: a new instrument for predicting the readability of selected accounting communications", *Accounting and Business Research*, Summer 1983, pages 162-175
3. Adelberg, A. H., Razek, J. R., (1984) The Cloze Procedure: A Methodology for Determining the Understandability of Accounting Textbooks, *The Accounting Review*, Vol. 59, no. 1, pages 109-122
4. Albrecht W. S., d Sack R. J. (2001) *Accounting Education: Charting the Course Through a Perilous Future*, Accounting Education Series 16, American Accounting Association
5. Alexander D., Britton A, Jorissen A., (2007) *International financial reporting and analysis*, Thomson.
6. Alexander D., (1993) A European true and fair view?. *European accounting review*, vol 2, issue n. 1.
7. Alexander, D. and H. R. Schwencke (1997). Accounting changes in Norway: a description and analysis of the transition from a continental towards an anglo-saxon perspective on accounting. 20th Annual Congress of the European Accounting Association. Graz, Austria.
8. Alexander, D. and H. R. Schwencke, (2003). Accounting change in Norway, *European Accounting Review* vol. 12, issue 3, p. 549-566.
9. Alexander, D., Jermakowicz E, (2006). A true and fair view of the principles/rules debate, *Abacus*, Vol. 42, n. 2.
10. Alexander, D., Nobes C. (2013). *Financial accounting: an international introduction*, Pearson.
11. Ankarath N., KJ Mehta K. J., Ghosh T. P., Alkafaji Y. A., (2010), *Understanding IFRS fundamentals: international financial reporting standards*, John Wiley and Son.
12. Avi M. S, (2017), in *Management accounting volume II. Cost analysis*, EIF-e.book
13. Avi, M. S., (2018), Understandability in Italian Financial Reporting and jail: a link lived dangerously, *European Journal of Economics, Finance, & Administrative Science*, vol. 99, pagesXXX
14. Ballwieser W., G. Bamberg, M. J. Beckmann, H. Bester, M. Blickle, R. Ewert, A. Wagenhofer and M. Gaynor (2012). *Agency theory, information, and incentives*. Springer Science & Business Media.

15. Baines, A., & Langfield-Smith, K. (2003). Antecedents to Management Accounting Change: a Structural Equation Approach, *Accounting, Organizations and Society*, vol. 28, Issue 7, pages 675-698.
16. Barth M. E., (2008) Financial Reporting Transparency, *The Journal of Accounting, Auditing, and Finance*, Vol 23, Issue 2, , pages. 173-190.
17. Barth, M. E (2014)., Measurement in Financial Reporting: The Need for Concepts, *Accounting Horizons*, Vol. 28, No. 2, pages. 331-352.
18. Barret, E. and Fraser, L. B., (1977). Conflicting roles in budgeting for operations. *Harvard Business Review*, July August, pages 137-146.
19. Baskerville R. F., Rhys H., (2014), A Research Note on Understandability, Readability and Translatability of IFRS, *Accademic Paper*.
20. Beest F., Braam G., Boelens S., (2009)Quality of Financial Reporting: measuring qualitative characteristics, NiCE Working Paper 09-108, April
21. Benston, G. J., M. Bromwich, R. E. Litan, and A. Wagenhofer, (2006). *Worldwide financial reporting: The development and future of accounting standards*. Oxford University Press.
22. Boer, G. (2000) 'Management Accounting Education: Yesterday, Today and Tomorrow', *Issues in Accounting Education*, Vol 15, Issue 2, pages 313 – 321
23. Bunce, P., Fraser, R. and Woodcok, L., (1995), *Advanced budgeting: a journey to advanced management system*. *Management Accounting Research*, 6, 253-265.
24. Burchell S., C. Clubb, A. Hopwood, J. Hughes, J. Nahapiet, (1980). The roles of accounting, organizations and society, *Accounting, Organizations and Society*, Vol. 5, issue 1, Pages 5-27.
25. Burchell S., C. Clubb A. G. Hopwood (1985). "Accounting in its social context: Towards a history of value added in the United Kingdom", *Accounting, Organizations and Society*, Vol. 10, issue 4, pages 381-413.
26. Cadez, S., & Guilding, C. (2008a). An Exploratory Investigation of an Integrated Contingency Model of Strategic Management Accounting. *Accounting, Organizations and Society*, Vol. 33, Issue 7, pages 836-863
27. Chenhall, R. H. (2008). Accounting for the Horizontal Organization: A Review Essay. *Accounting, Organizations and Society*, Vol 33, Issue 4, pages 517-550.
28. Chloe Y., Kan C., Budget depreciation: when budgeting early increases spending, (2021), *Journal of consumer research*, vol. 47, issue 6, pages 937-958
29. Cristea, S. M. and Saccon, C. (2008) Italy between applying national accounting standards and IAS/IFRS, in *Romanian Accounting Profession's Congress* (Bucharest: CECCAR).
30. Covaleski, M., Dirsmith, M. and Samuel, S. (1996), *Managerial Accounting Research: the Contributions of Organizational and Sociological Theories*, *Journal of Management Accounting Research*, Vol. 8, Issue 1, pages 1-35
31. Covaleski, M. A., Evans, J. H. III, Luft, J. L. and Shields, M. D., (2003), Budgeting research: Three theoretical perspectives and criteria for selective integration., *Journal of Management Accounting Research*, Vol 15, Issue 1, pages 3-49.
32. Deatherage R. H., (2021) *Security on a Budget*, in *Security Operations*, Taylor and Francis Group.
33. Delvaille, P., Ebberts, G. and Saccon, C. (2005) International financial reporting convergence: evidence from three continental European countries, *Accounting in Europe*, 2 (1), pp. 137–164.14
34. De Franco, G., S. P. Kothari and R. S. Verdi (2011). "The Benefits of Financial Statement Comparability", *Journal of Accounting Research*, Vol. 49, pages 895–931.
35. Di Pietra, R, McLeay S., Riccaboni A., (2001) "Regulating Accounting Within the Political and Legal System", *Contemporary Issues in Accounting Regulation*. Chapter 3. Pages 59-78. Springer.
36. Doxey C. H., (2021), *The controller's Toolkit*, Wiley.
37. Ekholm, B. and Wallin, J., (2011). The Impact of Uncertainty and Strategy on the Perceived Usefulness of Fixed and Flexible Budgets. *Journal of Business Finance and Accounting*, vol 38, Issue 1, pages , 145-164.
38. Epstein, M. J., Manzoni, J-F and Dávila, A., (2005) . *Performance Measurement and Management Control: Innovative Concepts and Practices*, vol. 20. Emerald Books,
39. Epstein M. J.; Manzoni J. F, (2010) *Performance Measurement and Management Control: Superior Organizational Performance*, in *Studies in Managerial and Financial Accounting*, Vol. 14, Emerald Books.
40. Ewer, Sid R., (2007), *Transparency and Understandability, But for Whom? The CPA Journal*; New York Vol. 77, Fasc. 2, pages16-18, 20-22.
41. Frow, N., Margisson, D. and Odgen, S., 2010. Continuous budgeting: Reconciling flexibility with budgetary control. *Accounting, Organizations and Society*, vol, 35, pages 444-461
42. Ghandour D., (2021) Analytical review of the current and future directions of management accounting and control system, in *European Journal of Accounting, Auditing and Finance Research*, vol 9, Issue 3, page 42-53

43. Gharairi A. M. (2020) Management control and performance, *International Journal of Management*, vol 11, Issue 10, page 2013-2023
44. Godfrey, J. M., Chalmers K., (2007) *Globalisation of Accounting Standards*, Edgar Elgar.
45. Haller, A. (2002) Financial accounting developments in the European Union: past events and future prospects, *European Accounting Review* vol 11 issue 1, pages 153-190.
46. Haller A, P. Walton and B. Raffournier B. (2003). *International accounting*. Cengage Learning EMEA.
47. Haller, A., B. Eierle (2004). The adaptation of German accounting rules to IFRS: a legislative balancing act, *Accounting in Europe* Vol. 1, Issue 1, pages 27-50
48. Hope, J. and Fraser, R., (1997). Beyond budgeting... Breaking through the barrier to the third wave. *Management Accounting*, Vol. 75, Issue 11, pages 20-23.
49. Hope, J. and Fraser, R., 2000. Beyond budgeting. *Strategic Finance*, Vol.82, Issue 4, pages 30-35.
50. Hope, J. and Fraser, R., 2003. Who needs budgets? *Harvard Business Review*, Vol. 81, Issue 2, pages 108-115.
51. Hopwood, A. G. (1972). "An Empirical Study of the Role of Accounting Data in Performance Evaluation", *Journal of Accounting Research*, Vol. 10, pages 156-182.
52. Hopwood, A. G. (1973). *An accounting system and managerial behaviour*. Lexington Books.
53. Hopwood, A. G. (1974). Leadership Climate and the Use of Accounting Data in Performance Evaluation, *The Accounting Review*, Vol. 49, No. 3, pages 485-495.
54. Hopwood, A. G. (1976). *Accounting and human behavior*. Prentice Hall.
55. Hopwood, A. (1987). "The archeology of accounting systems", *Accounting, organizations and society*, vol. 12, issue 3, pages 207-234.
56. Hopwood, A. G. and Peter Miller (1994). *Accounting as social and institutional practice*. Vol. 24. Cambridge University Press.
57. Hopwood, A.G., (1999). "Situating the practice of management accounting in its cultural context: an introduction". *Accounting Organizations and Society*, Vol. 24, Issue 5-6, pages 377-378.
58. Hopwood, A.G. (1983). "On trying to study accounting in the context in which operates", *Accounting, Organizations and Society*, Vol. 8, No. 213, pages. 287-305.
59. Hopwood, A. G., (1990). "Ambiguity, Knowledge and Territorial Claims: Some Observations on the Doctrine of Substance Over Form", *British Accounting Review*, Vol. I. pages 79-87.
60. Hopwood, A. G. (1990). "Accounting and the pursuit of efficiency", *Accounting, Auditing & Accountability Journal*, Vol I, pages 238-249.
61. Hopwood, A. G. (2000). "Understanding financial accounting practice", *Accounting, Organizations and Society* Volume 25, Issue 8, pages 763-766.
62. Hopwood, A. G., (2007). Whither accounting research?, *The Accounting Review* vol. 82, issue 5, p. 1365-1374.
63. Hopwood, A. G., Chapman C. S., Shields M. D. (2007a). *Handbook of management accounting research*. Volume 1, Elsevier.
64. Hopwood, A. G., Chapman C. S., Shields M. D. (2007b). *Handbook of management accounting research*. Volume 2, Elsevier.
65. Hopwood, A. G., (2008). "Changing Pressures on the Research Process: On Trying to Research in an Age when Curiosity is not Enough", *European Accounting Review*, Vol. 17, Issue 1, pages 87-96.
66. Hopwood, A. G., (2009). "Accounting and the environment", *Accounting, Organizations and Society*, Vol. 34, Issues 3-4, pages 433-439
67. Hopwood, A. G., (2009). "The economic crisis and accounting: Implications for the research community", *Accounting, Organizations and Society*, Vol. 34, Issues 6-7, pages 797-802.
68. Hopper A., Burns J, Yazdifar M., (2004). *Management accounting education and training: putting management in and taking accounting out*, *Qualitative Research in Accounting and Management*, 2004, vol 1, Issue 1, pages 1-29.
69. Horngren, C. T., Sundem, G. L. and Stratton, W. O., (2013). *Introduction to Management Accounting*, Pearson.
70. Jonas, G. J., Blanchet J. (2000), *Assessing Quality of Financial Reporting*, *Accounting Horizons*, Volume 14, Issue 3, pages 353-363
71. Jensen, M. C., 2001. Corporate budgeting is broken – let's fix it. *Harvard Business Review*, vol. 89, Issue 10, pages. 94-101.
72. Johannessen J. A., (2021), *Continuous change and communication in knowledge management*. Emerald Publishing.
73. Jones, M., Smith M., (2014) *Traditional and alternative methods of measuring the understandability of accounting narratives*, *Accounting, Auditing & Accountability Journal*, Volume: 27 Issue: 1, pages 183-208
74. Kaplan R. S., Anderson S. (2007) *Time-driven activity-based costing. A simpler and more powerful path to higher profits*, Harvard business school press.
75. Lewandoski R., Goncharuk A. G., Deforowsky J. J., (2020), *Ideology, trust, and spirituality: A framework for management control research in industry 4.0 era*, *The futur of Management Industriy 4.0 and Digitalization*, issue 1, pages 72-91.
76. Libby, T. and Lindsay, M., (2010), *Beyond budgeting or budgeting reconsidered? A survey of North-*

- American budgeting practice. *Management Accounting Research*, vol. 21, Issue 1, pages 56-75.
77. Katz B., (2019) *The Acquisition Budget*, Routledge.
 78. Kuhnle A., Kaiser J. P., Theiss F., Stricker NN., Lanza G., (2021) Designing and adaptive production control system using reinforcement learning., *Journal of Intelligent Manufacturing* volume 32, issue 3, pages 855–876
 79. Miller G. J., Hildreth W. B., Rabin J., (2019) *Performance-Based Budgeting*, Routledge.
 80. Mintzberg H, Qatrs J. A., (1985) Of strategies, deliberate and emergent, *Strategic Management Studies Journal*, vol. 6, issue 1, pages 157-172.
 81. Moisello A. M., (2021) ABC: evolution, problems of implementation and organizational variable, *American Journal of Industrial and Business Management*, Vol 2, issue 2, page. 55-63.
 82. Morton, J. R., (1974) Qualitative Objectives of Financial Accounting: A Comment on Relevance and Understandability, *Journal of Accounting Research*, Vol. 12, No. 2, pages 288-298.
 83. Mouritsen, J., K. Kreiner (2016). Accounting, decisions and promises”, *Accounting, Organizations and Society*, Vol 49, pages 21-31.
 84. Morrel J, (2018) *How to Forecast: a Guide for Business*, Routledge.
 85. Nillson, S., (1997) Understandability of Narratives in Annual Reports, *Journal of Technical Writing and Communication*, Vol 27, Issue 4, pages 361-384.
 86. Nobes, C. W., Aisbitt S. (2001). “The True and Fair Requirement in Recent National Implementations”, Vol. 31, No. 2, pages 83-90.
 87. Nobes, C. W., M. Gee and A. Haller (2010). ‘The Influence of Tax on IFRS Consolidated Statements’, *Australian Accounting Review*, Vol. 7, No. 1, pages 97-122.
 88. Nobes, C. W., (2013). “The continued survival of international differences under IFRS”, *Accounting and Business Research*, Vol. 43, No. 2, pages 83-111.
 89. Nobes C. (2016). *Towards an Assessment of Country Effects on IFRS Recognition Decisions and Measurement Estimations*, Paper, Venezia.
 90. Nobes C., Parker R., (2016), *Comparative International Accounting*, Pearson.
 91. Nobes C. W., Stadler C. (2015), *The Qualitative Characteristics of Financial Information, and Managers’ Accounting Decisions: Evidence from IFRS Policy Changes*, *Accounting and Business Research*, Vol 45, Issue 5, pages 572-601.
 92. Obaidat, A. N., (2007) Accounting Information Qualitative Characteristics Gap: Evidence from Jordan, *International Management Review* Vol. 3 No. 2, pages 26-32.
 93. Oderlheide, D. (2001). *Transnational Accounting*, Macmillan, London.
 94. Onushchenko S. V., Berezhna A. Y., Filonych, (2021), *Budget Mechanism: Methodological Approach to and the Practice of Budget Decentralization*, *The Problems of Economy*, Vol 47, Issue 1, pages 107-122.
 95. Patel C, Day R., (1996) The influence of cognitive style on the understandability of a professional accounting pronouncement of by accounting students, *The British Accounting Review*, Volume 28, Issue 2, Pages 139-154.
 96. Rankin, M., Stanton, P., McGowan, S., Ferlauto, K., & Tilling, M. (2012). *Contemporary Issues in Accounting*. Milton, Qld.: Wiley & Sons.
 97. Samuelson, L. A., 1986. Discrepancies between the roles of budgeting. *Accounting, Organizations and Society*, Vol. 11, Issue 1, pages 35-45.
 98. Schoen, W. (2004) International accounting standards – a ‘starting point’ for a common European taxbase? *European Taxation*, vol 44, issue 10, Pages. 426–440.
 99. Schorck E. M., Lefebvre H. L., (2021), *The good and the bad news about quality*, CRC Press.
 100. Simons, R. S., 1995. *Levers of Control*, Harvard Business School Press.
 101. Slighy N., Taffurelli V., Iber M. m Doyle A.S, (2021) *Budgeting Lesson and Stories*, in *Growth, Creativity and Collaboration: Great Vision on a Great Lake*, Routledge.
 102. Smith, M., Taffler, R., (1992) Readability and Understandability: Different Measures of the Textual Complexity of Accounting Narrative, *Accounting, Auditing & Accountability Journal*, Vol. 5, Issue 4.
 103. Smith M., (2021), *Who controls the past... controls the future*, *Public History Review*, vol. 28, page 90-105.
 104. Steven, M. FloryT., Phillips, J, Maurice Jr., Tassin F., 1992 *Measuring readability: A comparison of accounting textbooks*, *Journal of Accounting Education*, Volume 10, Issue 1, Spring, pages 151-161.
 105. Schwaiger, W. S. A., (2015) *The REA Accounting Model: Enhancing Understandability and Applicability*, *International Conference on Conceptual Modeling, Conceptual Modeling* pages 566-573, Part of the *Lecture Notes in Computer Science* book series (LNCS, volume 9381)
 106. Van der Stede, W. A., 2000. The relationship between two consequences of budgetary controls, budgetary slack creation and managerial short term orientation. *Accounting, Organizations and Society*, vol. 25, Issue 6, pages 609-622.
 107. Wagenhofer, A. (2003). “Accrual-based compensation, depreciation and investment decisions.” *European Accounting Review*, Vol. 12, Issue 2, pages 287-309.

108. Wagenhofer, A. (2006). "Management accounting research in German-speaking countries", *Journal of Management Accounting Research* vol. 18, Issue1, pages 1-19.
109. Wagenhofer, A., Göxa R. F. (2009). "Optimal impairment rules", *Journal of Accounting and Economics*, Vol. 48, Issue 1, pages 2–16.
110. Wagner J., Petera P., Popesko B., Novák P., Šafr K., (2021) Usefulness of the budget: the mediating effect of participative budgeting and budget-based evaluation and rewarding, *Baltic Journal of Management*, June 2021.
111. Webster T., Yee G., *Web based energy information and control systems*, (2021), River Publisher.
112. Wildavsky A, (2017) *Budgeting and Governing*, Routledge.
113. Zeff S. A., (2013), *The objectives of financial reporting: a historical survey and analysis*, *Journal of Accounting and Business Research*, Volume 43, - Issue 4, pages 262-327.
114. Yuthas K., Rogers R., Dillard J. F., (2002) *Communicative Action and Corporate Annual Reports*, *Journal of Business Ethics*, Volume 41, Issue 1–2, pages 141–157.



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Intrapreneurship and its Impact on Organizational Performance; Facilitated through Organizational Factors: An Empirical Study of Palestinian Banks

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Abstract- The purpose of this study is to look at the relationship between intrapreneurship dimensions and organizational factors, as well as the effects they can have on the performance of Palestinian banks in the West Bank. Furthermore, this research concentrated on both financial and non-financial performance.

Based on data collected from 7 West Bank Palestinian banks and 344 individual replies, preliminary findings revealed that intrapreneurship dimensions have statistically significant effects on organizational performance to diverse degrees and at varying impact strengths. Proactiveness, innovation, and offensive competitiveness appeared to be the most influential dimensions. Furthermore, organizational factors moderate the association between intrapreneurship and organizational success while also having a considerable beneficial impact on organizational performance. The study advocated for developing intrapreneurship within Palestinian banks with an emphasis on performance improvement.

Keywords: *intrapreneurship; entrepreneurship; creativity; innovation; organizational performance; organizational factors; palestinian banks.*

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I. INTRODUCTION

Modern business environments have become more complex and dynamic due to the strong competition generated by globalization, rapid development of production technology, quality of services in terms of service requests, and rapid communications.

Business organizations have realized that their survival and continuity necessitate the adoption of new practices in order to maintain product quality and customer satisfaction, therefore enhancing competitiveness on both local and global levels.

These new realities have compelled organizations to closely monitor entrepreneurial trends to better withstand market challenges in hostile and competitive environments. As a result of these

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challenges, companies must now strive for excellence by leveraging creativity, innovation, and modernization to achieve better performance (Miller, 1983).

Intrapreneurship refers to entrepreneurial activities implemented within an existing organization of any size that lead to innovative products and services, as well as sustain entrepreneurial activities in highly competitive environments (R. D. Hisrich & Peters, 2002; Miller, 1983). The concept founder, (Aina & Solikin, 2020), describe intrapreneurship as a revolutionary system that accelerates innovation within organizations through utilizing the talents of staff entrepreneurs, they emphasize that entrepreneur employees are empowered when given the freedom of creativity within existing organizations, therefore this necessitates that these organizations to create a climate that stimulates and incentivizes creativity and innovation.

Intrapreneurship is a revolutionary initiative that helps improve organizational performance by capitalizing on the entrepreneurial talent of employees when faced with complex and competitive circumstances (Åmo & Kolvereid, 2005). In (1983), Danny Miller proposed a definition stating that a pioneering company that enters the marketplace through its innovations and acquisition of risky projects is typically the first to create proactive innovations to be superior to competitors (Miller, 1983). Therefore, intrapreneurship is integral to the success and growth of any organization. Miller regarded the three key dimensions of intrapreneurship to be creativity, risk-taking, and proactiveness (Covin & Wales, 2012).

Building on Miller's pre-research (1983), Lumpkin and Dess (1996) proposed that intrapreneurship could be visualized as a multidimensional phenomenon and suggested two additional dimensions: aggressive competition and autonomy in addition to the initial proposed dimensions (G Thomas Lumpkin & Dess, 2001).

The purpose of this study is to assess the impact of intrapreneurship dimensions on the organizational performance of Palestinian banks operating in the West Bank. It also aims to determine the impact of organizational factors on the relationship

between intrapreneurship and organizational performance.

This study will provide the relevant literature review, research methodology, and accordingly, the hypotheses related to the research model will be developed and then statistical analysis and research results will be added. Finally, conclusions, recommendations and suggestions for future research will be presented based on the findings.

II. LITERATURE REVIEW

The term organizational intrapreneurship encompasses a group of best practices that allow innovative individuals privileges within their organization that serve to channel their spirit of initiative by providing a supportive environment that enables them to generate creative ideas that lead to innovations which the organization and its stakeholders may benefit from (Pinchot, 2010).

Additionally, intrapreneurship includes the process by which individuals identify and exploit new business opportunities within their organization or generate new ventures under the auspices of their existing organization, in the interest of serving their companies and the supply chain service with or without formal support (Pinchot, 2010). While intrapreneurship is included in entrepreneurship (Åmo & Kolvereid, 2005; Antoncic & Hisrich, 2001; Honig, 2001), there are quite a few differences between the former and the latter. First, in contrast to entrepreneurs, intrapreneurs take decisions fraught with risk using company resources instead of their own (Antoncic & Hisrich, 2001; Morris, Kuratko, & Covin, 2008). Second, intrapreneurship is organized among staff within their organizations, while the focus of entrepreneurship is external (Antoncic & Hisrich, 2001). Third, intrapreneurs are working to develop implicit knowledge in new organizations rather than using the visible knowledge that other companies use. In other words, intrapreneurs work within organizations that already have their own policies, language, procedures, standards, and operating processes (Åmo & Kolvereid, 2005). Despite the fact that intrapreneurship and entrepreneurship have differences, they also have similarities because intrapreneurship is considered entrepreneurship within organizations (Antoncic & Hisrich, 2001).

Creativity is a main factor for organizational development and the basis for remaining in the market. Organizational creativity is defined as “the capability to generate new and useful ideas that concern products, services, processes, managerial practices as well as competitive strategies which is treated as a main vehicle of organizational development and the basis for staying in the market and innovative success” (Olszak & Kisielnicki, 2016). According to (Beheshtifar & Kamani-Fard, 2013) were defined it as “create a new product,

service, idea, presenting modern work methods related to the organizational structure and the administrative process to individuals who work together in a complex social system”.

In accordance to the aforementioned, researchers argue that organizational creativity is the process of establishing or developing existing ideas to obtain new ideas that lead to improving the current work, or a new work that did not exist beforehand on the product or service level.

These creativities may be at the individual level or at a group level within the organization. The impact of creativity in organizations can range from making slight improvements in performance to bringing substantive development; these improvements may include new products, methods in technology, organizational structures, management systems, new plans and programs for working individuals (Robbins, 1993).

Researchers have defined Proactiveness in various forms, some shed light on the advantages of being the primary mover in the market as the best strategy to exploit asymmetric market opportunities and face threats in the environment.

Proactive companies tend to be leaders (G Tom Lumpkin & Dess, 1996), these companies take initiative and seize opportunities by anticipating and meeting market requirements before they are exploited by others (Zahra & Garvis, 2000). If a company finds an opportunity in the market and was the first to act, accordingly, it can generate significant profits and establish brand recognition (G Tom Lumpkin & Dess, 1996). Proactive companies act according to future needs and are actively looking for new opportunities, thereby allowing being the first in the market (Nazdrol, Breen, & Josiassen, 2011).

Risk taking is a key feature of entrepreneurship and intrapreneurship (R. D. Hisrich & Peters, 2002). It involves a desire to seek risky opportunities with a high probability of loss in order to achieve high potential returns (Morris et al., 2008). The term “entrepreneur” refers to individuals who bear the risk of either profit or loss (Antoncic & Hisrich, 2003; G Tom Lumpkin & Dess, 1996). Researchers believe that what drives an entrepreneur towards the tendency to take risks is the strong desire to succeed and achieve the greatest possible return. Despite the strong relationship between risks and the rest of intrapreneurship’s dimensions, researchers in the past considered it a distinctive dimension of intrapreneurship (Antoncic & Hisrich, 2003).

Researchers believe that the offensive competition dimension – also called aggressive competition—is unavoidable between people and organizations with conflicting interests. Offensive competition by definition (Lyon, Lumpkin, & Dess, 2000), is the tendency for organizations to take a hostile attitude towards their competitors, and using an

extremely competitive approach in serious attempts to overcome them. Corporations adopt this strategy in an effort to protect their competitive standing in the market.

The autonomy dimension on the other hand, refers to the ability of making decisions independently and moving forward with a task through an individual or a team with the goal of creating a new project, concept, or vision that increases value and achieves competitive advantages without any restrictions or barriers (G Thomas Lumpkin, Cogliser, & Schneider, 2009; G Tom Lumpkin & Dess, 1996). It is associated with the offensive dimension. As individuals under psychological, administrative or material pressures cannot have the creative energy. Therefore, reducing organizational constraints and negative influences will allow for creative ideas to be implemented in the form of innovations that gain competitive advantages for the organization, and therefore workers continue to maintain the intellectual creativity that can be supported through learning and refinement, which increases the organization's ability to search for and take advantage of new opportunities (Usta & Unsar, 2015).

Interest in studying the relationship between intrapreneurship and organizational performance has increased during the past three decades due to the effect of intrapreneurial activity on established organizations and improving their performance, which increases the welfare of the country. Studies show that intrapreneurial actions are associated with growth and profitability in business organizations (Antoncic & Hisrich, 2001; Zahra & Covin, 1995). Although the impact of intrapreneurship on organizational performance can be weak in the early years, it gradually increases in later years. Generally speaking, companies that take part in entrepreneurial activities acquire higher levels of expansion, survival, development and profitability compared to companies that do not attempt to undertake any of these activities. Thus, the level of intrapreneurship within companies is directly proportional to organizational growth and profitability (Covin & Miles, 1999; Zahra, 1993).

Determining the impact of intrapreneurship on organizational performance is not an easy task due to the complex dimensions of organizational performance. Scientists also revealed that the use of financial performance measures alone is not a sufficient assessment for overall performance. Therefore, scientists suggest the use of multiple performance indicators in organizational performance measurement due to the different variable positive and negative impacts entrepreneurial activities may have on different performance dimensions (Lumpkin & Dess, 1996; Zahra et al., 2002). As a result, scholars stress the importance of a true organizational performance evaluation that includes various organizational procedures such as marketing, production, human resources, research and development, employee satisfaction, customer

satisfaction, reputation, innovation, market share and profitability (Anthony A Atkinson, John H Waterhouse, &

Robert B Wells, 1997; Knight, 1997). Through integrating financial and non-financial metrics into the organizational performance appraisal system, managers are able to better appraise their performance and make the appropriate decisions. This study focused on financial and non-financial performances including innovation, customer satisfaction, market share, and social responsibility. Daft (Daft, 2000) [(2000) defines organizational performance "as the ability of an organization to achieve its goals efficiently and effectively with optimal use of resources, as well as the extent of the organization's effective management and the value it provides to clients and stakeholders". Researchers believe that the modern vision for measuring performance is related to the extent to which the organization's goals are achieved and its ability to renew, develop, innovate and satisfy its customers and expand its market share along with its commitment to serving its community.

Innovation, is one of the main dimensions of intrapreneurship, which is defined as the practical application of creative ideas, has emerged through transforming creative ideas into products or services that add value to the organization and achieve competitive advantages to the evolution of performance, it is commonly known as the implementation of creative ideas to find a solution to a problem (Argabright, McGuire, & King, 2012). Most researchers believe that innovation is the core point of intrapreneurship. As well, as viewing intrapreneurs as creators and generators of ideas. Innovation can be implemented in several areas of the enterprise including products, services, processes, marketing innovation and so on. According to (Pearce & Carland, 1996), many researchers have emphasized the relationship between intrapreneurship and innovation by defining innovation as "the process of developing new products and new markets" So that innovation and creativity are critical talents necessary for the success of improving performance. However, being creative does not necessarily imply entrepreneurship. This is because creativity may not affect organizational performance (Åmo & Kolvereid, 2005). Therefore, creativity is an essential component of intrapreneurship but is not the only one.

The second dimension of organizational performance is Customer Satisfaction. (Kotler & Keller, 2012) affirms the importance of the customer's sense of satisfaction and happiness when purchasing a product or receiving a service that exceeds expectations.

Intrapreneurship is more likely to apply a customer focus culture through the constant renewal and innovation of products and services, which ultimately leads to greater customer value. This can be achieved by collecting market information and



monitoring developments so that customers' needs are continuously identified and met.

(Luo, Zhou, & Liu, 2005) emphasized that intrapreneurship needs to monitor client trends, competitors and market opportunities more carefully; it must also have a faster response to market fluctuations, thereby allowing companies to take advantage of new opportunities. The development of organizational performance is directly related to customer satisfaction and their orientations. Therefore, entrepreneurial companies will focus heavily on customers' needs, which leads to an increase in customer satisfaction with the company.

In reference to market share, which refers to the ratio of an organization's sales in relation to the total volume of sales in a particular market or production sector (Kotler & Keller, 2012). Good market share is obtained through superior performance, innovation, and high-quality service (Simon, Bilstein, & Luby, 2006). Furthermore, social responsibility, as defined by the World Business Council for Sustainable Development (WBCSD), is the obligation employers have to contribute to sustainable development by working with their employees, families and the local and international community to improve people's lives in a way that serves the levels of trade and development (Fox, Ward, & Howard, 2002).

In the empirical literature, it is indicated that organizational factors are key pillars for examining the relationship between intrapreneurship and organizational performance. (Covin & Slevin, 1991) reported that the internal environment of an organization has moderating influence on the intrapreneurship and business performance relationship. Zahra, Hayton and Salvato study (Zahra, Hayton, & Salvato, 2004) revealed that organizational factors influence the intrapreneurial behavior of an organization, supporting or discouraging factors according to the condition in which these factors are positive or negative. As for management support, reinforcing intrapreneurial behavior by encouraging creative ideas, developing accumulated experiences, and providing resources to put these ideas into practice to reach successful innovations (Hornsby, Kuratko, & Zahra, 2002). Management plays a prominent role in nurturing entrepreneurs by supporting and encouraging innovation. Hornsby, Kuratko, Holt and Wales added that organizations that do not encourage pioneers through management support, would fail to innovate, which will ultimately negatively affect their performance (Hornsby, Kuratko, Holt, & Wales, 2013), while (Halme, Lindeman, & Linna, 2012) added that in order to avoid creative obstruction in the organization, support to developing an intrapreneurial environment and culture must exist. Referring to organizational culture as one of the organizational factors, Lumpkin and Dess (G Tom Lumpkin & Dess, 1996) supported the view that organizational culture has a strong influence on the

relationship between intrapreneurship and business performance. (Hornsby et al., 2002; Donald F Kuratko, Montagno, & Hornsby, 1990) found five internal factors in favor of intrapreneurial orientation: rewards, administrative support, resources availability (including time), organizational structure, and risk-taking. While Kuratko and Welsch (D. F. Kuratko & Welsch, 2004) found that, the organizational factors that have a significant impact on the relationship between intrapreneurship and business performance are management support, organizational structure, resources and rewards. Antoncic and Hisrich (Antoncic & Hisrich, 2004) reinforced the above findings and emphasized that internal factors such as administrative support and effective reward system are important in terms of intrapreneurship and organizational performance. Therefore, the current study will address organizational factors, such as Management Support, Organizational Structure, Rewards Reinforcement, Resources Availability and Organizational Culture as measures to assess their impact on intrapreneurship within the organization and as a consequence on the Organizational performance. (Covin & Slevin, 1991) defined the organizational structure by the arrangement of workflows, communications, and power relations within the organization. Consequently, the organizational structure is an internal divisions and coordination mechanisms between all of them that aim to ensure oversight and supervision within the organization, cooperation between workers in different units, and the most prominent aspects of formal organization are the organizational structure, instructions and procedures used in the organization (Jones, 2013). Therefore, organizational factors must be designed in an effective way that motivates employees to engage in creative behavior and encourage intrapreneurship to work towards organizational goals and performance development (R. Hisrich, Peters, & Shepherd, 2013).

