

# GLOBAL JOURNAL

OF MANAGEMENT AND BUSINESS RESEARCH: A

## Administration and Management



Role of Emotional Intelligence

The Moderating Role of Knowledge

Highlights

The Messengers of the Future

Style and Employees Performance

Discovering Thoughts, Inventing Future

VOLUME 15

ISSUE 1

VERSION 1.0



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A  
ADMINISTRATION AND MANAGEMENT

---

GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A  
ADMINISTRATION AND MANAGEMENT

---

VOLUME 15 ISSUE 3 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of  
Management and Business  
Research. 2015.  
All rights reserved.

This is a special issue published in version 1.0  
of "Global Journal of Science Frontier  
Research." By Global Journals Inc.

All articles are open access articles distributed  
under "Global Journal of Science Frontier  
Research"

Reading License, which permits restricted use.  
Entire contents are copyright by of "Global  
Journal of Science Frontier Research" unless  
otherwise noted on specific articles.

No part of this publication may be reproduced  
or transmitted in any form or by any means,  
electronic or mechanical, including  
photocopy, recording, or any information  
storage and retrieval system, without written  
permission.

The opinions and statements made in this  
book are those of the authors concerned.  
Ultraculture has not verified and neither  
confirms nor denies any of the foregoing and  
no warranty or fitness is implied.

Engage with the contents herein at your own  
risk.

The use of this journal, and the terms and  
conditions for our providing information, is  
governed by our Disclaimer, Terms and  
Conditions and Privacy Policy given on our  
website <http://globaljournals.us/terms-and-condition/>  
[menu-id-1463/](#)

By referring / using / reading / any type of  
association / referencing this journal, this  
signifies and you acknowledge that you have  
read them and that you accept and will be  
bound by the terms thereof.

All information, journals, this journal,  
activities undertaken, materials, services and  
our website, terms and conditions, privacy  
policy, and this journal is subject to change  
anytime without any prior notice.

**Incorporation No.: 0423089**  
**License No.: 42125/022010/1186**  
**Registration No.: 430374**  
**Import-Export Code: 1109007027**  
**Employer Identification Number (EIN):**  
**USA Tax ID: 98-0673427**

## Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; **Reg. Number: 0423089**)  
Sponsors: [Open Association of Research Society](#)  
[Open Scientific Standards](#)

### *Publisher's Headquarters office*

**Global Journals Headquarters**  
301st Edgewater Place Suite, 100 Edgewater Dr.-Pl,  
Wakefield MASSACHUSETTS, Pin: 01880,  
United States of America  
**USA Toll Free: +001-888-839-7392**  
**USA Toll Free Fax: +001-888-839-7392**

### *Offset Typesetting*

**Global Journals Incorporated**  
2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey,  
Pin: CR9 2ER, United Kingdom

### *Packaging & Continental Dispatching*

**Global Journals**  
E-3130 Sudama Nagar, Near Gopur Square,  
Indore, M.P., Pin:452009, India

### *Find a correspondence nodal officer near you*

To find nodal officer of your country, please  
email us at [local@globaljournals.org](mailto:local@globaljournals.org)

### *eContacts*

**Press Inquiries:** [press@globaljournals.org](mailto:press@globaljournals.org)  
**Investor Inquiries:** [investors@globaljournals.org](mailto:investors@globaljournals.org)  
**Technical Support:** [technology@globaljournals.org](mailto:technology@globaljournals.org)  
**Media & Releases:** [media@globaljournals.org](mailto:media@globaljournals.org)

### *Pricing (Including by Air Parcel Charges):*

#### *For Authors:*

22 USD (B/W) & 50 USD (Color)

*Yearly Subscription (Personal & Institutional):*  
200 USD (B/W) & 250 USD (Color)

**INTEGRATED EDITORIAL BOARD**  
**(COMPUTER SCIENCE, ENGINEERING, MEDICAL, MANAGEMENT, NATURAL**  
**SCIENCE, SOCIAL SCIENCE)**

**John A. Hamilton,"Drew" Jr.,**  
Ph.D., Professor, Management  
Computer Science and Software  
Engineering  
Director, Information Assurance  
Laboratory  
Auburn University

**Dr. Henry Hexmoor**  
IEEE senior member since 2004  
Ph.D. Computer Science, University at  
Buffalo  
Department of Computer Science  
Southern Illinois University at Carbondale

**Dr. Osman Balci, Professor**  
Department of Computer Science  
Virginia Tech, Virginia University  
Ph.D. and M.S. Syracuse University,  
Syracuse, New York  
M.S. and B.S. Bogazici University,  
Istanbul, Turkey

**Yogita Bajpai**  
M.Sc. (Computer Science), FICCT  
U.S.A.Email:  
yogita@computerresearch.org

**Dr. T. David A. Forbes**  
Associate Professor and Range  
Nutritionist  
Ph.D. Edinburgh University - Animal  
Nutrition  
M.S. Aberdeen University - Animal  
Nutrition  
B.A. University of Dublin- Zoology

**Dr. Wenyi Feng**  
Professor, Department of Computing &  
Information Systems  
Department of Mathematics  
Trent University, Peterborough,  
ON Canada K9J 7B8

**Dr. Thomas Wischgoll**  
Computer Science and Engineering,  
Wright State University, Dayton, Ohio  
B.S., M.S., Ph.D.  
(University of Kaiserslautern)

**Dr. Abdurrahman Arslanyilmaz**  
Computer Science & Information Systems  
Department  
Youngstown State University  
Ph.D., Texas A&M University  
University of Missouri, Columbia  
Gazi University, Turkey

**Dr. Xiaohong He**  
Professor of International Business  
University of Quinnipiac  
BS, Jilin Institute of Technology; MA, MS,  
PhD,. (University of Texas-Dallas)

**Burcin Becerik-Gerber**  
University of Southern California  
Ph.D. in Civil Engineering  
DDes from Harvard University  
M.S. from University of California, Berkeley  
& Istanbul University

**Dr. Bart Lambrecht**

Director of Research in Accounting and Finance  
Professor of Finance  
Lancaster University Management School  
BA (Antwerp); MPhil, MA, PhD (Cambridge)

**Dr. Carlos García Pont**

Associate Professor of Marketing  
IESE Business School, University of Navarra  
Doctor of Philosophy (Management), Massachusetts Institute of Technology (MIT)  
Master in Business Administration, IESE, University of Navarra  
Degree in Industrial Engineering, Universitat Politècnica de Catalunya

**Dr. Fotini Labropulu**

Mathematics - Luther College  
University of Regina  
Ph.D., M.Sc. in Mathematics  
B.A. (Honors) in Mathematics  
University of Windsor

**Dr. Lynn Lim**

Reader in Business and Marketing  
Roehampton University, London  
BCom, PGDip, MBA (Distinction), PhD, FHEA

**Dr. Mihaly Mezei**

ASSOCIATE PROFESSOR  
Department of Structural and Chemical Biology, Mount Sinai School of Medical Center  
Ph.D., Eötvös Loránd University  
Postdoctoral Training, New York University

**Dr. Söhnke M. Bartram**

Department of Accounting and Finance  
Lancaster University Management School  
Ph.D. (WHU Koblenz)  
MBA/BBA (University of Saarbrücken)

**Dr. Miguel Angel Ariño**

Professor of Decision Sciences  
IESE Business School  
Barcelona, Spain (Universidad de Navarra)  
CEIBS (China Europe International Business School).  
Beijing, Shanghai and Shenzhen  
Ph.D. in Mathematics  
University of Barcelona  
BA in Mathematics (Licenciatura)  
University of Barcelona

**Philip G. Moscoso**

Technology and Operations Management  
IESE Business School, University of Navarra  
Ph.D in Industrial Engineering and Management, ETH Zurich  
M.Sc. in Chemical Engineering, ETH Zurich

**Dr. Sanjay Dixit, M.D.**

Director, EP Laboratories, Philadelphia VA Medical Center  
Cardiovascular Medicine - Cardiac Arrhythmia  
Univ of Penn School of Medicine

**Dr. Han-Xiang Deng**

MD., Ph.D  
Associate Professor and Research  
Department Division of Neuromuscular Medicine  
Davee Department of Neurology and Clinical Neuroscience  
Northwestern University Feinberg School of Medicine

**Dr. Pina C. Sanelli**

Associate Professor of Public Health  
Weill Cornell Medical College  
Associate Attending Radiologist  
NewYork-Presbyterian Hospital  
MRI, MRA, CT, and CTA  
Neuroradiology and Diagnostic  
Radiology  
M.D., State University of New York at  
Buffalo, School of Medicine and  
Biomedical Sciences

**Dr. Michael R. Rudnick**

M.D., FACP  
Associate Professor of Medicine  
Chief, Renal Electrolyte and  
Hypertension Division (PMC)  
Penn Medicine, University of  
Pennsylvania  
Presbyterian Medical Center,  
Philadelphia  
Nephrology and Internal Medicine  
Certified by the American Board of  
Internal Medicine

**Dr. Roberto Sanchez**

Associate Professor  
Department of Structural and Chemical  
Biology  
Mount Sinai School of Medicine  
Ph.D., The Rockefeller University

**Dr. Bassey Benjamin Esu**

B.Sc. Marketing; MBA Marketing; Ph.D  
Marketing  
Lecturer, Department of Marketing,  
University of Calabar  
Tourism Consultant, Cross River State  
Tourism Development Department  
Co-ordinator , Sustainable Tourism  
Initiative, Calabar, Nigeria

**Dr. Wen-Yih Sun**

Professor of Earth and Atmospheric  
SciencesPurdue University Director  
National Center for Typhoon and  
Flooding Research, Taiwan  
University Chair Professor  
Department of Atmospheric Sciences,  
National Central University, Chung-Li,  
TaiwanUniversity Chair Professor  
Institute of Environmental Engineering,  
National Chiao Tung University, Hsin-  
chu, Taiwan.Ph.D., MS The University of  
Chicago, Geophysical Sciences  
BS National Taiwan University,  
Atmospheric Sciences  
Associate Professor of Radiology

**Dr. Aziz M. Barbar, Ph.D.**

IEEE Senior Member  
Chairperson, Department of Computer  
Science  
AUST - American University of Science &  
Technology  
Alfred Naccash Avenue – Ashrafieh

## PRESIDENT EDITOR (HON.)

### **Dr. George Perry, (Neuroscientist)**

Dean and Professor, College of Sciences

Denham Harman Research Award (American Aging Association)

ISI Highly Cited Researcher, Iberoamerican Molecular Biology Organization

AAAS Fellow, Correspondent Member of Spanish Royal Academy of Sciences

University of Texas at San Antonio

Postdoctoral Fellow (Department of Cell Biology)

Baylor College of Medicine

Houston, Texas, United States

## CHIEF AUTHOR (HON.)

### **Dr. R.K. Dixit**

M.Sc., Ph.D., FICCT

Chief Author, India

Email: [authorind@computerresearch.org](mailto:authorind@computerresearch.org)

## DEAN & EDITOR-IN-CHIEF (HON.)

### **Vivek Dubey(HON.)**

MS (Industrial Engineering),

MS (Mechanical Engineering)

University of Wisconsin, FICCT

Editor-in-Chief, USA

[editorusa@computerresearch.org](mailto:editorusa@computerresearch.org)

### **Sangita Dixit**

M.Sc., FICCT

Dean & Chancellor (Asia Pacific)

[deanind@computerresearch.org](mailto:deanind@computerresearch.org)

### **Suyash Dixit**

(B.E., Computer Science Engineering), FICCTT

President, Web Administration and

Development , CEO at IOSRD

COO at GAOR & OSS

### **Er. Suyog Dixit**

(M. Tech), BE (HONS. in CSE), FICCT

SAP Certified Consultant

CEO at IOSRD, GAOR & OSS

Technical Dean, Global Journals Inc. (US)

Website: [www.suyogdixit.com](http://www.suyogdixit.com)

Email:[suyog@suyogdixit.com](mailto:suyog@suyogdixit.com)

### **Pritesh Rajvaidya**

(MS) Computer Science Department

California State University

BE (Computer Science), FICCT

Technical Dean, USA

Email: [pritesh@computerresearch.org](mailto:pritesh@computerresearch.org)

### **Luis Galárraga**

J!Research Project Leader

Saarbrücken, Germany

## CONTENTS OF THE ISSUE

---

- i. Copyright Notice
- ii. Editorial Board Members
- iii. Chief Author and Dean
- iv. Contents of the Issue
  
- 1. Why are They Cheating? --Mislabeling Pork in Chongqing Wal-Mart. **1-4**
- 2. Case Study Business Process Re-Engineering of Supply Chain Activities in Attock Petroleum Limited (APL). **5-12**
- 3. Using Analytical Hierarchy Process (AHP) to form Shares Portfolio in Kingdom of Bahrain's Bourse. **13-38**
- 4. Non-Conventional Organizations – the Messengers of the Future in the World of Organizations and Management. **39-46**
- 5. A Theoretical Approach to Customer Relationship Management and Communication. **47-50**
  
- v. Fellows and Auxiliary Memberships
- vi. Process of Submission of Research Paper
- vii. Preferred Author Guidelines
- viii. Index



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A  
ADMINISTRATION AND MANAGEMENT  
Volume 15 Issue 3 Version 1.0 Year 2015  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# Why are They Cheating? –Mislabeled Pork in Chongqing Wal-Mart

By Liao Minchao

*Hong Kong Lingnan University, China*

**Introduction-** Recent years, in China, it is easy to find that we are suffering the food safety crisis. The food safety and quality are closely related to our life and draws much attention in public. However, repackaging of expired food, counterfeit and substandard food issues are very common. Even more astonishing is that even those big international supermarkets with high reputation, like Carrefour and Wal-Mart, repeated cheating customers on food issues. The reasons behind this phenomenon provoke a deep thinking.