(Altinay & Altinay, 2004) study showed that there is a positive relationship between the decentralized structure and intrapreneurship, as it increases the independence of employees, which encourages employees to be creative and innovate new projects, goods and services, thus develop performance. In addition, the decentralized and informal structure helps increase information sharing among employees with their management. This promotes innovation and a better relationship between the supervisors and co-workers and leads to an increase in employee satisfaction; therefore, intrapreneurial organizational culture enhances employee satisfaction.

According to (Hitt, Ireland, & Hoskisson, 2007) definition, "Organizational Culture is a complex set of basic ideologies, symbols and values that are shared among workers and through which the organization does its work". As for the innovative culture, it is one of the most important factors in achieving sustainable

competitive advantage by influencing employee behavior towards creative business and thus encouraging intrapreneurship (Gursoy & Guven, 2016). (Covin & Slevin, 1991) emphasized that entrepreneurs should be rewarded in proportion to the amount of effort and risks they may incur in creating new products or services. In addition to the organizational structure and rewards, entrepreneurs also need financial resources to start implementing their ideas (Hornsby et al., 2002). Therefore, the organization must provide the resources necessary to carry out innovative activities, including tangible and intangible resources, as well as provide the time needed to conduct intrapreneurial activities (Hornsby et al., 2002).

In larger and more complex organizations, and with increasing challenges in working for innovative intrapreneurs, management must empower employees by facilitating access to information, sharing their knowledge, and giving them responsibility while promoting accountability (Amabile & Khaire, 2008). For this study, Palestinian Banks have been selected as they form the backbone of the country's economy and its development, and experience a highly competitive and dynamic environment. Banks in Palestine are struggling to maximize profits and utilize various intrapreneurial initiatives to obtain superior performance and provide innovate products and high-quality services. Many obstacles prevent from having competitive advantages that are satisfactory to existing customers, and simultaneously attracts new customers. The importance of this study lies in its highlighting of how creating business cultures and environments that supports creativity and innovation can help Palestinian banks in the West Bank overcome the risks, challenges, and competition from foreign banks and thereby improving their continuity and profitability. This will help organizations with their performances, as well as their market positions within a competitive environment fraught with risks.

The number of licensed banks in Palestine at the end of 2019 was 15 banks, including 4 local commercial banks, 8 foreign commercial banks, and 3 local Islamic banks. This study focused on 7 local Palestinian banks with a total of 194 branches and offices in Palestine, distributed across West Bank with 153 branches and 41 in the Gaza Strip. The Palestinian banks in this study included: Bank of Palestine, Palestinian Investment Bank, Al Quds Bank, The National Bank, The Arab Islamic Bank, The Palestinian Islamic Bank and Al-Safa Bank that located in west bank (Palestine Monetary Authority, 2021).

III. WHAT DISTINGUISHES THE CURRENT STUDY?

This study adopted five dimensions of intrapreneurship that have the greatest influence on the

organizational performance. Their different from other elements studied by researches that are more similar to the characteristics of human resources or organizational factors. This study is unique because it addresses the banking sector directly, which is considered an important component of the Palestinian economy. This study focused on the internal entrepreneurship characteristics that Palestinian banks enjoy, as well as how these organizational factors influence the relationship Vis a Vis intrapreneurship and organizational performance. Furthermore, the aforementioned arguments underscored the conceptual and empirical findings regarding the influence of intrapreneurship dimensions on organizational performance, as well as the organizational factors that explain this relationship, the following hypotheses is formed.

IV. HYPOTHESES

Hypothesis 1 and its sub-hypotheses

H01: There is no statistically significant effect of intrapreneurship dimensions (creativity, proactiveness, risk taking, offensive competition and autonomy) on the combined organizational performance elements (Innovation, customer satisfaction, market share, and social responsibility) for Palestinian banks in the West Bank.

- *H01-1*: There is no statistically significant effect of creativity on the combined organizational performance elements (Innovation, customer satisfaction, market share, and social responsibility) for Palestinian banks in the West Bank.
- *H01-2*: There is no statistically significant effect of proactiveness on the combined organizational performance elements (Innovation, customer satisfaction, market share, and social responsibility) for Palestinian banks in the West Bank.
- *H01-3*: There is no statistically significant effect of risk taking on the combined organizational performance elements (Innovation, customer satisfaction, market share, and social responsibility) for Palestinian banks in the West Bank.
- *H01-4*: There is no statistically significant effect of offensive competition on the combined organizational performance elements (Innovation, customer satisfaction, market share, and social responsibility) for Palestinian banks in the West Bank.
- *H01-5*: There is no statistically significant effect of autonomy on the combined organizational performance elements (Innovation, customer satisfaction, market share, and social responsibility) for Palestinian banks in the West Bank.

Hypothesis 2 and its sub-hypotheses

H02: There is no statistically significant effect organizational factors in West Bank Palestinian banks in

explaining the effect of intrapreneurship dimensions combined on the elements of organizational performance of these banks

- *H02-1*: There is no statistically significant effect of intrapreneurship dimensions combined on the organizational factors of Palestinian banks in the West Bank.
- *H02-2*: There is no statistically significant effect of the organizational factors on the elements of organizational performance of Palestinian banks in the West Bank.

Hypothesis 3 and its sub-hypotheses

H03: There are no statistically significant differences in the opinions of the study sample in the intrapreneurship dimensions of West Bank Palestinian banks due to demographic and functional variables (gender, age, educational qualification, job title and years of banking experience).

- *H03-1*: There are no statistically significant differences in the opinions of the study sample in

the intrapreneurship dimensions of West Bank Palestinian banks due to gender.

- *H03-2*: There are no statistically significant differences in the opinions of the study sample in the intrapreneurship dimensions of West Bank Palestinian banks due to age.
- *H03-3*: There are no statistically significant differences in the opinions of the study sample in the intrapreneurship dimensions of West Bank Palestinian banks due to educational qualification.
- *H03-4*: There are no statistically significant differences in the opinions of the study sample in the intrapreneurship dimensions of West Bank Palestinian banks due to job title.
- *H03-5*: There are no statistically significant differences in the opinions of the study sample in the intrapreneurship dimensions of West Bank Palestinian banks due to years of banking experience.

V. STUDY MODEL

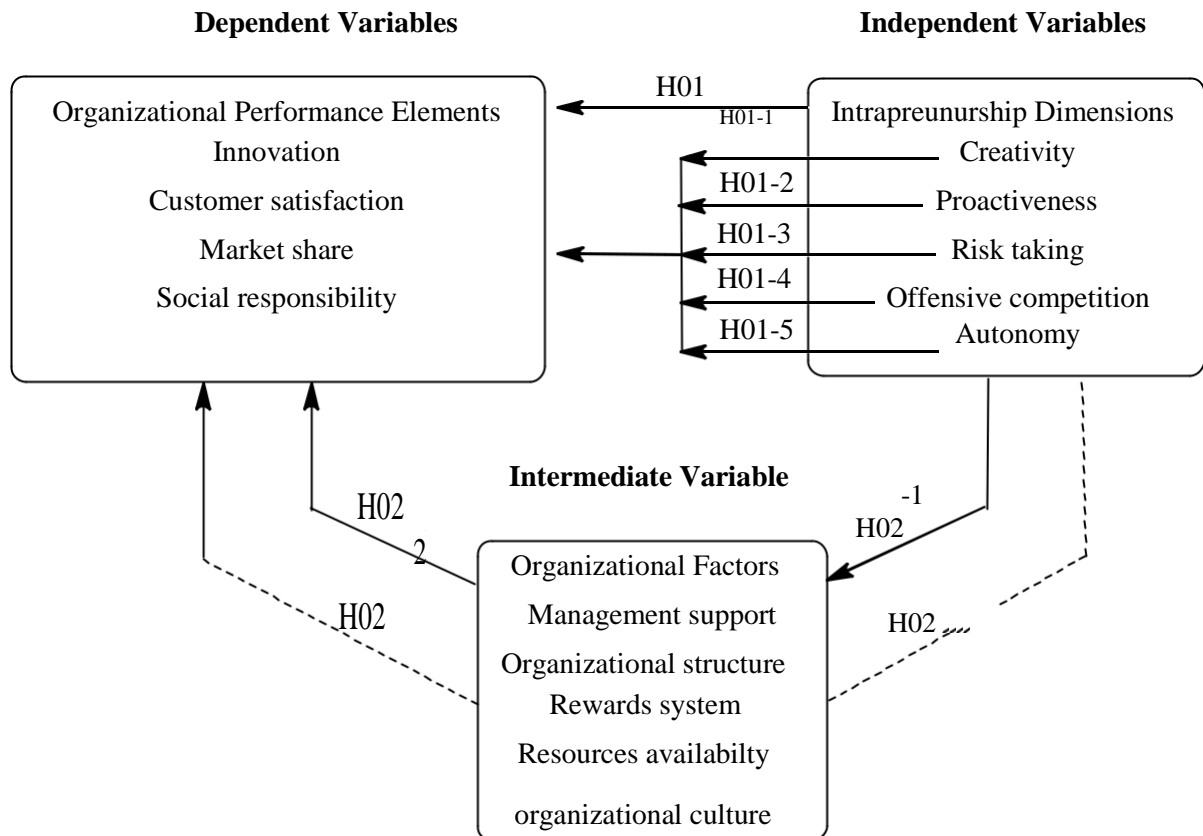


Figure 1: Study Model

The researcher based the model preparation on the studies of (Miller, 1983), (G Tom Lumpkin & Dess, 1996) regarding the independent variable, (La Nafie, Nimran, Al Musadieq, & Suyadi, 2014), (Shamsuddin, Othman, Shahadan, & Zakaria, 2012) regarding the intermediate variable, then on the studies of (La Nafie et al., 2014; Lekmat & Chelliah, 2014) regarding the dependent variable.

The study model as shown in (Figure 1) represents a logical link between the independent variable represented in intrapreneurship dimensions and organizational performance elements as a dependent variable, as well as the intermediate variable represented in organizational factors was shown through the conceptual model.

VI. METHODOLOGY

a) Sample and Procedure

This study is an applied study as well as simultaneously a cross-sectional study according to the timeline. The study's data is based on a sample from the opinions of individuals in a set time. Furthermore, the study is explanatory concerning its purpose, which is to measure the influence of organizational intrapreneurship on the institutional performance of West Bank Palestinian banks, and to highlight the mediator's role in explicating the relationship between the independent and dependent variables. The researcher has chosen the questionnaire to be the study tool, which was divided into two parts; the first part presented the demographic variables, while the second presented the paragraphs of the questionnaire based on the five-pointed Likert scale. The questionnaire was designed out of (65) statements distributed in ten sections.

The study sample consisted of (344) individuals from senior, middle and lower management within the seven West Bank Palestinian banks, their total number

of employees was (3266). The sample size represented was 10.53% of the community size, which was determined through the following formula:

$$n = \frac{P(1-P)}{\frac{P(1-P)}{N} + \frac{E^2}{Z^2}} = 344 \text{ units}$$

(Berenson & Levine, 1999: 392)

n = sample size N = population size

E = margin of error (significance level 5%)

Z-score = 1.96 for confidence level 95%

P = 50% (sample proportion)

To improve the response rate, (400) questionnaires were distributed and (344) questionnaires were returned representing (86%) of the total sample, so it is statistically acceptable.

VII. RESULTS

This section presents the statistical analysis of the collected data. Here, the characteristics of the study sample were presented, and the study hypotheses were tested according to the previously presented model.

Table No. 1: Characteristics of the Sample According to Demographic Variables

Variable	Category	Frequency	Percent
Gender	M	225	65.4
	F	119	34.6
	Total	344	100.0
Age	20 to < 25	41	11.9
	25 to < 30	88	25.6
	30 to < 35	112	32.6
	35 to < 40	54	15.7
	40 and more	49	14.2
	Total	344	100
Educational	High School	1	0.3
	Diploma	12	3.5
	Bachelors	277	80.5
	Postgraduate	53	15.4

	Prof. certificates	1	0.3
	Total	344	100
Position	Dept., Manager	40	11.6
	Branch Manager	53	15.4
	Division Chief	81	23.5
	Employees	170	49.4
	Total	344	100.0
Experience	0 to < 5	97	28.2
	5 to < 10	99	28.8
	10 to < 15	88	25.6
	15 to < 20	31	9
	20 and more	29	8.4
	Total	344	100

According to Table 1, (65.4%) of the sample were male, (34.6%) were female. In addition, (32.6%) of the sample were individuals whose age (30 - < 35) with a frequency of (112); followed by individuals whose age was (25 - < 30) by (25.6%) with a frequency of 88. Furthermore, (80.5%) of the sample for those holding a bachelor's degree with a frequency of (277). Those holding a postgraduate degree were (15.4%) with a frequency of (53). As for the positions at the banks,

(49.4%) of the sample were working in the lower levels with a frequency of (170), this is followed by the division chief position at (23.5%) and a frequency of (81). Finally, it was found that (28.8%) of the sample had 5 to 10 years of experience with a frequency of (99). On the other hand, those with less than five years of experience made up (28.2%) of the sample at a frequency of (97), the results looked narrow and the differences were not wide.

Table No. 2: Descriptive Results of Variables

Variable	N	Mean	Std. Deviation
Creativity	344	3.92	0.76
Proactivity	344	4.09	0.73
Risk Taking	344	3.74	0.85
Offensive Competition	344	3.85	0.86
Autonomy	344	3.81	0.88
Intrapreneurship	344	3.88	0.0.82
Innovation	344	3.99	0.80
Customer Satisfaction	344	4.14	0.79
Market Share	344	4.13	0.81
Social Responsibility	344	4.13	0.77
Performance	344	4.10	0.79

Mgt. Support	344	3.95	0.80
Org'al Structure	344	3.80	0.83
Rewards System	344	3.76	0.93
Resources Availability	344	4.02	0.76
Org'al Culture	344	3.90	0.77
Org'al Factors	344	3.89	0.82

As in Table 2, through the participants' responses, show their positive attitude towards variables, where the mean looks higher than 3.00 as a good indicator of responses.

VIII. RELIABILITY TEST

The reliability test was examined using Alpha Cronbach to confirm the reliability levels of the scales. The value of the independent variable was (0.91), and the intrapreneurship dimensions were as follows: creativity ($\alpha = 0.77$), proactiveness ($\alpha = 0.79$), risk

taking ($\alpha = 0.82$), offensive competition ($\alpha = 0.89$) and autonomy ($\alpha = 0.88$). On the other hand, it was found that the value for the dependent variable was (0.93) and (0.92) for the intermediate variable, and the ranges for all paragraphs of the questionnaire ranged between (0.70) and (0.93). In addition, the alpha for each variable was greater than the acceptable percentage of (0.60), which is a reasonable value indicating the tool consistency that indicated to be used in the (J. F. Hair, Black, Babin, Anderson, & Tatham, 2006) study.

a) Data Analysis and Hypotheses Tests

Table No. 3: Pearson Correlation Matrix for Independent Variables

Variables	Creativity	Proactivity	Risk Taking	Offensive Competition	Autonomy
Creativity	1				
Proactivity	.687	1			
Risk Taking	.371	.390	1		
Offensive Competition	.536	.579	.589	1	
Autonomy	.256	.261	.443	.459	1

Table No. 4: Pearson Correlation Matrix for Dependent Variables

Variables	Innovation	Customer Satisfaction	Market Share	Social Responsibility
Innovation	1			
Customer Satisfaction	.602	1		
Market Share	.515	.696	1	
Social Responsibility	.463	.547	.621	1

To ensure the relevance of the data to the regression analysis assumptions which stipulate that there is no high correlation between the independent variables and no overlap between them as illustrated in Table 3 and 4, the Pearson correlation coefficient was calculated between those study variables, and the highest correlation between the sub-variables of the independent variable and the dependent variable was

(0.589) and (0.696) respectively. Therefore, the degree of correlation of each dimension with the other dimensions is less than the maximum permitted levels, which is 0.80 (Sekaran & Bougie, 2010). Depending on the results of the data readiness and validity test, we can use regression analysis tests to investigate the hypotheses.

Table No. 5: Results of the Stepwise Multiple Regression Analysis of the Effect of Intrapreneurship on Organizational Performance

Intrapreneurship Dimensions	R	R ²	Adjusted R ²	B	Std. Error	Beta	T	F	Sig. T
Proactiveness	0.74	0.54	0.54	0.66	0.03	0.74	20.19	407.58	.00
Proactiveness				0.42	0.04	0.47	9.94		.00
Creativity	0.79	0.63	0.63	.030	0.03	0.40	8.67	285.98	.00
Proactiveness				0.37	0.04	0.41	8.65		.00
Creativity	.080	0.64	0.64	0.27	0.04	0.36	7.80	199.60	.00
Offensive				0.10	0.03	0.13	3.26		.00
Competition									

Hypothesis 1 Test: A multiple regression analysis test was applied to determine which intrapreneurship dimension had the most significant impact on organizational performance. Looking at Table 5, the (proactiveness) dimension explains (54.5%) of the total variance that occurs in (organizational performance), which is higher than the 50% of cut-off point (Falk & Miller, 1992), when adding (creativity) dimension to the (proactiveness) dimension, both explain the (62.8%) from the total variance in (organizational performance). Furthermore, when simultaneously adding (offensive competition), the explanation was (63.9%) of the total variance that occurs in (organizational performance). Risk taking and autonomy did not add much value in explaining the variation in organizational performance.

Additionally, the different (F) levels in the three cases were respectively: (F = 407.58; F = 285.98; F = 199.60) and all of them are within a significant level (Sig = 0,000) which confirms the regression significance and indicates that the effect of the variables in the three models are a statistically significant effect. In addition, the values of (β) in the (proactiveness), (proactiveness and creativity), then (proactiveness, creativity, and offensive competition) at the different (t) levels are at a significant level (Sig = 0,000, Sig = 0,000, Sig = 0,000). This supports the significance of the regression coefficients, because it is less than the significance level (0.05), which indicates that the effect of these variables in the three models is a statistically significant effect. Consequently, based on these findings, H01 is rejected.

Table No. 6: Simple Regression Analysis of the Effect of Intrapreneurship on Organizational Performance

Sub Hypotheses	Intrapreneurship Dimensions	Model Summary	ANOVA Dependent			variable	Coefficients					Results
			DF	F	Sig. F		B	Std. error	Beta	T	Sig.t	
01-1		R 0.72 R ² .51	1	356.94	.00	.54	.03	.72	18.89	.00	Reject	
01-2	iveness	R 0.74 R ² .54	1	407.58	.00	.66	.03	.74	20.19	.00	Reject	
01-3	Risk taking	R 0.34 R ² .11	1	45.08	.00	.28	0.4	.34	06.71	.00	Reject	

Sub-Hypotheses Test for Hypothesis 1: Based on the results of the simple regression analysis with organizational performance as a dependent variable in Table 6, it was concluded that there was a statistically significant effect of all dimensions of intrapreneurship on

the organizational performance elements combined. Accordingly, all the sub- hypotheses of the first main hypothesis are rejected.

Table No. 7: Direct and Indirect Effects of Variables

Variables	Std. Direct Impact	Sig.	Std. Indirect Impact	Std. Overall Effect	C. R.	P
Intrapreneurship on Organizational Performance	0.52	.00	0.20	0.72	4.22	***
Organizational factors on Organizational Performance	0.32	.00		0.32	4.56	***
Intrapreneurship on Organizational factors	0.62	.00		0.62	4.29	***
Chi ² =237.611 is significant at (0.05) level						

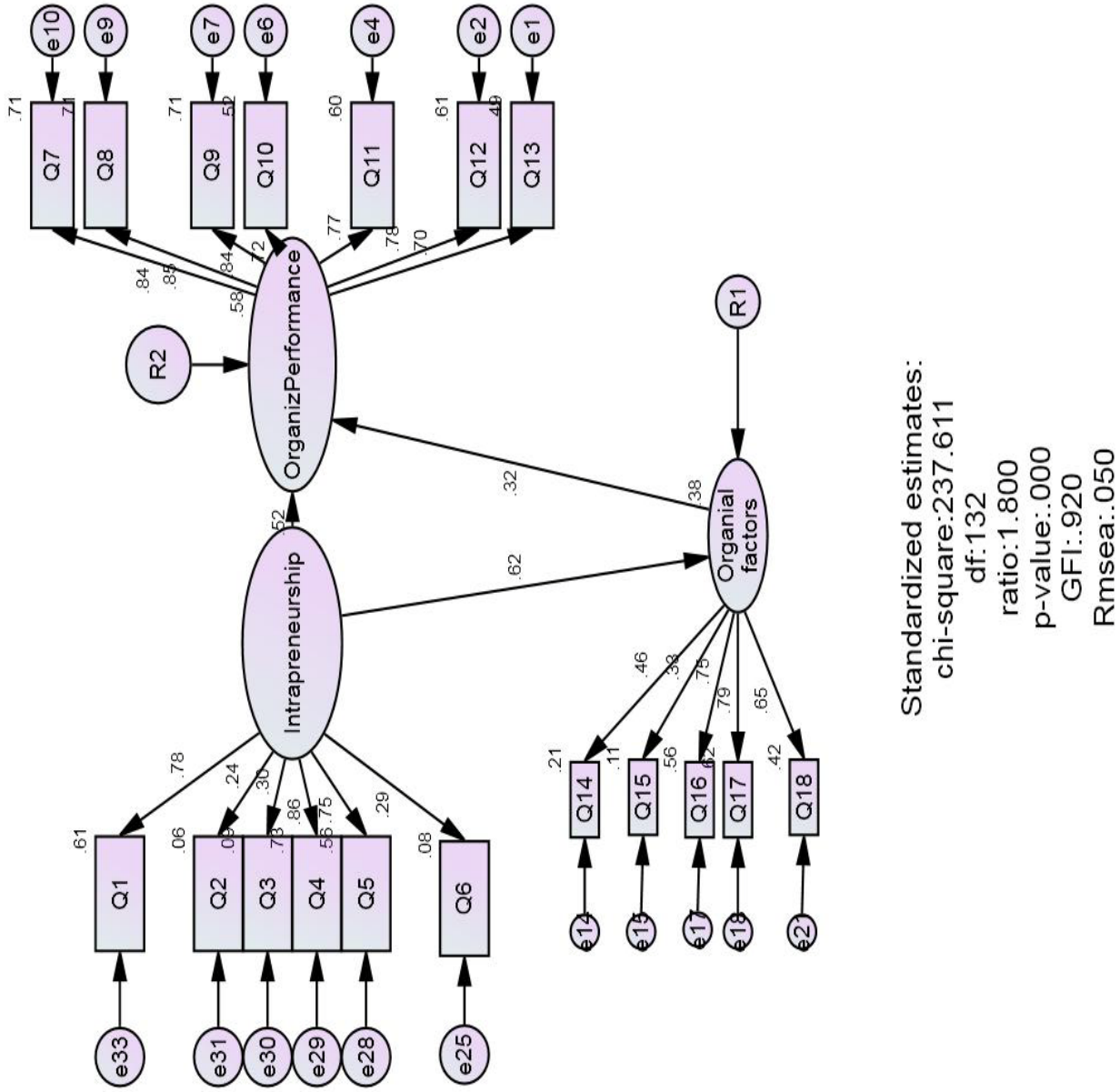


Figure 2: AMOS (The Effect of Organizational Factors in Explaining the Relationship between Intrapreneurship Dimensions Combined on the Elements of Organizational Performance)

Hypothesis 2 Test: Based on the hypotheses supported in theory and represented in the research model (Figure 2) and in assessing the goodness of fit of the models, we began the analysis by validating the internal consistency of the direct and indirect impact for the intermediate variable. Using appropriate fit indices (J.F. Hair, Black, Babin, & Anderson, 2010), we found that the initial formulations have an appropriate fit, where (Chi2 = 237.611) at the level of significance (Sig = 0.000), and its relationship to the level of significance (0.05 α), (GFI= 0.920 and CFI = 0.958), and the two values are closer to the correct one, as for (RMSEA= 0.050) which closes to zero. All of the above confirm the suitability of the model for testing.

AMOS program was used to interpret and evaluate the causal effects. Looking at Table 7, the direct standard impact of intrapreneurship on organizational performance value was (0.516), and the direct impact of intrapreneurship on organizational factors value was (0.618). As for the effect of organizational factors on organizational performance, it reached (0.324). Accordingly, the standard indirect effect of intrapreneurship on organizational performance

was shown by the presence of organizational factors with a value of (0.200). Consequently, the organizational factors explain (20%) of the overall impact of intrapreneurship on organizational performance. This means that the indirect impact between intrapreneurship dimensions combined on organizational performance is weaker than the direct impact between them, which is (0.516). So the organizational factors as an intermediate variable adjust the direct impact between Independent and dependent variables, and therefore the overall effect of these combined dimensions in organizational performance is (0.716), This means that the combined intrapreneurship dimensions were able to explain (71.6%) of the variance of the organizational performance, while the remainder of this percentage (28.4%) signifies that there are other variables, or they may be due to random error that affect organizational performance. Based on the abovementioned, we reject the second null hypothesis and accepts the alternative hypothesis; consequently, the organizational factors do moderate the relationship between Intrapreneurship and organizational performance.

Table No. 8: The Effect of Intrapreneurship on Organizational Factors, and the Effect of Organizational Factors on Organizational Performance

Independent Variables	Model Summary		ANOVA			Dependent Variable	Coefficients					Result
	R	R ²	DF	F	Sig. F		B	Std. error	Beta	T	Sig. t	
Intrapreneurship	0.71	.50	1	346.88	.00	Organizational factors	.94	.05	.71	18.63	.00	Reject
Organizational Factors	0.66	.44	1	266.48	.00	Organizational Performance	.52	.03	.66	16.32	.00	Reject

Sub-Hypotheses Test for Hypothesis 2: Linear Regression was used to test these hypotheses as shown in Table 8.

H02-1: It is found that R (0.71) is the correlation of the Intrapreneurship and the organizational factors; F value of (346.88) is significant at (0.05) level. Therefore, there is a statistically significant influence of Intrapreneurship on Organizational Factors elements combined. Based on these findings, H02-1 is rejected.

H02-2: It is found that R (0.66) is the correlation of the organizational factors and the organizational performance, F value of (266.48) is significant at (0.05) level. Thus, there is a statistically significant influence of Organizational Factors on Organizational performance elements combined. Based on these findings, H02-2 is rejected.

Table No. 9: Summary of the Test Results

Hypotheses	Variable	Differences	Non-differences	Results
03-1	Gender	Creativity And Proactiveness	Risk Taking, Offensive Competition, Autonomy	Reject
03-2	Age	—	All Dimensions	Accept
03-3	Educational Level	All Dimensions Except Autonomy	Autonomy	Reject
03-4	Position	—	All Dimensions	Accept
03-5	Experience	Creativity And Autonomy	Proactiveness' Risk Taking, Offensive Competition	Reject

Hypothesis 3 and its Sub-Hypotheses

T-test and ANOVA were used to test the hypotheses of differences in opinions of sample groups, and the results were as follows:

According to Table 9, it is observed that there were statistically significant differences in the opinion of the study sample towards the intrapreneurship dimensions of Palestinian banks in the West Bank, attributable to gender, scientific qualification and years of experience. In contrast, there were no statistically significant differences in the opinion of the study sample towards the intrapreneurship dimensions of Palestinian banks in the West Bank, attributable to age and position.

IX. CONCLUSION AND RECOMMENDATION

This empirical study investigated the impact of the intrapreneurship dimensions (creativity, proactiveness, risk taking, offensive competition and autonomy) on the organizational performance (innovation, customer satisfaction, market share and social responsibility) for Palestinian banks in the West Bank. Furthermore, the study included research on whether the organizational factors (management support, organizational structure, rewards system, resources availability and organizational culture), as intermediate variables, can explain the relationship between intrapreneurship and organizational performance. Most studies on this matter have adopted performance measures that cover only the financial aspect; in this study, both financial and non-financial performance measures were considered. This is because performance measurement systems that lack financial integration do not provide the wholistic information to formulate correct decisions in order to

improve organizational performance (A. A. Atkinson, J. H. Waterhouse, & R. B. Wells, 1997; Knight, 1997).

The first hypothesis focused on determining whether intrapreneurship dimensions had a positive effect on the organizational performance of Palestinian banks in the West Bank. The result shows that the multidimensional structure of intrapreneurship has a positive and significant impact on organizational performance but in varying degrees and impacts. Proactiveness, creativity and offensive competition contribute to the interpretation of organizational performance at a percentage of (63.90%) with a direct relationship between these dimensions and organizational performance. This means that in the event of an increase or strengthening of proactivity by one measurement unit, it leads to an increase in organizational performance by (0.370) and vice versa. Additionally, when increasing or strengthening creativity by one measurement unit, it leads to an increase in organizational performance by (0.270) and vice versa. Similarly, in the case of increasing or strengthening offensive competition by one unit, it leads to an increase in organizational performance by (0.104) and vice versa. Consequently, there is a strong positive correlation between intrapreneurship and organizational performance, and proactive, creative and offensive competition play the most important role in improving the Palestinian banks' performance in the West Bank. Therefore, this encourages creativity and innovation in their products and services. This study agrees with (Lekmat & Chelliah, 2014), whereas the results showed a strong positive correlation between intrapreneurship and organizational performance. However, the study differed in that it showed that creativity was considered

to have the most important role in improving overall performance, and that proactiveness plays the most important role in improving organizational performance in Palestinian banks in the West Bank. This study is also consistent with the findings by (Karacaoglu, Bayrakdaroğlu, & San, 2013; Shamsuddin et al., 2012) that showed a strong positive correlation between intrapreneurship and organizational performance with the organizational factors as an intermediate variable, but the study diverged from (Karacaoglu et al., 2013; Shamsuddin et al., 2012) due to their consideration of financial performance only.

Regarding the second hypothesis, which was to determine whether the organizational factors as an intermediate variable can explain the relationship between intrapreneurship and organizational performance; the study found that the ratio of direct impact of intrapreneurship on organizational performance was (0.516), and with organizational factors, the indirect effect of entrepreneurship on organizational performance was (0.200), and therefore the overall effect was (0.716), which means that organizational factors have an impact as an independent variable more than being an intermediate variable between independent and dependent variables. This is consistent with the findings of (Antonicic & Hisrich, 2004; D.F. Kuratko & Welsch, 2004) in that organizational factors such as administrative support, organizational structure, resources, and rewards have a significant influence on the relationship between intrapreneurship and organizational performance. It also agrees with (La Nafie et al., 2014) that the internal factors represented in administrative support and the rewards system used in banks have had a significant positive impact on performance and differ with this study in the availability of resources, which has had a negative and negligible effect.

Based on the findings of this study, and the above argument, it can be inferred that intrapreneurship dimensions in organizations generally improve their performance. Furthermore, the existence of organizational factors at the same importance level as intrapreneurship is crucial to achieve better performance. Therefore, organizations must adopt behaviors to promote internal environmental factors and intrapreneurship to develop an innovative culture to achieve competitive advantage. Whereas some studies confirm that organizational factors and intrapreneurship are still emergent in organizations, this study underlines the importance of the promotion and adoption for sustainability.

As a result, a pioneering business strategy must be utilized so that businesses are able to exploit opportunities provided by the environment and deal with

threats posed by hostile environments. Other important recommendations include:

- Giving a greater area of independence to workers in Palestinian banks participating in banking activities and services, and integrate that within the organizational culture in order to facilitate entrepreneurial behaviors, without condoning internal control.
- Supporting the creative ideas of workers in Palestinian banks, which leads to turning these ideas into successful innovations that contribute to improving organizational performance. This can be done through channels of communication between workers in different organizations that allow the flow and exchange of ideas without restrictions, and create communication channels that allow creative ideas to flow easily to managers, without any obstacles, and to be the first mover in developing clear business plans that help to seize opportunities and invest them efficiently before competitor banks seize them.
- Reinforcing innovation in Palestinian banks through access to the latest technological developments and innovations achieved by international banks especially in the field of electronic banking.
- The study is able to contribute significantly to the intrapreneurship research literature, by helping researchers and academics had better understand the relationship between intrapreneurship, organizational performance and organizational factors to support banking industries. Therefore, I recommend conducting the following future studies:
- Conduct similar studies on other organizations to show the differences between the entrepreneurial orientations in various economic sectors, as well as the difference of entrepreneurial orientations between the public and private sectors, to address the following points:
- Integrate other factors such as organizational learning and management flexibility, as internal organizational factors, and studying their impact on intrapreneurship and organizational performance.
- Study the impact of external factors on the relation between intrapreneurship and organizational performance
- Promote collaboration between universities and other scientific institutions with organizations in the private sector in order to exploit creative ideas.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Aina, Q., & Solikin, I. (2020). Entrepreneurship and Intrapreneurship: How Supporting Corporate Performance. *Review of Integrative Business and Economics Research*, 9, 288-297.