*GJMBR - A Classification : JEL Code : M00*



*Strictly as per the compliance and regulations of:*



RESEARCH | DIVERSITY | ETHICS

# Why are They Cheating? --Mislabeling Pork in Chongqing Wal-Mart

Liao Minchao

## I. INTRODUCTION

Recent years, in China, it is easy to find that we are suffering the food safety crisis. The food safety and quality are closely related to our life and draws much attention in public. However, repackaging of expired food, counterfeit and substandard food issues are very common. Even more astonishing is that even those big international supermarkets with high reputation, like Carrefour and Wal-Mart, repeated cheating customers on food issues. The reasons behind this phenomenon provoke a deep thinking.

A deviation from maintaining good ethical behaviors can have disastrous results, one of the most famous being the story of Enron. In business, ethics is about managing risks as an organization, no matter what individual beliefs or standards are (Michael, 2012). This essay will firstly demonstrate how this Wal-Mart cheating behavior is, analyze Wal-Mart's unethical behavior and the reasons behind, show the ethical issues and related stakeholders, and then give the alternatives and solutions by using the ethical guidance.

## II. CASE INTRODUCTION

In September, 2011, Wal-Mart in Chongqing, China, was found selling high prices of "green pork", labeling that these pork are organic. However, in fact, those so-called "green pork" are just common cold fresh meat with much lower value. Surprisingly, the Wal-Mart stores were accused of selling more than 63,500 kilograms (14.4 tons) of mislabeled pork for about 20 months, the official Xinhua News Agency said, citing the director of the Chongqing Administration of Industry and Commerce, Huang Bo. This cheating behavior violates the legitimate rights and interest of consumers. The Chongqing Wal-Mart group apologized to customers for their unethical behavior and the inconvenience they have caused.

Remarkably, it's not the first time for Wal-Mart to cheat its customers; since it began operating in Chongqing in 2006, it had been repeatedly punished 20 times for violating food standards and other rules. In particular, this food cheating behavior is the least harmful one among 21 times unethical behavior, but

Wal-Mart get the most serious punishment this time. The Chongqing government fined Wal-Mart with 2.69 million Yuan, which is 5 times of their illegal income. And the police had detained some of its employees who are related to this "green pork" incident. What's more, 13 stores of Chongqing Wal-Mart were asked to close for 15 days. The earlier 20 fines for Wal-Mart did not included "close the stores"; this closing stores' punishment for 15 days may cause Wal-Mart lose more than million. In addition, when asking the reasons for why they sold fake "organic pork", Wal-Mart once argued that it's because when dividing the pork, the employees mixed up the "organic pork" and "ordinary pork", and the management advocated they did not know. But this argument was subverted by pork suppliers, advocating that employees who divided the pork are very professional, they will never make stupid mistakes like that. Therefore, this case becomes rather complex and astonishing. If it's the first time Wal-Mart ignore the basic rights of consumers, this unethical behavior may not infuriate public.

## III. ETHICAL ISSUES IN THIS CASE

### a) *Indifferent and Illegal*

Wal-Mart's pork scandal is not only indifferent behavior but also illegal. There are two reasons why Wal-Mart's scandal is regarded as indifferent and illegal. Firstly, Wal-Mart is completely indifferent to consumers' right to know the truths and interest. Secondly, Wal-Mart's cheating behavior violates the law of "Mark green food management methods" in China. Detailed analyses of these two accusations are as follows. Indeed, Wal-Mart's mislabeled pork did not do any harm, after all, the pork they sold do not consist any pernicious substance. That means, the quality of the pork itself has no problem. However, the quality of organic pork and ordinary pork is different. More importantly, the prices of these two kinds of pork are quite different. Wal-Mart took advantage of consumers by mislabeling the pork, which will be took as "indifference" behavior. Ironically, even though many retailers advocate "the customer is God", which means they put their customers in the first place, actually, when profit comes, they will totally ignore the interest of consumers but put their own benefit in the first place. And Wal-Mart's lying behavior becomes a satire

Author: e-mail:joy7756@sina.com

because its indifference to consumers exactly opposite with its propaganda of "save money, live better".

b) Lack of effective supervision and serious punishment.

This case brought problems of lacking effective supervision and serious punishment to light. It is not only about cheating consumers, but more about the reasons behind "cheating even after 20 times punished by the government". There are two reasons that make a top ten retailer company to take the risk of ruin its reputation doing unethical things. With no doubt, the first one is profit. They can achieve huge benefits by selling mislabeled "organic pork", and they think it's not easy for consumers to discover. Therefore, their own supervision within the company is not strict, that means, they ignore managing and supervising the quality of food because they think it's not important, the most important thing they think is the profit. Secondly, even its cheating behavior was found by government supervision department, the punishment is too gentle to this retail tycoon. It won't learn a lesson from punishment and will still take the risk doing unethical things, because the money they gain by cheating is much more than the fine. As the fine was decided according to the "Food Safety Law" in China, government should use "industry rules" to increase the fines, or adjust the regulations such as deciding the fine according to its annual turnover.

c) *Theory of firm—pluralist*

We can conclude from the case, effective supervision and management is very essential. Firstly, government should supervise strictly. The pluralist perspective insists that "capitalism need to be supervised and regulated to ensure compatibility with broader societal aims" (Colin Fisher, Alan Lovell, 2009). If the government has strict supervise system, and rigorous punishment for those companies who done bad, Wal-Mart's cost of cheating will become higher, then it will respect the law and behave well. And in this case we can see, this time, the punishment is serious enough, if this kind of punishment comes earlier, Wal-Mart may not repeat making mistake. Secondly, a good management system by the company inside is also important. Only the company itself is aware of the important of food quality, and supervises the quality of food strictly, can they avoid this kind of scandal, and keep the company's reputation.

#### IV. RELEVANT STAKEHOLDERS AND THEIR STAKE

a) *Consumers*

In this case, Wal-Mart took advantage of the consumers, making them the biggest victims.

Consumers have the right to enjoy a good product with fair price, and have the right to know the truth. But consumers was cheated by Wal-Mart and paid more money to buy a lower value food. What's more, after this cheating scandal, 13 stores were asked to closed for 15 days, this brings inconvenience to customers who always buy things in Wal-Mart. Consumers should ask for compensation from Wal-Mart.

b) *Suppliers of Wal-Mart*

Suppliers of Wal-Mart lost benefit from this unethical behavior. Records show that the purchase of "organic pork" of Wal-Mart has been decreased since they mislabeled the "green pork", because Wal-Mart used cheaper ordinary pork instead. It is obvious that Wal-Mart indirectly harm the interest of organic pork suppliers. In addition, as 13 stores of Chongqing Wal-Mart were asked to close for 15 days after this cheating scandal, suppliers lost benefit under this circumstance.

c) *Government (especially the supervision department)*

Government has the responsibility to supervise the companies, ensuring the existing regulations can protect the basic right of consumers. The impact on government from this case has two sides. On the one side, the serious punishment for Wal-Mart this time showed that the government is serious about the right of consumers, and this may won public trust for government. However, on the other side, an survey on the internet investigated to what extent people think the government has protected the consumers, 70% argues it's too late to give serious punishment after 20 times cheating. Because Wal-Mart has cheated customers 21times, this case also arouse the suspicious about our government. Some are showing their dissatisfaction about our government's late effective methods. The government should do more to win its reputation and trust among public, such as give unethical companies bigger fines helping then behave better, and warn those who want to do unethical things by "beat the dog before the lion".

d) *Other competitor companies*

The impact on Wal-Mart's competitor companies has two sides. Before this scandal is reveled to public, it has negative influence on competitor companies. The companies originally enjoy the right of fair competition and an ethical business market, but Wal-Mart made profit by cheating consumers which violated the fair competition and ethical market environment. After this cheating scandal reveled to public, it has positive influence on competitor companies. As lots of consumers won't trust Wal-Mart anymore thus they tend to buy things in other supermarkets, a survey on the internet shows that many Wal-Mart's consumers now tends to buy things in other

supermarkets, this actually brings benefit of Wal-Mart's competitors.

#### e) *Wal-Mart stores*

The impact on Wal-Mart stores also should be divided by stages. At first, Wal-Mart gained a lot profit by mislabeling the pork. It seems that it's the winner. But after this cheating scandal, the fine made the company lost 2.69 million. And the stores need to pay the consumers compensations. And consumers should provide the cashier bills or check the monitoring recording from that day they bought the pork, and then get the compensation. The compensation is equivalent to double the amount of the price sold. What's more, Wal-Mart lost its reputation in public, which means, it may loss regular and potential consumers. Wal-Mart's lost after this scandal cannot be accurately calculated. Wal-Mart eventually hurt itself.

#### f) *Media*

Media won public reputation this time. Media have the responsibility to discover and report the "true picture" of events. In this case, Wal-Mart did unethical behavior by hiding the truth, and this scandal was firstly found by a consumer's while-blowing, without media, public will not discover the truth and know the whole cheating scandal clearly. Also, without media, the police and government won't take measures immediately. Furthermore, media played an essential role in arousing public awareness about quality of food this time, also in helping government discover the truth and warning other companies behave well. Media's timely report and powerful influence is helpful for preventing unethical behaviors, making it also won public reputation this time.

## V. ETHICAL GUIDANCE OF THIS CASE

#### a) *Deontology*

The deontology insists that lying is always wrong, that means the Wal-Mart has the duty to tell the truth, the cheating behavior cannot be tolerated. What's more, consumers have the right to know the truth; their right should be respected and protected.

The Golden Rule in Buddhism gives a great ethical guidance here. It says that "hurt not others in ways that you yourself would find hurtful". This principle can help preventing indifference to others. Wal-Mart is indifferent to the consumers' lost because it thinks it's not its own loss, on the contrary, it gains profit from consumers' loss. However, it ignored the long term benefit, which is its reputation. If Wal-Mart lost its reputation, it will lose its customers and lost the leading position in retail market. That means, if Wal-Mart hurt its customers, eventually, it itself will be hurt. Only Wal-Mart respect its consumers, try to benefit its consumers, making a win-win situation, can it gain more.

## VI. ALTERNATIVES

On the Wal-Mart website, we can easily find its goal, it says "saving people money to help them live better was the goal that Sam Walton envisioned when he opened the doors to the first Wal-Mart more than 40 years ago". But in this case, we can just see the totally contrary goal about take advantage of its customers and make them live worse. Wal-Mart's reputation was thoroughly damaged by this 21th cheating. From the Wal-Mart company aspect, there are actually 3 alternatives:

#### a) *Strict management of food purchase channels*

Wal-Mart once said that this mislabeling pork behavior is a result of mistakes made by employees and managers did not know it. No matter it's an excuse or not, Wal-Mart should improve its management, build a strict supervision system of the food they purchase, develop a strict management system that ensure the quality of the food.

#### b) *Treating customers sincerely*

Only by treating customers sincerely rather than cheating them, Wal-Mart will win long term benefit rather than a short term profit. And only win the consumers trust and build a good reputation in the public, can Wal-Mart operates well in the future. There is an old Chinese saying that is "If you would not be known to do anything, never do it". Wal-Mart knows that the supervision in China is not strict, so it chooses to do unethical things and begs no one will discover. However, justice has long arms. Once Wal-Mart lost its reputation by cheating, it lost huge. And it need long time to rebuild the reputation.

#### c) *Compensate its suppliers*

As this scandal also made Wal-Mart's suppliers lost money, if Wal-Mart want to rebuild its reputation and shows its determination to deal with this scandal seriously, it should compensate its suppliers and rebuild a good relationship with them.

As this is the 21th cheating consumers for Wal-Mart, which shows the problems of ineffective supervision and management, there are also alternatives for government and consumers.

- 1) Government should severely punish the companies who done unethically, such as give them big fines. That means, the coming fines will make companies lost much more than they gained from doing unethical things, and then the companies won't repeat making mistakes like this.
- 2) Consumers should choose the stores which always behave ethically, and strengthen the awareness of identifying the quality of goods. Consumers also need to use laws to protect their own right. To be

more specific, if they find anything that violates their right and interest, they can whistle blowing and ask for compensations.

## VII. SOLUTIONS

### a) *From Wal-Mart aspect*

- i. Compensation consumers: Firstly Wal-Mart should give a sincere apologize to the consumers and then give them reasonable compensation for their loss. The compensation is equivalent to double the amount of the price sold. According to the "protection of consumers' rights and interests" law processing in China, consumers shall provide the cashier bills or check the monitoring recording from that day they bought the pork firstly, and then get the compensation.
- ii. Reshape the reputation by really care about customers: Wal-Mart should ensure there is no cheating any more, try to benefit its consumers with more favorable goods. Using high-quality food and sincere services to win back consumers.
- iii. Develop a code of supervises food and effective management system. The Wal-Mart management should pay more attention in supervise the quality of the goods they sold. Only they themselves did some change, and did they have excellent and effective management, can they be better and won the trust of customers.

### b) *From government aspect*

- i. Build more formal channels for public to blow the whistle on unethical behaviors. This can spark public supervision on companies. Also, internally, employees in companies should do whistle blowing if they find unethical things happen within. Government may give some reward to those employees in order to motivate who do whistle blow. When people are all involved, the supervision becomes powerful.
- ii. Impose big fines or prison sentences if the case is serious or even withdraw the license of companies who done badly. Only with strict punishment regulations, the companies will consider the cost of cheating consumers and respect the laws.

### c) *From consumers' aspect*

Improve consumers' own awareness of identify the quality of food, if consumers find any unqualified food or other goods, they should blow a whistle, tell the media, or resort to law to protect its own right.

## VIII. CONCLUSION

Wal-Mart's mislabeling pork scandal is a satire about cheating and indifference to the consumers but

eventually hurt its own benefit. This scandal happened after 20 times violated the law in China, which really provokes our Chinese government's and Wal-Mart management's reflection. Therefore, as a company, reputation is always essential, try to behave ethically and be sincere to the customers is the golden rule for long term business operation. And for the government, strict supervision and serious punishment should be conducted to help this free market become better.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Asanghanwa, E. (2011). Hacks: How can they be prevented? ECN: Electronic Component News, 55(10), 24-24.
2. Fisher. C. M. and A. Lovell. (2009). Business ethics and values. FT Prentice Hall.
3. Laurie, B.(2011), "Authorities Shut Wal-Mart Stores in Southwestern China", available at: <http://online.wsj.com/article/SB10001424052970203633104576621841009108466.html>
4. Michael A. C. (2012), "Providing the ethical example", available at: <http://www.emeraldinsight.com/journals.htm?issn=0888-045X>
5. Peter(2011), "Wal-Mart stores in Chongqing closed for mislabel pork", available at: <http://www.chinawhisper.com/wal-mart-stores-in-chongqing-closed-for-mislabel-pork>
6. Miller M.(2011), "Mislabeled pork forces Wal-Mart closings in China", available at: <http://www.porknetwork.com/pork-news/Mislabeled-pork-forces-Wal-Mart-closings-in-China131481408.html>
7. John R. Boatright (2000). Globalization and the Ethics of Business. Business Ethics Quarterly 10 (1):1-6.
8. Joanne B. Ciulla (2011). Is Business Ethics Getting Better? A Historical Perspective. Business Ethics Quarterly 21 (2):335-343.
9. Clare M. Pennino (2004). Norman E. Bowie, Business Ethics, a Kantian Perspective. Journal of Business Ethics 50 (4):415-.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A  
ADMINISTRATION AND MANAGEMENT  
Volume 15 Issue 3 Version 1.0 Year 2015  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

## Case Study Business Process Re-Engineering of Supply Chain Activities in Attock Petroleum Limited (APL)

By Saba Idrees

**Abstract-** Organizations in the modern age are being challenged by many difficulties because of the rapid advancements in technology while using old and traditional techniques for the running of their processes. To increase the competitiveness of the organization and to improve the sustainability of the company, the concept of Business process re-engineering is being adopted which involves the radical redesign of process by tossing aside the existing ways and methods. The main objective of this case study is to explore the possibilities for improvement in the processes of Attock Petroleum Limited (APL) such as supply chain management with the technique of business process reengineering as the traditional approach is affecting the performance of the company. Data has been collected through unstructured interviews from the engineering personals in the company and from the company website.

**Keywords:** *business process re-engineering, supply chain, attock petroleum limited, vehicle tracking system, auto tank guaging(atg), centralised data acquisition centre.*

**GJMBR - A Classification :** *JEL Code : M10*



CASE STUDY BUSINESS PROCESS REENGINEERING OF SUPPLY CHAIN ACTIVITIES IN ATTOCK PETROLEUM LIMITED APL

*Strictly as per the compliance and regulations of:*



RESEARCH | DIVERSITY | ETHICS

# Case Study Business Process Re-Engineering of Supply Chain Activities in Attock Petroleum Limited (APL)

Saba Idrees

**Abstract-** Organizations in the modern age are being challenged by many difficulties because of the rapid advancements in technology while using old and traditional techniques for the running of their processes. To increase the competitiveness of the organization and to improve the sustainability of the company, the concept of Business process re-engineering is being adopted which involves the radical redesign of process by tossing aside the existing ways and methods. The main objective of this case study is to explore the possibilities for improvement in the processes of Attock Petroleum Limited (APL) such as supply chain management with the technique of business process reengineering as the traditional approach is affecting the performance of the company. Data has been collected through unstructured interviews from the engineering personals in the company and from the company website. Along with that extensive study has been carried out from the existing literature. By applying BPR techniques: the installation of vehicle tracking system, auto tank guaging and establishment of centralised data acquisition centre the company would be able to increase its sales volume by 20% and reduce its human resource by 30% thereby resulting in savings for the company.

**Keywords:** business process re-engineering, supply chain, attock petroleum limited, vehicle tracking system, auto tank guaging(atg), centralised data acquisition centre.

## I. INTRODUCTION

A business process is an activity which involves a group of tasks that are achieved in a manner that provide satisfaction to the needs of the users and also they are directed to give them value, in order to meet the strategic goal of any organization. It is very important to properly manage the tasks in order to manage the processes effectively so that it becomes easy to meet the operational objective of the organization (Berber, Baasic & Pasula, 2011). To increase the competitiveness of the organization and to improve the sustainability of the company the concept of business process reengineering emerges which improves the overall condition of the company by implying new and improved ways. (Magutu, Nyamwange & Kaptoge, 2010).

Business process reengineering is the concept in which all the processes of an organization or the company are redesigned in a way that they are invented

again and no same task is revised thus it is the radical redesigning of all the processes of the organization. It is done to improve the existing condition of the organization by implying new and improved ways thus lowers the cost and improves the profitability of the organization.

Year 1990 was the year of business process reengineering success especially when Michael Hammer and James Champy published their bestselling book "Reengineering the corporation", according to their concept business process reengineering is necessary in order to make the company profitable by lowering its cost, it was needed in that era because most of the companies in USA were suffering from losses therefore the researchers gave this idea to improve their condition.

The main objective of this case study is to explore the possibilities for improvement in the processes of Attock Petroleum Limited (APL) such as supply chain management with the technique of business process reengineering. Supply chain management is a process by which a company finds the raw components or material that is needed to make its final product, reengineering in supply chain management means exploring new and improved ways of producing the product which in turn lowers the cost and this maximizes the profit.

According to Briggs and Tolliver (2012) the petroleum industry supply chain is like the supply chain of any other industry, composed of intricate entities that extend from the oil fields to the gasoline stations. The upstream petroleum supply chain has always been considered complex compared to other process industries, such as pharmaceuticals. However, the logistics function is one of the areas that affect supply chain performance in the petroleum industry.

## II. COMPANY'S PROFILE

APL is the 3<sup>rd</sup> largest oil marketing company of Pakistan after Pakistan state oil (PSO) and Shell and was established in 1998. The main aim of the company is to continuously provide quality and environment friendly petroleum products and related services to industrial, commercial and retail consumers, and exceeding their expectations through reliability,

*Author:* e-mail: [sabайдrees162@hotmail.com](mailto:sabайдrees162@hotmail.com)



economy and quality of products and services. APL is committed to benefiting the community and ensuring the creation of a safe, responsible and innovative environment geared to client satisfaction, end user gratification, employees' motivation and shareholders' value.

### III. COMPANY'S OPERATIONS

APL is procuring its product from Attock Refinery Limited, National Refinery Limited, PARCO refinery and imported product through Jetty. Currently the company is operating from the following supply points.

- Rawalpindi
- Machike, sheikhupura
- Karachi
- Gatti, Faisalabad
- TarruJabba, Peshawar
- Vehari, Sindh
- Mahmood kot, Muzzafargarh
- Shikarpur, Sindh
- Habibabad, Lahore

### IV. PROBLEM IN COMPANYS PROCESS

Supply chain is believed to be back bone of any oil marketing company like APL where it plays a vital role in successful operation. It consists of the processing, transportation, marketing, and distribution of petroleum products, and it is usually characterized as a mature, rather competitive, and complex industry (Hackworth & Shore, 2004). In APL, traditional approach towards supply chain is denting the company's growth to a great deal.

### V. LITERATURE REVIEW

Organizations in past considered their structure and behavior in order to defend their evolution and adaption in dynamic and rapidly changing environment. Change has always been the major cause in any organization, though it was predictable, incremental and evolutionary but today it is rapid, unalarmed and unpredictable.

One of the major development of management studies is business process reengineering around 1990's. Hammer and Champy (1993) and Davenport(1993) introduced the approach to redesign business processes for creating profit and restructure the whole business using engineering methodology.

According to Aghassi (1994), the process reengineering often seem as one of the tools to justify the organizational business processes. Davenport himself describes business process reengineering as "the fad that forgot people". 1990's have been a decade

of retrenchment in spite of enlargement for most businesses, and found that in fact US, UK and German organizations change in size enlarger rather than organizations which appear to occupy the reengineering.

At core business process reengineering involves structural changes and processes within the business environment. It helps to change whole organizational, technical, human dimensions.

Over the past couple of years, it gained much importance and involved in increased circulation of businesses on larger parts of the world, because of that many try to learn, implement and successfully applied a real business process reengineering (Davenport, 1993). Today more than 120 businesses from small to medium size in Greece and thousands in Europe have been with such type of re design organizational structures.

Kallio, Aarinen, Tinnila and Vepsalaine (1999) explains business process reengineering as one of the strategy developed to improve companies entire business processes.

Common fundamental approaches highlighted supply chain management, business process reengineering, business process improvement philosophies. It is argued that those who work with supply chain management in their businesses, have already undergone business process reengineering and therefore reengineered their own processes, so the business process reengineering and supply chain management traveled the same path far ago. Once businesses integrated supply chain management, they processed with the greatest benefits. (Wisnosky, Dennis & Batteau, 1990)

According to global supply chain forum ,it is integration of key business processes from end user through original suppliers that provide products, services ,information that add value for the customers and other stakeholders. (Chan & Qi, 2003).

Improvement in supply chain management can be shown with the help of business renovation, effective information technology utilization and techniques of business process reengineering modeling. By reformation and different business processes integration between companies at various tiers in the chain, the performance gets enhanced ultimately. (Wisnosky et al, 1990).

Thus the ultimate purpose of supply chain management is to enable specialization and economies of scale and to be successful, business process reengineering projects need to be top down, taking in the complete organization, and the full end to end processes. It needs to be supported by tools that make processes easy to track and analyze. (Hunt, 1996. Hammer & Champy, 1993).

## VI. CASE PRESENTATION

Attock Petroleum Limited (APL) intends to build a world class infrastructure for the receipt and distribution of petroleum products throughout the country. Every day millions of liters of refined product is received from the refineries through pipelines or road trucks, stored in storage tanks and hundreds of vehicles roll out from the oil installations to travel vast stretches of the Indus Valley, deserts in the south and mountainous ranges in the north to reach its customers.

APL supply chain intends to ensure that each product is delivered to its customers at the right time in the right quantity and quality.

## VII. BUSINESS PROCESS RE-ENGINEERING AT COMPANY

It is suggested that the whole process should be re-engineered and technological advancements should be used to help develop better mechanism for the company. e.g one major issue is that retailers illegally purchases fuel from other sources because of several un avoidable reasons, which in

return effects the profits of the company. so if the company opt for installation of auto tank gauging at all its retail outlets and a centralized data acquisition center, logistic department will get a real time picture about stocks at all its locations.

Also it will benefit to get first hand information of fuel levels at stations, so the logistic department can arrange for the supply in advance and avoid the station to get dry. Another addition which may benefit the company is to install tracking system on all its fleet vehicles. This will help supply chain department to figure out the actual time required by a particular fuel to get to its location, when in transit.

## VIII. AIM OF BUSINESS PROCESS REENGINEERING

It is proposed to introduce vehicle tracking system, Auto tank gauging and other technological advanced equipment for effective utilization of resources. By these additions, product adulteration and or theft of fuel can also be controlled and it will definitely help company to gain customer satisfaction and capture better market share.