2. Altinay, L., & Altinay, M. (2004). The influence of organisational structure on entrepreneurial orientation and expansion performance. *International Journal of Contemporary Hospitality Management*, 16 (6), 334-344.
3. Amabile, T., & Khaire, M. (2008). Creativity and the role of the leader. *Harvard Business Review*, 86 (10), 100-109.
4. Åmo, B. W., & Kolvereid, L. (2005). Organizational strategy, individual personality and innovation behavior. *Journal of Enterprising Culture*, 13 (01), 7-19.
5. Antoncic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of business venturing*, 16 (5), 495-527.
6. Antoncic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of small business and enterprise development*, 10 (1), 7-24.
7. Antoncic, B., & Hisrich, R. D. (2004). Corporate entrepreneurship contingencies and organizational wealth creation. *Journal of management development*.
8. Argabright, K., McGuire, J., & King, J. (2012). Extension through a new lens: Creativity and innovation now and for the future. *Journal of extension*, 50 (2), 1-7.
9. Atkinson, A. A., Waterhouse, J. H., & Wells, R. B. (1997). A stakeholder approach to strategic measurement. *Sloan Management Review*, 38 (3), 25-38.
10. Atkinson, A. A., Waterhouse, J. H., & Wells, R. B. (1997). A stakeholder approach to strategic performance measurement. *MIT Sloan Management Review*, 38 (3), 25-38.
11. Beheshtifar, M., & Kamani-Fard, F.-B. (2013). Organizational creativity: A substantial factor to growth. *International journal of academic research in business and social sciences*, 3 (3), 98.
12. Covin, J. G., & Miles, M. P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship theory and practice*, 23 (3), 47-63.
13. Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship theory and practice*, 16 (1), 7-26.
14. Covin, J. G., & Wales, W. J. (2012). The measurement of entrepreneurial orientation. *Entrepreneurship theory and practice*, 36 (4), 677-702.
15. Daft, R. L. (2000). *Management* (5 ed.). NY: The Dryden press.
16. Falk, R. F., & Miller, N. B. (1992). *A Primer for Soft Modeling* (1 ed.). Ohio: University of Akron Press.
17. Fox, T., Ward, H., & Howard, B. (2002). *Public sector roles in strengthening corporate social responsibility: A baseline study*: World Bank Washington, DC.
18. Gursoy, A., & Guven, B. (2016). Effect of innovative culture on intrapreneurship. *International Journal of Business and Social Science*, 7 (1), 152-162.
19. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7 ed.). NJ: Prentice Hall, Upper Saddle River.
20. Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6 ed.). New Jersey: Pearson Prentice Hall.
21. Halme, M., Lindeman, S., & Linna, P. (2012). Innovation for inclusive business: Intrapreneurial bricolage in multinational corporations. *Journal of Management Studies*, 49 (4), 743-784.
22. Hisrich, R., Peters, M. P., & Shepherd, D. A. (2013). *Entrepreneurship*. 9th international ed: New York, USA: McGraw-Hill.
23. Hisrich, R. D., & Peters, M. P. (2002). *Entrepreneurship* (5 ed.). New York: McGraw-Hill/Irwin.
24. Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2007). *Strategic management: competitiveness and globalization, concepts and cases* (7 ed.). Ohio: Thomson Higher Education.
25. Honig, B. (2001). Learning strategies and resources for entrepreneurs and intrapreneurs. *Entrepreneurship theory and practice*, 26 (1), 21-34.
26. Hornsby, J. S., Kuratko, D. F., Holt, D. T., & Wales, W. J. (2013). Assessing a measurement of organizational preparedness for corporate entrepreneurship. *Journal of Product Innovation Management*, 30 (5), 937-955.
27. Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of business venturing*, 17 (3), 253-273.
28. Jones, G. R. (2013). *Organizational theory, design, and change*: Upper Saddle River, NJ: Pearson.
29. Karacaoglu, K., Bayrakdaroglu, A., & San, F. B. (2013). The Impact of corporate entrepreneurship on firms' financial performance: Evidence from Istanbul Stock Exchange. *International Business Research*, 6 (1), 163-175.
30. Knight, G. A. (1997). Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of business venturing*, 12 (3), 213-225.
31. Kotler, P., & Keller, K. L. (2012). *Marketing Management* (14 ed. Vol.). New Jersey: Pearson Education Inc, Upper Saddle River.
32. Kuratko, D. F., Montagno, R. V., & Hornsby, J. S. (1990). Developing an intrapreneurial assessment

- instrument for an effective corporate entrepreneurial environment. *Strategic management journal*, 49-58.
33. Kuratko, D. F., & Welsch, H. P. (2004). *Strategic Entrepreneurial Growth* (2 ed.). SouthWestern, Ohio: Thomson.
 34. La Nafie, N., Nimran, U., Al Musadieq, M., & Suyadi, I. (2014). Organizational internal factors, corporate entrepreneurship, and organizational performance. *European Journal of Business and Management*, 6 (36), 83-97.
 35. Lekmat, L., & Chelliah, J. (2014). What are the antecedents to creating sustainable corporate entrepreneurship in Thailand? *Contemporary Management Research*, 10 (3).
 36. Lumpkin, G. T., Cogliser, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship theory and practice*, 33 (1), 47-69.
 37. Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.
 38. Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of business venturing*, 16 (5), 429-451.
 39. Luo, X., Zhou, L., & Liu, S. S. (2005). Entrepreneurial firms in the context of China's transition economy: an integrative framework and empirical examination. *Journal of Business Research*, 58 (3), 277-284.
 40. Lyon, D. W., Lumpkin, G. T., & Dess, G. G. (2000). Enhancing entrepreneurial orientation research: Operationalizing and measuring a key strategic decision making process. *Journal of management*, 26 (5), 1055-1085.
 41. Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management science*, 29 (7), 770-791.
 42. Morris, M. H., Kuratko, D. F., & Covin, J. G. (2008). *Corporate entrepreneurship & innovation* (3 ed.). UK: Cengage Learning.
 43. Nazdrol, W. M., Breen, J., & Josiassen, A. (2011). *The relationship between strategic orientation and SME firm performance: Developing a conceptual framework*. Paper presented at the Regional Frontiers of Entrepreneurship Research 2011: Proceedings of the 8th AGSE International Entrepreneurship Research Exchange, Swinburne University of Technology, Melbourne, Australia.
 44. Olszak, C. M., & Kisielnicki, J. (2016). Organizational Creativity and IT-based Support. *Informing Science*, 19 (1), 103-123.
 45. Palestine Monetary Authority. (2021). Retrieved 15 March 2019, from <https://www.pma.ps/en/>
 46. Pearce, J. W., & Carland, J. W. (1996). Intrapreneurship and innovation in manufacturing firms: An empirical study of performance implications. *Academy of Entrepreneurship Journal*, 1 (2), 87-96.
 47. Pinchot, G. (2010). The Pinchot Perspective. *Search of a Future Worth Living*. Retrieved 15 March 2019, from <http://www.pinchot.com/2010/01/back-to-intrapreneuring.html>
 48. Robbins, S. P. (1993). *Organizational Behavior: Concepts Controversies and Applications* (6 Ed.). Englewood, Cliffs, N.J: Prentice-Hall Inc.
 49. Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (5 ed.). New York: John Wiley & Sons.
 50. Shamsuddin, S., Othman, J., Shahadan, M. A., & Zakaria, Z. (2012). The dimensions of corporate entrepreneurship and the performance of established organization. *ACRN Journal of entrepreneurship perspectives*, 1 (2), 111-131.
 51. Simon, H., Bilstein, F. F., & Luby, F. (2006). *Manage for profit, not for market share: A guide to greater profits in highly contested markets*: Harvard Business School Press Boston, MA.
 52. Usta, I., & Unsar, S. (2015). Examining Perception of Organizational Creativity in Turkish Public Organizations. *International Journal of Business and Social Science*, 6 (10), 227-236.
 53. Zahra, S. A. (1993). A conceptual model of entrepreneurship as firm behavior: A critique and extension. *Entrepreneurship theory and practice*, 17 (4), 5-21.
 54. Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of business venturing*, 10 (1), 43-58.
 55. Zahra, S. A., & Garvis, D. M. (2000). International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility. *Journal of business venturing*, 15 (5-6), 469-492.
 56. Zahra, S. A., Hayton, J. C., & Salvato, C. (2004). Entrepreneurship in family vs. non-family firms: A resource-based analysis of the effect of organizational culture. *Entrepreneurship theory and practice*, 28(4), 363-381.



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Enterprise Risk Management in Designing Meta-Regulation under Risk-based Regulatory Strategy: An Empirical Evidence from Financial Regulation

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Abstract- The empirical literature is bounded to explaining the use of emerging regulatory innovation in designing meta-regulation under risk-based regulatory strategy as a new “regulatory mix”. Therefore, this paper aims to demonstrate how enterprise risk management (ERM), an emergent regulatory innovation, uses to design meta-regulation under the risk-based strategy. Based on qualitative content analysis of a central bank’s annual report in an emerging economy over eleven years, including the issued guidelines and circulars, this paper reveals the dimension of ERM as a meta-regulatory toolkit in the regulatory regime. The evidence reflects that the regulator’s sectoral risk management reform based on ERM philosophy enforces regulated banks to develop self-regulation across the industry that subsequently enrol into the regulatory process as a meta-regulatory approach. The regulator achieves the risk-based regulatory aims relying intensely on ERM based self-regulation of the regulated banks and supervise with enhanced institutional capacity and advanced tools and techniques.

Keywords: *central bank, enterprise risk management, meta-regulation, risk-based regulation, regulatory mix.*

GJMBR-A Classification: *DDC Code: 303.484 LCC Code: HM101*



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Keywords: central bank, enterprise risk management, meta-regulation, risk-based regulation, regulatory mix.

I. INTRODUCTION

The regulatory landscape is a big tent. The last two decades have been witnessed a move towards more “flexible regulation” as an alternative to traditional “command-and-control” regulation (1). Several labels have been devised for these alternative regulations titled: management-based regulation, principles-based regulation, system-based regulation, meta-regulation, self-regulation, enforced self-regulation, reflexive regulation (2–4). These new forms of flexible regulation are also advocating as a “new governance” style of the regulation (5–7) and belong to the family of “process-oriented regulation” (4). In addition, a shift has been marked in regulatory governance towards performance-based or outcome-based regulation (8) and risk-based regulation, particularly in financial and public domains (9).

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These “new governance” regulatory techniques and the “flexible regulatory alternatives” were lauded as superior in various ways over the “prescriptive” regulation in the last two decades, particularly in the pre-crisis era. However, the latest financial crisis has exposed the shortcomings of these “new governance” regulatory techniques and forced the regulators to rethink the governance mechanism (1,7). Likewise, there is a sparkling debate in regulatory scholarship regarding the effectiveness of different alternatives of flexible regulation (7). However, among the process-oriented regulations, meta-regulation is likely to have comparative advantages over the other alternative form of process-oriented regulations (4). It has drawn a great deal of attention from both scholars and regulators (3). It is often regarded as a much flexible alternative to the traditional “command-and-control” regulation (10).

However, the new governance regulatory techniques are not unproblematic. There is evidence of the regulatory failure of meta-regulation and risk-based strategy in the financial industry following the global financial crisis (11). Despite this, the relevance of risk-based regulation and meta-regulation is still surviving among regulators and have gained much popularity in recent years (11). Nevertheless, there is a dearth of empirical research in flexible regulatory scholarship to explore how a meta regulatory approach can be designed using a new regulatory innovation, i.e., enterprise risk management (ERM) in achieving risk-based regulatory goals. This research intends to fill this gap.

This study anticipates contributing to flexible regulation scholarship by providing an account of how a new “regulatory mix” (12) can be developed using an emergent regulatory innovation to ensure regulatory governance in financial regulation. Precisely, how risk-based regulation, meta-regulation and enterprise risk management are integrated into a regulatory platform as a “regulatory mix”. Besides, the evidence would have practical value to other regulators in adopting risk-based regulation using ERM as a meta-regulatory toolkit. Further, the study’s outcome would be useful to the international standard-setting bodies of financial

institutions like Basel Committee on Banking Supervision and the international development institutions like the World Bank, International Monetary Fund and many more being a stakeholder of the global financial industry.

The rest of the paper is organized as follows. Section 2 reviews the literature on risk-based regulation, meta-regulation and ERM and delineates the research gap to explore. Section 3 explains the research design, while Section 4 reports the gradual development of the meta-regulation in practice using ERM in achieving risk-based regulatory aims. Section 5 provides an account of how ERM, as a meta-regulatory toolkit, integrates these notions as a “regulatory mix” in achieving the regulatory objective. Section 6 concludes the paper with avenues for further research and limitation of the study.

a) *Risk-Based Regulation, Meta-Regulation and Enterprise Risk Management – An Integrated Framework*

Risk-based regulation is deemed as a “new governance” regulatory technique (7). This philosophy enables regulators to govern by “risk” and provide a powerful justification to achieve the regulatory aims in a legitimate way (13). In the regulatory regime, “risk” is now deemed as the central doctrine for “better regulation” (14). Consequently, risk-based regulation becomes a common trend for regulatory reform. It is argued that the risk-based regulation facilitates robust governance through defining regulatory goals, monitoring performance, and securing compliance in effective, economical, proportionate, and legitimate ways (13,15). Thus, it becomes a popular regulatory strategy in many countries, including the UK, Australia, New Zealand, Canada, and the USA in diverse areas like environment, food safety, health and safety, legal service including financial regulation (7,16). In fact, international organizations such as the World Trade Organization (WTO), the Organization for Economic Co-operation and Development (OECD), the European Union (EU), and the World Bank (WB) have also been advocating to adopt risk-based regulation (17).

The central proposition of risk-based regulation is that regulators should focus mainly on the risky factors preventing them from achieving their objectives (18). Regulators are not able to address all types of risk with their limited resources. They have resource constraints. Therefore, risk-based regulation is the management of three ‘Rs’ in practice, namely risk, resources and reputation (7). As a new governance technique, risk-based regulatory philosophy is highly praised as a superior technique over traditional prescriptive regulation. However, the limitations of this approach revealed following the recent financial crisis and the regulatory failure. The risk-based approach is assessed as an “inherently complex and potentially a self-contradictory strategy” (7). The scholarly evidence

also reflects the regulatory failure of this strategy (11,13). Despite this, it has gained much relevance in Anglo-Saxon scholarship, particularly in financial regulation (11,19) and remains still under the banner of “new governance” (7).

The framework of the risk-based regulation is relatively technical and complex. Various regulatory approaches, tools and techniques are used to design the framework of risk-based regulation. Among the approaches, the meta-regulatory style is highly preferred by the regulators. Consequently, the risk-based regulation and meta-regulation have received considerable attention from academics, policymakers, practitioners and broad stakeholders’ groups (13,19), particularly after the lesson learnt following the recent global financial crisis and large-scale corporate collapse during the last two decades.

The meta-regulation is a flexible alternative over the traditional command-and-control based regulation and conceptualized as a dynamic process-oriented regulatory institution (4). It entered the mainstream of the regulatory lexicon in the 1990s and early 2000s (20). Peter Grabosky has primarily developed the concept of meta-regulation in 1995. However, it is subsequently advanced by Darren Sinclair (1998) and Christine Parker (2002).

In defining meta regulation, it is mentioned as a deliberate effort of the regulator to induce regulated firms to create their own internal regulation (3). The regulator may direct the regulated firms to regulate themselves in a number of ways ranging from enforcement, sanction and rewards (21). Therefore, it sometimes refers as “management-based regulation” (2) or as “regulation of self-regulation” (22).

Under this approach, regulators promote regulated firms to develop their self-regulation. After that, the self-regulation of the regulated firms is enrolled directly into the regulatory process for supervision. Regulators achieve the regulatory aims by relying heavily on the regulated firms’ self-regulation (11, 23). The meta-regulatory approach is the most appropriate and collaborative form of regulation in the regulatory regime (12). This approach immensely helps the regulators and the regulated firms to work together in practice.

However, the general focus of meta-regulation is given on the roles of rationality and morality or normative control to ensure the public interest. However, this normative approach of meta-regulation is criticized in the regulation scholarship (24). The potential differences among individuals, including moral and cultural differences, are much responsible for the ineffectiveness of such normative approach. Therefore, a system-based approach of meta-regulation is advocating as an alternative to the normative approach (24, 25).

In an alternative approach of meta-regulation, regulators follow both a system-oriented approach and a performance-oriented approach in its design (8,11). Under the system-oriented approach, regulators focus on regulated firms' systems and processes rather than prescribing rules and regulations to comply. Thus, the regulated firms' internal control systems and management process are the main aspects of the system-based approach. Contrarily, regulators focus on the performance and outcome of the regulated firms under the performance-oriented approach. Here, regulated firms are allowed to decide their best choices to achieve their targeted objectives. They also have the freedom to design their system in a cost-effective way (11).

Thus, meta-regulation may design considering both the system and performance of the regulated firms. Therefore, the supervision through meta-regulation is not merely monitoring the regulated firms' compliance with the system and process but also evaluating and monitoring the firm's awareness of the risks created by their business, internal controls, and risk management framework (12). However, in designing a system and performance-oriented meta-regulation, a regulatory innovation has evolved in the regulatory regime, which is 'enterprise risk management (ERM)'. Although, it is yet to explore the practical use of ERM as a regulatory innovation in designing meta-regulation.

In "new governance" scholarship, risk management also emerges as an overarching form of new governance (26). The risk regulation and the risk management responses of organizations are most explicitly recognized as a form of new governance(27). However, a new institution has evolved in the risk management domain called "enterprise risk management". The rise of ERM is regarded as one of the significant organizational shifts in the past decade's risk management practice (28). To define, ERM is a top-down and holistic approach that integrates all interrelated risks throughout an organization. It is a philosophy to address the risks comprehensive and coherent manner after prioritization, instead of managing them separately (29). Thus, ERM is a systematic and coherent approach to risk management (29,30), enabling organizations to manage a wide range of risks in an integrated and holistic fashion(31). The COSO is a dominant proponent of ERM. It defines ERM as:

"...a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives"(COSO -

Committee of Sponsoring Organizations of the Treadway Commission, 2004, p.2).

In ERM scholarship, evidence shows that it has entered in the management jurisdiction as organizing and controlling concepts (33, 34) Besides, it becomes an approach for organizational value creation (35) and a strategic decision-making tool (36). Moreover, it improves operational performance through better allocation of organizational resources (Baxter et al., 2013) and assists to remain compliant with the regulatory requirements and corporate governance code (37).

However, ERM has drawn the regulators' attention following the regulatory failure, priced experience of the recent financial crisis, and large corporate giants' collapse (38). Therefore, ERM is now a regulatory agenda for better governance, regulation and improved risk management practice (33, 39) The adoption of ERM is growing on a wholesome basis, particularly in the financial industry due to regulation (40). Consequently, ERM has emerged with the feature of a self-control mechanism within the firms. Regulators can rely on such ERM based self-control apparatus for regulation and supervision.

Despite this, empirical evidence is limited to investigate how a new regulatory innovation or a new emerging institution of risk management i.e., ERM transpires as a self-regulatory apparatus among regulated firms in designing meta-regulation to achieve the regulatory goals, particularly risk-based regulatory aims in the financial industry. Henceforth, this research attempts to address this gap by integrating the notions of risk-based regulation, meta-regulation and ERM into one manifesto. In achieving the aim, a conceptual framework is developed to understand this integration conceptualizing the meta-regulation as a dynamic process-oriented regulatory institution and as a "regulation of self-regulation" (22), which is illustrated in Figure 1:

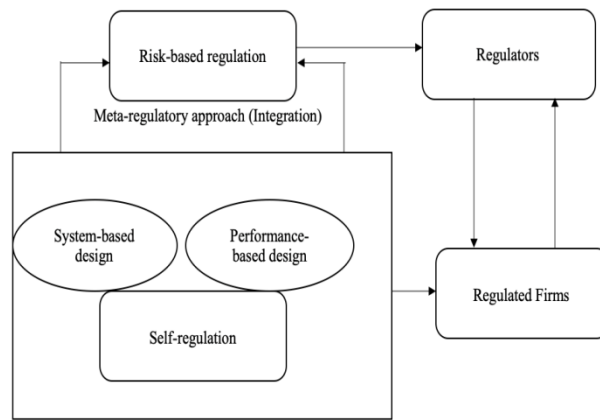


Figure 1: Conceptual Framework for Designing Meta-Regulatory Approach under Risk-based Regulation

II. RESEARCH METHODS

This study focused on the banking sector of Bangladesh to discern the implementation of ERM as a meta-regulatory toolkit under the framework of risk-based regulation. Regulators in financial industry in different countries experiment with different regulatory tools that best suit to archive their regulatory aims. Therefore, this context provides a typical case (41) to understand the gradual development of the meta-regulatory approach and the risk-based regulatory framework mainly for three reasons. Firstly, the central bank of Bangladesh i.e., the Bangladesh Bank (BB) has initiated a strategic shift for its supervisory approach from the “compliance-based” supervision to the forward-looking “risk-based” regulation since 2011. To pursue this risk-based supervisory approach, the BB hastaken meta-regulatory approach and developed diverse tools and techniques to achieve the risk-based regulatory goals. Secondly, the BB has made it mandatory for regulated banks to implement ERM based self-regulation. Therefore, it becomes an “enforced self-regulation”. Finally, the BB has enrolled such enforced self-regulation into the regulatory process to oversee the self-regulation and discharge the regulatory responsibility relying on it. Therefore, the contextual background provided a unique research setting to explore an evolving dynamic of ERM as a meta-regulatory toolkit to achieve the risk-based regulatory goals.

This study analyzed BB’s annual report from 2009 to 2019 to capture the gradual development of the meta-regulation under the risk-based regulatory framework in the banking industry. “Chapter Five” from the annual reports was mainly examined as the banking sector’s performance, including the BB’s regulatory and supervisory measures are disclosed only in this chapter. Although the initiative for risk-based regulation began in 2011, the annual reports before the initiative were also considered to draw a holistic picture of the development. In addition, data were extracted from the

BB’s risk management guidelines, circulars, risk management templates, statutory laws, and sectoral assessment reports that were issued during those eleven years.

Furthermore, the study examined the annual report of ten regulated banks for the year 2019, selected randomly, ranging from the first-generation to the fourth-generation banks for understanding firm level implementation of ERM based self-regulation. Risk management disclosures of the banks were read several times through close reading to examine the implementation and practice of self-regulation following the BB’s risk management reform.

The qualitative content analysis (42) technique was followed to analyze the data. The content analysis technique is useful for analyzing text units, narratives, short sentences, and single paragraphs to identify a specific theme and common theme (43). Three phases were followed for systematic data analysis using the content analysis technique: data familiarization, data extraction and coding, and theme development and refinement. Following these steps, two broad themes mainly emerged from the data to demonstrate the gradual development of the meta-regulation using ERM under risk-based regulatory philosophy namely, “sectoral risk management reform” and “institutional capacity building”.

a) The Trajectory of Meta-Regulation under Risk-based Regulatory Strategy using ERM

The evidence shows that the BB has made a strategic change to supervise and regulate the banking sector by shifting from the “compliance-based” approach to the “risk-based” approach. In its annual report for 2013-2014, the BB explicitly disclosed this shift, although such strategic change began in 2011 when the Basel-II implementation pressure was mounting in the industry. The BB disclosed:

[...] in particular, BB is shifting its strategy from the compliance-based approach to the forward-looking

risk-based approach aiming at matching with international best practices.

In fact, it is revealed that there was a recommendation of the World Bank (2010, pp.1, 5) under the “Financial Sector Assessment Program” to enhance the supervisory initiatives of the BB by shifting towards risk-based supervision. The WB recommended:

[...] BB’s initiatives to shift to risk-based supervision also need enhancement. [...] continue to strengthen BB by automating its operations, improving supervisory capacities (including more effective risk-based supervision), increasing transparency, enhancing disclosure policies, and providing it with greater independence and autonomy. (44)

Since then, the BB has gradually been designing the meta-regulation framework under risk-based regulatory strategy using ERM as a meta-regulatory apparatus, although it is still evolving. However, the two board themes, namely, “sectoral risk management reform” and “institutional capacity building” will assist in drawing the trajectory of the gradual development of meta-regulation in the sector:

b) Sectoral Risk Management Reform

Soon after the strategic shift towards risk-based regulation, the BB embarked on sectoral risk management reform based on ERM in 2012. The BB realized that risk-based regulation is not possible in the industry without an improved risk management practice in the banks. The BB, therefore, initiated both “structural” and “functional” reforms for an integrated risk management practice based on the ERM notion and made it mandatory for all banks. Consequently, the ERM has become an “enforced self-regulatory” toolkit to manage the risks within the regulated banks.

c) Structural Reform – An Architecture of ERM based Self-Regulation

The structural reform had begun when the BB issued a mandatory guideline for integrated risk management practice on 15 February 2012 for the commercial banks. It was a landmark for the industry to integrate and manage bank-wide risks based on ERM philosophy. Following narrative disclosed in the guideline:

[...] this document promotes an integrated, bank-wide approach to risk management that we hope will propel banks in Bangladesh to the forefront among banks in our region in adopting contemporary methods to identify, measure, monitor, and control risks throughout their institutions. (Bangladesh Bank 2012, p. v).

In this guideline, banks were instructed to establish an independent “Risk Management Unit (RMU)” headed by the “Chief Risk Officer (CRO)” and advised the Unit to act as a secretariat of “All Risk

Committee”. In addition, the oversight roles of the board and the senior management were redefined in respect of the risk management practice.

Following this risk management guideline, the Bank Company Act 1991 was amended in the year 2013 with the provision of having a “Board Risk Management Committee (BRMC)” to engage the board in the ERM process. The BB also issued guidelines regarding formation, composition, eligibility, qualification and responsibilities of the board and the BRMC to manage risks. With this structural change, the ERM received significance within the banks. Afterwards, the BB advised all the regulated banks to form a team for “Supervisory Review Process (SRP)” headed by the Managing Director/Chief Executive Officer (MD/CEO) under the guideline on risk-based capital adequacy (revised regulatory capital framework for banks in line with Basel III). The BB also instructed to the heads of all functional departments to be a member of this team and assigned the SRP team to monitor the implementation of the supervisory review process and develop the “Internal Capital Adequacy Assessment Process (ICAAP)” document. In the guideline, banks were instructed as follows:

[...] Banks must have an exclusive body naming SRP team which will be constituted by the concerned departmental heads of the bank and headed by the Managing Director. (Bangladesh Bank 2014, p. 51).

However, the structural design of ERM-based self-regulation received a momentum in the industry when the BB issued a new circular on 9 September 2015 to further strengthen the banks’ risk management practice. The sophistication of ERM based self-regulation was institutionalized following this promulgation. In addition to the previous risk management guidelines, banks were instructed to establish a separate division for risk management under the title “Risk Management Division (RMD)”. The organogram of the RMD with eight separate desks and the communication hierarchy were also prescribed in this circular. Besides, a CRO was instructed to appoint as the chief of the RMD from a senior management position who shall not be incharge of the internal control and compliance department. In that circular, it is quoted as:

[...] Banks shall appoint a Chief Risk Officer (CRO) from at least the AMD/DMD level who is not incharge of the Internal Control and Compliance (ICC) department and shall also form a management-level risk management committee with the CRO as the head. (Bangladesh Bank 2015).

Likewise, the “Head of the RMD” was instructed to be appointed after the position of CRO. Further, the RMD was prescribed to communicate the risk reports directly to the BRMC with a copy to the MD/CEO for

information. Similarly, a risk committee was advised to form at the management level comprising heads of all functional departments under the chair of the CRO, and the Head of RMD was instructed to act as a member secretary of this committee. Consequently, the architecture of ERM based self-regulation became visible in the banks following this regulation.

After three years, the BB further revised the risk management guideline in 2018, superseding the previous guideline issued in 2012 and the circular issued in 2015 to upgrade the risk management practice of the banks. A few revisions have made in the guideline; nevertheless, the spirit of the previous guideline and the circular prevails in this revised guideline. In the revised guideline, banks are instructed to reconstruct the risk management organogram, although the responsibility of risk management is entrusted to a dedicated and independent department (i.e., RMD) as like before headed by the CRO. In the revised guideline, it is instructed as:

[...] banks shall reconstruct its risk management organogram and appoint Chief Risk Officer (CRO) as the head of Risk Management Department (RMD) following the instructions of the revised risk management guidelines issued by BB. (Bangladesh Bank 2018).

Besides, the CRO is advised to be an independent senior executive whose position should be equal to or at least one grade higher than the other departmental heads. However, the position “Head of RMD” has been removed from the organogram of the RMD. Despite this, banks are given the flexibility to enhance the organogram of the RMD considering the size and complexity of the bank, keeping at least five dedicated desks. In addition, a BASEL implementation unit is advised to establish. Further, banks are instructed to form an “Executive Risk Management Committee (ERMC)” comprising the CRO as a Chairman and all the departmental heads as members, where RMD will act as the secretariat of this committee. Similarly, the RMD is instructed to communicate the risk reports directly to the BRMC with a copy to the MD/CEO for information. Moreover, the board's oversight role and the top management have also been redefined in the revised guideline, including the role and responsibilities of the BRMC, ERMC, RMD, the CRO, and all functional desks under the RMD. Currently, this guideline is effective in the banking sector for the management of risks.

d) Functional Reform – Integration of Risks from Bottom to the Top

In line with the structural reform, a number of risk reports and documents are operationalized as a part of functional reform of risk management that integrates risk management functions from the bottom to the top in the banks. Part of this reform, the BB provides a detailed guideline to banks in 2018 to submit

a “Risk Appetite Statement (RAS)” on a yearly basis within February for each year in advance with an option of interim revision if required, although the concept of “risk appetite” was first introduced in the risk management guideline issued in 2012 and was also included in the subsequent circular issued in 2015. In the guideline, it is mentioned as:

Banks are instructed to submit Board approved Risk Appetite Statement (RAS) on yearly basis within first two months of the year [...] the risk appetite must reflect strategic planning of the bank which includes shareholder aspirations within the constraints of regulatory requirements, creditor and legal obligations. (Bangladesh Bank 2018, p.16).

Further analysis revealed that the RAS is a strategic paper of a bank that reflects vision, mission and strategic goals. Diverse areas are considered in its preparation, for example, an analysis of external and internal environment, SWOT analysis, strategic goals, corporate governance, compliance with laws and regulation, internal control system and its evaluation system, investment portfolio, loan growth, last three years’ performance, sector-wise loan concentration, non-performing loan, loan recovery, loan written-off, loan classification, profitability, capital maintenance, liquidity position, risk management culture, risk profile, risk tolerance, risk limit/threshold, management action trigger point, credit rating, CAMELS rating, core risk rating and many more including a provision to include other areas if the bank thinks fit.

However, following the RAS, the development of “Comprehensive Risk Management Report (CRMR)” and “Monthly Risk Management Report (MRMR)” is a breakthrough for formal integration of bank-wide risks for management with a holistic view. It is found that the BB has developed a template of CRMR and prescribed the banks to fill it up. The CRMR was instructed to prepare through the circular issued in 2015; nevertheless, it is still effective following the revised circular issued in 2018. Banks are instructed to prepare the CRMR according to the prescribed format on a half-yearly basis and asked to submit both soft and hard copies of this report to the BB by successive month with a signature of the CRO. This risk management template is prescribed as a minimum to provide the banks’ information with the flexibility to include additional information depending on the nature, size and complexity of the business. It is mentioned in the guideline as:

Banks shall prepare Monthly Risk Management Report (MRMR) and Comprehensive Risk Management Report (CRMR) according to the formats provided by BB as a minimum requirement. They can also include additional information related to the concerned risk areas depending on the nature, complexity and size of business (Bangladesh Bank 2018, p.37).

Further analysis of the CRMR revealed that it acts as a dashboard of a bank. It is also considered as a blueprint that integrates with the RAS of a bank. Bank-wide risks are incorporated into this report for a holistic view to manage. This template is prescribed with nine distinct segments to narrate the risks and risk management information namely, investment risk, market risk, liquidity risk, operational risk, reputational risk, core risk, compliance risk, capital management, and money laundering risk. After the identification of risks in every segment, banks are also instructed to state their mitigating tools and techniques to address those risks. Therefore, the CRMR integrates bank-wide risks into a report as a dashboard for holistic and integrated management of risks.