*Supply Chain Cycle (Product Receipt)*

Step#	Event description	Process Title
1.	All OMCs raises their demand every month to the refineries across Pakistan, based on their respective forecasted sales, storage capacities, shutdowns, etc.	Product demand
2.	All refineries issue a product allocation sheet that depicts the volumes up liftments for every OMC. Refineries are bound to follow the regulations imposed by Oil and Gas regulatory authority (OGRA) and Oil companies advisory committed (OCAC).	Product allocation
3.	The product is then transferred to OMC's terminals through pipelines, tank trucks etc.	Product receipt

*Supply Chain Cycle (Product Dispatch)*

Once the product is received at OMC's terminals it is dispatched to its customers including its retail network, power generation companies, industries,

Pakistan Army etc. Steps involved in this cycle is as under

Step#	Event description	Process title
1.	Payment in advance by the customers by mean of payorder, demand draft etc. in favor of APL.	Product Payment
2.	APL logistic section arranges for the suitable vehicle as per product volume, area of disptach etc.	Logistic
3.	Issuance of PUA (Product up liftment authorization) to the customers representative by APL finance section at terminal.	Invoicing
4.	The PUA is then transferred to the APL operations department for filling of product into tank truck. The product in exact volume is handed over the customers representative after sealing truck outlets valves.	Operations
5.	The tank truck then leaves the terminal for its designated location.	Transshipment
6.	Product is off loaded for onward utilization.	Product delivery

#### Human Resources

#	Designation	No of staff	Process title	Department	Location
1.	Business support officer	57	Invoicing & Product payment	Finance	All
2.	Executives	26	Invoicing, Product payment, Logistics, Opearations,	Finance, Logistics, opearations	All
3.	Sr. Executives	07	Product demand, logistics, Operations	Supply chain	All
4.	Assistant Manager	03	Product demand, Invoicing	Supply chain	Head Office
5.	Managers	02	Operations, Product demand and receipt	Supply chain	Head Office
6.	Assistant General Manager	01	Supply chain cycle	Sales & Marketing	Head Office
7.	General Manager	01	Finance	Finance and Accounts	Head Office
	Total	97			

## IX. METHODOLOGY

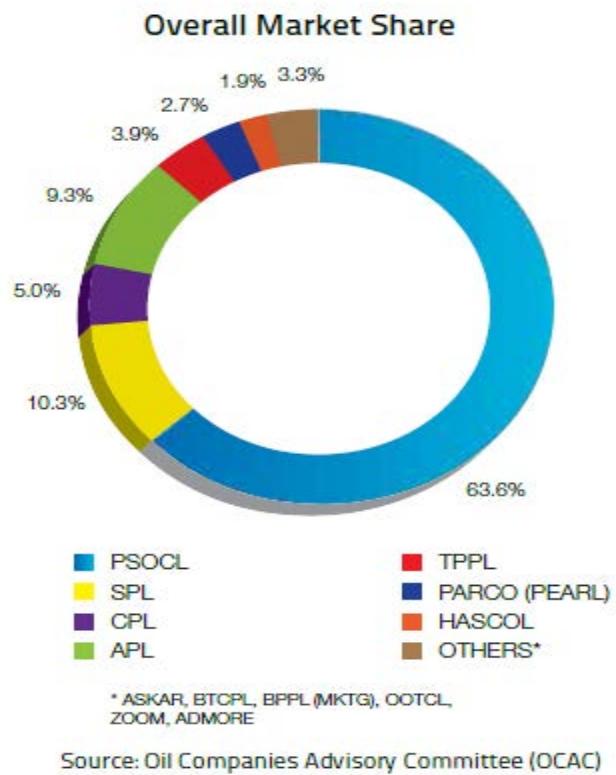
Data has been collected through unstructured interviews from the engineering personals in the company. Along with that extensive study has been carried out from the existing literature. Company's website is also visited to get information.

## X. BUSINESS PROCESS IMPROVEMENT

After proposed reengineering of company's supply chain algorithm, following outcomes / betterments are expected.

- Increase in company's sale volumes.
- Just in time product availability at all sale points which in return increases customers trust in company.
- Better utilization of companys resources

- Deduction in company's operating cost due to involvement of lesser human resources
- Better & advance product sourcing and distribution planning.
- No chance of theft of product during transportation.
- Cost reduction in logistics of product
- Cutting margins of competitor & increasing company's market share



- Ensure Quality of product



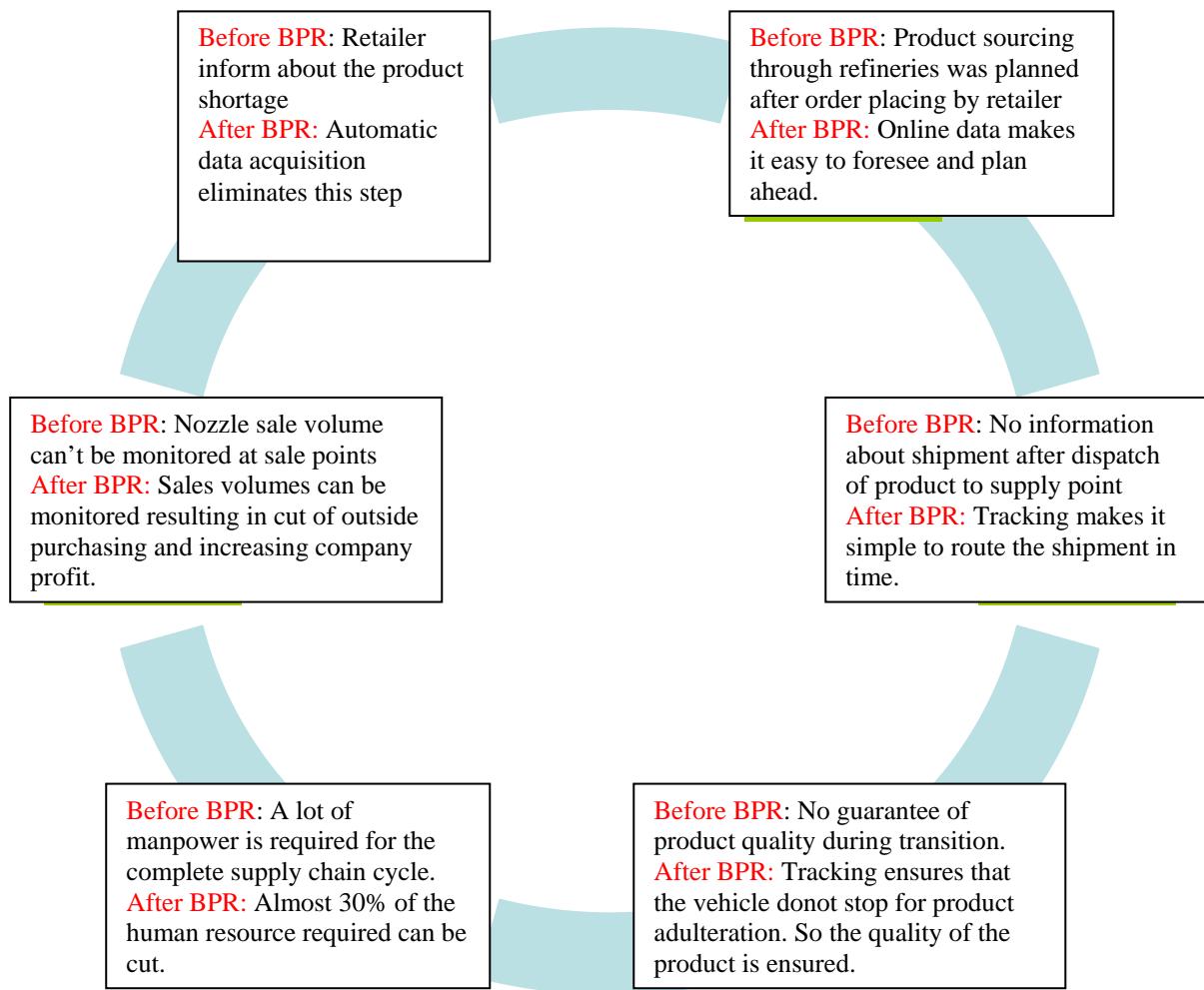
## XI. DISCUSSION

By getting the real time data through ATG's installed at storages at company's sale points, the supply chain department can restrict illegal purchasing of retailer and thereby increasing company's sales volumes. It is estimated that the current annual sale volumes of company which are 1,837,357 Mtons of oil for the financial year 2012-13 will increase by approx. 20 % and will close out at around 2.2 Million Mtons of Oil at the end of next financial year.

In marketing gaining customer trust is the first and foremost objective and the ability to ensure product

availability at all times is critical. By implementation of suggested re-engineering, it is presumed that any chance of product unavailability at any of supply point will be eliminated. This is because the supply chain department is getting all the required information about the stock positions through the introduction of auto tank gauging system sitting in head office and they can easily manage to supply the product in time for fulfilment of customers requirements. It is pertinent to mention here that it is an obligation on the company to ensure product availability at all its sale points by oil and gas regulatory authority (OGRA) of Pakistan, so in that context this re-engineering will also prove to be helpful in this regard.

*Effect of BPR on the supply chain cycle will be as under*



Through establishment of central command and control where the data is acquired automatically through online gauging of product and tracking of vehicles will not only decrease the hassle previously involved but will also help in getting the correct authentic data and reduction in the cost of communication.

By introduction of these changes it is expected that the manpower required can be reduced by as much

as 30% thereby resulting in savings for the company and also by mean of automation the precision of data can be achieved.

By mean of this advancement it is assumed that the product sourcing section will get prior information about the upcoming requirements of product and they can arrange for the refineries in advance. The refineries then schedule their plant operations accordingly and the

whole cycle of oil products in the country can be streamlined.

Most of the time, a single vehicle carries oil from depot to multiple source points, so by introduction of this system the logistics department will have the prior information regarding requirements of a particular region and they can plan suitable size of vehicles accordingly. This will reduce the cost of transportation.

Since by introduction of vehicle tracking system the central control and command will be getting the real time data about the movement of fleet vehicles across various supply points, so in case a vehicle reports to some other station for product adulteration / mixing where it is not supposed to go, the same can be monitored. So the risk of adulteration can be minimized. Also it is assumed that by introduction of this change the product theft of thousand of liters every month can almost be eliminated.

Some retailers use to get product through other sources like other OMC's which badly hits the company's profits, so by minimizing this probability it is assumed that the company will increase its market share by 1-2% which is currently around 18-19 % of the total.

By subject changes it is believed that the quality of product at source points can also be ensured as any addition to the product other than the product supplied by the company can be easily tracked and monitored on the central control and command center.

## XII. CONCLUSION

Reengineering is a complex process that consists of several important elements that companies, wanting to implement it, have to pay attention. (Radosavic, Pasula, Berber, Nebojsa & Nerandzic, 2013).

Re-engineering cannot be implemented without the use of Information Technology. It is also necessary to focus upon the processes rather than functions before starting re-engineering.

The main objective of this case study is to explore the possibilities for improvement in the processes of Attock Petroleum Limited (APL) such as supply chain management with the technique of business process reengineering as the traditional approach is affecting the performance of the company. Unstructured interviews have been conducted to gather the information along with the usage of some secondary sources of data.

By applying BPR techniques that is the installation of auto tank gauging, vehicle tracking system and establishment of centralized data acquisition centres, product adulteration and/or theft of fuel can also be controlled and it will definitely help company to

gain customer satisfaction and capture better market share. Also the company would be able to increase its sales volume by 20% and reduce its human resource by 30% thereby resulting in savings for the company.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Aghassi, H. (1994), Organizational structures, people and technology, in Coulson-Thomas, C. (Ed.), *Business Process Re-engineering Myth and Reality*, Kogan Page, London, pp. 192-200.
2. Berber, N., Baosic, M., & Pasula, M. (2011). Management of the Compensation Process in Human Resource Management. Conference Proceedings of the XV International Scientific Conference on Industrial Systems (IS 2011). Ed. Ivan Beker, FTN Novi Sad, 427-432.
3. Briggs, C.A. & Tolliver, D. (2012). Managing and mitigating the upstream petroleum industry supply chain risks: Leveraging analytic hierarchy process. *International Journal of Business and Economics Perspectives*. 7(1).
4. Chan, F. & Qi, H.J. (2003). An innovative performance measurement method for supply chain management. *Supply Chain Management: An International Journal*. 8(3), 209-23.
5. Davenport, T.H. (1993), *Process Innovation, Reengineering Work through Information Technology*, Harvard Business School Press, Boston, MA.
6. Forrester, J. (1961), *Industrial Dynamics*, MIT Press, Cambridge, MA.
7. Hammer, M. & Champy, J. (1993). *Re-engineering the Corporation, A Manifesto for Business Revolution*, Nicholas Brealey, London.
8. Hunt & Daniel, V. "Process Mapping: How to Reengineer your Business Process", John Wiley and Sons Inc, New York, 1996.
9. Hackworth, J., & Shore, J. (2004). Challenging Times for Making Refinery Capacity
10. Decision. *Energy Information Administration presentation at NPRA Annual Meeting*.
11. Kallio, J., Saarinen, T., Tinnila, M. & Vepsalaine n , A. P. J. (1999) .Drivers and tracers of business process changes. *Journal of Strategic Information Systems*, 8, 125± 142
12. Magutu, P. O., Nyamwange, S. O., & Kaptoge, G. K. (2010). Business process reengineering for competitive advantage. *African Journal of Business & Management*, 1, 135-150.
13. Radosevic, M., Pasula, M., Berber, N., Nebojsa, N., & Nerandzic, B. (2013). Reengineering of supply chain processes in production system-A Case Study. *Inzinerine Ekonomika-Engineering Economics*, 24(1), 71-80.