In addition to the CRMR, banks are also instructed to prepare a MRMR putting the focus on the CRMR relatively in a short version except for the months of June and December. Banks are also advised to submit this monthly report to the BB by the end of the successive month. Further analysis of this template denoted that the MRMR includes an assessment of capital adequacy, assessment on operational risk, large loan investment with funded and non-funded categories including their limit and outstanding balance, top 30 depositors, investment performance branch wise, and comparison with the budget, sectoral and divisional performance of the investment, liquid asset, recovery, profitability, loan classification, investment growth, top 20 defaulters, deposit mix with growth, top 10 depositors and many more as a major disclosure. Like CRMR, banks must mention their action plan to address the risks after the identification.

In parallel to the risk reports, it is also marked that banks are advised to hold BRMC meeting at least four times annually, preferably one meeting in every quarter and instructed to submit the meeting minutes to the BB within seven days following the meeting. Besides, banks are also instructed to hold ERM meeting at least monthly and ask to submit the meeting minutes to the BB within the following month of the meeting. Moreover, the CRO is instructed to chair the ERM meeting and report the material risks directly to the BRMC with a copy to the MD/CEO for information.

It is further noted that banks are instructed to prepare a tailor-made "Comprehensive Risk management Guideline" based on the BB's revised risk management guideline issued on 8 October 2018 depending on the business nature, size, and complexities, subject to an annual review to cope with the changing environment. Besides, this guideline is also asked to submit to the BB after taking approval from the board. Also, banks must submit a "Review Report" on own risk management policies and effectiveness of the risk management functions after approval of the board by the end of the second month

following the financial year. In the guideline, it is instructed as:

Banks are also instructed to submit [...] A review report of Risk Management Policies and effectiveness of risk management functions with the approval of the board of directors by the end of 2nd month following the end of each year. (Bangladesh Bank 2018, p. 37).

It is also evidenced that banks are asked to submit the soft copy of the "Stress Testing" report on a half-yearly basis to the BB within the successive month of the half-year. The framework of the stress testing report is designed by the BB considering Pillar 2 of the Basel-III framework, which mainly includes sensitivity tests and scenario analysis and advised the banks to carry out the stress testing as per the given framework at regular intervals. Besides, it is marked that the BB has revised the core-risk management guidelines in six core risk areas namely, credit risk, asset-liability management risk, internal control and compliance risk, foreign exchange risk, money laundering risk, and information and communication technology security risk during the years 2016 and 2017 and made it mandatory for banks to follow. After this revision, banks are also instructed to evaluate the effectiveness of the core risk management and advised to conduct internal risk rating of the core risks both individual and composite way on a half-yearly basis. The core risk rating is also directed to disclose in the CRMR. It is guided as:

Meanwhile, core risk management guidelines and other risk related guidelines have been revised. [...] BBB's shall comply with latest core risk guidelines and risk management guideline circulated by BB for effective risk management (Bangladesh Bank 2018, p. 20).

Further, it is found that banks are instructed to submit the "Capital to Risk-weighted Asset Ratio (CRAR) Report" on a quarterly basis to the BB through a prescribed format on a consolidated basis and a solo basis by the end of the month following the quarter based on Pillar 1 of the Basel III framework. Besides, it is asked to submit the "Internal Capital Adequacy Assessment Process (ICAAP) Report" annually after approval of the board by 31 May based on the latest audited financial report. In preparation of the ICAAP report, an SRP (Supervisory Review Process) Team is instructed to form in the banks headed by the MD/CEO comprising heads of all functional departments. The main aim of the SRP Team is to reveal whether a bank has a prudent risk management system in place and have sufficient capital to cover its own risk profile. However, there is a provision of a joint meeting between the BB's "SREP (Supervisory Review Evaluation Process) Team" and the bank's "SRP Team" to evaluate the ICAAP Report. In its guideline, BB instructed:

[...] the SRP team must meet at least bi-monthly to monitor the implementation of SRP. Banks must have a document (called Internal Capital Adequacy Assessment Process-ICAAP) for assessing their overall risk profile and a strategy for maintaining adequate capital (Bangladesh Bank 2014, p. 51)

In addition, banks have asked to prepare and submit a “Self-assessment Report on Internal Control and Compliance” so that the operational risk can be kept at a minimum. The format of the report was introduced in 2012 with 53 questionnaires in the areas of anti-fraud internal controls, fraud and forgery. However, the format was revised subsequently in 2017. This report shall be submitted to the BB on a half-yearly basis after the signature of the MD/CEO of the bank and a counter-signature by the chairman of the board’s audit committee. Currently, this report is comprising of a questionnaire divided into five sections namely, Internal Control and Compliance (ICC), General Banking and Operation, Loans and Advances, Foreign Exchange Operation, and Information and Communications Technology (ICT) along with two statements containing detailed information regarding fraud-forgeries.

Finally, the RMD of the bank is encouraged to prepare a “comparative analysis report” of risk management functions and advised to send the report to the senior management and to the board of the bank and thereafter to the BB on a yearly basis. It is instructed as:

RMD of the bank is encouraged to prepare a comparative analysis report on bank’s gain/loss due to/lack of proper risk management activities and its impact on capital and send the same to senior management & board of the bank and DOS of BB on yearly basis. (Bangladesh Bank 2018, p. 20)

Moreover, the RMD is empowered to perform the risk management functions independently, keeping it separate from the business operation. In view of that, the appointment, remuneration, promotion, dismissal of the CRO is vested on the board or BRMC. Being an independent department, the CRO is also advised not to take any dual responsibility as Chief Operating Officer (COO), Chief Financial Officer (CFO), Chief of Internal Audit (CIA) and others. Likewise, the RMD is made responsible for recommending and monitoring the bank’s risk appetite and policies, and for following up and reporting on risk-related issues across all types of risks. In addition, the RMD is made responsible for risk reporting, both internal and external authorities on a regular basis. These functional reforms over the years assist the banks to integrate bank-wide risks from the bottom to the top for effective self-regulation.

III. INSTITUTIONAL CAPACITY BUILDING

In parallel to the sectoral risk management reform, the BB has gradually taken various initiatives for institutional capacity building since its strategic shift in order to full-fledged functioning the risk-based regulation. Part of this capacity building initiatives, the BB has strengthened the capacity of its inspection departments, formed an SREP Team for ICAAP review, set up an electronic dashboard, established Financial Stability Department (FSD) and Financial Integrity and Customer Services Department (FICSD), launched Integrated Supervision System (ISS) Software and established Integrated Supervision Management Department (ISMD) among the major.

At the outset, the BB strengthened the capacity of its two supervision departments namely, the Department of Off-site Supervision (DOS), responsible for conducting off-site supervision of banks and rating of the bank’s financial condition based on the various risk management reports and documents submitted to it and the Department of Banking Inspection (DBI), responsible for conducting the physical inspection of banks throughout the year. As part of the capacity building of DOS, BB formed six banking supervision specialist sections chaired by “Bank Supervision Specialists (BSS)” in 2013, who works as an early signal provider for the banks. They mainly prepare “Diagnostic Review Report (DRR)” and “Quick Review Report (QRR)” for banks and provide possible solutions to problems. In addition to BSSs, a new cell named “Observer Cell” is established under DOS in 2017 to appoint observers in banks if needed. The BB disclosed:

In order to strengthen banking supervision, BB has recently formed six Banking Supervision Specialist Sections in the Department of Off-site Supervision (DOS). Each section is headed by a Banking Supervision Specialist (BSS), at the Deputy General Manager level [...] Supervision Specialists monitor treasury functions, capital adequacy, ADR, etc. of the portfolio banks and prepare diagnostic review report (DRR) on audited financial statements. They also examine the internal control systems to improve its resilience (Annual Report 2015-2016, p. 43)

The CAMELS rating is one of the major supervisory tools used by DOS to assess and review the financial soundness of banks. It helps to identify the problem banks. The BB takes necessary inspection measures for the individual bank based on the outcome of “CAMELS rating”. However, the BB revised the “CAMELS rating” guidelines from time to time latest in 2013. The BB disclosed:

The previous CAMELS rating guideline has been reviewed by the Department of Off -site Supervision [...] the revised CAMELS rating guideline came into effect from 2013. (Annual Report 2016-2017, p. 39)

Besides, the BB introduced for the first time a “comprehensive risk rating” in 2015 for each bank on a half-yearly basis based on the risk reports (i.e. RAS, CRMR, MRMR) and other documents (i.e. stress testing report, meeting minutes, other compliance reports) submitted to the DOS. This risk rating carries 15 per cent weight in the management component of the “CAMELS Rating”. Besides, certain regulatory approval, such as a new branch licence, an AD licence or dividend payment depends on such “risk rating” of an individual bank. The BB mentioned:

A risk rating procedure has been developed to quantify all possible risks based on available information [...] this risk rating is done on a half-yearly basis and carries 15 percent weight in the management component of CAMELS rating (Annual Report 2014-2015, p. 43).

The BB also disclosed in the following year:

[...] Besides, this rating plays an important role in getting branch licence, AD licence, permission for dividend declaration, etc. for banks. (Annual Report 2015-2016, p. 44).

Further, the DOS is made responsible for reviewing the “self-assessment reports” of banks in order to provide proper instruction to keep the operational risk at a minimum level. The DOS verifies this report with the help of the on-site inspection department.

Likewise, BB strengthened the capacity of its on-site inspection department. The number of on-site inspection department has been increased to conduct a field-level inspection and exercise regulatory power to receive the desired outcome from the regulated banks. The individual bank has CAMELS rating between “3” and “5” are inspected every year. Banks rated “1”, or “2” are inspected once in every two years, although the foreign banks are inspected in every year irrespective of the rating. In addition, the on-site department reviews the accuracy of the ICAAP Report of the banks. The BB disclosed:

As part of statutory function, currently six departments of BB are conducting on-site inspection activities [...] These departments conduct mainly two types of inspection, which may be summarized into three major categories like comprehensive/regular/ traditional inspection (ii) Core risks evaluation and (iii) special/surprise inspection. (Annual Report 2018-2019, p. 45).

Similarly, the BB formed an SREP Team under the Basel framework headed by an Executive Director and revised the process document for ICAAP Report in 2014. The SREP of BB includes a dialogue between the BB and the bank’s SRP Team to evaluate the bank’s ICAAP Report. Further analysis revealed that the BB determines if any additional capital requires for banks

during the SRP-SREP dialogue on the basis of quantitative and qualitative judgment. If any bank fails to produce their own ICAAP report backed by proper evidence and rigorous review regarding risk management, the SREP Team of BB applies their prudence in determining the level of adequate capital. However, information of the ICAAP document is rechecked with the departments of on-site inspection and off-site supervision.

In addition, the BB established a new department titled “Financial Stability Department (FSD)” in 2012 as a part of its supervisory initiatives. This department is working relentlessly to build up a stable macro-prudential framework. It publishes annual financial stability report, quarterly financial stability assessment report, and develops various tools techniques like Financial Projection Model, Interbank Transaction Matrix, Composite Financial Stability Index (CFSI), and Bank Health Index and many more. It has also developed a framework for identifying and dealing with the Domestic Systemically Important Banks (DSIB) and a new oversight framework titled “Central Database for Large Credit (CDLC)” to enhance financial discipline through monitoring the large exposures of banks. Further, it has developed Bangladesh Systemic Risk Dashboard (BSRD) as an early warning system. In addition, a framework for “Coordinated Supervision for Bangladesh Financial System (CSBFS)” is under progress in this department.

Moreover, the BB established an “Integrated Supervision and Management Department (ISMD)” in 2015 to monitor the banks through Integrated Supervision System (ISS) software. The ISS is an outcome of BB’s comprehensive and risk-based supervisory initiatives. It is a web-based monitoring tool integrating the information of a bank’s overall activities i.e. balance sheet exposure, off-balance sheet exposure, credit operation, foreign exchange business, money market operation and regulatory compliance related to their head office to root level branch operations. The head office of all scheduled banks and their branches currently are under the coverage of ISS. This department also complements the on-site inspection department. The BB disclosed:

BB has started a comprehensive supervision research in late 2012 to develop a more effective supervision and monitoring tool in order to strengthen its existing supervision system. Integrated Supervision System (ISS) is the outcome of that initiative. ISS Software was formally inaugurated by the honourable Governor on 8th October 2013. Subsequently, mandatory ISS reporting of banks’ head offices and branches started from March 2014. (Annual Report 2016-2017, p. 34).

Further analysis revealed that Enterprise Data Warehouse (EDW) and Foreign Exchange Monitoring

Dashboard (FEMD) are some of the milestones of ISMD. It has developed “Pre-Inspection Assessment Report (PIAR)”, an excel-based risk calculator of a bank branch, which is mandatory to use for on-site inspection teams before starting their inspection. In addition, Bank Branch Risk Index, PIAR for Head Office, and Foreign Exchange Inspection are under process of development in this department. Moreover, this department prepares a report titled “Report for Banks’ Observer” based on ISS

data which is provided to the “Observer” if appointed to any problem bank. This department also conducts some risk-based inspections on selective branches of banks and their head offices.

The trajectory of the design of meta-regulatory framework using ERM under the risk-based regulation over the years in the banking sector of Bangladesh is summarised in Figure 2:

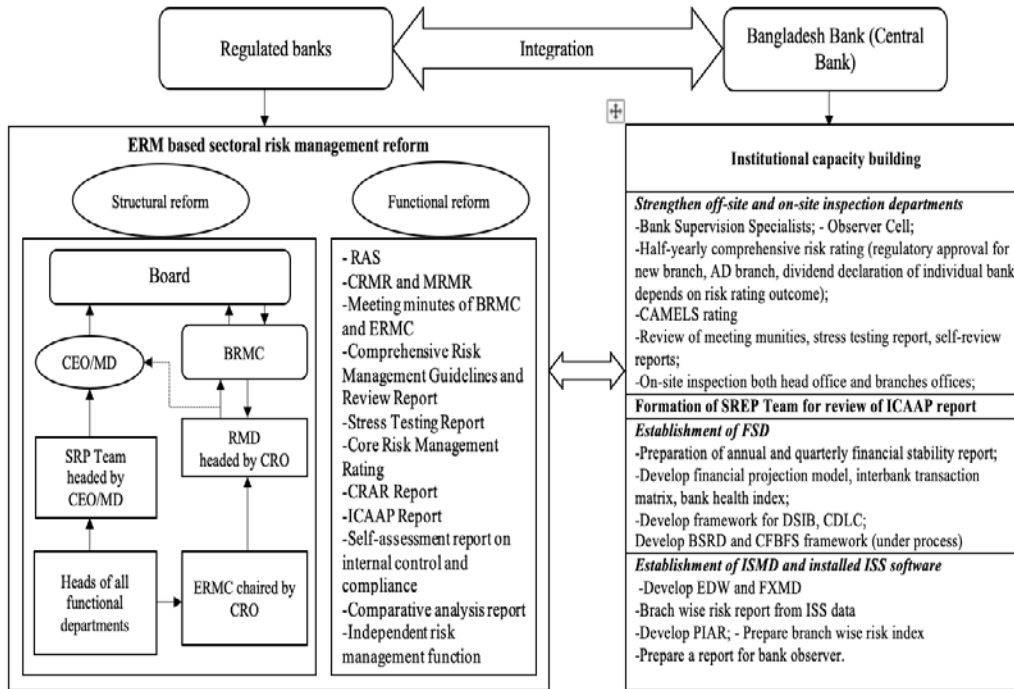


Figure 2: Trajectory of Meta-Regulation under Risk-based Regulatory Strategy using ERM

On the other hand, examining the annual report of the ten regulated banks provided evidence of implementation of ERM based self-regulation at the firm level. All the banks under scrutiny were provided risk management reports in the annual report along with disclosures regarding compliance with the BB’s risk management guideline and circulars, risk governance, risk management framework, risk management committee at board level and management level with photographs, the number of the meeting of the risk committees, establishment of a dedicated department for risk management, role and responsibilities of the risk management department, organogram of the RMD and CRO, preparation and submission of risk appetite statement, comprehensive and monthly risk management reports, stress testing report, ICAAP report and many more. Non-compliance with regulation might attract physical inspection, punishment, and sanction, including non-approval for dividend payment, opening a new branch, and getting an authorized dealership for foreign transactions.

a) Design of Meta-Regulation using ERM under the Risk-based Regulatory Strategy

Risk-based regulation is now a widely promoted strategy across policy domains and still under the pavilion of “new governance” as a flexible regulation and an alternative to the “command and control” based regulation. While much attention has been paid to the normative rationales for risk-based approaches, less attention has been paid to how this new governance technique was designed using meta-regulation, particularly in the financial industry. The meta-regulatory approach has received much acceptance from the regulators and becomes a key regulatory technique of risk-based approaches (9). Prior literature focusing on the roles of rationality and morality in meta-regulation. Consequently, it becomes problematic to generate an acceptable framework of meta-regulation. Thus, the process-oriented meta-regulation is advocating for moving beyond theory into practice (4, 45) This article provides an account how the process oriented meta-regulation implemented in practice using a regulatory innovation to achieve the risk-based regulatory aims in financial industry.

Meta-regulation can take a variety forms. Sometimes it is referred to as “enforced self-regulation,” wherein firms devise their own detailed rules in light of regulatory goals (46). However, it is found that ERM has entered in the regulatory regime. The use of ERM as enforced self-regulation indicative to the use of the meta-regulatory approach under the risk-based regulatory strategy. Therefore, an archetype of meta-regulation based on ERM has evolved in financial regulation to achieve the risk-based regulatory aims.

Drawing on the conceptual framework depicted in Figure 2.1, it can be stated that ERM based enforced self-regulation induced the regulated banks to develop both system-based and performance-based architecture of the self-regulation.

The structural reform under ERM compels banks to develop the system-based or management-based architecture of self-regulation. More focus is given to the board of governance and top management of banks. In one end of the architecture, the board of directors is put in place and made them responsible for oversight of bank-wide risks with the help of a sub-committee of the board (i.e. BRMC) and the RMD. Likewise, a risk committee at the executive level (i.e. ERMC) is formed at the other end of the architecture comprises of the heads of all functional departments. The RMD, as an independent department, is placed between the governance and the operations (i.e. BRMC and ERMC) with the CRO as the Head of the department through a defined communication hierarchy. In addition, a supervisory review process team is formed with the MD/CEO as the Head to monitor the risk-based internal capital adequacy and hold a dialogue with the central bank's team. Thus, the system-based or management-based architecture for regulation become effective in banks following the ERM based structural reform.

Similarly, the functional reform under ERM helps to operationalize the performance-based or outcome-based regulation. The banks use a range of risk management reports such as RAS, CRMR, MRMR, ICAAP, Stress Testing Report and many more, including the meeting minutes of the risk committees as operational control tools to integrate the bank-wide risks from the bottom to the top. The RAS acts as a strategic paper of a bank, whereas the CRMR considers as a blueprint. Bank-wide risks are articulated in CRMR for a holistic focus on a half-yearly basis. This report accelerates all material risks from the operation to the board along with the course of actions. The board becomes aware of bank-wide risks and can take necessary measures to address those risks. Besides, the meeting minutes of the risk committees are required to prepare on time. Thus, the formal responsibility to prepare the risk reports, including meeting minutes of the risk committees and the board's oversight role,

brings a bank into performance-based or outcome-based self-regulation. Thus, the performance-based /outcome-based regulation becomes effective in banks after the functional reform.

However, in parallel to sectoral risk management reform, the central bank enrolls the ERM based regulation of the regulated banks into the regulatory process as a part of a meta-regulatory approach. The approach regulator used based on ERM characterised as enforced meta-regulation under the risk-based approach. In this strategy, the regulator discharges the regulatory duties through administrating the self-regulation of the regulated banks. The enhanced institutional capacity and advanced tools and techniques help the central bank to achieve the risk-based regulatory aims relying on substantially on such ERM based enforced self-regulation of the banks.

It reflects that the central bank exercises its regulatory power in administrating the self-regulation of the banks. It develops a “comprehensive risk rating” system on a half-yearly basis for each bank based on the bank's risk reports and documents submitted to it and align certain regulatory approvals with this “risk rating” result like approval for new branch opening, authorized dealership, dividend declaration. Besides, it carries out a CAMELS rating to identify the problem bank where the “comprehensive risk rating” carries 15 per cent weight in the “Management” component of the CAMELS rating. It also carries out the physical inspection of the bank's ERM architecture and its operation based on the CAMELS rating report. Further, it forms a supervision specialist unit to carry out the “diagnostic review report” and “quick review report” as an early signal provider, including an “observer cell” for appointment of observers in banks' board if required. In addition, an SREP Team is formed to conduct the one-to-one review with the bank's SRP Team to evaluate the ICAAP report and determine if any additional capital requires based on the BASEL-III framework.

Moreover, the central bank establishes some other departments equipped with advanced tools and techniques to supervise the industry under risk-based regulation. A software is launched for integrated supervision as a part of comprehensive and risk-based supervisory initiatives that integrate all the regulated banks' head offices and branch offices. Thus, the enrolment of self-regulation of the regulated banks into the central bank's regulatory process and the institutional capacity building assures the use of ERM as a meta-regulatory toolkit in achieving the risk-based regulatory aims. The entrenchment of ERM among regulated firms through enforcement, the emergence of ERM based self-regulation, enrolment of the self-regulation into the regulatory process and subsequently administer the self-regulation by the regulator with enhanced capacity warrant the use of ERM as a meta-

regulatory toolkit to design the risk-based regulatory framework and achieve the regulatory goals. The design

meta-regulatory approach using ERM under risk-based regulation is drawn in Figure 3.

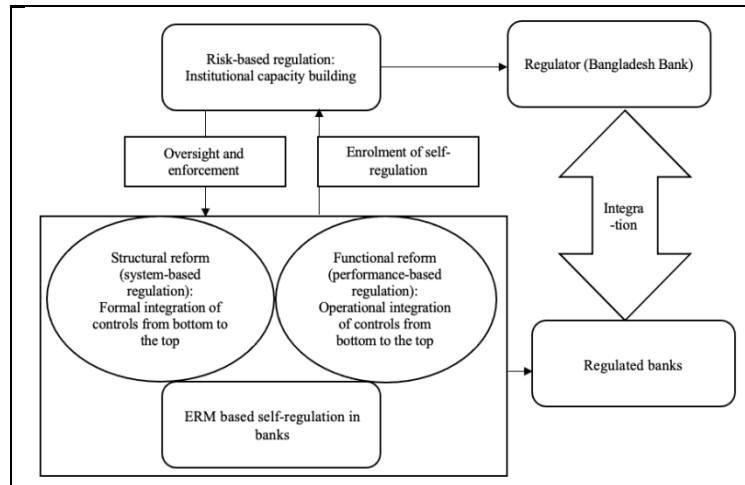


Figure 3: Design of Meta-Regulatory Approach using ERM under Risk-based Regulation

Thus, the evidence reflects that the financial regulation is moved away from compliance-based regulation to risk-based regulation incorporating the meta-regulation. The development of the enforced meta-regulation based on ERM gives a risk-based approach to regulating the firms with a flavour of system /management-based and performance/outcome-based approaches. With this mechanism, regulators expect that regulated firms will identify risks and devise internal control systems and continuously evaluate the efficacy of such self-regulation and incrementally improve them in light of the evaluation. Therefore, it can be argued that ERM strongly ties with meta-regulation and risk-based regulation.

IV. CONCLUSION

The shift towards risk-based regulation and meta-regulation has attracted a great deal of interest, while this move is undoubtedly a complex and multifactorial phenomenon. However, the effectiveness of process-oriented regulation in the domain of flexible regulation is subject to debate. The enforcement of self-regulatory models is also always a matter of debate (1). The global financial crisis 2007–2009 also uncovered the key limitations of flexible regulations and the regulatory capacity (26). Further, meta-regulation is not perfect and unproblematic. Despite this, the relevance of risk-based regulation and meta regulation is growing to the regulators across the globe in diverse areas. The meta-regulatory approach is an upright choice to the regulators in designing risk-based regulation (9), although it is not a naturally grown regulation. The empirical literature is limited to explore how meta-regulation can be designed using an emerging regulatory innovation and risk-based regulation to

achieve the regulatory aims. This article contributes to this research gap.

This article draws a connection between risk-based regulation and meta-regulation. It reveals a “regulatory mix” combining these two flexible regulations into one manifesto using a contemporary regulatory innovation to promote regulatory governance in financial regulation. It is stated in the regulation scholarship that a right regulatory mix is a promising regulatory tool (12). Besides, a hybrid nature of regulation is potentially valuable(4). Therefore, the study's context provides empirical evidence to draw the design of a “regulatory mix” to achieve the regulatory goals in financial regulation.

This study reflects that ERM has emerged as a robust regulatory innovation with the feature of self-regulation in designing the meta-regulatory approach to achieve the risk-based regulatory goals. The sectoral risk management reform based on ERM philosophy enforces the regulated firms to implement self-regulation's structural and operational architecture. Under the meta-regulatory approach, this ERM based self-regulation is enrolled in the regulatory process. With the enhanced institutional capacity and advanced tools and techniques, the regulator administers the regulated firms' self-regulation and attains risk-based regulatory goals intensely relying on such self-regulation. Thus, a new dynamic has evolved in ERM philosophy that enforce to bring out the inside of the regulated firms and act as a meta-regulatory toolkit in the risk-based regulatory framework.

This paper makes three contributions in major. First, this paper contributes to regulation scholarship, in particular to the “flexible regulation” and “new governance” landscape, including ERM literature by

demonstrating the design of a “regulatory mix” in financial regulation. Therefore, this paper extends the regulation literature (i.e. 3,4,6,7,10,15,19,47) exhibiting a “new governance” in financial regulation. Besides, this paper advocates a new dimension of ERM as a “regulatory innovation” for a self-control device within firms in addition to the existing dimensions such as a strategic decision-making tool(36), a management control innovation (50), elements of improved corporate governance (51,52), including a tool for quality financial reporting (53) and the external audit efficacy (54).

Second, this paper has some practical implications. It demonstrates empirically how a system and performance-based self-regulation is designed within regulated firms based on ERM philosophy that ensures formal and operational integration of firm-wide control from the bottom to the top. It also presents how such self-regulation is used as a meta-regulatory strategy by enrolling into the regulatory process and how the regulator administers the self-regulation through enhanced capacity and advanced regulatory tools and techniques in succeeding the risk-based regulatory goals. Therefore, the empirical evidence of this study has practical value to the regulators of other industries such as aviation, exploration, insurance and many more. Besides, the evidence might have a practical value to the financial regulators and international donor agencies such as WB, the IMF, because the adoption of risk-based regulations is one of their policy recommendations to the regulators, particularly in the emerging economy.

Finally, this paper has opened the avenue of further research to assess the effectiveness of the “regulatory mix” based on ERM as a self-regulatory approach is always a matter of debate (1). Excessive dependency on the self-regulation of regulated firms without assessing its efficacy may arise the risk of regulatory failure. Besides, there is a likelihood to adopt ERM as a symbol under regulatory enforcement to display to the outsiders rather than doing the actual practice of the approach to comply with the regulation (55). We need to gain a better understanding regarding the efficacy of the meta-regulatory approach based on ERM under the risk-based regulatory framework as regulators intensely rely on such self-regulation to identify and prioritise the risks for supervision. Moreover, it could be explored how regulators determine the risk appetite under meta-regulation as it is one of the elements of risk-based regulation to succeed.

However, like other research studies, this research is not free from limitation. This study entirely relied on secondary information to postulate the design choice of meta-regulation under the risk-based regulatory strategy. Findings would be enriched if some interviews could be taken from the central bank's top officials and risk managers of the regulated banks.

Besides, data was collected through qualitative content analysis of the narratives provided in the annual reports of the central bank, circulars and guidelines, which was highly subjective.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Ford C. Principles-Based Securities Regulation in the Wake of the Global Financial Crisis. *McGill Law J.* 2010; 55 (2): 257–307.
2. Coglianesi C, Lazer D. Management-Based Regulation: Prescribing Private Management to Achieve Public Goals. *Law Soc Rev.* 2003; 37: 691–730.
3. Coglianesi C, Mendelson E. Meta-Regulation and Self-Regulation. In: Martin Cave, Robert Baldwin, & Martin Lodge, Editors, *The Oxford Handbook on Regulation.* Oxford University Press; 2010.
4. Gilad S. It runs in the family: Meta-regulation and its siblings. *Regul Gov.* 2010; 4 (4): 485–506.
5. Ford CL. New governance, compliance, and principles-based securities regulation. *Am Bus Law J.* 2008; 45 (1): 1–60.
6. Ford C. New governance in the teeth of human frailty: Lessons from financial regulation. *Wis L Rev.* 2009; 57 (3): 441–87.
7. Black J. Paradoxes and Failures: 'New Governance' Techniques and the Financial Crisis. *Mod Law Rev.* 2012; 75 (July): 1037–63.
8. May PJ. Regulatory regimes and accountability. *Regul Gov.* 2007; 1 (1): 8–26.
9. Black J. The Emergence of Risk Based Regulation and the New Public Risk Management in the UK. *Public Law.* 2005; 32 (March): 1–42.
10. Ford C. Flexible Regulation Scholarship Blossoms and Diversifies: 1980- 2012. In: *Innovation and the State: Finance, Regulation, and Justice.* New York: Cambridge University Press,; 2017.
11. Akinbami F. Is meta-regulation all it's cracked up to be? the case of UK financial regulation. *J Bank Regul.* 2013; 14 (1): 16–32.
12. Ojo M. The growing importance of risk in financial regulation. *J Risk Financ.* 2010; 11 (3): 249–67.
13. Beaussier AL, Demeritt D, Griffiths A, Rothstein H. Accounting for failure: risk-based regulation and the problems of ensuring healthcare quality in the NHS. *Heal Risk Soc.* 2016; 18 (3–4): 205–24.
14. Black J, Baldwin R. Really responsive risk-based regulation. *Law Policy.* 2010; 32 (2): 181–213.
15. Rothstein H, Irving P, Walden T, Yearsley R. The risks of risk-based regulation: Insights from the environmental policy domain. *Environ Int.* 2006; 32 (8): 1056–65.
16. Black J. Risk-Based Regulation: Choices, Practices and Lessons Being Learned. In: *in Risk and Regulatory Policy: Improving the Governance of Risk,* OECD Publishing, Paris, Paris: OECD, 2010.

17. Rothstein H, Borraz O, Huber M. Risk and the limits of governance: Exploring varied patterns of risk-based governance across Europe. *Regul Gov.* 2013; 7 (2): 215–35.
18. Baldwin R, Black J. Driving priorities in risk-based regulation: What's the problem? *J Law Soc.* 2016; 43 (4): 565–95.
19. Paul R, Huber M. Risk-based Regulation in Continental Europe? Explaining the Corporatist Turn to Risk in German Work Safety Policies. *Eur Policy Anal.* 2015; 1 (2).
20. Coglianese C. Regulatory Abdication in Practice. *Fac Scholarsh Penn Law* 2144. 2020.
21. Coglianese C, Nash J. Motivating without Mandates? The Role of Voluntary Programs in Environmental Governance. In: *Decision Making in Environmental Law*, edited by Lee Paddock, Robert L Glicksman, and Nicholas S Bryner, 237-52 Cheltenham, UK: Edward Elgar Publishing. 2006.
22. Parker C. *The Open Corporation: Effective Self-regulation and Democracy.* Cambridge: Cambridge University Press; 2002.
23. Gray J, Hamilton J. *Implementing Financial Regulation: Theory and Practice.* Wiley Finance Series. 2006.
24. Simon FC. Meta-regulation in practice: Beyond normative views of morality and rationality. *Meta-Regulation in Practice: Beyond Normative Views of Morality and Rationality.* Routledge. 2017. 1–240.
25. Lahneman B. Meta regulation in practice: Beyond normative views of morality and rationality” by FC Simon (Routledge, 2017). *J Manag Gov.* 2018; 22 (1): 213–8.
26. Ford C, Condon M. Introduction to “New governance and the business organization” special issue of law and policy. *Law Policy.* 2011; 33 (4): 449–58.
27. Hutter BM. Understanding the New Regulatory Governance: Business Perspectives. *Law Policy.* 2011; 33 (4): 459–476.
28. Hayne C, Free C. Hybridized professional groups and institutional work: COSO and the rise of enterprise risk management. *Accounting, Organ Soc.* 2014; 39 (5): 309–30.
29. Bromiley P, McShane M, Nair A, Rustambekov E. Enterprise Risk Management: Review, Critique, and Research Directions. *Long Range Plann.* 2015; 48 (4): 265–76.
30. Nocco BW, Stulz R. Enterprise Risk Management: Theory and Practice. *J Appl Corp Financ.* 2006; 18 (4): 8–20.
31. Liebenberg AP, Hoyt RE. The Determinants of Enterprise Risk Management: Evidence From the Appointment of Chief Risk Officers. *Risk Manag Insur Rev.* 2003; 6 (1): 37–52.
32. COSO - Committee of Sponsoring Organizations of the Treadway Commission. *Enterprise Risk Management — Integrated.* New York [Internet]. 2004; 3 (September). Available from: http://www.coso.org/documents/COSO_ERM_ExecutiveSummary.pdf
33. Soin K, Collier P. Risk and risk management in management accounting and control. *Manag Account Res.* 2013; 24 (2): 82–7.
34. Choi Y, Ye X, Zhao L, Luo AC. Optimizing enterprise risk management: a literature review and critical analysis of the work of Wu and Olson. *Ann Oper Res.* 2016; 237 (1–2): 281–300.
35. Hoyt RE, Liebenberg AP. The Value of Enterprise Risk Management. *J Risk Insur.* 2011; 78 (4): 795–822.
36. Viscelli TR, Hermanson DR, Beasley MS. The integration of ERM and strategy: Implications for corporate governance. *Account Horizons.* 2017; 31 (2): 69–82.
37. Arena M, Arnaboldi M, Azzone G. Is enterprise risk management real? *J Risk Res.* 2011; 14 (7): 779–97.
38. Florio C, Leoni G. Enterprise risk management and firm performance: The Italian case. *Br Account Rev.* 2017; 49 (1): 56–74.
39. Lundqvist SA. Why firms implement risk governance - Stepping beyond traditional risk management to enterprise risk management. *J Account Public Policy.* 2015; 34 (5): 441–66.
40. Khan MJ, Hussain D, Mehmood W. Why do firms adopt enterprise risk management (ERM)? Empirical evidence from France. *Manag Decis.* 2016; 54 (8): 1886–907.
41. Yin R. *Case study research: Design and methods.* 2nd Editio. Beverly Hills, CA: Sage Publishing.; 1994.
42. Bryman A, Bell E. *Business research methods.* New York: Oxford University Press Inc; 2007.
43. Samkin G, Schneider A, Tappin D. Developing a reporting and evaluation framework for biodiversity. *Accounting, Audit Account J.* 2014; 27 (3): 527–562.
44. World Bank. *Financial Sector Assessment: Bangladesh [Internet].* Washington, DC; 2010. Available from: <https://openknowledge.worldbank.org/handle/10986/15917>
45. Listokin-Smith S. Meta-regulation of OTC derivatives contracts post reform. *J Financ Regul Compliance.* 2013; 21 (2): 188–200.
46. Ayres I, Braithwaite J. *Responsive Regulation: Transcending the Regulatory Debate.* New York: Oxford Univ. Press; 1992.
47. Ford C. Financial Innovation and Flexible Regulation: Destabilizing the Regulatory State. *18 NC Bank Inst Spec Ed.* 2013; 18 (1): 27–38.

48. Black J, Baldwin R. When risk-based regulation aims low: Approaches and challenges. *Regul Gov.* 2012; 6 (1): 2–22.
49. Black PJ. Risk Based Regulation Main elements of a risk based framework Scope and aim of research Draw out lessons for policy makers. 2008; 1–4.
50. Jabbour M, Abdel-Kader M. Changes in capital allocation practices - ERM and organisational change. *Account Forum.* 2015; 39 (4): 295–311.
51. Beasley MS, Clune R, Hermanson DR. Enterprise risk management: An empirical analysis of factors associated with the extent of implementation. *J Account Public Policy.* 2005; 24 (6): 521–31.
52. Baxter R, Bedard JC, Hoitash R, Yezegel A. Enterprise risk management program quality: Determinants, value relevance, and the financial crisis. *Contemp Account Res.* 2013; 30 (4): 1264–95.
53. Cohen J, Krishnamoorthy G, Wright A. Enterprise Risk Management and the Financial Reporting Process: The Experiences of Audit Committee Members, CFOs, and External Auditors. *Contemp Account Res.* 2017; 34 (2): 1178–209.
54. Bailey C, Collins DL, Abbott LJ. The impact of enterprise risk management on the audit process: Evidence from audit fees and audit delay. *Audit A J Pract Theory.* 2018; 37 (3): 25–46.
55. Beasley M, Branson B, Pagach D. An analysis of the maturity and strategic impact of investments in ERM. *J Account Public Policy.* 2015; 34 (3): 219–43.

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Research Gaps in HR Applications of AI in Recruitment

By Swati Choubey

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Abstract- With advancements in technology now diffuse in all dimensions of business and social life, artificial intelligence (AI) has found its place in human resource management (HRM), assisting in the recommendation and selection of suitable candidates for specific jobs. In this regard, AI is used to improve the productivity of HR personnel and mitigate bias in candidate selection. This research discusses the background and applications of AI in HRM, its current benefits and limitations, and suggests potential future pathways in this domain.

Keywords: *artificial intelligence, human resource management, recruitment, selection.*

GJMBR-A Classification: *DDC Code: 650.1 LCC Code: TA168*



Strictly as per the compliance and regulations of:



Research Gaps in HR Applications of AI in Recruitment

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I. INTRODUCTION

In the globalized business environment, businesses continuously update their technology and working paradigms. AI has brought revolutionary developments to many fields; its effects are evident in banking systems, IT systems, research, manufacturing, and logistics. In addition, AI is also slowly permeating the domain of HRM, a space where human judgment is considered paramount for candidate selection.

AI can be used to access and rapidly filter an abundance of digital resumes, job positions on job-posting sites, and professional networks (such as LinkedIn profiles, etc.) and assemble a narrow selection

of the best candidates for any of an organizations' specific roles/functions. Many big companies have started using AI for recruitment, including L'Oréal (cosmetics), Adecco (staffing), Hays (recruitment), and Deloitte (a multinational professional services network). According to a recent study by the Sage Group, 24% of talent has been hired with the help of AI (Case, 2021). These examples highlight that AI is in the initial stages of application by human resource (HR) departments and it seems likely that it will become a vital part of the recruitment and selection process in the coming years.

AI recruitment applications are appealing to organizations and have seen considerable development in recent years due to the key benefits they offer. AI-based tools automate repetitive tasks, crunch external data, and present recruiters with a simplified view. This allows them to skip the manual work required to process the raw data and make final hiring decisions with more deliberation, leading to increased quality in the hiring process (Source: Talent Lyft, 2022). AI-based tools also check recruiter decision-making bias, reducing the number of biased decisions made by recruiters. Finally, AI-based tools integrate the hiring process with recruitment data analytics.

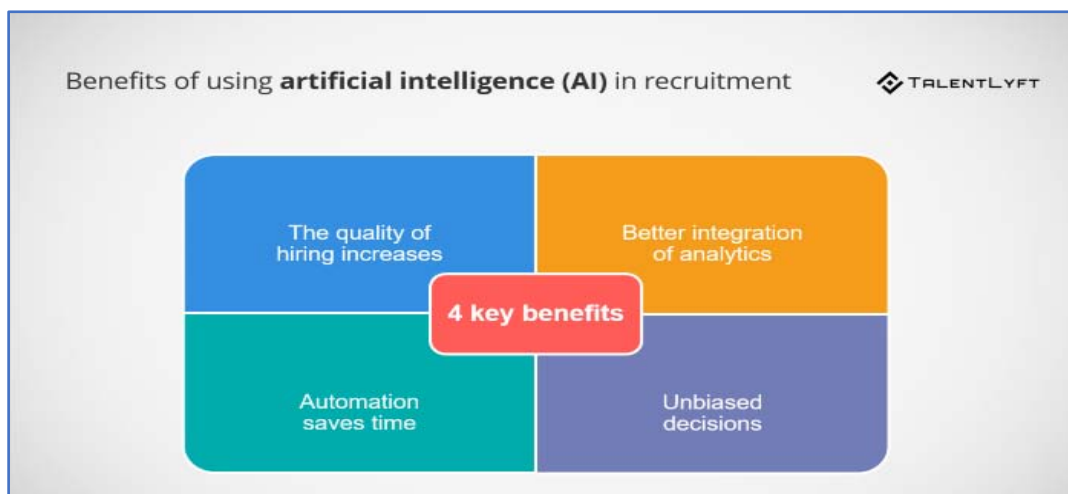


Figure 1: Benefits of AI as Described by Talentlyft, an AI Application for HRM (Source: Talentlyft, 2022)

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II. LITERATURE REVIEW

Existing literature demonstrates that AI-enabled recruitment (AIER) greatly impacts the business world. Figure 2 (below) gives a map of this literature, which highlights the following key points. Firstly, AIER creates complex AI-human dynamics with positive/negative impacts such as job replacement or career enhancements. Secondly, AIER has been examined in case studies in both Finnish and Scandinavian recruitment processes. As of 2021, AI-accelerated tools such as Skillate and HireVue assist with HR recruitment. Thirdly, AIER provides organizations with recruitment data analytics for continuous analysis and improvement using tools like ANOVA and machine learning. Finally, in some cases, AIER leads to e-selection (i.e., electronic selection) and allows organizations to close geographical gaps in the recruitment of employees as well as increase hiring efficiency by reducing bias.

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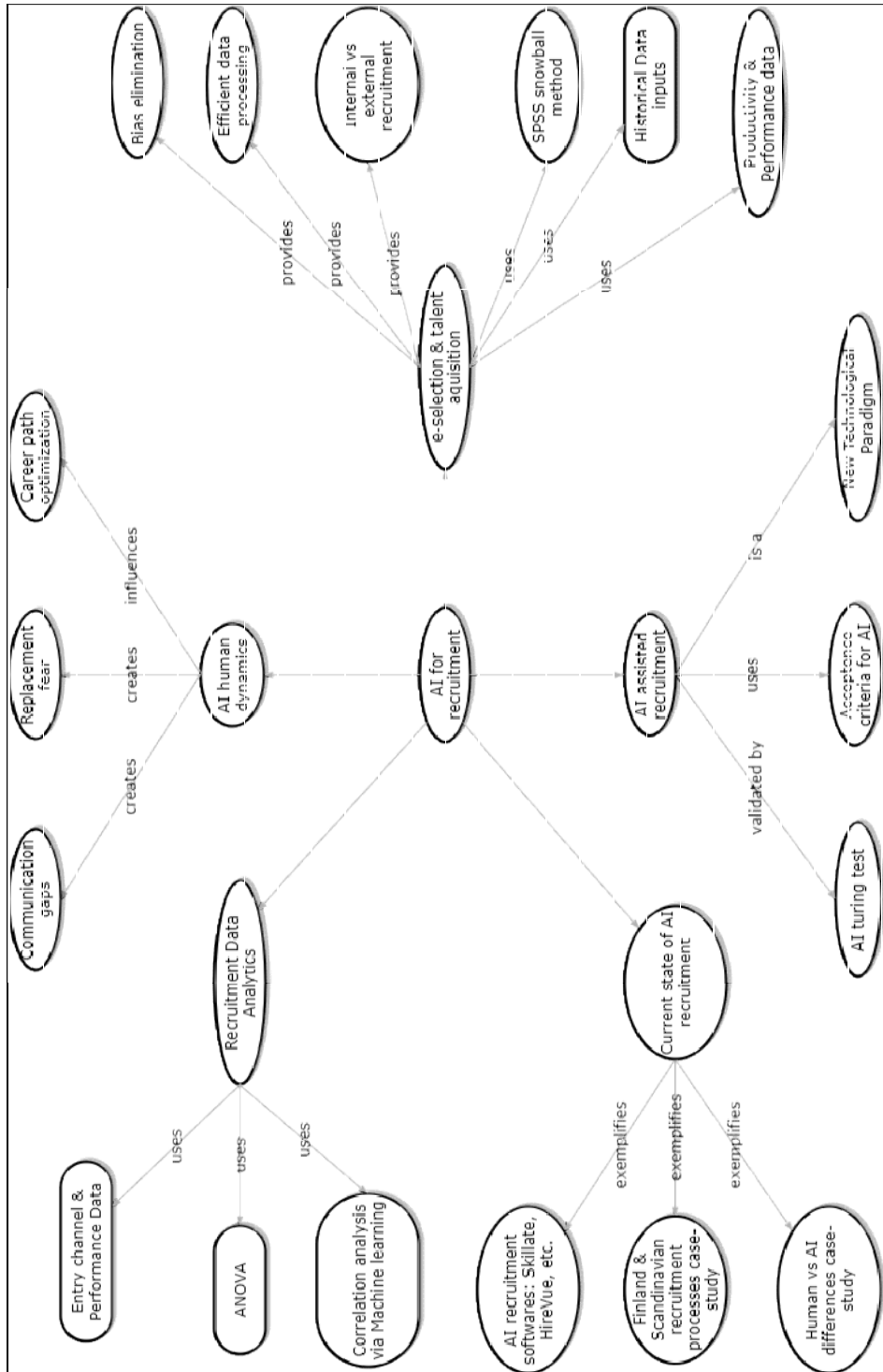


Figure 2: Literature Review Map (Source: Author)

A survey of the existing literature identifies the gaps that exist in the application of AI in HR recruitment systems. Liu et al. (2021) observe that every business must attract and recruit strong talent to develop their organization in today's competitive world. These authors investigated HR teams that consolidated performance scores and corresponding recruitment entry channels (campus, online, internal transfers, and referrals). The performance scores included three dimensions of an employee's performance: subjective awareness, job satisfaction, and job self-dedication. This data was then processed through AI regression analysis to determine the correlation coefficient's T-value and how predictable the entry channel was as an indicator of performance. Dijkkamp (2019) used an exploratory research method with a case study to investigate the organization AI recruiting, which supported the study by allowing access to company documents, presentations, communications, conversational interviews, and policy documents (Dijkkamp, 2019). The author collected different perspectives from the company's HR professionals, including asking them about AI replacing their jobs. Through the case study, Dijkkamp was able to map changes to the HR teams once AI was integrated into their workflow. Geetha and BanthuSree Reddy (2018) examined how AI influenced recruitment strategy and evaluated AI's value in an organization. Their study utilized a literature review, which found that HR professionals' view of AI replacing their jobs was not a concern. Rather, study findings suggest that AI eases HR's mundane activities and allows more time for effective work. Johansson and Herranen (2019) used a combination of conversational interviews with company employees of various designations and literature reviews to explore the application of AI in HRM and its impact on the traditional recruitment process. Firstly, these authors found that AI in HRM is very new and involves high one-time integration and HR training costs. Secondly, AI can cater to about half of the recruitment process, but the rest requires human-specific capabilities that are beyond current AI. Finally, AI integration in HRM gives companies access to a larger candidate pool, speeds up parts of the recruitment process, and handles the more mundane HR tasks. Bhalgat (2019) used a wide-scale literature survey that included topics such as information technology (IT) in recruitment, recruitment strategy and planning, and AI in recruitment and its risks. Bhalgat concluded that the use of AI-based applications in recruitment is an emerging field that is growing rapidly with technological innovations and data expansion. In particular, the growth of AI helps HRM optimize the recruitment process by eliminating repetitive tasks (like sourcing and screening) that otherwise fall to HR staff. In their study of an AI recruitment integration application, Son et al. (2019) note that AI-based interview tools improve communication between the applicant and the recruiter;

the authors scale this experience to the interviews of thousands of applicants. The paper observes that AI has the potential to evaluate employee experiences, train employees in various job skills, and make decisions necessary for business management. Klucin (2020) states that only large companies try AI in recruitment, pointing out that using AI for recruitment is a new process still caught up in ongoing research, and there are feasibility concerns making it work with recruitment in actual practice. Nawaz (2020) studied facial recognition AI applications and their impact on recruitment, and found that the AI applications could accurately judge an applicant's body language during job interviews. Johnson et al. (2021t) argue that e-recruitment with AI helps talent acquisition in the tourism and hospitality industry. Arslan et al. (2021) observe that AI challenges for HRM users create closer connections between leaders and their departments. These authors described the close collaboration between AI-based tools and human workers in Industry 4.0, noting that the AIs' interaction data accumulated over time. Leadership AI-based tools then used this accumulated data to recommend the best advice (regarding decision-making) for their team to reduce their challenges and improve their workflow. Wan Ibrahim and Hassan (2019) also examined the implications of AI in HRM in Industry 4.0 (where 16% of the workforce is retiring and more jobs are being automated). These authors evaluated the pros and cons of AI in HRM. Kekkonen (2020) applied AI to HRM analyses of highly skilled specialists and senior managers, finding that recruitment specialists followed an abductive approach*. The author analyzed the recruitment and selection process theory (or practice) by interviewing recruitment specialists. Vedapradha et al. (2019) reviewed the adaptability of AI and how this impacts the performance of employees. Lahti (2020) observes that the rapid growth of technology always creates new business opportunities, which applies to AI recruitment. Hovland (2021) notes that the advent of AI innovated internal HRM processes and contributed to unbiased and fair recruitment and selection processes. This paper exemplifies the affordance-actualization theory in HRM. Mujtaba (2020) and Veluchamy et al. (2021) both state that using AI in recruitment creates inherent bias leading to career issues. The paper discusses using tools to reduce bias and add fairness in order to create optimal career pathways for workers, which they state is necessary given the radical changes in AI integration. Rezzani (2021) suggests there are problems with user acceptance of AI in an industrial IT environment. The paper explains bias, ethical concerns, and the human/AI mix in decision-making (Rezzani, 2021). Abou Hamdan (2019) addresses the application of AI for screening resumes to improve HRM efficiency and reduce errors and bias. Cavaliere et al. (2021) studied the recent increase of e-recruitment over traditional recruitment and its associated reasons, such

as COVID-19 restrictions, faster paperwork, availability of technology, and reliable internet reachability.

III. GAPS IN RESEARCH

Current literature appraises the impact of AI in HRM and related issues of job replacement to some extent, however, studies typically take a broad approach to these topics and do not engage with specifics. For example, no studies have so far surveyed the difficulty of using AI software tools and the impact of this on the sourcing, screening, and selection stages of the recruitment process. The literature also does not yet detail what specific aspects of each recruitment phase (e.g., sourcing, interviewing, decision-making) are covered by AI-based software. It further does not yet offer projected job loss statistics connected to using AI-based software for different job functions, nor does it cover job replacement risk, given that AI performs a job function which can directly cause professionals to retrain.

Some studies have investigated issues of bias in recruitment due to AI-based software, both in regard to pre-existing bias in the data that trains the AI, and bias added by a human during data labeling. Others examine ethical issues related to bias, such as sex, race, ethnicity, or religion, being included in recruitment decision making via the data given to the AI. However, the literature does not dig deep into various sources of bias to ascertain the root cause, and ignores related issues such as limited AI training data and short-term decision-making history. The literature also does not suggest any options for improving the AI-based software and reducing or removing the bias. It further does not cover the ethical impact on decisions made through AI inputs that typically ignore human-specific aspects. In summarizing these omissions, three concerning issues surface that require further investigation: (a) AI-based software's lack of transparency in AI learning and decision-making can magnify biases, impacting the talent pool; (b) AI can break the non-discrimination policy (based on sex, race, ethnicity, or religion) as it pulls this data from sourcing channels (such as LinkedIn, monster.com, etc.); and (c) compared to face-to-face human interviews, AI hiring decisions inherently ignore candidates' other abilities that may not be reflected in sourced data (such as resumes), potentially leading to inappropriate hiring decisions and/or under-performing talent.

In this regard, while literature offers some case studies of AI-based software being used in interviews, it does not cover job-function-specific AI-based interviews

and does not investigate the efficacy of AI-based software in comparison with human interviews. The literature also does not survey the impacts of AI applications on both HR and non-HR teams in an organization. This is a vital element of understanding these impacts, since job functions are significantly different, as are their related implications.

IV. RESEARCH QUESTION AND RESEARCH PROBLEM

The literature reviewed for this paper suggests that AI-based tools and AIER bring efficiency and innovation to HRM, thus improving recruitment processes. AIER can be a game-changer, for (a) HR professionals, as it allows them to invest time in more valuable business goals; (b) organizations, as it scales recruiting up rapidly with lower bias; and (c) even job candidates, as it leads to predictable expectations between the applicant and the recruiter. Despite its benefits, however, certain key limitations can create risk for organizations in utilizing AIER. In addition, as a bleeding-edge technology, the use of AIER requires both specialized training and the adaptation of organizational processes, which means time and staff resources must be routed to this end. These limitations pose a costly investment for organizations, and evidence suggests that this has slowed AIER adoption in HRM. Given this complex situation, this paper poses the research question, *Is there value in using artificial intelligence in the recruitment and selection process?*

V. RESEARCH METHODOLOGY

The literature review has described the essential theoretical elements and secondary data regarding the use of AI in HRM. Literature was obtained from various sources, including: google search; google scholar; researchgate.net; iopscience.iop.org; various journal titles in business and management, system sciences, and tourism; emerald.com; scirp.org; the *Journal of Critical Reviews*; and sciencedirect.com. Study of the literature provided insights into the various relevant research areas and assisted in identifying the research gaps, some of which may be addressed by the research proposed by this paper.

The next phase of the research methodology will use surveys to gather data from HR teams in various companies with the intention of discovering the different uses of AI tools in HR recruitment functions. Survey data will be the primary data source, and additional secondary data will be garnered from existing research. To begin with, a sample size of HR employees will be established across various companies. Next, to conduct the survey, a questionnaire will be sent to the identified HR employee sample (see Appendix for the proposed

* The abductive approach is an analytic induction approach for generating innovative ideas using inductive and deductive reasoning.

questionnaire). Online tools such as Survey Monkey and Google Forms will be used for the survey process. Data will then be analyzed through statistical methods. Based on this analysis and data visualization, inferences will be drawn about the usefulness and limitations of AI in the various recruitment phases.

VI. ANALYSIS AND CONCLUSIONS

Using AI-based software in the recruitment and selection process can enhance the value of HRM job functions in an organization. With the help of AI, HR teams can work more efficiently and effectively as they spend less time on repetitive tasks, such as resume review, shortlisting, data processing, etc. Instead, HR teams are able to focus on more essential job functions, such as recruitment planning, compensation management, and employee performance management, etc. (Rojewska, 2022).

In certain cases, AI-enabled recruitment has demonstrated a high-level of performance in comparison to the traditional recruitment process, nearly making the HR recruiter's job function redundant. However, it is essential to note that AI does not have the level of judgment and sensibility that is abundant in humans. Given this difference, it could be suggested that any organization considering AI for HR may need to separate areas of the HRM job function that require more complex judgment and sensibility from the objective parts to ensure that AI can contribute to recruitment effectively.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Abou Hamdan, L. F. (2019). *The role of artificial intelligence in the recruitment and selection processes: A systematic review* [Unpublished thesis]. The American University of Beirut. <https://scholarworks.aub.edu.lb/bitstream/handle/10938/21594/pj-1970.pdf?sequence=1>
2. Arslan, A., Cooper, C., Khan, Z., Golgeci, I., & Ali, I. (2021). Artificial intelligence and human workers interaction at the team level: A conceptual assessment of the challenges and potential HRM strategies. *International Journal of Manpower*, 43(1), 75–88. <https://doi.org/10.1108/IJM-01-2021-0052>
3. Bhalgat, K. H. (2019). *An exploration of how artificial intelligence is impacting the recruitment and selection process* [Unpublished master's thesis]. Dublin Business School. <https://esource.dbs.ie/handle/10788/3956>
4. Case, T. (2021, February 15). *Covid "forced us to be creative": How AI is being used to recruit and onboard talent*. Digiday. <https://digiday.com/marketing/ai-is-being-used-to-recruit-and-onboard-talent/>
5. Cavaliere, L. P. L., Nath, K., Wisetsri, W., Villalba, K. O., Arias-Chavez, D., Setiawan, R., Koti, K., & Regin, R. (2021). The impact of e-recruitment and artificial intelligence (AI) tools on HR effectiveness: The Case of High Schools. *Productivity Management*, 26(1), 322–343. <http://repository.petra.ac.id/19044/>
6. Dijkkamp, J. (2019). *The recruiter of the future, a qualitative study in AI-supported recruitment process* [Unpublished master's thesis]. University of Twente. <https://purl.utwente.nl/essays/80003>
7. Geetha, R., & Banthu Sree Reddy, D. (2018). Recruitment through artificial intelligence: A conceptual study. *International Journal of Mechanical Engineering and Technology*, 9 (7), 63–70. https://iaeme.com/MasterAdmin/Journal_uploads/IJMET/VOLUME_9_ISSUE_7/IJMET_09_07_007.pdf
8. Hovland, I. V. (2021). *Artificial intelligence for innovating recruitment and selection processes: Evidence from Scandinavian companies* [Unpublished master's thesis]. Norwegian University of Science and Technology. <https://ntnuopen.ntnu.no/ntnu-xmlui/bitstream/handle/11250/2777951/no.ntnu%3Ainspera%3A70212282%3A43531770.pdf?sequence=1&isAllowed=y>
9. Johansson, J., & Herranen, S. (2019). *The application of artificial intelligence (AI) in human resource management: The current state of AI and its impact on the traditional recruitment process* [Unpublished bachelor thesis]. Jönköping University. <https://www.diva-portal.org/smash/get/diva2:1322478/FULLTEXT01.pdf>
10. Johnson, R. D., Stone, D. L., & Lukaszewski, K. M. (2021). The benefits of eHRM and AI for talent acquisition. *Journal of Tourism Futures*, 7(1), 40–52. <https://doi.org/10.1108/JTF-02-2020-0013>
11. Kekkonen, E.-P. (2020). Value and use of AI in external recruitment of highly skilled specialists and senior management roles [Bachelor's thesis, Turku University of Applied Science]. *These us*. <https://urn.fi/URN:NBN:fi:amk-2020102221536>
12. Klucin, F. (2020). *The use of artificial intelligence in the recruitment process* [Unpublished bachelor's thesis]. Aalto University. <https://aaltodoc.aalto.fi/handle/123456789/103040>
13. Lahti, W. (2020). *Potential of AI assisted recruitment in technology businesses* [Unpublished bachelor's thesis]. JAMK University of Applied Sciences. <https://www.theseus.fi/bitstream/handle/10024/343483/LahtiWilliam.pdf;jsessionid=8AF878EB40FB36CECF5B7F6C173A5CD0?sequence=2>
14. Liu, J., Chang, S.-H., Xu, Y.-C., Wu, G.-A., & Chang, S.-F. (2021). Using AI to enhance recruitment effect.

Journal of Physics: Conference Series, 1827(1), Article 012150. <https://doi.org/10.1088/1742-6596/1827/1/012150>

15. Mujtaba, D. F. (2020). *Fairness in AI-based recruitment and career pathway optimization* [Unpublished master's thesis]. Michigan State University. <https://d.lib.msu.edu/etd/48478/datastream/OBJ/view>
16. Nawaz, N. (2020). Artificial intelligence applications for face recognition in the recruitment process. *Journal of Management Information and Decision Sciences*, 23(S1), 507–517. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3883916
17. Rezzani, A. (2021, July 11–13). *Recruitment and selection HR process through artificial intelligence: An analysis of the aspects of acceptance, validity, and interaction with the human decision-maker* [Paper]. Joint Proceedings of Interactive Experiences and Doctoral Consortium, Bolzano, Italy. <https://ceur-ws.org/Vol-2892/paper-8.pdf>
18. Rojewska, K. (2022, October 11). *5 key reasons you should use AI-based solutions in your HR department*. D-Labs. <https://dlabs.ai/blog/5-key-reasons-why-you-should-use-ai-based-solutions-in-your-hr-department/>
19. Son, M., Lee, H., & Chang, H. (2019). Artificial intelligence-based business communication: Application for recruitment and selection. *Business Communication Research and Practice*, 2(2), 84–92. <https://doi.org/10.22682/bcrp.2019.2.2.84>
20. TalentLyft. (2022). *Simple and affordable software for SMBs*. <https://www.talentlyft.com/en>
21. Vedapradha, R., Hariharan, R., & Shivakami, R. (2019). Artificial intelligence: A technological prototype in recruitment. *Journal of Service Science and Management*, 12 (3), 382–390. <https://doi.org/10.4236/jssm.2019.123026>
22. Veluchamy, D. R., Chattaraj, S., & Gupta, S. K. (2021). Artificial intelligence within recruitment: Eliminating biases in human resource management. *Journal of Critical Reviews*, 8 (3). <http://www.jcreview.com/admin/Uploads/Files/61c5b5f3504913.36848659.pdf>
23. Wan Ibrahim, W. M. R., & Hassan, R. (2019). Recruitment trends in the era of industry 4.0 using artificial intelligence: Pros and Cons. *Asian Journal of Research in Business and Management*, 1 (1). <https://myjms.mohe.gov.my/index.php/ajrbm/article/view/6604>

APPENDIX: RESEARCH QUESTIONNAIRE

The following questionnaire consists of qualitative and quantitative questions as part of the

research data collection to extract information on all aspects of AI in HRM functions.

Quantitative Questions

1. Do you work in a private recruitment agency or in an HR role in an organization?
2. Does your organization have an in-house recruitment team, or do you outsource it?
3. In which sector does your organization operate?
4. Does the company build products, provide services (or both) as the main part of its business?
5. Do you use in-house software or the vendor-provided software for HRM?
6. Is the hiring process software in your organization AI-based?
7. What stages of the hiring process are covered by AI-based software?
8. What AI-based software applications are available in the recruitment market? Why and who chose that software?
9. Does AI-based software interest you in hiring now or in the future?
10. How many days a week do you spend sourcing, screening, and selecting candidates?
11. How much time (please provide in hours or days) has been saved using AI-based software for sourcing, screening, and selecting over the last week?
12. What cost savings can AI-based recruitment bring to the company?
13. What was the revenue per employee (this is public information for a public company) before using AI, and what is it after using AI?
14. What is the percentage of AI-based hires versus human judgment-based hires?
15. Indicate what percentage of HRM functions are getting easier with AI-based tools.
16. Indicate how many HRM function jobs will be lost due to AI-based software.
17. Indicate how beneficial (extremely, moderate, not at all) AI-based software is for recruitment and selection.
18. Indicate how risky (extremely, moderate, not at all) it is to use AI-based software for recruitment and selection.
19. Indicate the level of trust (very, somewhat, not at all) of HR teams using AI-based software for recruitment.
20. Indicate the readiness (fully ready, not fully ready, not at all ready) of the current state of AI technology for recruitment.
21. Indicate the challenges (huge, moderate, small, none) to be solved in AI-based software for recruitment.

22. Indicate the increase in efficiency (huge, moderate, small, none) provided by using AI-based software applications for HRM functions.

Qualitative questions

1. Why are the job search websites (like monster.com) relied upon for recruitment?
2. How does AI-based software help in finding the best talent?
3. Is AI-based software the future of hiring? If yes, why?
4. Is investing in AI-based recruitment profitable for an organization? If yes, why?
5. How can AI save time in the screening process of recruitment?
6. How can AI help bring cost savings to the company?
7. Under which conditions will AI-based recruitment replace the conventional recruitment process?
8. How can AI and HR professionals work together when AI handles recruitment?
9. Does the use of AI-based software lead to effective recruitment? If yes, why?
10. Is your organization resistant to switching to AI-based recruitment? If yes, why?
11. Why would AI-based software applications increase and easier to integrate in the future?
12. Which areas of HR would AI decisions be better than human judgment?
13. Why does AI-based recruitment replace existing HRM jobs?
14. Is AI-based software hard to use without prior training? If yes, why?
15. Are there concerns about using AI-based recruitment from the HR side? If yes, why?
16. Are there concerns about using AI-based recruitment from the applicant's side? If yes, why?
17. Are applicants informed that recruitment is done or based on AI decisions?
18. Is AI-based software capable of handling functions that require more personal engagement? If yes, why?
19. Why do you think AI-based recruitment software not understand applicants' motivation, mindset, or future behavior?
20. Why is AI-based software inefficient when the number of applicants is small or applied in a very specialized job function?
21. Under which conditions would human judgment overrule or supersede AI decisions?
22. Under which conditions would AI decision overrule or supersede human judgment?

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Management's Attitude Towards Employee Working in the Retail Shop in Bangladesh

By Md. Mayeen Uddin

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Keywords: management, attitude, employee, retail shop.

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Strictly as per the compliance and regulations of:



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Abstract- This study aimed at identifying Management's attitude towards employees working in retail shops in Bangladesh by exploring some factors that specify attitude. The Study used descriptive statistics design. This study was based on a field survey which was conducted in different areas of Chattogram, Bangladesh. Cluster Random sampling technique was used to pick up the sample. The questionnaire was presented to 160 respondents in person, all of them responded; hence analyzed and presented in frequency distribution tables with their corresponding percentages and some statistics analysis. Other data were sourced from published academic journals, articles, and other relevant materials on the internet. The results indicate that Management in Retail Shop seems to have mildly negative attitude towards their employees. The Study summed up that Management should have more focus on employees' financial and Non financial benefits as those indicate the attitude of them towards employees in retail shops in Bangladesh.