14. Wisnosky, Dennis E., Allen W & Batteau, "IDEF in Principle and Practice," GATEWAY, pp. 8-11, 1990.
15. Mr. Aqeel A Khan, Assistant General Manager (Sales and Marketing), APL, personal communication, October 25, 2013.
16. Mr. Sheraz A Zaidi, Assistant Manager (Sourcing and distribution), APL, personal Communication, November 10, 2013.
17. Mr. Shoaib Ahmed, Engineering departmental Head, APL, Personal Communication, November 10, 2013.
18. [http://www.cio.com/article/40940/Supply\\_Chain\\_Management\\_Definition\\_and\\_Solutions](http://www.cio.com/article/40940/Supply_Chain_Management_Definition_and_Solutions)
19. <http://www.apl.com.pk>



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A  
ADMINISTRATION AND MANAGEMENT  
Volume 15 Issue 3 Version 1.0 Year 2015  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

## Using Analytical Hierarchy Process (AHP) to form Shares Portfolio in Kingdom of Bahrain's Bourse

By Hussain Sinjar Alsamaray

*Applied Science University, Australia*

**Abstract-** This study comes to Use the Analytic Hierarchy Process (AHP) approach to build shares portfolio in kingdom of Bahrain shares' market. So that, we want to find out to what extent the Analytical Hierarchy Process approach is helpful taken in the account the importance of the investment decision to the investors as individuals or fund manager. We perform this assessment depending on the information of Bahrain stock market activities' handbook and some experts who have good experience in financial planning and some colleagues in university who are teaching financial and investment decision courses. The results demonstrated that (AHP) can help the decision maker to rank the sectors of the stock market according to their relative importance.

**Keywords:** *analytical hierarch process (AHP), pair-wise comparisons, multi-criteria decision making.*

**GJMBR - A Classification : JELCode : M19**



USING ANALYTICAL HIERARCHY PROCESS AHP TO FORM SHARES PORTFOLIO IN KINGDOM OF BAHRAIN'S BOURSE

*Strictly as per the compliance and regulations of:*



RESEARCH | DIVERSITY | ETHICS

# Using Analytical Hierarchy Process (AHP) to form Shares Portfolio in Kingdom of Bahrain's Bourse

Hussain Sinjar Alsamaray

**Abstract-** This study comes to Use the Analytic Hierarchy Process (AHP) approach to build shares portfolio in kingdom of Bahrain shares' market. So that, we want to find out to what extent the Analytical Hierarchy Process approach is helpful taken in the account the importance of the investment decision to the investors as individuals or fund manager. We perform this assessment depending on the information of Bahrain stock market activities' handbook and some experts who have good experience in financial planning and some colleagues in university who are teaching financial and investment decision courses. The results demonstrated that (AHP) can help the decision maker to rank the sectors of the stock market according to their relative importance. The rank is more likely influenced by the relative importance of balance sheet, income shares trading, profitability and leverage& liquidity. The study sheds importance insight into an area of multi-criteria decision making.

**Keywords:** analytical hierarchy process (AHP), pair-wise comparisons, multi-criteria decision making.

## I. INTRODUCTION

Using the Analytic Hierarchy Process (AHP) to build a shares portfolio in Kingdom of Bahrain stock market is described. AHP can be characterized as a multi-criteria decision technique in which qualitative factors are of prime of importance. A model of the problem (shares portfolio) is developed using a hierarchical representation (Zeleny 1982), (McCord & Neufville 1983) and (Kirkwood 1997). At the top of the hierarchy is the overall goal or prime objective one is seeking to fulfill (Saaty 1986), (Saaty 1996). The succeeding lower levels then represent the progressive decomposition of the problem. We complete a pair-wise comparison of all entries in each level relative to each of the entries in the next higher level of the hierarchy. The comparison of these judgments indicates the relative priority of the entities at the lowest level (e.g. investment sectors) relative to achieving the top-most objective (Saaty 1994).

## II. AN OVERVIEW OF THE ANALYTICAL HIERARCHY PROCESS (AHP)

The Analytical Hierarchy Process (AHP) grew and evolution, at the Wharton School of Business by (Thomas Saaty 1980). It is a structured approach

facilitates the process of analyzing the problem by breaking it down to small problems with multistage (Saaty 1990) which leads to show the problem of decision in analytical and systematic Fashion and in the way that shows the degree of similarity with the thinking of the decision-maker in the filming of the problems. The (AHP) style is not a style of complex processes designed for the analysis of complex problems but rather simple operations designed to analyze complex problems.

The (AHP) style views the problem of decision hierachal with multiple levels, making it easier to use pairwise comparisons to determine the relative importance of all elements of the pyramid using a series of objectives / subjective judgments. This style shows its ability to detect the mistakes of Consistency of Judgments. By using (AHP) provisions to determine priorities more accurately depending on verbal judgments even if the words used are not accurate, building on this property, it is possible to use the words of comparison as quality variables for a relative measure could be coupled with quantitative variable to calculate the priorities that can affect or contribute to every variable in determining the final decision. (AHP) uses to overcome the negatives that accompany the process of using the other entries in the decision-making process like the style of pros / cons, weights and scores techniques by identifying all aspects of the problem and the variables which reflect the relative importance of each variable within the group but not individually (Alsamaray & Almadhon 1990). Using (AHP) needs four steps (Saaty 1977), (Dyer 1990) and (Saaty 1990a).

### a) Decompose the Problem and Represents it Hierarchically

The first step in using (AHP) is to divide the problem and analysis it to its components, and synthesis it in hierarchically form. So that, the problem should contain at least at the following levels: the first level is the Goal, second level Criteria and the third level is the alternatives which are the course of actions.

### b) Setting priorities for the problem components

Rating process in (AHP) depends on the opinion of the decision maker, where judgments can be derived from realistic information -hard data- in addition to the knowledge and experience of decision-maker.

*c) Synthesis of Results*

Calculated relative importance of each alternative depends on the relative contribution of each criterion in determining the degree of preference. Sum of the relative importance of each alternative represents an appropriate degree that alternative standards for. The alternative with higher relative importance has the higher chance in the selection process (Forman, Saaty, Selly and Waldron 1983) and (Forman1990).

*d) Evaluate the homogeneity of the verdicts*

Pairwise comparison adopted in (AHP) does not specify randomly but can be derived from a set of judgments. These Judgments whether quality or quantity are governed by mathematical rules. At this stage, is assessing the degree of homogeneity of these verdicts and case heterogeneity Inconsistency must be equal to or less than 0.10 (Saaty 1980). Individuals often give a high bias in the estimation of the verdicts, overweighting bias requires tested statistically in order not to affect the importance of giving the proportion of non- real value (Dyer and Forman 1991). The lack of high inconsistency at any level or in the final assembly process does not invalidate the model as a whole, but

give the indicator on the need to re- test some of the provisions (Saaty 1977), (Saaty 1994).

### III. THE RESEARCH PROBLEM

The decision problem considered in this study is how to determine the priorities of the sectors in Bahrain stock market to form the shares portfolio depending on their relative importance. Generally speaking, we develop an (AHP) model as multi-criteria decision making method in the field of investment. Accordingly, the emphases had been put to shade the light on using the Analytical Hierarchy Process (AHP) as new way to form shares financial portfolio.

### IV. RESEARCH DESIGN

We built (AHP) model to research problem to form shares portfolio in Bahrain Bourse market. The structure of multi-criteria decision making according to (AHP) model consists of a number of alternatives (banks, investment, insurance, services, industrial and hotels &tourism) after setting the overall goal (shares portfolio) as well as a number of criteria like(balance sheet, income statement, shares trading, profitability and leverage & liquidity) as depicted in table (1).

*Table (1) : Consolidated Market Information*

Hotels & Tourism	Industrial	services	Insurance	Investment	Banks	Criteria	
213.4	1.264M	1.152	602,4	17.7	22	Total Assets	Balance Sheet
32.5	402,3	280.8	392,6	14.7	19.4	Total Liability	
52.7	147.6	257.4	113,88	2.153	1.285	Paid up Capital	
180.9	861.6	871.4	209,7	2.9	2.520	Total Equity	
13.627	98.5	100.8	11.8	207,633	197,165	Net Profit/ Loss	Income statement
8.032	40.6	59.770	3.7	21,432	166,188	Cash dividend	
516.036	1,468M	2.558M	501	8.495m	13.162m	Number of shares	Share Trading
0.35	1.13	1.67	0.53	0.57	2.94	Share turnover	
0.351	0.587	0.337	0.372	0.313	0.174	Book value	
0.026	0.067	0.037	0.025	0.019	0.014	Earn per share	Profitability
0.016	0.028	0.023	0.007	0.003	0.009	Dividend PS	
1.01	0.73	1.09	0.79	0.52	1.01	Price to book value	
4.39	6.50	6.38	2.55	1.67	5.02	Dividend yield	
7.53	11.43	11.10	6.84	5.96	7.86	Return/ equity	
6.38	7.79	8.30	2.11	0.83	0.82	Return/ assets	
84.75	68.17	74.81	30.94	13.98	10.39	Total equity to total assets	Leverage & Liquidity
0.18	0.47	0.33	2.11*	5.98	-	Total liability to total equity	
-	-	-	-	-	-	Management**	

\*Investors' Guide, Bahrain Bourse, 2013

\*\* Management will be assessed subjectively

We perform this assessment depending on the information of Bahrain stock market activities' handbook and some experts who have good experience in financial planning and some colleagues in university who are teaching financial and investment decision courses. The results demonstrated that (AHP) can help

the decision maker to rank the sectors of the stock market according to their relative importance.

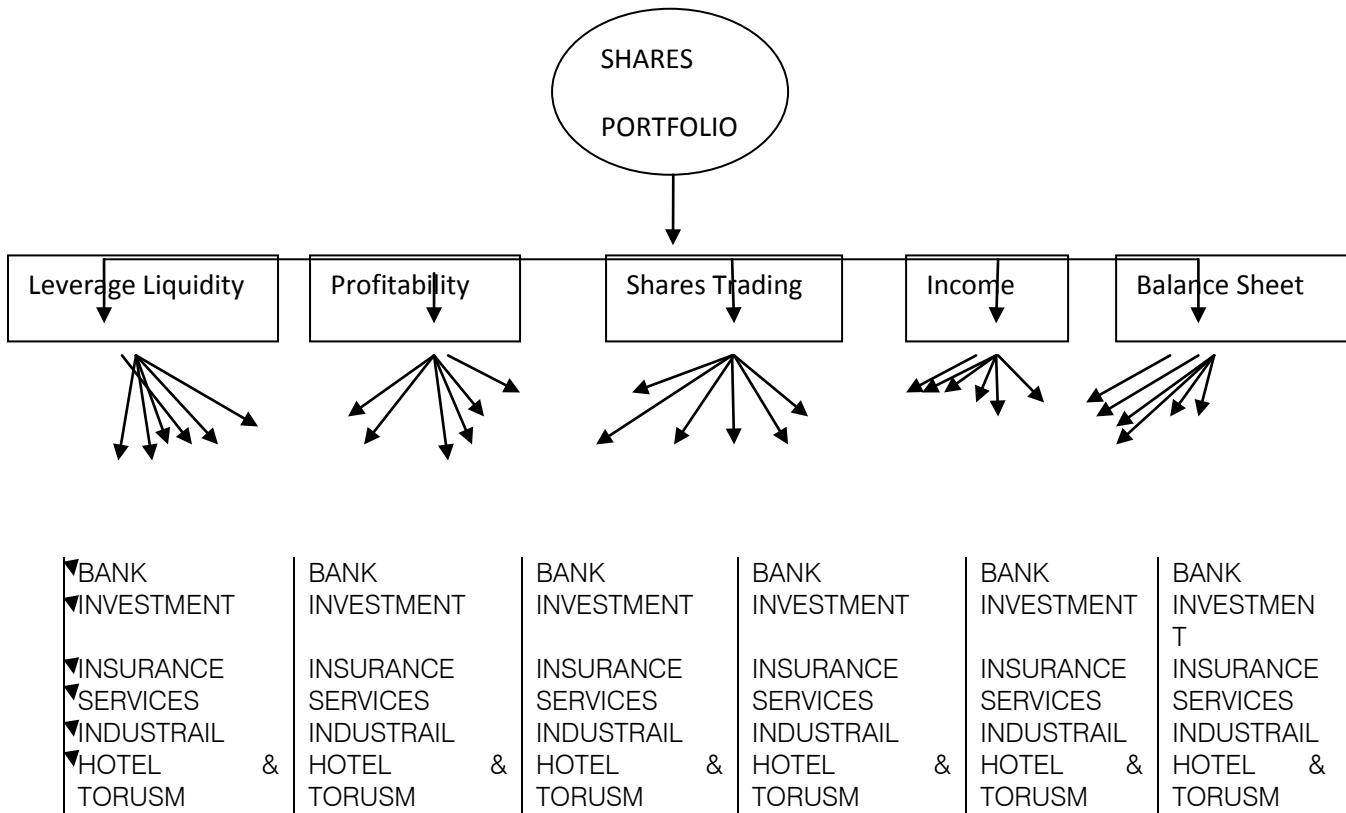


Figure (1) : Structure of the decision problem according to (AHP)

## V. MODEL ANALYSIS

Figure (1) illustrates the decision problem according to (AHP) model which consist of six alternatives and five criterions. This is some of the pairwise comparison judgment. We evaluated the six alternatives in term of five decision criteria. The following

matrix represents the corresponding judgment matrix with the pairwise comparison. So that the corresponding priority vector and the consistency coefficients are given as well. Table (2) illustrates the judgment matrix for the case of comparing the importance of the six alternatives.