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I. INTRODUCTION

Management's attitude is the way of Business Growth. Management's Attitude has a profound impact on the way they lead people. Their attitude has a direct impact on how they communicate and collaborate with others, how they contribute to the culture of their work environment, and how they lead a firm/business. A Manager/Department Head/Proprietor with a good attitude breeds motivation within his/her department and/or organization. The attitude of leaders plays a role in developing the behavior, beliefs and attitude of employees. Motivation brings increased production, work satisfaction, work and personal appreciation, personal commitment and personal respect. The motivation of wanting to do a good job comes from within the employee. Motivation has direct relation with the employee performance. Management directs the business. In Retail Shops, Employees represent the Brand as they directly handle the Final consumers/customers. Their attitudes towards consumers/customers reflect on the profit/success of the Business. Consumers/Customers are the Sources of Profit or Growths of Business. Their ultimate satisfactions are essential in the Retail Business. In retail Shops, Consumers/Customers buy the attitudes of related staffs or employees. Employees' in retail shops proactive attitudes towards Consumers/Customers

depends on the Management's Attitude. As Management's Attitude breeds Motivation, ultimately it affects Motivational Factors of Employee. It affects the way employees' sell and the way they serve customers. It can be also displayed towards individual job duties, products or services, coworkers or management, or the organization as a whole in the workplace. Attitudes are thought to have three components: an affective component (feelings), a behavioral component (the effect of the attitude on behavior), and a cognitive component (belief and knowledge). Management has the feelings for their employees could be defined as affective component of Attitude. Behavioral component describes how Management behaves with employees in aspects of benefits and relation. A cognitive component describes Management's belief and Knowledge regarding employees. Based on Management's belief and Knowledge employees are treated. As the most of the retail shops' management directly interacts with the employees, Employees can experience their attitudes directly. It could be positive experience or Negative experience. Beside Human Relations between management and employees are important. The Human relations reflect on working environment. Working environment leads to satisfaction and motivation; and increases productivity of employees. Some employees prefer financial benefits to non financial benefits. It varies employee to employee as they experienced different things from different ambiances in different time in their life. We collected some information regarding some financial and non financial motivational factors that specify Management's attitude towards employees from those employees working in different retail shops in Bangladesh. We wanted to know whether Management's attitude is Positive or Negative towards employees. Positive attitude satisfies employees that affects their responses. And Negative attitude dissatisfies employees that affects their responses also. Actually, Management attitude can be come to know by the responses of employees regarding their job working in Retail Shops.

II. LITERATURE REVIEW

There appears to be a very few literature related to Management's attitude towards employees working in retail shops in Bangladesh. The following section describes Management, attitudes and Employee Salary and Benefits.

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a) *Management*

The management definition is a single or group of individuals who challenges and oversees a person or collective group of people in efforts to accomplish desired goals and objectives. Furthermore, the definition of management includes the ability to plan, organize, monitor and direct individuals. The management definition is also a person or collective group who possess the executive abilities to lead a group through hardships, aspiring to meet an organization's purpose and visions. According to Mc Farland, "Management is defined for conceptual, theoretical and analytical purposes as that process by which managers create, direct, maintain and operate purposive organization through systematic, coordinated co-operative human effort". As Henry Fayol defines, "To manage is to forecast and plan, to organize, to compound, to co-ordinate and to control". Harold Koontz says, "Management is the art of getting things done through and within formally organized group". Mary Parker Follett defines management as the "art of getting things done through people".

George R. Terry defines management as a process "consisting of planning, organizing, actuating and con-trolling, performed to determine and accomplish the objectives by the use of people and other resources".

The management are responsible for setting and achieving the firm's goals with and through other people. There are several management functions and roles that are needed in the management function of planning for an organization's success. Management function examples include the following:

- Accounting
- Business Administration
- Finance
- Human Resource
- Consulting
- Information Technology
- Marketing
- Sales
- Retails
- Operations Management

There have been a number of studies on what management actually do, the most famous of which conducted by Professor Henry Mintzberg in the early 1970s (Mintzberg, 1973). Mintzberg identified ten roles, which he divided into three groups: interpersonal, informational, and decisional. The informational roles link all managerial work together. The interpersonal roles ensure that information is provided. The decisional roles make significant use of the information (Carpenter, Bauer, Erdogan, 2012).

1. *Interpersonal Roles are the Following*

- Figurehead – Management have social, ceremonial and legal responsibilities. They are a source of

inspiration. People look up to them as a person with authority, and as a figurehead.

- Leader – Management provides leadership for the team, organization, and manages the performance and responsibilities of everyone in the group.
- Liaison – Management communicate with internal and external contacts.

2. *Informational Roles are*

- Monitor – Management regularly seek out information related to the organization and industry, looking for relevant changes in the environment. They also monitor the team, in terms of both their productivity and their well-being.
- Disseminator – Management communicate potentially useful information to the colleagues and the team.
- Spokesperson – Management represent and speak for their organization. They are responsible for transmitting information about their organization and its goals to the people outside it.

3. *Decisional Roles are*

- Entrepreneur – Management creates and controls change within the organization. This means solving problems, generating new ideas and implementing them.
- Disturbance Handler – When an organization or team hits an unexpected roadblock, it is the manager who must take charge.
- Resource Allocator – Management need to determine where organizational resources are best applied. This involves allocating funding, as well as assigning staff and other organizational resources.
- Negotiator – Management take part in, and direct important negotiations within the team, department, or organization (Mintzberg's Management Roles).

Performing these roles is the basis of a management's job. The effectiveness of management depends on managements' skills. We have summed up the most important skills for management:

- Leadership skills;
- Influencing, delegating abilities;
- Communication skills;
- Critical thinking skills;
- Collaboration and negotiation skills;
- Project management skills;
- Human resources management skills;
- Time management skills;
- Forecasting skills.

b) *Attitude*

"Attitude is everything" is a common quote. Anastasi defined attitude as "A tendency to react favorably or unfavorably towards a designated class of stimuli, such as a national or racial group, a custom or an institution." Thurstone said, "An attitude denotes the

total of man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats, and other any specific topic." Attitude can and will make a difference in our personal lives and work environment; The attitude that we display towards our superiors, peers and subordinates generally decides their attitude towards us (By JAMES L. MAZUREK; July 1989).

Attitudes can form in different ways (Baron & Byrne, 1991; Eagly & Chaiken, 1993; Fazio & Petty, 2008; Luthans, 2008). Firstly, attitudes can form through situations where people's behaviour is not consistent with their attitudes towards the object (Baron & Byrne, 1991; Luthans, 2008). A negative attitude towards the object can form to balance this inconsistency towards the object (Eagly & Chaiken, 1993; Fazio & Petty, 2008).

Secondly, attitudes can form through the expectancy-value framework, a theory that assumes that the attitude towards the object is based on the sum of the values of all of the attributes that the attitude object is thought to have, which is based on the mental formation of attitudes (Ajzen, 2001; Eagly and Chaiken (1993) explain that this framework is a useful and popular model to explain how a collection of beliefs about objects forms attitudes. The expectancy-value framework attitude formation theory was adopted for this study.

c) *Employee Salary and Benefits*

Salary is a fixed amount of money or compensation paid to an employee by an employer in return for work performed. Salary is commonly paid in fixed intervals, for example, monthly payments of one-twelfth of the annual salary. According to Cockman, "Employee benefits are those benefits which are supplied by an employer to or for the benefits of an employee, and which are not in the form of wages, salaries and time rated payments."

The four major types of employee benefits

- Medical insurance
- Life insurance
- Retirement plans
- Disability insurance

In its 2019 Employee Happiness Index, HR tech company distinguishes 4 categories of employee benefits:

- Benefits at Work
- Benefits for Health
- Benefits for Financial Security
- Lifestyle Benefits

❖ *Benefits at Work*

This includes working hours & leave, skills development, food & beverage, and employee clubs, activities & gifts.

Working Hours & Leave

Think of flextime here for instance. Flextime gives your employees the possibility to decide about their working hours and/or the location they want to work from. Other examples include additional holidays and, one of the other benefits employees value most, paid parental leave.

Skills Development

Rapid technological developments and the fact that people change jobs more often make skills development more important too. Skills development, however, is not just an important benefit for (younger) employees, it's also essential for organizations if they want to remain competitive.

Food & Beverage

We already mentioned the meal vouchers in France. Other benefits that fall into this category include free lunches, fruit, and coffee. At AIHR, we get to enjoy a free lunch every day and it's something that's very much appreciated by the team. As an added bonus, free lunch and fruit are also a good way to promote healthy eating habits at work.

Employee Clubs, Activities & Gifts

There are heaps of possibilities when it comes to this category of the employee benefits package: knitting clubs, running groups, (video) game nights, Secret Santas, anniversary gifts, you name it.

❖ *Benefits for Health*

Health and Wellness

More and more companies have employee wellness programs. The possibilities are endless and examples of employee wellness programs vary from a simple gym membership to full suite solutions that include physical, mental and financial wellness. A focus on total employee wellbeing will be one of the key HR trends for 2023, and organizations with the HR departments in the lead will be looking for ways to improve the different aspects of their employees' wellbeing.

Healthcare

Healthcare benefits also come in different shapes and sizes. Think of physiotherapy and chiropractic sessions, for instance, but sometimes fertility treatments and psychological support can also be included.

Benefits for Financial Security

The number one thing here is pension plans. Other benefits for financial security are insurances, financial benefits for employees, and personal finance benefits.

Pension plans

Interestingly, according to the research study, pension plans are considered as a very important benefit by every generation, but they're not among the top ten most appreciated benefits.

Insurances

As we mentioned above, in some countries health insurance is something that comes with the simple fact of being an employee. Other types of insurance benefits for employees cover parental leave or injury.

Financial Benefits

Think of commissions, bonuses and the possibility for employees to buy shares of the company they work for.

Personal Finance Benefits

The Benify report too shows that stress about personal finances has grown bigger over the past year. Yet another reason for employers to seriously start thinking of benefits such as advice about loans and savings. In other words: employee financial wellness.

❖ *Lifestyle Benefits*

Lifestyle benefits consist of work-life balance and mobility.

Work-Life Balance

As employees increasingly attach importance to their work-life balance, it's no surprise that benefits in this area become more popular too. Examples are childcare, grocery delivery, and legal services.

Mobility

Mobility benefits can make your employees' life a lot easier. Because even if they can work from home or elsewhere, they'll still have to come into the office – or workplace – regularly. This category covers things like public transport and cars but also bicycles and carpooling.

b) *Participants*

We conducted a survey in different areas of Chattogram (Known as Port City), Bangladesh. The goal of this survey was to know the attitudes of Management toward employees working in the Retail Shop. Some employees were willing to response and some were willful not to response in front of management and behind them. They think it is not essential to response our survey questionnaires as this is not beneficial for them. But We did not lose our hope. We met some employees of retail shops who shared their responses of we survey questionnaires. In this survey 160 Employees participated who were from Different Retail Shops.

c) *Procedure*

Eleven Questions were asked to employees working in the Retail Shops as following: "I am happy working Here, I get a Handsome Salary, The working Environment is Good, The Boss is Generous, I enjoy good number of holidays, I get reward while doing good performance, I get punishment while doing bad performance, The pressure is high, I got target list, Fear of getting fired, Rational Working Hours". They were free to give opinion of their own. They could choose one option from strongly agree, agree, not certain, disagree or strongly disagree. We analyzed the responses based on every question. How many employees were strongly agree, agree, not certain, disagree or strongly disagree on Question was our aim to know in this survey.

d) *Ethics*

We obtained opinion from every participant in person. So, the opinions were participants' individual opinions. We hid the identity of every participant so that they could not affected by any harassment for participating in our survey.

III. METHODS

a) *Survey Design*

A Likert scale assumes that the strength/intensity of an attitude is linear, i.e. on a continuum from strongly agree to strongly disagree, and makes the assumption that attitudes can be measured. Likert Scales have the advantage that they do not expect a simple yes / no answer from the respondent, but rather allow for degrees of opinion, and even no opinion at all. We used Likert scale for getting participants' opinions regarding management attitudes that everyday employees experience.

IV. ANALYSIS AND DISCUSSION

The data analyzed and findings discussed herein, is based on the respondents' responses to the 11 questions structured according to the Likert 5-point rating scale, with: SD = representing strongly disagree, D= for disagree, U = for uncertain/neutral, A = for agree, and SA = for strongly agree; rated on a scale of 1-5 respectively. Each of 160 Participants answered to each question. And we showed some statistical data, Rounding down to 2, with: X = Mean, σ = Standard Deviation, s^2 = Variance and SE= Standard Error.

Table 1: Q 1- I am Happy Working here

Q-1	SA	A	U	D	SD	X	σ	s^2	SE
I am Happy Working here	4(2.50)	60 (37.50)	37 (23.13)	46 (28.75)	13 (8.12)	2.98	1.05	1.09	0.08

Table 1 above showed that the rate of responses was 100%. 4 participants were strongly agreed, 60 participants were agreed, 37 participants were uncertain or chose to be neutral, 46 participants

were disagreed and 13 participants were strongly disagreed with the question. The percentage rate is 2.50%, 37.50%, 23.13%, 28.75% and 8.12% respectively. The Mean, Standard Deviation, Variance

and Standard Error are \bar{X} 2.98, σ 1.05, s^2 1.09 and SE 0.08. The Table revealed that participants are not more working in their present job place.

Table 2: Q 2- I Get a Handsome Salary

Q 2	SA	A	U	D	SD	X	σ	s^2	SE
I Get a Handsome Salary	2(1.25)	53 (33.12)	73(45.63)	24(15)	8 (5)	3.11	0.85	0.72	0.07

The above Table presented that 2 participants were strongly agreed, 53 participants were agreed, 73 participants were uncertain or chose to be neutral, 24 participants were disagreed and 8 participants were strongly disagreed with the question. The percentage rate is 1.25%, 33.12%, 45.63%, 15% and 5%

respectively. The Mean, Standard Deviation, Variance and Standard Error are \bar{X} 3.11, σ 0.85, s^2 0.72 and SE 0.07. Above data show that participants are neutral in their decision to opine whether they get handsome salary or not.

Table 3: Q 3- The Working Environment is Good

Q 3	SA	A	U	D	SD	X	σ	s^2	SE
The working Environment is Good	4(2.50)	49 (30.63)	57 (35.63)	46 (28.75)	4(2.50)	3.01	0.89	0.80	0.07

The above Table revealed that 4 participants were strongly agreed, 49 participants were agreed, 57 participants were uncertain or chose to be neutral, 46 participants were disagreed and 4 participants were strongly disagreed with the question. The percentage

rate is 2.50%, 30.63%, 35.63%, 28.75% and 2.50% respectively. The Mean, Standard Deviation, Variance and Standard Error are \bar{X} 3.01, σ 0.89, s^2 0.80 and SE 0.07. Participants are neutral also in their decision to opine whether the working environment is good or not.

Table 4: Q 4- The Boss is Generous.

Q-4	SA	A	U	D	SD	X	σ	s^2	SE
The Boss is Generous	0(0)	42 (26.25)	58 (36.25)	59(36.88)	1 (0.62)	2.88	0.81	0.65	0.06

The above Table specified that none of participants was strongly agreed, 42 participants were agreed, 58 participants were uncertain or chose to be neutral, 59 participants were disagreed and 1 participant were strongly disagreed with the question. The

percentage rate is 0%, 26.25%, 36.25%, 36.88% and 0.62% respectively. The Mean, Standard Deviation, Variance and Standard Error are \bar{X} 2.88, σ 0.81, s^2 0.65 and SE 0.06. Participants are almost disagreed regarding the generosity of their Boss.

Table 5: Q 5- I Enjoy Good Number of Holidays

Q-5	SA	A	U	D	SD	X	σ	s^2	SE
I Enjoy Good Number of Holidays	1(0.63)	36 (22.50)	54 (33.75)	64(40)	5 (3.12)	2.77	0.85	0.72	0.07

The above Table specified 1 participant was strongly agreed, 36 participants were agreed, 54 participants were uncertain or chose to be neutral, 64 participants were disagreed and 5 participants were strongly disagreed.

The percentage rate is 0.63%, 22.50%, 33.75%, 40% and 3.12% respectively. The Mean, Standard Deviation, Variance and Standard Error are \bar{X} 2.77, σ 0.85, s^2 0.72 and SE 0.07. Participants could not be able to enjoy good number of holidays. They get few.

Table 6: Q 6- I Get Reward while doing Good Performance

Q-6	SA	A	U	D	SD	X	σ	s^2	SE
I Get Reward while doing Good Performance	0(0)	38 (23.75)	60 (37.50)	56 (35)	6 (3.75)	2.82	0.84	0.71	0.07

The above Table stated none of participants were strongly agreed, 38 participants was agreed, 60 participants were uncertain or chose to be neutral, 56 participants were disagreed and 6 participants were strongly disagreed. The percentage rate is 0%, 23.75%,

37.50%, 35% and 3.75% respectively. The Mean, Standard Deviation, Variance and Standard Error are \bar{X} 2.82, σ 0.84, s^2 0.71 and SE 0.07. Participants do not get enough reward (financially or non-financially) while doing good performance.

Table 7: Q 7- I Get Punishment while doing Bad Performance

Q-7	SA	A	U	D	SD	X	σ	s^2	SE
I Get Punishment while doing Bad Performance	1(0.63)	24(15)	75 (46.88)	47 (29.37)	13 (8.12)	2.70	0.84	0.71	0.07

The above Table stated 1 participant was strongly agreed, 24 participants were agreed, 75 participants were uncertain or chose to be neutral, 47 participants were disagreed and 13 participants were strongly disagreed. The percentage rate is 0.63%, 15%,

46.88%, 29.37% and 8.12% respectively. The Mean, Standard Deviation, Variance and Standard Error are X 2.70, σ 0.84, s^2 0.71 and SE 0.07. Participants do little experience of punishment while doing bad performance.

Table 8: Q 8- The Pressure is High

Q-8	SA	A	U	D	SD	X	σ	s^2	SE
The Pressure is High	11(6.88)	40 (25)	59(36.88)	46 (28.75)	4 (2.50)	3.06	0.96	0.91	0.08

The above Table revealed 11 participants were strongly agreed, 40 participants were agreed, 59 participants were uncertain or chose to be neutral, 46 participants were disagreed and 4 participants were strongly disagreed. The percentage rate is 6.88%, 25%,

36.88%, 28.75% and 2.50% respectively. The Mean, Standard Deviation, Variance and Standard Error are X 3.06, σ 0.96, s^2 0.91 and SE 0.08. Participants remained neutral in the question of rush hour.

Table 9: Q 9- I Got Target List

Q-9	SA	A	U	D	SD	X	σ	s^2	SE
I Got Target List	1(0.63)	29 (18.12)	60 (37.50)	30(18.75)	40 (25)	2.52	1.07	1.15	0.09

The above Table showed 1 participant was strongly agreed, 29 participants were agreed, 60 participants were uncertain or chose to be neutral, 30 participants were disagreed and 40 participants were strongly disagreed. The percentage rate is 0.63%,

18.12%, 37.50%, 18.75% and 25.00% respectively. The Mean, Standard Deviation, Variance and Standard Error are X 2.52, σ 1.07, s^2 1.15 and SE 0.09. Target to sell or to serve customer is few.

Table 10: Q 10- Fear of Getting Fired

Q-10	SA	A	U	D	SD	X	σ	s^2	SE
Fear of Getting Fired	8(5)	52 (32.50)	60 (37.50)	33 (20.63)	7 (4.37)	3.14	0.94	0.89	0.07

The above Table displayed 8 participants were strongly agreed, 52 participants were agreed, 60 participants were uncertain or chose to be neutral, 33 participants were disagreed and 7 participants were strongly disagreed. The percentage rate is 5.00%,

32.50%, 37.50%, 20.63% and 4.37% respectively. The Mean, Standard Deviation, Variance and Standard Error are X 3.14, σ 0.94, s^2 0.89 and SE 0.07. Participants are neutral in question of getting fired.

Table 11: Q 11- Rational Working Hours

Q-11	SA	A	U	D	SD	X	σ	s^2	SE
Rational Working Hours	3(1.88)	42(26.25)	49(30.62)	35 (21.88)	31 (19.37)	2.69	1.11	1.24	0.09

The above Table displayed 3 participants were strongly agreed, 42 participants were agreed, 49 participants were uncertain or chose to be neutral, 35 participants were disagreed and 31 participants were strongly disagreed. The percentage rate is 1.88%, 26.25%, 30.62%, 21.88% and 19.37% respectively. The Mean, Standard Deviation, Variance and Standard Error

are X 2.69, σ 1.11, s^2 1.24 and SE 0.09. Participants think they do not get Rational Working Hours.

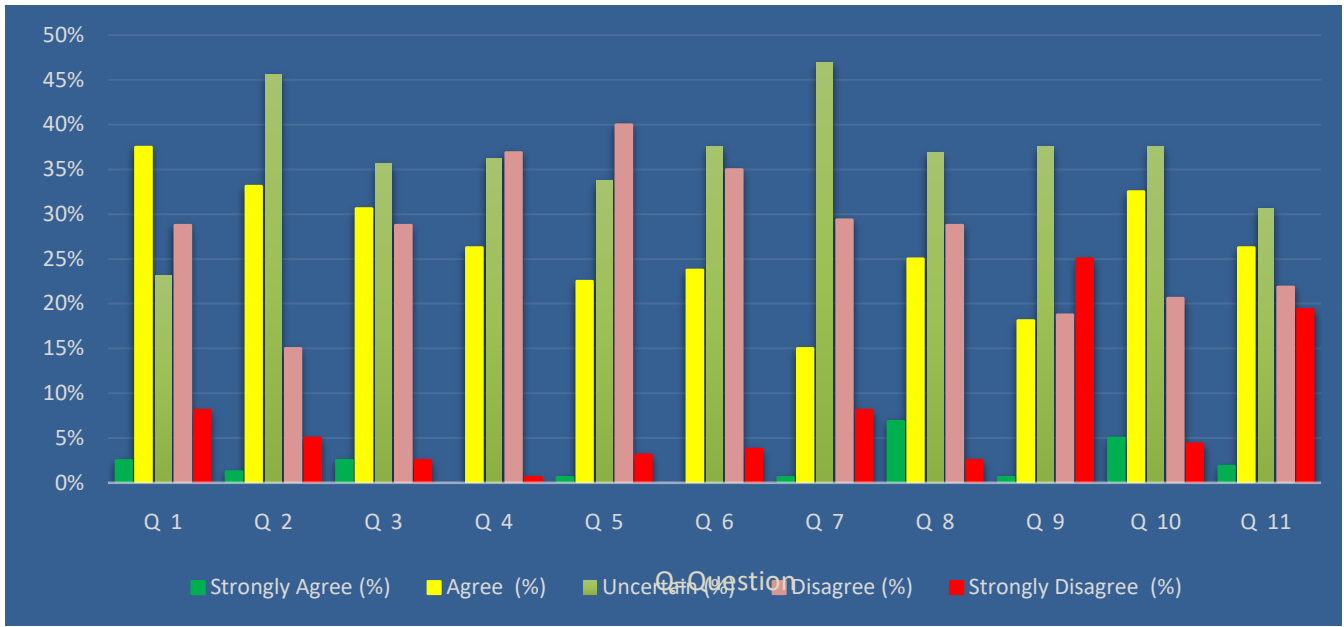


Fig.1: Responses Percentage of Participants

The above figure-1 shows that Responses Percentage of Participants in terms of opinion for every question.

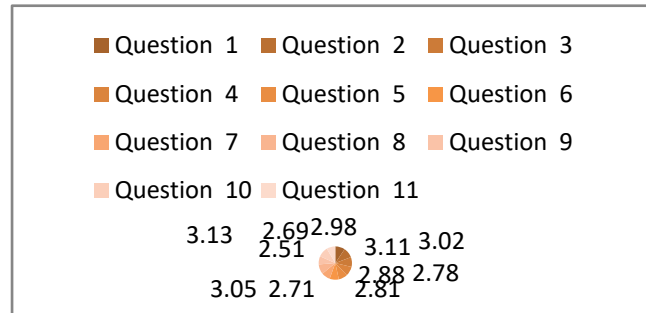


Fig. 2: Mean of Respondents' Scores

The above figure-2 shows Mean of Respondents' Scores in terms of opinion for every question.

Rounding down to 2, the sentiment score of our survey in term of mean of all questions responded by participants is \bar{X} 2.88, the deviation of Mean of all questions is σ 0.20, Skewness is Y_1 -0.43, Variance s_2

$= 0.04$, Range is R 0.62, Coefficient of Variation is CV 0.07, Mean Absolute Deviation is MAD 0.16, Relative Standard Deviation is RSD 6.87%, Interquartile Range is IQR 0.34, Mid Range is MR 2.82 and Standard of Error is 0.06.

Table 12: Summary of Analysis

X	σ	Y_1	R	s_2	CV	MAD	RSD	IQR	MR	SE
2.88	0.20	-0.42	0.62	0.04	0.07	0.16	6.87%	0.34	2.82	0.06

V. CONCLUSION

We asked mentioned questions to the employees that defines Management's attitude. Questions were related to employees financial issues and Non-Financial issues that give them mental satisfaction and they can spend more time with family. Most of the participants were uncertain or neutral regarding their job security, Salary, Pressure in work

place, Target, Working Hours and Working environment. They enjoy very few holidays in a calendar year. Normally Management does not take strict actions against employees regarding doing bad performance. Employees are not happier working their work place, they accept the situation as most of them comes from needy family and they need a job for living a life. The relation between management and employees are mildly bad. The results indicate that Management in

Retail Shops seems to have mildly negative attitudes towards their employees.

VI. RECOMMENDATIONS

Management should have more focus on employees' financial and Non financial benefits. A Retail Shop is only as strong as its employees, which is why it is imperative for managements to ensure employees are happy and valued. Getting to know team can make a world of difference in creating a happy culture and a happy workplace. Maintaining happiness and Motivation at the workplace is a team effort. As the old saying goes, "Teamwork makes the dream work." Due to the lack of opinions of whole employees working in retail shops in Bangladesh, the results may vary. The current study can be interpreted as a first step in the study on Management's attitude towards employees in retail shops in Bangladesh. However, the results of this study should be treated with caution due to the small sample size and the lack of details regarding the participants' Opinions. Future research could collect further data and engage more participants for making sample size big regarding Management's attitude towards employees for more accurate results. It could also contribute to a deeper understanding of the Management Attitude.

REFERENCES RÉFÉRENCES REFERENCIAS

1. "ATTITUDE: AN IMPORTANT MANAGEMENT TOOL" By JAMES L. MAZUREK; July 1989 / Illinois Municipal Review/Page 7 <https://www.lib.niu.edu/1989/im890707.html>
2. "A study on the effects of managers' behaviors and attitudes on job satisfaction and motivation of workers in the Directorate of Sports and Youth Services through the eyes of workers" By Akin CELIK. <https://academicjournals.org/journal/ERR/article-full-text-pdf/D873CB25735>
3. <https://www.questionpro.com/blog/employee-attitude/>
4. <https://strategiccco.com/articles/management-ownership/management-definition/>
5. <https://www.simplypsychology.org/likert-scale.html>
6. Anastasi, C. (1957) Attitude of in-service and pre-service primary school teachers Journal of Education Psychology 36, 3, 1-5, July.
7. Thurstone, L. L. (1928). Attitudes Can Be Measured. In M. Fishbein (Ed.) (1967), Readings in Attitude Theory And Measurement. (pp. 77-90). NewYork: John Wiley & Sons, Inc
8. Likert, R., 1967. The human organization: its Management, management and values.
9. McGregor, D., 1960. The human side of enterprise, New York, pp: 21.
10. <https://focus3.com/the-power-of-attitude/>
11. <https://gethppy.com/workplace-happiness/4-causes-of-unhappiness-in-the-workplace-and-how-to-deal-with-them>
12. Eagly, A. H., & Chaiken, S. (1993). The psychology of attitudes. New York, NY: Harcourt Brace Jovanovich College Publishers
13. Fazio, R. H., & Petty, R. E. (2008). Attitudes: key readings. New York, NY: Psychology Press.
14. Baron, R. A., & Byrne, D.E. (1991). Social psychology: Understanding human interaction. Boston, MA: Allyn & Bacon.
15. Luthans, F. (2008). Organizational behaviour. Boston: McGraw Hill.
16. Ajzen, I. (2001). Nature and operation of attitudes. Annual Review of Psychology, 52, 27-58. doi:10.1146/annurev.psych.52.1.27
17. Gayane Tovmasyan, January 2017 Business Ethics and Leadership 1(3):20-26 DOI:10.21272/bel.1(3).20-26.2017
18. Carpenter, M., Bauer, T., Erdogan B. (2012). Principles of Management, p. 15. Retrieved from: <https://2012books.lardbucket.org/pdfs/management-principles-v1.0.pdf>.
19. Mintzberg's Management Roles, Identifying the Roles Managers Play. Retrieved from: <https://www.mindtools.com/pages/article/management-roles.htm>.
20. Cantrell, P. (2001). A study of temperament, Pennsylvania, p. 7.
21. <https://en.wikipedia.org/wiki/Salary>
22. <https://www.aihr.com/blog/types-of-employee-benefits/>



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An Assessment of the Last Mile Delivery Market in Saudi Arabia during and Post COVID-19

By Hani K. Alzahrani

Abstract- Last mile delivery (LMD) focuses on the final step in the supply chain which considered to be the most critical part of the supply chain. This research examines the LMD in Saudi Arabia during and post COVID-19. Further, the challenges and successes of the companies in Saudi Arabia were examined to provide insight into market opportunity. Data was collected by way of semi-structured interviews with professionals working in the LMD industry that were purposively selected based on their roles within their organisation that would allow them to discuss their LMD in their organisation, and the impact of the Covid-19 pandemic on their business and on LMD specifically within and outside their organisation. Interviews were conducted and these were analysed using Grounded Theory combined with thematic analysis. Further, as it relates to the LMD market specifically, there appear to be permanent changes in how people are shopping as well as an evolution of payments in Saudi Arabia.

GJMBR-A Classification: DDC Code: 658.7 LCC Code: HD38.5



ANASSESSMENT OF THE LAST MILE DELIVERY MARKET IN SAUDI ARABIA DURING AND POST COVID 19

Strictly as per the compliance and regulations of:



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Abstract- Last mile delivery (LMD) focuses on the final step in the supply chain which considered to be the most critical part of the supply chain. This research examines the LMD in Saudi Arabia during and post COVID-19. Further, the challenges and successes of the companies in Saudi Arabia were examined to provide insight into market opportunity. Data was collected by way of semi-structured interviews with professionals working in the LMD industry that were purposively selected based on their roles within their organisation that would allow them to discuss their LMD in their organisation, and the impact of the Covid-19 pandemic on their business and on LMD specifically within and outside their organisation. Interviews were conducted and these were analysed using Grounded Theory combined with thematic analysis. Further, as it relates to the LMD market specifically, there appear to be permanent changes in how people are shopping as well as an evolution of payments in Saudi Arabia.

I. INTRODUCTION

a) Background

Last mile delivery (LMD) focuses on the final step in the supply chain and that considered to be the most expensive aspect of providing home delivery (de Souza et al., 2014). This is an issue that has to be addressed by all businesses involved in delivery to consumers, and this has increased over the last two decades as online shopping has grown. The surge in online business across the world has led to increased emphasis on home delivery and the LMD problem is a key issue in this area (de Souza et al., 2014). As a result, there has been a growth in the need for LMD services globally, which is driven by the development and growth in the e-commerce sector business and the rise in the trading activities (Yadav and Mutreja, 2022). The global LMD market size was estimated in 2020 at a value of US\$ 39.6 Billion and is projected to grow at a compound annual growth rate (CAGR) of approximately 9% to reach over US\$ 66 Billion by 2026 (Sharma, 2021).

In the Kingdom of Saudi Arabia (hereafter KSA or Saudi Arabia) in particular, the LMD market gained great importance on back of e-commerce and trading sectors growth. Development of the LMD market became an integral part of the Kingdom's 2030 vision (CITC, 2019) as the Kingdom has positioned itself to become the new logistics hub for the Middle East (Vision 2030, 2022). The LMD market in Saudi Arabia was valued at US\$ 285 Million in 2020, and is projected

to reach US\$ 521 Million by 2030, registering a CAGR of 6.3% from 2021 to 2030 (Yadav and Mutreja, 2022). This research examines the issue of LMD in Saudi Arabia.

b) Research Overview and Aims

Covid-19 pandemic has led to an increase in online shopping and home deliveries, spurred on by the need for lockdowns and cessations of movements, and this has also affected business models. Thus, this research examines how companies reacted strategically during and post Covid-19 to adapt to the demand trends.

c) Research Objectives

The key objectives for this study are as follows:

1. To provide an overview of the LMD market in Saudi Arabia during and after Covid-19 and examine how this has influenced the LMD industry in Saudi Arabia; and
2. To assess the challenges that companies faced during the pandemic and might face while entering the LMD market in Saudi Arabia.

d) Research Question

This research is guided by the following question.

How have LMD companies been adapting to market trends during and after Covid-19?

e) Research Scope

The scope of the study is limited to providing an assessment of the LMD market in Saudi Arabia. The research data was collected between April 2022 and November 2022 and targeted key opinion leaders of different firms in Saudi Arabian LMD market.

f) Importance of the Study

The Saudi Arabia launched its Vision 2030 in April 2016 and one of the key pillars of the vision is transforming the Kingdom into the go-to logistics hub for the region, capable of efficiently linking trade across three continents, namely Asia, Europe, and Africa. There are potential development and expected growth in the LMD market in KSA since the government is focusing on logistics as part of its 2030 vision (Vision 2030, 2022). The LMD in KSA was valued at \$285.3 million in 2020, and is projected to reach \$520.9 million by 2030, registering a CAGR of 6.3% from 2021 to 2030. Last mile delivery aims to deliver items to customers as quickly as possible while minimizing company costs (Cabral A. R., 2021). Last mile delivery accounts for more than ~50%

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of the total shipping cost. (Yadav and Mutreja, 2022). KSA's e-commerce market grew by 60% in 2019-2020, accelerated by the pandemic, and is expected to reach US\$13.3 billion by 2025 (Cabral A. R., 2021).