Table (2) : Pairwise comparison matrix for balance sheet

Balance Sheet	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	Priority Vector
C. bank	0.41	0.46	0.28	0.18	0.52	0.28	<b>0.36</b>
investment	0.20	0.23	0.23	0.18	0.26	0.23	<b>0.22</b>
insurance	0.09	0.06	0.06	0.04	0.03	0.03	<b>0.05</b>
Services	0.13	0.08	0.12	0.06	0.03	0.23	<b>0.11</b>
industrial	0.10	0.12	0.28	0.24	0.13	0.18	<b>0.18</b>
Hotels & tourism	0.07	0.05	0.03	0.30	0.03	0.05	<b>0.09</b>

Inconsistency = 0.08

## VI. MEASURING THE INCONSISTENCY OF THE JUDGMENTS

AHP provides a measure of the consistency of the decision maker's judgment process. Consistency is very important because we would not want to base an important decision upon a set of judgment that lack consistency. Inconsistency can result from many reasons such as improper conceptualization of the hierachal, leak of information, a mental lapse or clerical errors. As Dyer and Forman (1991) said "accurate judgments are fairly consistency, but consistency judgments need not be accurate. This consistency is necessary but not sufficient for a good decision".

Perfect judgment rarely occurs in the real world and should not be the objective when making judgments. However, perfect consistency should not be expected in working with AHP. The issue really is, how much inconsistency is accepted or tolerable in the expression of our preferences? AHP provides a method

$$\text{Bank} = .41(.36) + .46(.22) + .28(.05) + .18(.11) + .52(.18) + .28(.09) = .4014/.36 = 1.115$$

$$\text{Investment} = .20(.36) + .23(.22) + .23(.05) + .18(.11) + .26(.18) + .23(.09) = .2214/.22 = 1.006$$

$$\text{Insurance} = .09(.36) + .06(.22) + .06(.05) + .04(.11) + .03(.18) + .03(.09) = .0611/.05 = 1.222$$

$$\text{Services} = .13(.36) + .08(.22) + .12(.05) + .06(.11) + .03(.18) + .23(.09) = .1031/.11 = .937$$

$$\text{Industrial} = .1(.36) + .12(.22) + .28(.05) + .24(.11) + .13(.18) + .18(.09) = .1424/.18 = .7911$$

$$\text{Hotel \& Tourism} = .07(.36) + .05(.22) + .03(.05) + .3(.11) + .03(.18) + .05(.09) = .0806/.09 = .8956$$

a) Divide each sum of row entries from step 1 by their corresponding priority values, for balance sheet evaluation, the calculations are

$$\begin{aligned} .4014/.36 &= 1.115, .2214/.22 = 1.006, .0611/.05 = 1.222, \\ .1031/.11 &= .937, .1424/.18 = .7911, .0806/.09 = .8956 \end{aligned}$$

b) Compute the average of the values specified in step 2; this average is denoted by  $L_{max}$ . For the balance sheet example we have

$$L_{max} = (1.115 + 1.006 + 1.222 + .937 + .7911 + .8956)/6 = 5.9667/6 = .9945$$

c) Compute the consistency index ( $CI$ ), which is defined as follow:

$$CI = (L_{max} - n)/(n - 1)$$

Where  $n$  = number of items being compared

For the balance sheet evaluation with  $n = 6$ , we obtain

$$CI = (.9945 - 6)/5 = .10$$

d) Compute the consistency ratio ( $CR$ ), which is defined as follow:

$$CR = CI/RI$$

*Table (3) : Composition and synthesis Impact of alternatives on Criteria*

	Balance Sheet 0.29	Income 0.07	Shares Trading 0.09	Profitability 0.36	Leverage& Liquidity 0.19	
C. Bank	0.36	0.17	0.40	0.28	0.25	0.29

called the inconsistency ratio that calculates the degree of inconsistency of judgment. As a rule of thumb, if the inconsistency ratio is greater than about 0.10, here one must investigate and try to ascertain the possible cause of the inconsistency (Schoner & Wedley 1989) and (Saaty 1991). If each of the possible causes is eliminated, then it is reasonable to proceed even though the inconsistency ratio is slightly greater than the 10 percent rule –of thumb value (Schenkerman 1997).

We will see how the inconsistency ratio can be approximated measures. The steps for estimating the inconsistency ratio are as follows:

- 1) Multiply the first row of the original pairwise comparison matrix for Balance sheet by the relative priority of bank (0.36). Performing the same multiplication for column 2,3,4,5 and 6. (e.g., column 2 X 0.22, column 3 X 0.05, column 4 X 0.11, column 5 X 0.18 and column 6 X 0.09). After, sum the entries across the rows to obtain the weighted sum (table (2)).

Where  $RI$  = random index

The random index is the consistency index of many randomly generated pairwise comparison matrices of size  $n$  as follow:

N	RI
2	.00
3	.58
4	.90
5	1.12
6	1.24
7	1.32
8	1.41

Therefore, for the balance sheet comparison with  $n = 6$  and  $RI = 1.24$ , we evaluate the following consistency ratio:

$$CR = 0.10/1.24 = 0.08$$

We previously mentioned as rule –of thumb was that a consistency ratio of 0.10 or less was accepted. Ours judgment results are in any estimate of the consistency ratio of .08, indicating that our priorities for balance sheet seem very accepted.

Investment	0.22	0.24	0.13	0.19	0.21	0.07
Insurance	0.05	0.10	0.06	0.13	0.11	0.09
Services	0.11	0.19	0.07	0.20	0.16	0.36
Industrial	0.18	0.19	0.19	0.12	0.13	0.19
Hotels & tourism	0.09	0.11	0.15	0.08	0.14	

*Commercial Bank = 0.30*

*Investment Bank=0.20*

*Insurance Sector=0.09*

*Services Sector =0.15*

*Industrial Sector=0.15*

*Hotels &tourism = 0.11*

## VII. LIMITATIONS

The crucial thing that I faced is the delay of the companies in Bahrain stock market to announce their final report, the riot in Bahrain which affect the investment in the stock market because many companies let or have no desire to invest by limiting their activities. As well as, the limited number of pages for the proposal which force me not to include supporting materials for the study?

## VIII. CONCLUSIONS

The most important conclusions can be determined as follows:

1. Shares portfolio must be respectively contains (Commercial banks 0.30%, Investment 0.20%, Services and Industrial 0.15%, Hotels & Tourism 0.11% and at the end came the insurance sector in 0.09%) shares according to the relative importance of these sectors.
2. It appears that Analytical Hierarchy Process (AHP) can be used with high elasticity and tool to analyze aspects of investment decisions, as it is characterized by easily use without the need for the decision-maker for the high requirements in mathematics and statistics.
3. (AHP) model can be used in the formulation of the problem of the resolution, which relies on subjective judgments and experience, is also distinguished by its ability to adapt and integration Completeness in cases that rely on a mixture of qualitative and quantitative factors.
4. (AHP) contributes to explain and understand complex and unstructured problem. to help decision maker.
5. (AHP) Model provides self-censorship to control the overall appreciation or judgments to decision makers by measuring the degree of homogeneity Consistency case to avoid bias that are the result of miscalculations or emotions.
6. Sensitivity Analysis uses to demonstrate the effect of the changes that can get on the relative importance

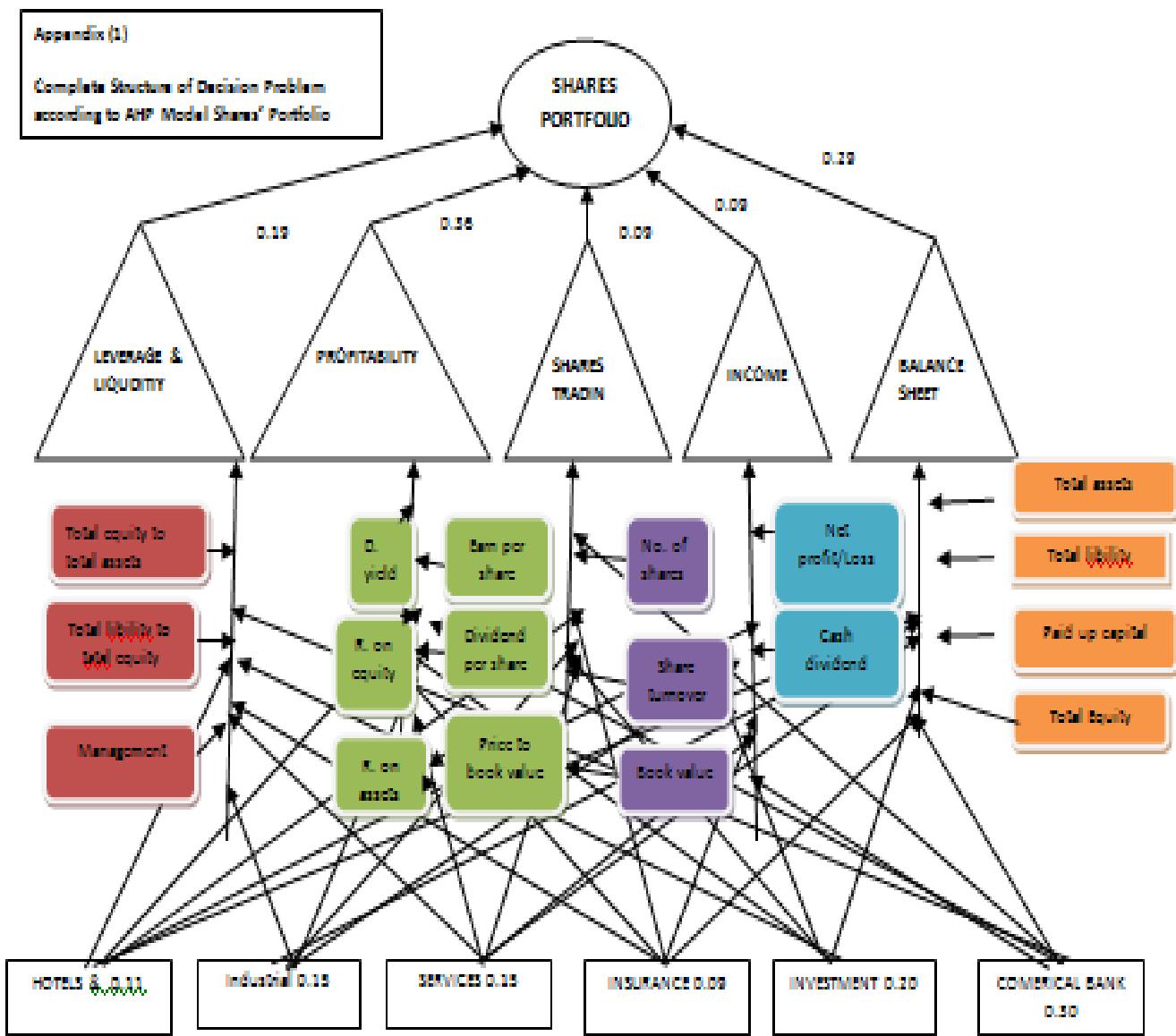
of some of the criteria on the final ranking of the decisions ranking of alternatives.

7. These results may encourage doing comparison study between (AHP) and other methods to form shares portfolio in near future.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Alsamaray, Hussain & Almadhon, Mosa, (1995), "Multi- Criteria Decision Making" 35th scientific week, Alathigia, Syria.
2. Dyer and Forman (1991), "An Analytic Approach to Marketing Decision", Prentice-Hall, International Edition.
3. Dyer, J. S. (1990). Remarks on the Analytic Hierarchy Process, Management Science, Vol. 36, No. 3, 249-258.
4. Forman, E. H., (1990). Deriving Ratio Level Measures from Verbal Judgments, George Washington University Working Paper.
5. Forman, E. H., Saaty, T. L., Selly, M. A., Waldron, R., (1983). Expert Choice, Decision Support Software, McLean, VA.3.
6. Kirkwood, C. (1997), "Strategic Decision Making – Multi-objective Decision Analysis with Spreadsheets", Duxbury Press, 1997, Belmont CA,
7. Mc Cord, M., and R. de Neufville. (1983). Fundamental Deficiency of Expected Utility Decision Analysis, pp. 179-305 in *Multi-Objective Decision Making*, S. French, R. Hartley, L.C. Thomas, and D.J. White (eds.), Academic Press, N.Y
8. Saaty, T. L. (1986). Axiomatic Foundation of the Analytic Hierarchy Process, Management Science, Vol. 32, No. 3, 841-855
9. Saaty, T. L. (1990). An Exposition of the AHP in Reply to the Paper "Remarks on the Analytic Hierarchy Process", Management Science, Vol. 36, No. 3, 259-268.
10. Saaty, T. L. (1991). How to Make a Decision: The Analytic Hierarchy Process, European Journal of Operations Research, Vol. 48, 9-26.
11. Saaty, T. L. (1994a). How to Make a Decision: The Analytic Hierarchy Process, Interfaces, 24, 19-43.
12. Saaty, T., (1977) A Scaling Method for Priorities in Hierarchical Structure", Journal of Mathematical Psychology 15,pp. 234-281
13. Saaty, Thomas L., (1996). Decision Making with Dependence and Feedback, RWS Publications, Pittsburgh, PA, 1996.
14. Saaty, Thomas, L., (1980), "The Analytical Hierarchy Process", McGraw-Hill Co., New York.