Moreover, there is insufficient research examining the LMD market in KSA; for example, of over 220,000 sources found concerning LMD only 207 LMD-related sources were found that relates to Saudi Arabia. Finally, this research provides practical knowledge regarding, complexity, drivers, supporting function, risks of resources, and related issues in this market and how companies adapt different strategies to manage and meet the demand.

II. LITERATURE REVIEW

a) Last Mile Delivery (LMD)

LMD can be defined as "a series of activities and processes that are necessary for the delivery process from the last transit point to the final drop point of the delivery chain" (Kum et al., 2018). Various stakeholders are involved in LMD from the demand side where the customers either individual or companies purchase the goods to the supply side where the goods

are delivered by courier, express and parcel companies (Bandeira et al., 2019). Also, the governments, which sets the regulations for LMD companies where they operate (Bandeira et al., 2019).

As shown in Figure 1, the LMD phase of getting the product to the right person or organisation is considered to be the most complex part of the logistics activities as it requires transportation management of vehicles/motors to the destination delivery points of the end customers/consumers. The prior phases are done at the main warehouses and at different shipping points such as dark stores and micro-fulfilment centres. Therefore, LMD should be well managed and optimised through coordinated activities with all entities involved (Mangiaracina et al., 2019). The LMD challenge is particularly salient for the retail chain as the process involve delivering the goods to many customers at different locations and this involves the collection of goods that are subject to complaints, delivered to wrong locations, or delayed in delivery (Macioszek, 2018; Weltevreden, 2008).



Figure 1: Last Mile Delivery Map (Source: Hafenstrom, 2022)

Based on the characteristic of each supply chain and the industry in which the company is operating, LMD can take different shapes (Mangiaracina et al., 2019). In business-to-business (B2B) distribution logistics that is aimed at physical stores, LMD covers the delivery or supplying the materials/goods to the stores that will be sold to customers at later stage. In manufacturing supply chains (B2B), LMD covers the delivery of components that are required to complete a part of a production process. Finally, in supply chains focused on end consumers and the retail

sector (business-to-consumer or B2C), LMD will be the direct delivery to the customer or at an agreed delivery point (Alharbi et al., 2022; Quaka and Kinb, 2020).

From a more general perspective, LMD is the last leg of the supply chain where the product is delivered to the customer (whether this is a business or final consumer) at the desired location (Mangiaracina et al., 2019). This step considered to be the most significant step in the whole supply chain and should be managed effectively to make sure the consumers are satisfied. Therefore, business need to have a solid and

efficient strategy concerning this logistics critical step for quick customer response and on time delivery (Alharbi et al., 2022).

b) *LMD Market Trends during Covid -19*

The LMD market in Saudi Arabia was valued at \$285.28 Million in 2020 and is projected to reach \$520.88 Million by 2030 showing a CAGR of 6.34% from

2021 to 2030 (Yadav and Mutreja, 2022). The rise of the e-commerce business, as well as an increase in trading activities as a result of globalization, are driving the growth of the KSA's LMD. Figure 2 shows the forecasted e-commerce market size from \$11 billion in 2020 to \$21 billion in 2025.

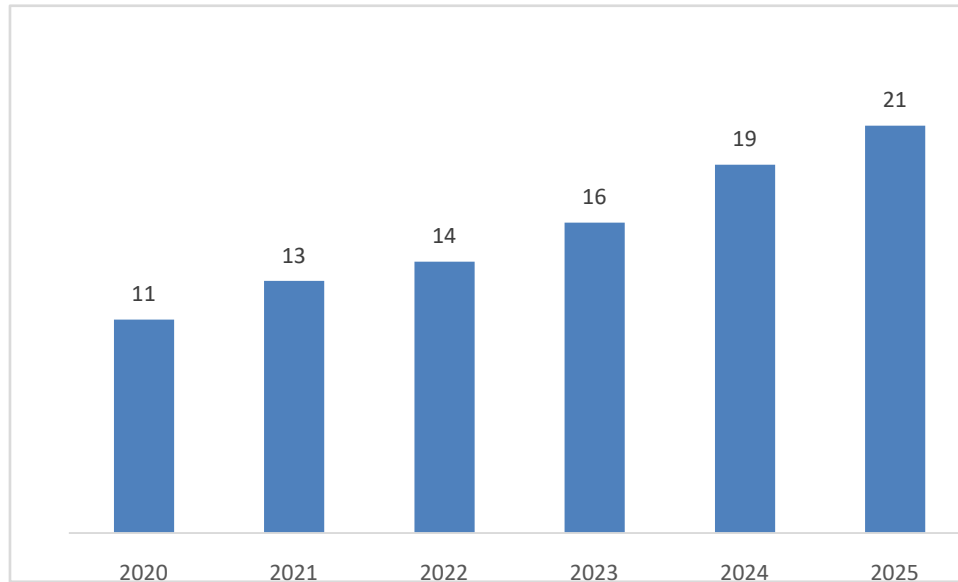


Figure 2: Forecasted E-Commerce Market Size Post-Covid-19, Saudi Arabia, US\$ billion (Source: Statista, 2020)

To fight Covid-19, the governments all around the world had implanted partial and complete nationwide lockdowns which has forced the general public to stay indoors and revolutionized their purchasing behaviour that resulted rise in consumer e-commerce last mile deliveries in 2020 alone by 25% (Weforum, 2021). The lockdown in KSA resulted in increase in online purchase behaviour among the consumers with 80% of the survey participants confirming an increase in their online purchases (Statista, 2020). Covid-19 has certainly changed the purchasing behaviour on consumers all around the globe including KSA. With rise in e-commerce and with increasing numbers of online shoppers in KSA, from 10.5 million in 2016 to 19.3 million in 2022 as illustrated in Figure 3, growth in LMD market cannot be argued (Statista, 2020).

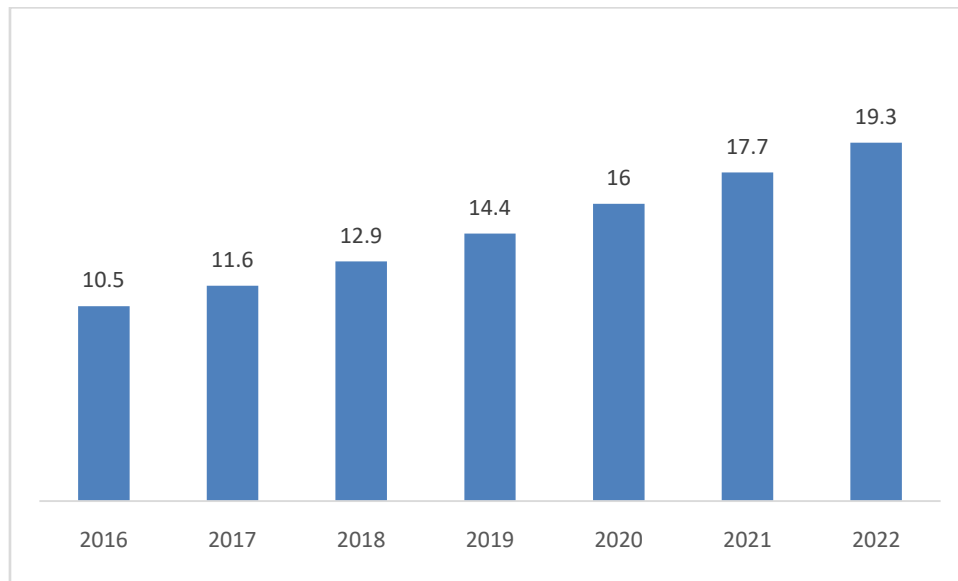


Figure 3: Millions of Online Shoppers in Saudi Arabia, 2016-2022 (Source: Statista, 2020)

The LMD market has seen a surge of new start-up entries in recent years, with the majority of them operating on an asset-light strategy and focusing on empowering small businesses by providing shipping services via crowd sourced couriers. Both regional and international investors are interested in the area. The rise in the number of players is due to more than only the pandemic and following e-commerce boom. In fact, the greatest significant increase in start-up entrants occurred before to Covid-19 in 2019, when 28 new firms, particularly in the courier industry, were founded. Wamda (2021) mapped 102 last-mile delivery firms, and

67 of them use the courier model. With rising competitions in the region, usage of technology has been increasing in the country (Wamda, 2021).

An important trend due to increase in online shopping behaviour is the demand of same day or express courier shipping in LMD has been forecasted by Yadav and Mutreja (2022). Figure 4 shows Saudi Arabia's LMD express and same day delivery market size to be \$46.8 million in 2020 which is forecasted to reach \$113.6 million by 2030 registering a CAGR of 9.4%.

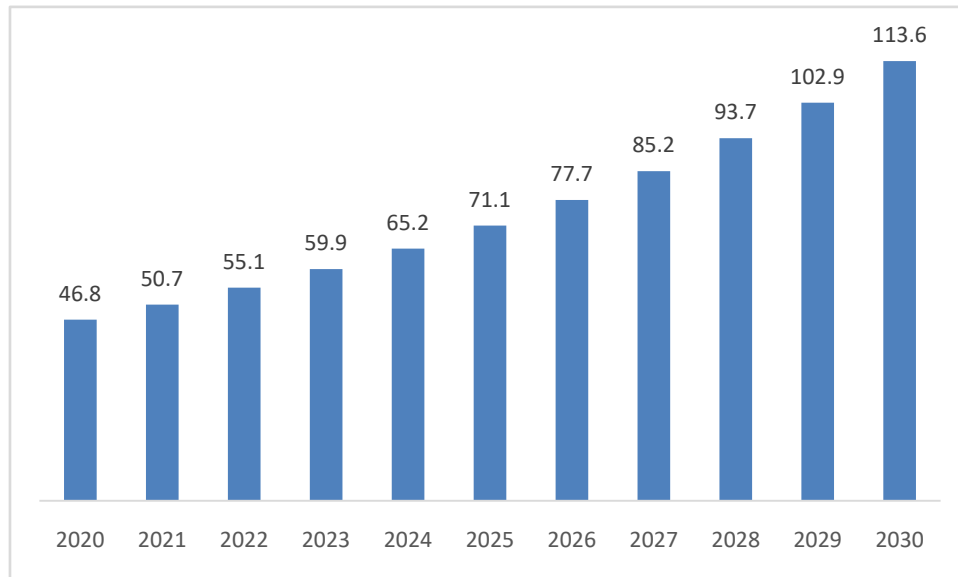


Figure 4: Size of Saudi Arabia's LMD Express and Same Day Delivery Market (Source: Yadav and Mutreja, 2022)

The question of whether to insource or outsource delivery is a key one. In comparison to regular procurement methods, quick technological investment costs more. This research will further explore and try to

find answers to this question (Rowan and Laffey, 2020). Figure 5 illustrates the forecasted comparison of LMD market by service type. It can be noted that B2B market share in 2020 was 57.9% which is forecasted to shrink to

41.8% in 2030. In other words, the B2C market share is expected to grow from 42.1% in 2020 to 58.2% in 2030. Similar findings in terms of revenue are represented in Figure 6. In 2021, KSA's Courier Express Parcel (CEP) market was dominated by B2B (almost 70%) when

compared to B2C (30%). This changing trend cannot be argued but only the speed of this trend. (Yadav and Mutreja, 2022).

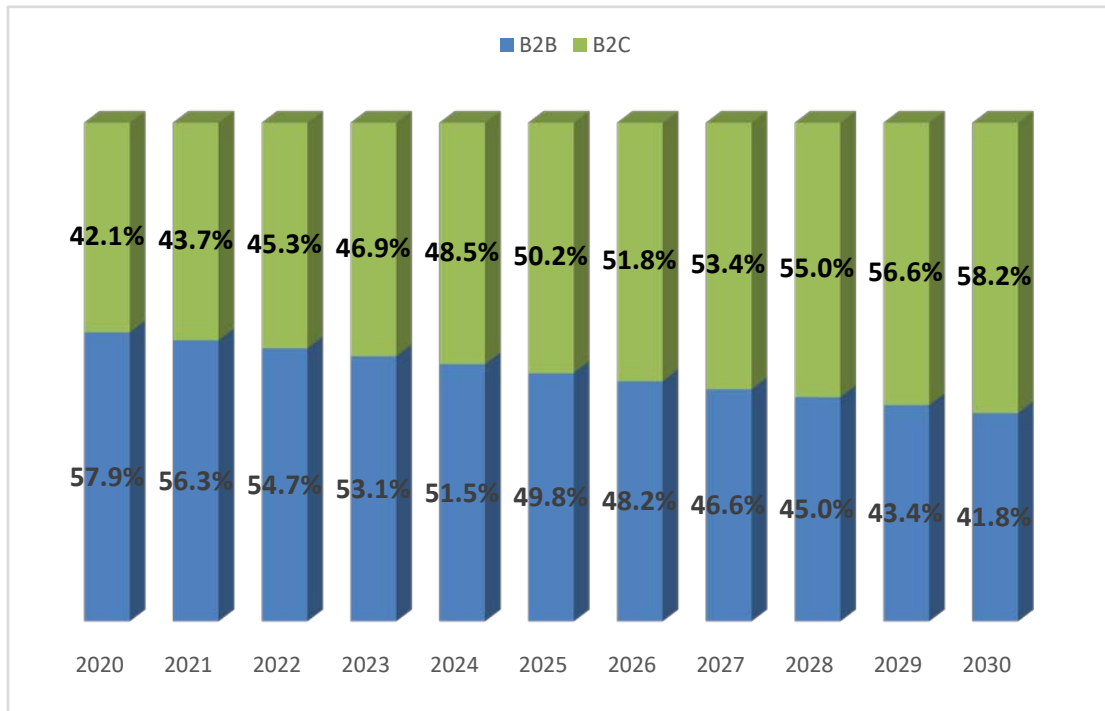


Figure 5: Forecasted Comparison of LMD Market by Service Type (Source: Yadav and Mutreja, 2022)



Figure 6: CEP Market, B2B Vs B2C (Source: Yadav and Mutreja, 2022)

As stated earlier, development in the e-commerce industry is the key factor in the changing trend in the KSA LMD market. Figure 7 shows the key factors playing a major role in shaping KSA's LMD market.

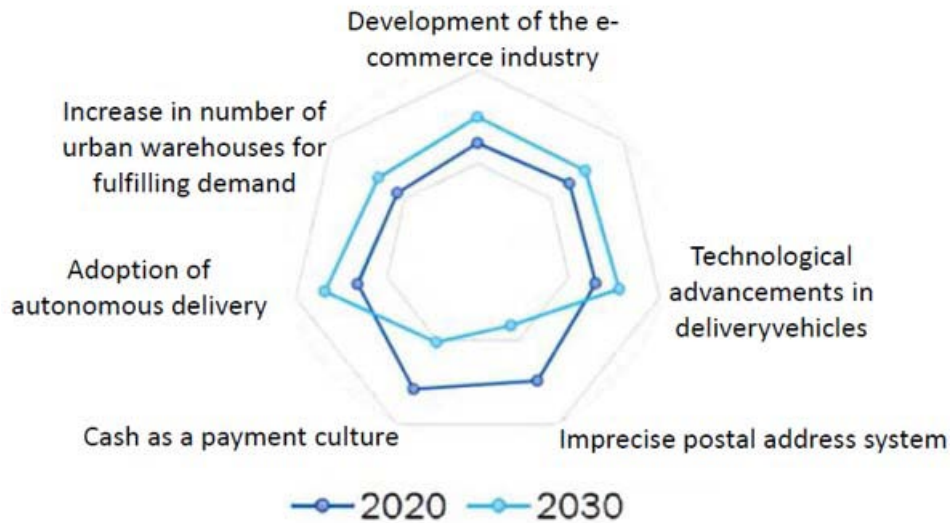


Figure 7: Most Impactful Factors in the LMD Market in Saudi Arabia (Source: Yadav and Mutreja, 2022)

This shows that expansion of LMD services by foreign companies in KSA, technological advancements in delivery vehicles, surge in adoption of autonomous delivery that reinforces demand, and increase in the number of urban warehouses to meet demand are all significant factors influencing the growth of the KSA LMD. However, the market is also adversely affected by the region's inaccurate postal addresses as well as the cash-as-payment culture. However, each of these variables is expected to have a significant impact on the total market's growth over the next decade (Yadav and Mutreja, 2022).

III. RESEARCH METHODOLOGY

a) Introduction

This section presents the methodology that has guided the collection and analysis of the primary data for addressing the research questions. This is guided by the research framework as presented in Figure 8, which positions the research methodology within the research process, shows how it links the literature that has been examined with the findings, discussions, and conclusions of the research.

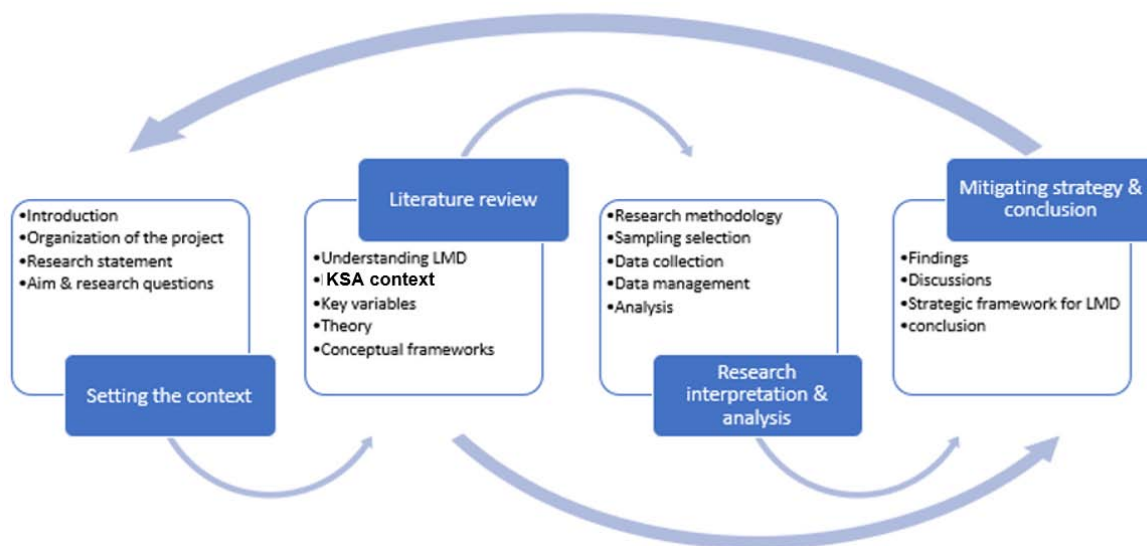


Figure 8: Research Framework (source: Based on Collins and Stockton, 2018)

To explicate the process of engaging and designing, the research framework shows some of the specific areas where the theoretical framework is

integrated to the qualitative process. It shows the ways in which the literature covers and guides the empirical research process. As Figure 8 illustrated, the theoretical

framework established and reflects on the methodology for the research where theory is used to support data analysis. The literature review also feeds into the discussion, while the last arrow represents the link between the findings and the research. The methodology section of the framework is discussed and justified next. Specifically, the section is divided into three main topics presenting information on the research philosophy, methodological approach, research design, data collection methods, and sampling strategy. Within these sections, the research approach, research choices and strategy, and time horizon of the research are presented and justified.

b) *Research Philosophy*

Research problems can be examined from many different perspectives and in this research, an interpretivist framework was used in which the focus was on people's perceptions and experiences of the world (Saunders et al., 2019). This creates the baseline for comparisons in Grounded Theory (Timonen et al., 2018). The qualitative basis of Grounded Theory provides room for conditioning the study to collect actual data. Since Grounded Theory embraces sociological aspects of the phenomena being studied, it creates room for integrating the changes in the behavioural aspects and appreciating the diversities in data sources (Ketchen and Craighead, 2020). The current research focuses on identifying the factors and processes that lead to changes in demand for the last-mile delivery in Saudi Arabia which identifies the steps involved in the product's journey from the warehouses to the final consumer (Timonen et al., 2018).

The delivery process determines the time and convenience factors, all of which affect the consumers. The e-commerce market has considered delivery and the last-mile strategies as part of the critical functions of the business models (de Souza et al., 2014). Although utilising the last-mile delivery approach has been a common venture for online ventures, Covid-19 may have created new dynamics in the market. Therefore, the theory would focus on the issues or requirements for companies in the LMD market, examining how their operations may have changed considering the surge in during and after the pandemic. Through grounded theory, the researcher has better chances of collecting data from the various stakeholders in the market.

The scientific and research approach integrated into the guide theory creates several benefits. The first one is the ability to create new questions to create new knowledge and clarify the current research (Bratianu, 2020). While studying the various attributes within research, it is important to have a comprehensive approach, making grounded theory an important baseline for the entire research (Bryman and Bell, 2018). The research creates insights on the scope of knowledge and contingent practice attributes from the

questions and the methodologies involved (Timonen et al., 2018). However, there are disadvantages to using a Grounded Theory approach. The main issue come from the challenge of collecting large amounts of data that may affect the analytical processes and may affect research objectivity and from a practical perspective, this means this approach is also is time consuming, reflective, and intensive (Ketchen and Craighead, 2020). Additionally, the interactions in the research affect the structuring of the research, which may create inconsistencies in the research sources (Ketchen and Craighead, 2020).

c) *Methodological Approach*

For this research, a qualitative approach is used to help in obtaining the quality evidence as the research questions to gain insights regarding trends in the LMD market in Saudi Arabia. Finally, the information gathered can be transformed into rich data analysis that allows credible and convincing results to the research questions to be created. Additionally, a cross-sectional timeframe was used in the research, meaning that a 'snapshot' of the issues related to the LMD market in Saudi Arabia are assessed (Saunders et al., 2019). The research was conducted is between April to November 2022.

d) *Data Collection & Sampling*

The data collection method remains a critical determinant of the data collected and its utilisation in the research. Grounded Theory is a qualitative approach and uses data collection methods such as participant observation and interviewing (Vakulenko et al., 2019). The current research utilised the interviewing method to collect data, which involves engaging the participants or the samples considered in the research is based on an expert sampling technique (Blumberg et al., 2014). Specifically, qualitative data was collected using semi-structured interviews. This method was used for qualitative data as it will give the flexibility for the interviewees to adapt the questions and change the flow as needed during the interview in order to dig deeper in the answer. These are used to obtain primary data as the main method of data collection. Figure 9 outlines the process of data collection and how this fed into the data analysis process described later in this paper.

The interview was designed to cover the gaps identified from the literature review. The set of questions were created by adopting the markets trends identified from secondary data in order to discover the company's responses of such trends. This sets would cover the market trends pre-, during-, and post-Covid-19. Also, it addresses some of the major market challenges, change in consumer behaviour, innovation, demands, and benefits. Specifically, these focused on:

1. Covid-19 impact on the LMD market and company operations.
2. The future of LMD market in Saudi Arabia.
3. Market trends and challenges.

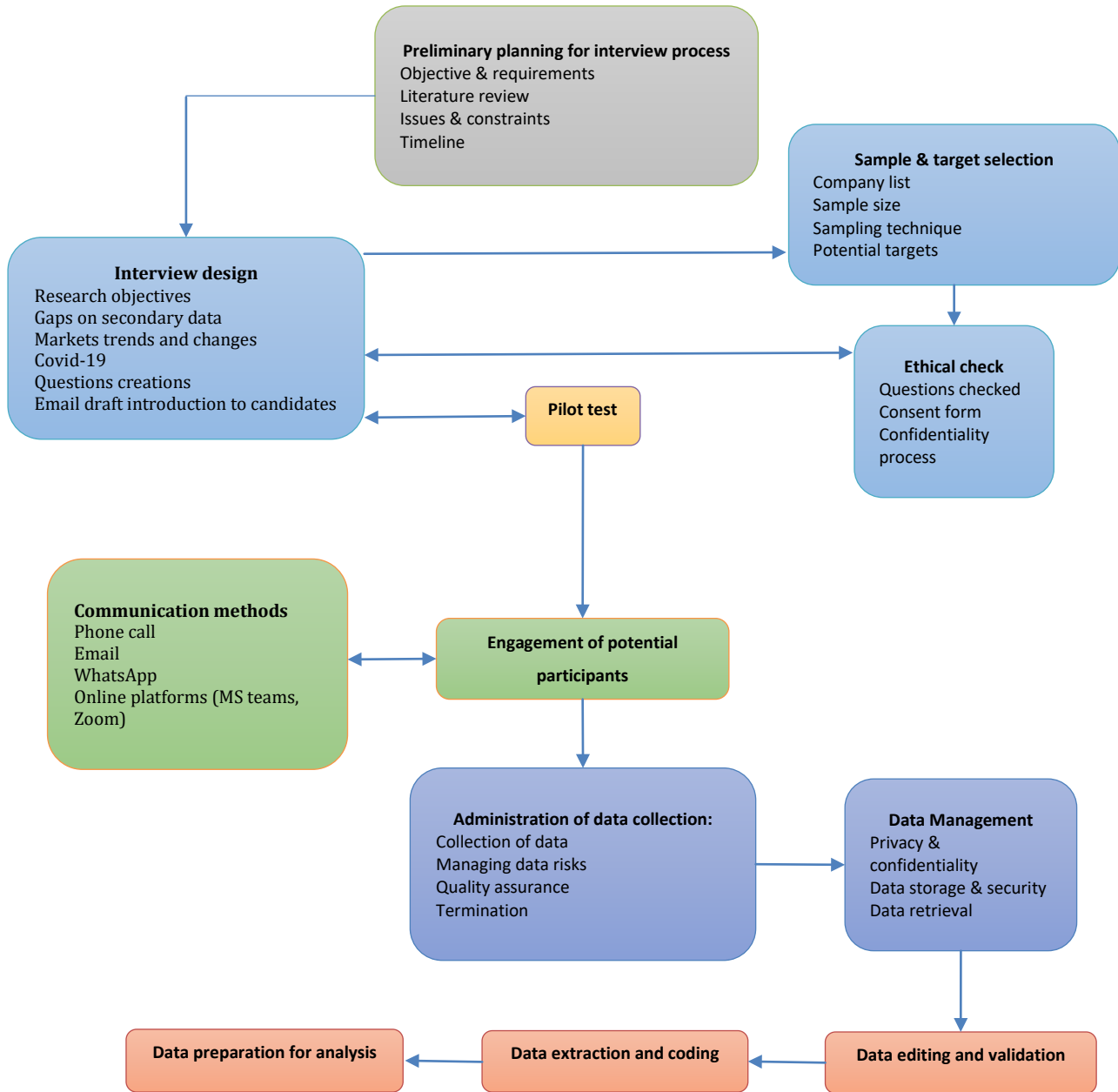


Figure 9: Interview Design, Data Collection & Data Analysis Process (Source: Developed for this Research)

In order to address the research objectives, the sampling approach used ensured that data was collected from highly knowledgeable participants in order to obtain insights on LMD market in Saudi Arabia. Thus, a purposive sampling strategy was used in which respondents were chosen based on their ability to provide the information needed to address the research questions (Saunders et al., 2019). Specifically, the interview data was obtained through 9 semi-structured interviews. First, the list of target population prepared using the government's online listed directory from the

Communications & Information Technology Commission (CITC). This website provided the information of current courier companies with active licenses. Also, another source of identifying companies working on LMD sector was through online tools. Google and LinkedIn were searched using keywords including delivery companies in Saudi Arabia, newly established mail delivery in Saudi Arabia, LMD companies in Saudi Arabia. Third, researcher connections and work colleagues were asked to recommend companies.

There is no commonly accepted sample size for qualitative studies (Saunders et al., 2019). For this research, the targeted sample size for this study is 13 interviews, however, data saturation was reached after reaching 9 interviews as the interviews started to have the almost the same answers. This is consistent with the recommendation when using qualitative research methods to use data saturation to determine the number of interviews to be conducted, meaning that data collection stops when further interviews no longer generate additional significant information (Aldiabat and Le Navenec, 2018; Saunders et al., 2019).

The study includes about 15 hours of discussions and interviews with multiple key opinion leaders that includes upstream and downstream participants. After reaching to the potential candidates through either email, WhatsApp, or phone call, an agreement was reached regarding conducting the interview. This is followed up by sending an email to the potential participants with a brief introduction about the research, list of questions, and consent form. The interview was then done virtually through online platforms after getting the consents of the interviewees. Also, consent was requested to record the interview at the start of each interview. According to (Eisenhardt, 1989), recording the interview increases the accuracy of findings and facilitates both coding and the interpretation of quotes.

IV. ANALYSIS, FINDING & DISCUSSION

a) Data Analysis

In this study, the data obtained from interviews were analysed using a combination of Grounded Theory analysis and thematic analysis, based on Chapman et

al.'s (2015) argument that "*thematic analysis in the context of Grounded Theory offers a systematic approach to the analysis of qualitative interview data.*" By itself, thematic analysis "*is not wedded to any pre-existing theoretical framework, and therefore it can be used within different theoretical frameworks (although not all), and can be used to do different things within them*" (Braun and Clarke, 2006, p. 81). For this reason, it is completed within a Grounded Theory framework since this offers an explicit framework for analysis and theory generation (Chapman et al., 2015). This is also consistent with Heydarian (2016), who outline a process of thematic analysis directed by the Grounded Theory approach based on the position that Grounded Theory is particularly useful when the area of study is new and is also helpful for identifying details of constructs, while thematic analysis provides a clear structure for the data analysis.

First, the overall study was conducted within a Grounded Theory framework and thus this continues to the analysis. Further, qualitative research questions that seek discovery or exploration of a topic usually draw on Grounded Theory, supporting the appropriateness of the approach for use in this research (Creswell and Poth, 2018). As a data analysis method, it is one of the most widely used approach to analysing qualitative data (Bryman and Bell, 2018). It is particularly useful for using empirical data to analyse and derive theoretical propositions (Aldiabatand Le Navenec, 2018). The process of undertaking the Grounded Theory analysis is presented in Figure 10, showing that the process begins with and is guided by a research problem and research questions that identify the main points to consider when collecting the data (Bryman and Bell, 2018).

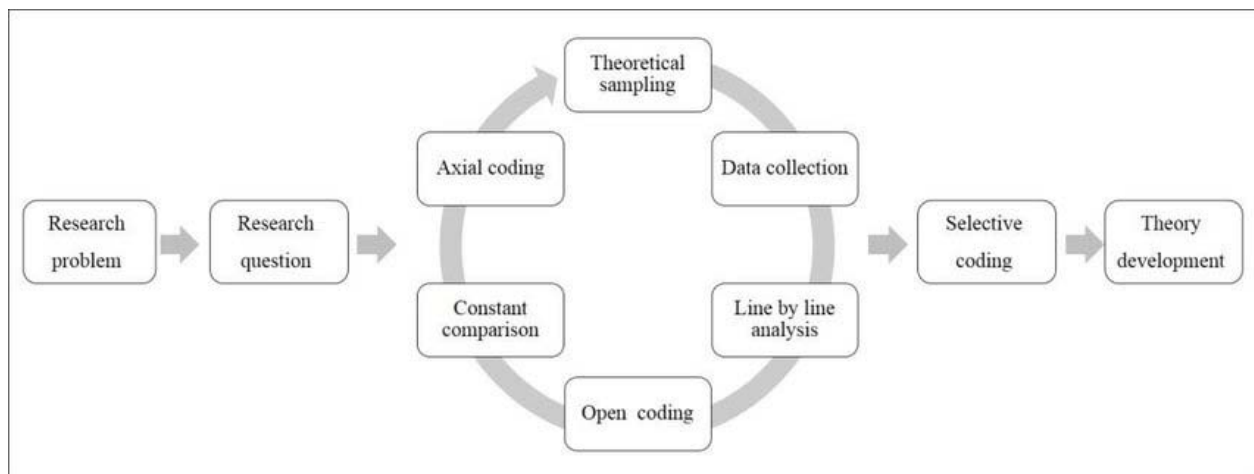


Figure 10: Steps in Grounded Theory Analysis (Source: Based on Bryman and Bell, 2018)

When the data is collected, the coding process is used to categorise the data for comparison purposes (Carmichael and Cunningham, 2017). In order to undertake this process, thematic analysis is used, which

involves identifying, analysing and studying themes within interview and other kinds of qualitative data, allowing the research to provide 'rich detail' on the data and interpret the aspects of the research topic that are

identified as most salient (Braun and Clarke 2006). Six specific steps were taken in completing the thematic analysis as shown in Figure 11, which was chosen for the systematic process of analysis and recommendations for increasing the trustworthiness, both of which assist in ensuring the results are consistent and coherent (Nowell et al., 2017).

Specifically, in this research, each answer was first coded into a concept that was reflected in the

theme of the answer. For example, some answers mentioned the issues of money collections from customers and the shift to online payments, so the theme here was payment method. All such themes were gathered and started to refine the coding of answers to create the first level of the thematic map.