15. Saaty, Thomas, L., (1990), " How to Make a Decision: The Analytical Hierarchy Process", European Journal of Operations Research, 48, pp 9-26
16. Schenker, S. (1997), Inducement of Nonexistent Order by the Analytic Hierarchy Process, Decision Sciences, 28 (2), 475-482.
17. Schoner, B. S. & Wedley, B. W, (1989), "Ambiguous Criteria Weights in AHP: Consequences and Solutions", Decision Sciences, 20, 462-475.
18. Vazsonyi, A. (1995). Multi-criteria Decision Making, Decision Line, December/January,13-14.
19. Zeleny, M. (1982). *Multiple Criteria Decision Making*, McGraw-Hill Book Co., N.Y.



Appendix 2:

PAIRWISE  
CMPARSION  
MATRICES TO ALL  
MODEL

R	Balance Sheet	Income	Shares Trading	Profitability	Leverage & Liquidity
	B	I	S	P	L&E
BALANCE SHEET	1	3	5	0.50	4
INCOME	0.33	1	0.33	0.17	0.15
SHARES TRADING	0.20	3	1	0.20	0.50
PROFITIBILITY	0.25	6	4	1	8
LEVERAGE& LIQUIDITY	0.25	7	5	0.15	1
	2.03	20	15.33	2.02	13.6

	B	I	S	P	L&E	SUM	AVG
BALANCE SHEET	0.49	0.15	0.3	0.25	0.28	1.47	0.29
INCOME	0.16	0.05	0.02	0.08	0.02	0.33	0.07
SHARES TRADING	0.10	0.15	0.07	0.10	0.04	0.46	0.09
PROFITIBILITY	0.13	0.3	0.28	0.5	0.59	1.80	0.36
LEVERAGE& LIQUIDITY	0.12	0.35	0.33	0.07	0.07	0.94	0.19
	1.00	1	1.00	1.00	1		1

BALANC SHEET	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	SUM
C. bank	1	2	5	3	4	6	21
investment	0.50	1	4	3	2	5	15.50
insurance	0.20	0.25	1	0.50	0.20	0.14	2.29
Services	0.33	0.33	2	1.00	0.25	5	8.91
industrial	0.25	0.50	5	4.00	1	4	14.75
Hotels & tourism	0.17	0.20	0.14	5.00	0.25	1	6.76
	2.45	4.28					69.2
			17.14	16.5	7.7	21.14	1



BALANC SHEET	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	SUM	A v g
C. bank	0.41	0.46	0.28	0.18	0.52	0.28	2.13	0 . 3 6
investment	0.20	0.23	0.23	0.18	0.26	0.23	1.33	0 . 2 2
insurance	0.09	0.06	0.06	0.04	0.03	0.03	0.31	0 . 0 5
Services	0.13	0.08	0.12	0.06	0.03	0.23	0.65	0 . 1 1
industrial	0.10	0.12	0.28	0.24	0.13	0.18	1.05	0 . 1
								7
Hotels & tourism	0.07	0.05	0.03	0.30	0.03	0.05	0.52	0 . 0 9
	1.00	1.00	1	1	1	1	5.99	1

INCOME	C. bank	investment	insurance	Services	Industrial	Hotels &tourism	SUM
C. bank	1	0.50	7	0.50	0.50	0.11	9.61
investment	0.14	1	6	2	2	8	19.14
insurance	7.00	0.17	1.00	0.14	0.14	1.00	9.45
Services	2.00	0.50	7	1.00	1.00	5	16.50
industrial	2.00	0.50	7	1.00	1	5	16.50
Hotels & tourism	9.00	0.13	1.00	0.20	0.20	1	11.53
	21.14	2.30	29	4.84	4.84	20.11	82.23

INCOME	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	SUM	A V G
C. bank	0.05	0.18	0.24	0.10	0.10	0.03	0.7	0 . 1 7
investment	0.03	0.36	0.21	0.4	0.4	0.4	1.80	0 . 2 4
insurance	0.34	0.06	0.04	0.05	0.05	0.05	0.59	0 . 1

								0 0 · 1 9
Services	0.08	0.17	0.24	0.20	0.20	0.24	1.13	0 0 · 1 9
industrial	0.08	0.18	0.24	0.20	0.2	0.23	1.13	0 0 · 1 9
Hotels & tourism	0.42	0.05	0.03	0.05	0.05	0.05	0.65	0 0 · 1 1
	1	1.00	1	1.00	1.00	1.00		

SHARES TRADING	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	SUM
C. bank	1	3.00	5	4.00	2.00	6.00	21
investment	0.33	1	3	2	1	0.17	7.50
insurance	0.20	0.33	1.00	0.33	0.25	0.50	2.62
Services	0.25	0.33	3	1.00	0.33	0.20	5.12
industrial	0.50	1.00	3	3.00	1	2	10.50
Hotels & tourism	0.17	6.00	2.00	0.20	0.50	1	9.87
	2.45	11.67	17	10.53	5.08	9.87	

SHARES TRADING	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	SUM	A V G
C. bank	0.4	0.26	0.29	0.36	0.40	0.60		0 0 · 4 0
investment	0.13	0.09	0.18	0.18	0.2	0.03	0.81	0.81 0

insurance	0.10	0.03	0.06	0.06	0.05	0.05	0.35	1.3006
Services	0.10	0.03	0.18	0.09	0.06	0.02	0.48	0.0700
industrial	0.20	0.09	0.18	0.27	0.2	0.2	1.14	0.1900
Hotels & tourism	0.07	0.51	0.12	0.04	0.10	0.1	0.94	0.1105
	1	1.0	1.0	1.00	1.0	1.00		

PROFITABILITY	C. bank	investment	insurance	Services	Industrial	Hotels & tourism
C. bank	1	2.00	1	3.00	2.00	3.00
investment	0.50	1	2	1	1	4.00
insurance	1.00	0.50	1.00	0.50	1.00	1.00
Services	0.33	1.00	2	1.00	3.00	2.00
industrial	0.50	0.25	1	0.33	1	3
Hotels & tourism	0.33	0.25	1.00	0.50	0.33	1
	3.7	5.00	8	6.33	8.33	14.00

PROFITABILITY	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	SUM	A V
								G
C. bank	0.28	0.40	0.13	0.47	0.24	0.21	1.73	0.29

investment	0.13	0.2	0.245	0.16	0.12	0.28		0 · 1 9
insurance	0.27	0.10	0.13	0.08	0.12	0.08		0 · 1 3
Services	0.09	0.20	0.245	0.16	0.36	0.14		0 · 2 0
industrial	0.14	0.05	0.125	0.05	0.12	0.21		0 · 1 2
Hotels & tourism	0.09	0.05	0.13	0.08	0.04	0.08		0 · 0 7
	1	1.00	1	1.00	1.00	1.00		1 · 0 0

LEVERAGE & LIQUIDITY	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	Sum
C. bank	1	3.00	2	1.00	1.00	4.00	12
investment	0.33	1	3	3	2	1.00	10.33
insurance	0.50	0.33	1.00	0.50	0.33	3.00	5.67
Services	1.00	0.33	0.33	1.00	4.00	2.00	8.66
industrial	1.00	0.50	3	0.25	1	0.50	6.25
Hotels & tourism	0.25	1.00	0.33	0.50	5.00	1	8.08
							50.9
	4.1	6.17	9.6	6.25	13.30	11.50	2

LEVERAGE & LIQUIDITY	C. bank	investment	insurance	Services	Industrial	Hotels & tourism	SUM	A V G
C. bank	0.24	0.49	0.2	0.16	0.07	0.35	1.51	0 . 2 5
investment	0.09	0.16	0.31	0.48	0.14	0.09	1.27	0 . 2 1
insurance	0.12	0.05	0.10	0.08	0.02	0.26	0.63	0 . 1 1
Services	0.25	0.05	0.04	0.16	0.32	0.17	0.99	0 . 1 6
industrial	0.24	0.08	0.31	0.04	0.08	0.05	0.80	0 . 1 3
Hotels & tourism	0.06	0.17	0.04	0.08	0.38	0.08	0.81	0 . 1 4
	0	1.00	1	1.00	1.01	1.00		

Hotels & tourism	BALANCE SHEET	INCOME	SHARES TRADING	PROFITABILITY	LEVERAGE & LIQUIDITY	SUM	AVG
C. bank	0.36	0.17	0.40	0.29	0.25	1.47	0.29
investment	0.22	0.24	0.13	0.19	0.21	0.99	0.20
insurance	0.05	0.10	0.06	0.13	0.11	0.45	0.09

Services	0.11	0.19	0.07	0.20	0.16	0.73	0.15
industrial	0.18	0.19	0.19	0.12	0.13	0.81	0.16
Hotels & tourism	0.09	0.11	0.15	0.07	0.14	0.56	0.11
	1.01	1.00	1.00	1.00	1.00		

CHASH DIVIDEND	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	7	8	3	4	9
Investment	0.14	1	6	0.33	0.50	3
Insurance	0.14	0.17	1	0.17	0.17	½
Services	0.33	3	1	1	2	8
industrial	¼	2	6	0.50	1	5
Hotels & tourism	0.11	0.33	2	0.15	0.20	1
Total	1.73	13.499	24	5.14	7.866	26.5

CHASH DIVIDEND	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM	Avg.
C. bank	0.578	0.482	0.333	0.583	0.508	0.346	2.83	0.46
Investment	0.08	0.074	0.25	0.06	0.06	0.115	0.65	0.1
Insurance	0.08	0.01	0.042	0.03	0.02	0.019	0.21	0.04
Services	0.19	0.222	0.042	0.194	0.254	0.307	1.21	0.2
industrial	0.144	0.148	0.25	0.10	0.127	0.192	0.958	0.16
Hotels & tourism	0.06	0.02	0.084	0.03	0.03	0.038	0.26	0.04

NUMBER of SHARES	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	2	8	5	8	9
Investment	0.50	1	7	4	6	9
Insurance	0.15	\$ 0.14	1	4	0.33	1
Services	0.20	1/4	1/4	1	2	4
industrial	0.15	0.17	3	1/2	1	3
Hotels & tourism	0.11	0.11	1	0.25	0.33	1
Total	2.103	3.42	20	14.25	17.663	27

NUMBER of SHARES	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM	Avg.
C. bank	0.476	0.585	0.4	0.35	0.453	0.333	2.597	0.41
Investment	0.24	0.292	0.35	0.28	0.34	0.333	1.83	0.3
Insurance	0.07	0.04	0.05	0.28	0.02	0.037	0.50	0.08
Services	0.1	0.073	0.13	0.07	0.113	0.148	0.634	0.1
industrial	0.07	0.05	0.15	0.035	0.057	0.111	0.47	0.07
Hotels & tourism	0.05	0.03	0.05	0.02	0.02	0.037	0.21	0.04

1

SHARE TERUOVER	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	8	9	2	2	8
Investment	0.15	1	1	0.33	1/2	2
Insurance	0.111	1	1	0.33	1/2	1
Services	1/2	3	2	1	1	4
Industrial	1/2	2	2	1	1	3
Hotels & tourism	0.15	0.50	1	0.25	0.33	1
Total	1.407	15.5	16	4.913	4.83	19

SHARE TERUOVER	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM	Avg.
C. bank	0.71	0.516	0.56	0.41	0.414	0.42	3.03	0.48
Investment	0.11	0.064	0.06	0.07	0.103	0.11	0.52	0.07
Insurance	0.078	0.064	0.06	0.07	1/9	0.053	0.428	0.06
Services	0.36	0.193	0.125	0.21	0.207	0.21	1.305	0.16
Industrial	0.36	0.13	0.125	0.21	0.207	0.16	1.192	0.18
Hotels & tourism	0.11	0.03	0.06	0.05	0.07	0.053		0.05
							0.38	

1

BOOK VALUE	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	0.50	1/2	1/4	1/5	1/3
investment	2	1	1	1	1/2	1
Insurance	2	1	1	1	1/2	1
Services	4	1	1	1	1/2	1
industrial	5	2	2	2	1	1/2
Hotels & tourism	3	1	1	1	2	1
	17	6 1/2	6 1/2	6 1/4	4 5/7	4 5/6

BOOK VALUE	C. bank	investment	insurance	Services	industrial	Hotels & tourism	Sum	Avg
C. bank	0.06	0.08	0.08	0.04	0.04	0.04	0.333	0.06
investment	0.12	0.153	0.153	0.16	0.11	0.21	0.898	0.15
Insurance	0.12	0.153	0.153	0.16	0.11	0.21	0.906	0.16
Services	0.24	0.153	0.153	0.16	0.11	0.21	1.026	17.00%
industrial	0.29	0.31	0.31	0.32	0.22	0.10	1.553	0.25
Hotels & tourism	0.18	0.153	0.153	0.16	0.44	0.21	1.296	0.21

1

EARN PER SHARE	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	0.50	0.33	0.25	0.20	0.33
investment	2	1	0.50	0.33	0.25	0.50
insurance	3	2	1	0.50	0.33	1
Services	4	3	2	1	0.50	1
industrial	5	4	3	2	1	3
Hotels & tourism	3	2	1	1	0.33	1
	18	12.50	7.83	5.08	2.61	6.83