Phases of Thematic Analysis	Means of Establishing Trustworthiness
Phase 1: Familiarizing yourself with your data	<ul style="list-style-type: none"> Prolong engagement with data Triangulate different data collection modes Document theoretical and reflective thoughts Document thoughts about potential codes/themes Store raw data in well-organized archives Keep records of all data field notes, transcripts, and reflexive journals
Phase 2: Generating initial codes	<ul style="list-style-type: none"> Peer debriefing Researcher triangulation Reflexive journaling Use of a coding framework Audit trail of code generation Documentation of all team meeting and peer debriefings
Phase 3: Searching for themes	<ul style="list-style-type: none"> Researcher triangulation Diagramming to make sense of theme connections Keep detailed notes about development and hierarchies of concepts and themes
Phase 4: Reviewing themes	<ul style="list-style-type: none"> Researcher triangulation Themes and subthemes vetted by team members Test for referential adequacy by returning to raw data
Phase 5: Defining and naming themes	<ul style="list-style-type: none"> Researcher triangulation Peer debriefing Team consensus on themes Documentation of team meetings regarding themes Documentation of theme naming
Phase 6: Producing the report	<ul style="list-style-type: none"> Member checking Peer debriefing Describing process of coding and analysis in sufficient details Thick descriptions of context Description of the audit trail Report on reasons for theoretical, methodological, and analytical choices throughout the entire study

Figure 11: Steps in the Thematic Analysis Process (Source: Nowell et al., 2017)

The second step was to start linking the codes into themes where all codes related to the lockdown or curfew were linked to Covid-19 impact and so on, this helped to build themes of the thematic map. The third level was built connecting the themes identified in the thematic analysis into the theoretical concepts found in the literature such as Covid-19 impact, cash culture, and technology, B2B and B2C demands shifting in KSA. The analysis was divided into two sections, one to cover the impact of Covid-19 and the second section covers market trends which was identified from the literature review.

b) Description of the Sample

As noted in the previous section, 13 participants were included in the interview, each being purposively selected based on their roles within their organisation that would allow them to discuss (1) their business structure in KSA, (2) LMD in their organisation, and (3) the impact of the Covid-19 pandemic on their business and on LMD specifically within and outside their organisation.

c) Coding Scheme

Figure 12 is a diagrammatic representation of the key themes emerging from the analysis of the semi-structured interviews. These themes were drawn from the interviewees' responses and each of these themes and their sub-themes are presented next.

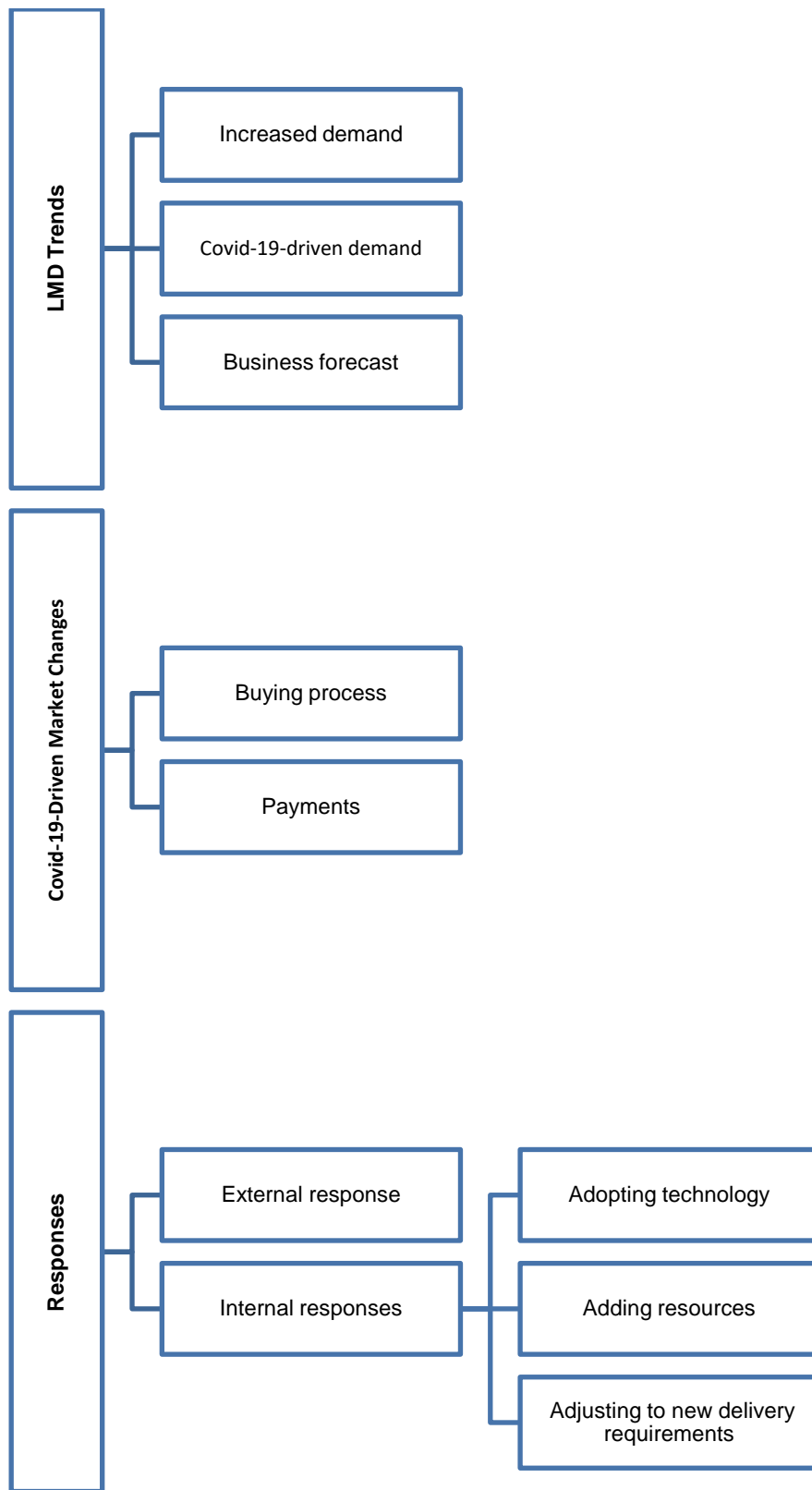


Figure 12: Visual Representation of the Coding Scheme (Source: Developed for this Research)

d) *LMD Trends In Saudi Arabia*

The rest of the themes in the research focus on the LMD market specifically. As it relates to the theme of

LMD Trends, three sub-themes were identified and are discussed in this section. First, all the respondents

noted increased demand for LMD services over the past two years, as highlighted below:

Yes, the number of orders had the spike that never happened.

...the number of deliveries 200% more than before Covid.

Second, as is clear from the second quote above, this was primarily Covid-19-driven demand, supported by the following quotes:

People need to buy stuff and they have no options, so they order online.

...because you are not allowed to go out of home during lockdown.

...they are going to buy their needs as they can't go out of home.

However, the third sub-theme was that business forecast indicate that this demand would remain high after the pandemic ends, as highlighted below:

The LMD business will keep growing.

LMD market will continue to rise, and operations will become more efficient.

The number of consumers will increase.

B2B LMD will not shrink but the percent of B2C market will rise.

e) Covid-19-Driven Market Changes

The results from the previous theme link to the second theme identified which was the Covid-19-Driven Market Changes as the LMD market has grown and changed over the last two years. Two main areas of change were identified. First, the buying process itself was evolving as digitization and e-commerce accelerated and Covid sped up the online process for buying. Second, payments specifically had also been evolving since the pandemic, as highlighted below:

I believe before Covid cash-on-delivery was the most usable but now we noticed online payments are increasing and Covid played a big role on it as we didn't allow any deliveries with cash.

... now there is increased to use online payments methods.

We prefer credit payment before making delivery.

This indicates that there are indeed changes taking place in the industry, and likely more widely as it relates to payments, with the cash-as-payment culture in Saudi Arabia identified by Yadav and Mutreja (2022) being challenged by the need to embrace other forms of payment that can facilitate e-commerce in particular.

f) External and Internal Responses to Market Changes

These changes in the market have seen responses from the businesses themselves (internal) and from the government (external). First, external responses to the Covid-19 induced market changes were particularly related to implementation challenges

faced by the companies as a result of both government changes and insufficient capacity respectively, as highlighted below:

Restrictions from the authorities to grant permissions for drivers.

As demand increased, there wasn't enough capacity to meet that demand.

Second, the companies themselves had a range of internal responses to the surge in demand caused by the pandemic, and the first sub-theme identified here related to technological responses being suggested, as highlighted below:

...the company is against the change and would prefer not to invest in expensive technologies but I believe it plays a big role specially now.

Technology can equip us with so many tools that allow us to improve our operations.

...technological factors helping LMD to grow through using AI, automations which help the company to operate better.

This is congruent with the discussion in the literature, with Alharbi et al. (2022) emphasising the importance of new technologies for the LMD market to grow. The companies also were looking to make other responses to ensure they are able to meet the new demand, as highlighted below:

[We are] also setting up 3 urban warehouses.

Fleet management system and warehouse management system. You will be very easily supporting your customers and delivering on time and having no complaints.

... investing in warehouse and transportation.

We are adding resources to tackle the demand.

This supports the point made in the literature that this industry is still heavily dependent on the traditional transport infrastructure and methods (Alharbi et al., 2022). Finally, the aim of these changes was to support the companies in adjusting to new delivery requirements, as highlighted below:

Express delivery, investing in warehouse[s] and transportation.

We have warehouses in each province and big city as a plan for same-day delivery.

Logistics infrastructure must be improved to have the express delivery.

The investment in warehouses developments and transportations systems which will allow us to provide express delivery in the future.

Express delivery requires huge chain in transportation to deliver the shipments.

This thus supports the trend identified in the secondary data sources that forecasted that an

important trend due to increase in online shopping behaviour is the demand of same day or express courier shipping in Saudi Arabia (Yadav and Mutreja, 2022). The results in this section also come together to support other forecasts and identification of driving factors in the LMD market in Saudi Arabia, including technological advancements in delivery vehicles, surge in adoption of autonomous delivery that reinforces demand, and increase in the number of urban warehouses to meet demand (Yadav and Mutreja, 2022).

V. CONCLUSION

This research has focused on LMD, which is the final step in the supply chain and continues the most expensive aspect of providing home delivery. In Saudi Arabia, development of the LMD market became an integral part of its 2030 vision as the Kingdom has positioned itself to become the new logistics hub for the Middle East (Vision 2030, 2022). In order to contribute to this area in both an academic and practical way, this research provided an analysis of the LMD market and addressed the challenges that companies may face. Further, Covid-19 pandemic has led to an increase in online shopping and home delivery and this research has examined how companies reacted strategically during and post Covid-19 to adapt to the demand trends.

The research question was: How have LMD companies been adapting to market trends during and after Covid-19? In order to answer this question, the first objective of this study was to provide an overview of the LMD market in Saudi Arabia during and after Covid-19 and examine how this has influenced the LMD industry in Saudi Arabia. The research shows increased demand for e-commerce and delivery services overall, consistent with the worldwide trend, as consumers were unable to shop directly from stores. While this demand was primarily driven by the pandemic, it is expected that this demand would remain high after the pandemic ends. However, there appear to be permanent changes in how people are shopping as well as an evolution of payments in Saudi Arabia, with the cash-as-payment culture in Saudi Arabia identified by Yadav and Mutreja (2022) being challenged by the need to embrace other forms of payment that can facilitate e-commerce in particular. This is an area for future research as this project was unable to investigate these kinds of changes in-depth but this is likely to have significant implications for the industry going forward.

For the second research objective, which was to examine the challenges companies faced during the pandemic and might face while entering the LMD market in Saudi Arabia. The research showed implementation challenges faced by the companies as a result of both government changes and insufficient capacity. There were both internal and external responses to the Covid-19 pandemic, with the

government responses appearing to work against the industry and is an issue that needs further examination. Internally, the companies used a range of strategies or seemed that they intended to do so. Important among these were technological solutions but a key caution was the availability of the resources and whether companies were willing to invest these resources. However, the companies that do well in Saudi Arabia's LMD industry are likely to be those that make the necessary changes to meet the growing need for express delivery by local consumers, which includes greater investment in technology and infrastructure such as warehouses. Future research can examine this issue in more detail, for example, examining the relationship between these kinds of spending and performance in Saudi Arabia's LMD industry.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Aldiabat, K. and Le Navenec, C. (2018). Data saturation: The mysterious step in grounded theory methodology. *The Qualitative Report*, 23 (1), pp. 245-261.
2. Alharbi, A., Cantarelli, C., and Brint, A. (2022). Crowd models for last mile delivery in an emerging economy. *Sustainability*, 14 (3), pp. 1401.
3. Bandeira, R. A. D., Goes, G. V., Goncalves, D. N. S., D'Agosto, M. D., and de Oliveira, C. M., 2019. Electric vehicles in the last mile of urban freight transportation: A sustainability assessment of postal deliveries in Rio de Janeiro-Brazil. *Transportation Research Part D: Transport and Environment*, 67, pp. 491-502.
4. Blumberg, B. F., Cooper, D. R. and Schindler, P. S. (2014) *Business research methods*. New York: McGraw-Hill Education.
5. Bratianu, C. (2020). Toward understanding the complexity of the COVID-19 crisis: a grounded theory approach. *Management & Marketing*, 15 (s1), pp. 410-423.
6. Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, pp. 77-101.
7. Bryman, A. and Bell, E. (2018). *Business Research Methods*. Oxford: Oxford University Press.
8. Cabral, A. (2021). Saudi Arabia's e-commerce market to hit \$13.3bn by 2025. *The National News*, 9 December. Available at: <https://www.thenational-news.com/business/economy/2021/12/09/saudi-arabias-e-commerce-market-to-hit-133bn-by-2025/>.
9. Carmichael, T. and Cunningham, N. (2017). Theoretical data collection and data analysis with gerunds in a constructivist grounded theory study. *Electronic Journal of Business Research Methods*, 15 (2), pp. 59-73.
10. Chapman, A., Hadfield, M., and Chapman, C. (2015). Qualitative research in healthcare: an introduction to grounded theory using thematic

- analysis. *Journal of the Royal College of Physicians of Edinburgh*, 45 (3), pp. 201-205.
11. CITC (2019). CITC unveils 'Controls and Guidelines for Providing Delivery Services via Digital Platforms'. Available at: <https://www.citc.gov.sa/en/media-center/pressreleases/Pages/2019120201.aspx>.
 12. Collins, C.S. and Stockton, C.M. (2018) "The central role of theory in qualitative research," *International Journal of Qualitative Methods*, 17 (1), p. 160940691879747. Available at: <https://doi.org/10.1177/1609406918797475>.
 13. Creswell, J.W. and Poth, C. N. (2018) *Qualitative Inquiry and Research Design Choosing among Five Approaches*. 4th Edition, SAGE Publications, Inc., Thousand Oaks.
 14. De Souza, R., Goh, M., Lau, H., Ng, W. And Tan, P. (2014). Collaborative urban logistics: Synchronising the last-mile – a Singapore research perspective. *Procedia-Social and Behavioural Sciences*, 125, 422-431.
 15. Eisenhardt, K. M. (1989) "Building theories from Case Study Research," *Academy of Management Review*, 14 (4), pp. 532–550. Available at: <https://doi.org/10.5465/amr.1989.4308385>.
 16. Hafenstrom.com (2022). *Mobile Robotics in Logistics, Warehousing and Delivery 2022-2042*. Available at: <https://hafenstrom.com/mobile-robotics-in-logistics-warehousing-and-delivery-2022-2042/>.
 17. Hassanein, D. (2021). A look at last-mile delivery in Mena [Part 1]. *Wamda*. Available at: <https://www.wamda.com/2021/12/look-last-mile-delivery-mena-1>.
 18. Heydarian, N. (2016). Developing theory with the grounded-theory approach and thematic analysis. *APS Observer*, 29 (4).
 19. Ketchen, D. J., & Craighead, C. W. (2020). Research at the Intersection of Entrepreneurship, Supply Chain Management, and Strategic Management: Opportunities Highlighted by COVID-19. *Journal of Management*, 46(8), 1330–1341. <https://doi.org/10.1177/0149206320945028>
 20. Kum, F., Xueqin, W., Li, T. W., and Yiik, D. (2018). An investigation of customers' intention to use self-collection services for last-mile delivery. *Transport Policy*, 66, pp. 1-8.
 21. Macioszek, E. (2018). *First and Last Mile Delivery: Problems and issues*. *Advances in Intelligent Systems and Computing*, vol 631. Springer, Cham.
 22. Mangiaracina, R., Perego, A., Seghezzi, A., and Tumino, A. (2019). Innovative solutions to increase last-mile delivery efficiency in B2C e-commerce: A literature review. *International Journal of Physical Distribution & Logistics Management*, 49 (9), pp. 901-920.
 23. Nowell, L., Norris, J., White, D. and Moules, N. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16 (1), 1609406917733847.
 24. Quaka, H. and Kinb, B. (2020, June). The impact of future delivery models in last-mile home deliveries. In 4th International Conference Green Cities 2020–Green Logistics for Greener Cities, 3-5 June 2020.
 25. Rowan, N. J. and Laffey, J. G. (2020) Challenges and solutions for addressing critical shortage of supply chain for personal and protective equipment (PPE) arising from Coronavirus disease (Covid19) pandemic-Case study from the Republic of Ireland. *Science of the Total Environment*, 725, 138532.
 26. Saunders, M., Lewis, P., and Thornhill, A. (2019). *Research Methods for Business Students*. Harlow, Essex: Pearson Education.
 27. Sharma, V. M. and Erramilli, M. K. (2004). Resource-Based Explanation of Entry Mode Choice. *Journal of Marketing Theory and Practice*, 12 (1), pp. 1-18.
 28. Statista (2020). Forecasted e-commerce market size post Covid-19 in Saudi Arabia from 2020 to 2025. Available at: <https://www.statista.com/statistics/1201953/saudi-arabia-forecasted-e-commerce-market-size-covid-19>.
 29. Statista (2020). Number of online shoppers in Saudi Arabia from 2016 to 2022*. Available at: <https://www-statista-com.manchester.idm.oclc.Org/statistics/981557/saudi-arabia-number-online-shoppers/>.
 30. Timonen, V., Foley, G., and Conlon, C. (2018). Challenges when using grounded theory: A pragmatic introduction to doing GT research. *International Journal of Qualitative Methods*, 17, pp. 1-10.
 31. Vakulenko, Y. et al. (2019) "Service innovation in e-commerce last mile delivery: Mapping the E-customer journey," *Journal of Business Research*, 101, pp. 461–468. Available at: <https://doi.org/10.1016/j.jbusres.2019.01.016>.
 32. Vision 2030. (2022). Vision Realization Program. [online] Available at: <https://www.vision2030.gov.sa/v2030/vrps/>
 33. Weforum (2021). *Covid-19 has reshaped last-mile logistics, with e-commerce deliveries rising 25% in 2020*. World Economic Forum. Available at: <https://www.weforum.org/press/2021/04/covid-19-has-reshaped-last-mile-logistics-with-e-commerce-deliveries-rising-25-in-2020/>.
 34. Weltevreden, J. (2008). B2C e-commerce logistics: The rise of collection and delivery points in The Netherlands. *International Journal of Retail & Distribution Management*. 36(8), pp. 638-660.
 35. Yadav, P. and Mutreja, S. (2022). *KSA Last Mile Delivery Market Size, Report, Research, Trends*. Allied Market Research. Available at: <https://www.alliedmarketresearch.com/ksa-last-mile-delivery-market-A15619>.

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Reputation

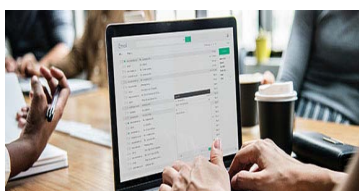
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Acknowledgments

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The following is the official style and template developed for publication of a research paper. Authors are not required to follow this style during the submission of the paper. It is just for reference purposes.



Manuscript Style Instruction (Optional)

- Microsoft Word Document Setting Instructions.
- Font type of all text should be Swis721 Lt BT.
- Page size: 8.27" x 11", left margin: 0.65, right margin: 0.65, bottom margin: 0.75.
- Paper title should be in one column of font size 24.
- Author name in font size of 11 in one column.
- Abstract: font size 9 with the word "Abstract" in bold italics.
- Main text: font size 10 with two justified columns.
- Two columns with equal column width of 3.38 and spacing of 0.2.
- First character must be three lines drop-capped.
- The paragraph before spacing of 1 pt and after of 0 pt.
- Line spacing of 1 pt.
- Large images must be in one column.
- The names of first main headings (Heading 1) must be in Roman font, capital letters, and font size of 10.
- The names of second main headings (Heading 2) must not include numbers and must be in italics with a font size of 10.

Structure and Format of Manuscript

The recommended size of an original research paper is under 15,000 words and review papers under 7,000 words. Research articles should be less than 10,000 words. Research papers are usually longer than review papers. Review papers are reports of significant research (typically less than 7,000 words, including tables, figures, and references)

A research paper must include:

- a) A title which should be relevant to the theme of the paper.
- b) A summary, known as an abstract (less than 150 words), containing the major results and conclusions.
- c) Up to 10 keywords that precisely identify the paper's subject, purpose, and focus.
- d) An introduction, giving fundamental background objectives.
- e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition, sources of information must be given, and numerical methods must be specified by reference.
- f) Results which should be presented concisely by well-designed tables and figures.
- g) Suitable statistical data should also be given.
- h) All data must have been gathered with attention to numerical detail in the planning stage.

Design has been recognized to be essential to experiments for a considerable time, and the editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned unrefereed.

- i) Discussion should cover implications and consequences and not just recapitulate the results; conclusions should also be summarized.
- j) There should be brief acknowledgments.
- k) There ought to be references in the conventional format. Global Journals recommends APA format.

Authors should carefully consider the preparation of papers to ensure that they communicate effectively. Papers are much more likely to be accepted if they are carefully designed and laid out, contain few or no errors, are summarizing, and follow instructions. They will also be published with much fewer delays than those that require much technical and editorial correction.

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It is necessary that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

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The title page must carry an informative title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) where the work was carried out.

Author details

The full postal address of any related author(s) must be specified.

Abstract

The abstract is the foundation of the research paper. It should be clear and concise and must contain the objective of the paper and inferences drawn. It is advised to not include big mathematical equations or complicated jargon.

Many researchers searching for information online will use search engines such as Google, Yahoo or others. By optimizing your paper for search engines, you will amplify the chance of someone finding it. In turn, this will make it more likely to be viewed and cited in further works. Global Journals has compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

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A major lynchpin of research work for the writing of research papers is the keyword search, which one will employ to find both library and internet resources. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining, and indexing.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy: planning of a list of possible keywords and phrases to try.

Choice of the main keywords is the first tool of writing a research paper. Research paper writing is an art. Keyword search should be as strategic as possible.

One should start brainstorming lists of potential keywords before even beginning searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in a research paper?" Then consider synonyms for the important words.

It may take the discovery of only one important paper to steer in the right keyword direction because, in most databases, the keywords under which a research paper is abstracted are listed with the paper.

Numerical Methods

Numerical methods used should be transparent and, where appropriate, supported by references.

Abbreviations

Authors must list all the abbreviations used in the paper at the end of the paper or in a separate table before using them.

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Authors are advised to submit any mathematical equation using either MathJax, KaTeX, or LaTeX, or in a very high-quality image.

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Tables: Tables should be cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g., Table 4, a self-explanatory caption, and be on a separate sheet. Authors must submit tables in an editable format and not as images. References to these tables (if any) must be mentioned accurately.



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Figures are supposed to be submitted as separate files. Always include a citation in the text for each figure using Arabic numbers, e.g., Fig. 4. Artwork must be submitted online in vector electronic form or by emailing it.

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TIPS FOR WRITING A GOOD QUALITY MANAGEMENT RESEARCH PAPER

Techniques for writing a good quality management and business research paper:

1. Choosing the topic: In most cases, the topic is selected by the interests of the author, but it can also be suggested by the guides. You can have several topics, and then judge which you are most comfortable with. This may be done by asking several questions of yourself, like "Will I be able to carry out a search in this area? Will I find all necessary resources to accomplish the search? Will I be able to find all information in this field area?" If the answer to this type of question is "yes," then you ought to choose that topic. In most cases, you may have to conduct surveys and visit several places. Also, you might have to do a lot of work to find all the rises and falls of the various data on that subject. Sometimes, detailed information plays a vital role, instead of short information. Evaluators are human: The first thing to remember is that evaluators are also human beings. They are not only meant for rejecting a paper. They are here to evaluate your paper. So present your best aspect.

2. Think like evaluators: If you are in confusion or getting demotivated because your paper may not be accepted by the evaluators, then think, and try to evaluate your paper like an evaluator. Try to understand what an evaluator wants in your research paper, and you will automatically have your answer. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

3. Ask your guides: If you are having any difficulty with your research, then do not hesitate to share your difficulty with your guide (if you have one). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work, then ask your supervisor to help you with an alternative. He or she might also provide you with a list of essential readings.

4. Use of computer is recommended: As you are doing research in the field of management and business then this point is quite obvious. Use right software: Always use good quality software packages. If you are not capable of judging good software, then you can lose the quality of your paper unknowingly. There are various programs available to help you which you can get through the internet.

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7. Revise what you wrote: When you write anything, always read it, summarize it, and then finalize it.

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11. Pick a good study spot: Always try to pick a spot for your research which is quiet. Not every spot is good for studying.

12. Know what you know: Always try to know what you know by making objectives, otherwise you will be confused and unable to achieve your target.

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14. Arrangement of information: Each section of the main body should start with an opening sentence, and there should be a changeover at the end of the section. Give only valid and powerful arguments for your topic. You may also maintain your arguments with records.

15. Never start at the last minute: Always allow enough time for research work. Leaving everything to the last minute will degrade your paper and spoil your work.

16. Multitasking in research is not good: Doing several things at the same time is a bad habit in the case of research activity. Research is an area where everything has a particular time slot. Divide your research work into parts, and do a particular part in a particular time slot.

17. Never copy others' work: Never copy others' work and give it your name because if the evaluator has seen it anywhere, you will be in trouble. Take proper rest and food: No matter how many hours you spend on your research activity, if you are not taking care of your health, then all your efforts will have been in vain. For quality research, take proper rest and food.

18. Go to seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

19. Refresh your mind after intervals: Try to give your mind a rest by listening to soft music or sleeping in intervals. This will also improve your memory. Acquire colleagues: Always try to acquire colleagues. No matter how sharp you are, if you acquire colleagues, they can give you ideas which will be helpful to your research.

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23. Upon conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print for the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects of your research.

INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form which is presented in the guidelines using the template.
- Please note the criteria peer reviewers will use for grading the final paper.

Final points:

One purpose of organizing a research paper is to let people interpret your efforts selectively. The journal requires the following sections, submitted in the order listed, with each section starting on a new page:

The introduction: This will be compiled from reference matter and reflect the design processes or outline of basis that directed you to make a study. As you carry out the process of study, the method and process section will be constructed like that. The results segment will show related statistics in nearly sequential order and direct reviewers to similar intellectual paths throughout the data that you gathered to carry out your study.

The discussion section:

This will provide understanding of the data and projections as to the implications of the results. The use of good quality references throughout the paper will give the effort trustworthiness by representing an alertness to prior workings.

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Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear: Adhere to recommended page limits.

Mistakes to avoid:

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- Submitting a manuscript with pages out of sequence.
- In every section of your document, use standard writing style, including articles ("a" and "the").
- Keep paying attention to the topic of the paper.



- Use paragraphs to split each significant point (excluding the abstract).
- Align the primary line of each section.
- Present your points in sound order.
- Use present tense to report well-accepted matters.
- Use past tense to describe specific results.
- Do not use familiar wording; don't address the reviewer directly. Don't use slang or superlatives.
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Choose a revealing title. It should be short and include the name(s) and address(es) of all authors. It should not have acronyms or abbreviations or exceed two printed lines.

Abstract: This summary should be two hundred words or less. It should clearly and briefly explain the key findings reported in the manuscript and must have precise statistics. It should not have acronyms or abbreviations. It should be logical in itself. Do not cite references at this point.

An abstract is a brief, distinct paragraph summary of finished work or work in development. In a minute or less, a reviewer can be taught the foundation behind the study, common approaches to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Use comprehensive sentences, and do not sacrifice readability for brevity; you can maintain it succinctly by phrasing sentences so that they provide more than a lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study with the subsequent elements in any summary. Try to limit the initial two items to no more than one line each.

Reason for writing the article—theory, overall issue, purpose.

- Fundamental goal.
- To-the-point depiction of the research.
- Consequences, including definite statistics—if the consequences are quantitative in nature, account for this; results of any numerical analysis should be reported. Significant conclusions or questions that emerge from the research.

Approach:

- Single section and succinct.
- An outline of the job done is always written in past tense.
- Concentrate on shortening results—limit background information to a verdict or two.
- Exact spelling, clarity of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else.

Introduction:

The introduction should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable of comprehending and calculating the purpose of your study without having to refer to other works. The basis for the study should be offered. Give the most important references, but avoid making a comprehensive appraisal of the topic. Describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will give no attention to your results. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here.

The following approach can create a valuable beginning:

- Explain the value (significance) of the study.
- Defend the model—why did you employ this particular system or method? What is its compensation? Remark upon its appropriateness from an abstract point of view as well as pointing out sensible reasons for using it.
- Present a justification. State your particular theory(-ies) or aim(s), and describe the logic that led you to choose them.
- Briefly explain the study's tentative purpose and how it meets the declared objectives.



Approach:

Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done. Sort out your thoughts; manufacture one key point for every section. If you make the four points listed above, you will need at least four paragraphs. Present surrounding information only when it is necessary to support a situation. The reviewer does not desire to read everything you know about a topic. Shape the theory specifically—do not take a broad view.

As always, give awareness to spelling, simplicity, and correctness of sentences and phrases.

Procedures (methods and materials):

This part is supposed to be the easiest to carve if you have good skills. A soundly written procedures segment allows a capable scientist to replicate your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order, but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt to give the least amount of information that would permit another capable scientist to replicate your outcome, but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section.

When a technique is used that has been well-described in another section, mention the specific item describing the way, but draw the basic principle while stating the situation. The purpose is to show all particular resources and broad procedures so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step-by-step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

Materials may be reported in part of a section or else they may be recognized along with your measures.

Methods:

- Report the method and not the particulars of each process that engaged the same methodology.
- Describe the method entirely.
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures.
- Simplify—detail how procedures were completed, not how they were performed on a particular day.
- If well-known procedures were used, account for the procedure by name, possibly with a reference, and that's all.

Approach:

It is embarrassing to use vigorous voice when documenting methods without using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result, when writing up the methods, most authors use third person passive voice.

Use standard style in this and every other part of the paper—avoid familiar lists, and use full sentences.

What to keep away from:

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings—save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part as entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Use statistics and tables, if suitable, to present consequences most efficiently.

You must clearly differentiate material which would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matters should not be submitted at all except if requested by the instructor.



Content:

- Sum up your conclusions in text and demonstrate them, if suitable, with figures and tables.
- In the manuscript, explain each of your consequences, and point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation of an exacting study.
- Explain results of control experiments and give remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or manuscript.

What to stay away from:

- Do not discuss or infer your outcome, report surrounding information, or try to explain anything.
- Do not include raw data or intermediate calculations in a research manuscript.
- Do not present similar data more than once.
- A manuscript should complement any figures or tables, not duplicate information.
- Never confuse figures with tables—there is a difference.

Approach:

As always, use past tense when you submit your results, and put the whole thing in a reasonable order.

Put figures and tables, appropriately numbered, in order at the end of the report.

If you desire, you may place your figures and tables properly within the text of your results section.

Figures and tables:

If you put figures and tables at the end of some details, make certain that they are visibly distinguished from any attached appendix materials, such as raw facts. Whatever the position, each table must be titled, numbered one after the other, and include a heading. All figures and tables must be divided from the text.

Discussion:

The discussion is expected to be the trickiest segment to write. A lot of papers submitted to the journal are discarded based on problems with the discussion. There is no rule for how long an argument should be.

Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implications of the study. The purpose here is to offer an understanding of your results and support all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of results should be fully described.

Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact, you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved the prospect, and let it drop at that. Make a decision as to whether each premise is supported or discarded or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."

Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work.

- You may propose future guidelines, such as how an experiment might be personalized to accomplish a new idea.
- Give details of all of your remarks as much as possible, focusing on mechanisms.
- Make a decision as to whether the tentative design sufficiently addressed the theory and whether or not it was correctly restricted. Try to present substitute explanations if they are sensible alternatives.
- One piece of research will not counter an overall question, so maintain the large picture in mind. Where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.



Approach:

When you refer to information, differentiate data generated by your own studies from other available information. Present work done by specific persons (including you) in past tense.

Describe generally acknowledged facts and main beliefs in present tense.

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<i>Result</i>	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
<i>Discussion</i>	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



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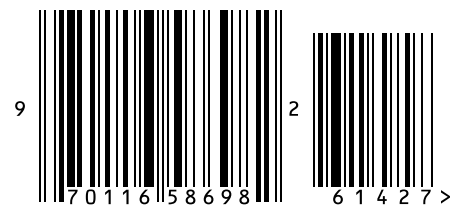
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