EARN PER SHARE	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM	Avg
C. bank	0.056	0.04	0.04	0.05	0.08	0.05	0.312	0.05
investment	0.111	0.08	0.06	0.07	0.10	0.07	0.489	0.08
insurance	0.167	0.16	0.127	0.10	0.13	0.146	0.824	0.14
Services	0.222	0.24	0.255	0.197	0.19	0.146	1.252	0.21
industrial	0.278	0.32	0.383	0.394	0.38	0.44	2.195	0.37
Hotels & tourism	0.166	0.16	0.127	0.197	0-Jan	0.146	0.926	0.15

1

DIVIDEND per SHARE	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	0.33	1	0.50	0.33	0.50
investment	3.00	1	0.50	0.15	0.11	0.50
Insurance	1	2	1	0.33	0.25	0.20
Services	2	8	3	1	1	2
Industrial	3	9	4	1	1	2
Hotels & tourism	2	5	2	0.50	0.50	1
	12	25.33	11.5	3.48	3.19	6.20

DIVIDEND per SHARE	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM	Avg
C. bank	0.09	0.013	0.087	0.15	0.10	0.08	0.523	0.09
investment	0.24	0.039	0.04	0.04	0.03	0.08	0.48	0.08
Insurance	0.09	0.079	0.087	0.10	0.08	0.04	0.469	0.09
Services	0.17	0.316	0.261	0.28	0.313	0.32	1.66	0.27
Industrial	0.24	0.356	0.348	0.28	0.313	0.32	1.857	0.30
Hotels & tourism	0.17	0.197	0.174	0.15	0.16	0.16		0.17
							1.008	

1.00

PRICE to BOOK VALUE	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	2	2	1	2	1
investment	1/2	1	1	1/2	1	1/2
Insurance	1/2	1	1	1/2	1	1/2
Services	1	2	2	1	1/2	1
Industrial	1/2	1	1	2	1	1/2
Hotels & tourism	1	2	2	1	2	1
Total	4.5	9	9	6	7.5	4.5

PRICE to BOOK VALUE	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM	Avg
C. bank	0.222	0.22	0.22	0.167	0.27	0.222	1.321	0.21
investment	0.11	0.11	0.11	0.09	0.13	0.11	0.66	0.11
Insurance	0.11	0.11	0.11	0.08	0.13	0.11	0.65	0.11
Services	0.222	0.22	0.22	0.167	0.08	0.222	1.131	0.21
Industrial	0.11	0.11	0.11	0.33	0.13	0.11	0.90	0.15
Hotels & tourism	0.222	0.22	0.22	0.166	0.27	0.222		0.21
							1.32	



DIVIDEND YIELD	C. bank	Investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	3	2	0.50	0.50	1
investment	0.33	1	0.50	0.20	0.20	0.33
Insurance	0.50	2	1	0.33	0.25	0.50
Services	2	4	3	1	1	0.50
Industrial	2	4	3	1	1	2
Hotels & tourism	1	3	2	2	0.50	1
Total	6.83	17	11.5	5.03	3.45	5.33

DIVIDEND YIELD	C. bank	Investment	insurance	Services	industrial	Hotels & tourism	SUM
C. bank	0.15	0.17	0.18	0.09	0.15	0.18	0.92
investment	0.05	0.06	0.05	0.05	0.06	0.07	0.34
Insurance	0.073	0.12	0.10	0.06	0.07	0.1	0.523
Services	0.29	0.24	0.24	0.20	0.29	0.1	1.36
Industrial	0.29	0.24	0.24	0.2	0.29	0.36	1.62
Hotels & tourism	0.15	0.17	0.18	0.4	0.15	0.18	1.225

RETURN on EQUITY	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	2	1	0.50	0.50	1
investment	0.50	1	1	0.50	0.50	1
Insurance	1	1	1	0.50	1	0.50
Services	2	2	2	1	1	2
Industrial	2	2	1	1	1	2
Hotels & tourism	1	1	2	0.50	0.50	1
Total	7.5	9	8	4.00	4.50	7.5

RETURN on EQUITY	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM
C. bank	0.133	0.222	0.125	0.13	0.11	0.13	0.846
investment	0.067	0.111	0.125	0.13	0.11	0.13	0.669
Insurance	0.133	0.111	0.125	0.13	0.222	0.07	0.786
Services	0.267	0.222	0.25	0.25	0.222	0.27	1.481
Industrial	0.267	0.222	0.125	0.25	0.22	0.27	1.354
Hotels & tourism	0.133	0.111	0.25	0.13	0.11	0.13	0.865

RETURN on ASSETS	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	1	0.33	0.11	0.15	0.14
investment	1	1	0.33	0.11	0.15	0.14
insurance	3	3	1	0.25	0.25	0.33
Services	9	9	4	1	1	1
industrial	8	8	4	1	1	1
Hotels & tourism	7	7	3	1	1	1
Total	29	29	12.66	3.47	3.54	3.61

RETURN on ASSETS	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM
C. bank	0.034	0.034	0.03	0.04	0.04	0.04	0.214
investment	0.034	0.034	0.03	0.04	0.04	0.04	0.216
insurance	0.103	0.103	0.08	0.08	0.08	0.09	0.536
Services	0.31	0.31	0.31	0.28	0.28	0.28	1.767
industrial	0.28	0.28	0.31	0.28	0.28	0.28	1.71
Hotels & tourism	0.24	0.24	0.24	0.28	0.28	0.28	1.56

TOTAL EQUITY to TOTAL ASSETS	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	1	0.33	0.14	0.17	0.15
investment	1	1	0.50	0.17	0.20	0.14
insurance	3	2	1	0.50	\$0.50	0.33
Services	7	6	2	1	1	1
industrial	6	5	1	1	1	1
Hotels & tourism	8	7	3	1	1	1
Total	26	22	7.83	3.81	3.87	3.62

TOTAL EQUITY to TOTAL ASSETS	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM
C. bank	0.04	0.045	0.04	0.04	0.04	0.04	0.245
investment	0.04	0.045	0.05	0.06	0.05	0.04	0.285
insurance	0.11	0.09	0.13	0.13	0.13	0.09	0.68
Services	0.27	0.27	0.26	0.26	0.26	0.28	1.6
industrial	0.23	0.23	0.13	0.26	0.26	0.28	1.39
Hotels & tourism	0.31	0.32	0.4	0.26	0.26	0.28	1.83



TOTAL LIABILITY to TOTAL EQUITY	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	1	1	1	1	1
investment	1	1	3	7	8	9
insurance	1	0.33	1	1	0.50	2
Services	1	0.14	1	1	0.50	2
industrial	1	0.15	2	2	1	3
Hotels & tourism	1	0.11	0.50	0.50	0.33	1
Total	6	2.73	8.5	12.5	11.33	18

TOTAL LIABILITY to TOTAL EQUITY	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM
C. bank	0.166	0.37	0.12	0.08	0.08	0.056	0.872
investment	0.167	0.37	0.35	0.56	0.7	0.5	2.647
insurance	0.166	0.12	0.12	0.08	0.05	0.11	0.646
Services	0.167	0.05	0.12	0.08	0.08	0.11	0.607
industrial	0.167	0.05	0.23	0.16	0.08	0.168	0.855
Hotels & tourism	0.167	0.04	0.06	0.04	0.03	0.056	0.393

MANAGEMENT	C. bank	investment	insurance	Services	industrial	Hotels & tourism
C. bank	1	0.50	3	0.33	5	0.14
investment	2	1	3	4	3	0.17
insurance	0.33	0.33	1	3	0.50	0.25
Services	3	0.25	0.33	1	2	0.20
industrial	0.20	0.33	2	0.50	1	0.14
Hotels & tourism	8	6	4	5	7	1
Total	14.53	8.41	13.33	13.83	18.5	1.90

MANAGEME NT	C. bank	investment	insurance	Services	industrial	Hotels & tourism	SUM
C. bank	0.07	0.06	0.22	0.04	0.27	0.07	0.73
investment	0.14	0.119	0.22	0.28	0.15	0.09	0.999
insurance	0.02	0.04	0.08	0.21	0.06	0.13	0.54
Services	0.2	0.03	0.03	0.07	0.1	0.11	0.53
industrial	0.01	0.04	0.16	0.05	0.07	0.07	0.40
Hotels & tourism	0.56	0.71	0.3	0.35	0.35	0.53	2.8

Pairwise comparisons to  
third level

Balance Sheet	Total Assets	Total Liquidity	Paid up Capital	Total Equity
Total Assets	1	0.50	4	0.14
Total Liquidity	2	1	0.20	0.11
Paid up				
Capital	0.25	5	1	1
Total Equity	7	9	1	1
Total	10.25	15.50	6.2	2.25

Balance Sheet	Total Assets	Total Liquidity	Paid up Capital	Total Equity	SUM
Total Assets	0.097	0.03	0.65	0.06	0.841
Total Liquidity	0.195	0.064	0.03	0.06	0.351
Paid up					
Capital	0.02	0.32	0.16	0.44	0.94
Total Equity	0.685	0.58	0.16	0.44	1.865
	1.001	1.00	1.002	1.00	

Income	Profit/ Loss	Cash dividend
Profit/ Loss	1	0.20
Cash		
dividend	5	1
Total	6	1.20

Income	Profit/ Loss	Cash dividend	SUM	Avg
Profit/ Loss	0.17	0.17	0.34	0.17
Cash dividend	0.83	0.83	1.66	0.83

Shares trading	No. of shares	share turnover	book value	earn per share	dividend per share
No. of shares	1	0.50	0.14	0.33	0.25
share turnover	5	1	0.25	0.20	0.33
book value earn per	7	4	1	3	4
share	3	5	0.33	1	5
dividend per share	4	3	0.25	0.20	1
price to book value	2	2	0.33	0.25	0.14
Total	22	15.50	2.30	4.98	10.72

Shares trading	No. of shares	share turnover	book value	earn per share	dividend per share
No. of shares	0.05	0.03	0.06	0.07	0.023
share turnover	0.23	0.07	0.12	0.04	0.04

Shares trading	No. of shares	share turnover	book value	earn per share	dividend per share
No. of shares share	0.05 0.23	0.03 0.07	0.06 0.12	0.07 0.04	0.023 0.04
turnover book value earn per	0.315	0.26	0.43	0.6	0.37
share dividend per	0.135	0.32	0.14	0.2	0.47
share price to book value	0.18 0.09	0.19 0.13	0.11 0.14	0.04 0.05	0.09 0.013

Profitability	dividend yield	return on equity	return on Assets
dividend yield	1	0.25	0.14
return one Equity	4	1	5
return on Assets	6	0.50	1
Total	11	1.75	6.14

Profitability	dividend yield	return on equity	return on Assets	SUM	AVG
dividend yield	0.1	0.15	0.03	0.28	0.09
return one Equity	0.36	0.57	0.81	1.74	0.58
return on Assets	0.54	0.28	0.16	0.98	0.33



Leverage & liquidity	total equity to total assets	total liability to total equity	management	
total equity to total assets		1	0.14	1
total liability to total equity		7	1	5
Management		1	0.2	1
		9	1.34	7

leverage& liquidity	Total Equity to total assets	total liability	management	SUM	Avg
Total Equity to total assets	0.11	0.10	0.14	0.1	0.11
total liability to total equity	0.78	0.75	0.71	2.24	0.75
management	0.11	0.15	0.15	0.41	0.14

1



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A  
ADMINISTRATION AND MANAGEMENT  
Volume 15 Issue 3 Version 1.0 Year 2015  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# Non-Conventional Organizations – the Messengers of the Future in the World of Organizations and Management

By Zoltán Csigás & Gergely Németh

*Corporate Values, Hungary*

**Abstract-** This study offers a pioneering description of non-conventional organizations (NCOs), enterprises which the authors suggest provide potential templates for the structure and operation of organizations of the future. Using established definitions of what constitutes an entrepreneur, the authors establish two criteria by which an organization might be judged as being an NCO, including the notion of “absolute uniqueness” and, according to the evolutionary model, the ability to pass on their non-conventional solutions to organizations of the future. The authors identify NCOs of the past and propose candidate NCOs of the present.

**Keywords:** *forms of business enterprises, patterns of entrepreneurship, non-conventional organizations, organizations of the future.*

**GJMBR - A Classification : JEL Code : M19**



*Strictly as per the compliance and regulations of:*



# Non-Conventional Organizations – the Messengers of the Future in the World of Organizations and Management

Zoltán Csigás <sup>a</sup> & Gergely Németh <sup>a</sup>

**Abstract-** This study offers a pioneering description of non-conventional organizations (NCOs), enterprises which the authors suggest provide potential templates for the structure and operation of organizations of the future. Using established definitions of what constitutes an entrepreneur, the authors establish two criteria by which an organization might be judged as being an NCO, including the notion of "absolute uniqueness" and, according to the evolutionary model, the ability to pass on their non-conventional solutions to organizations of the future. The authors identify NCOs of the past and propose candidate NCOs of the present.

**Keywords:** forms of business enterprises, patterns of entrepreneurship, non-conventional organizations, organizations of the future.

## I. INTRODUCTION

What will the organization of the future look like? This is a question we often pose to business leaders, but very few of them take a visionary leap and look beyond the next few days and months in an attempt to reveal the future of their organizations or of organizations in general. We, as organizational development consultants, continually direct our clients towards better, more effective and more "modern" organizations. But what do we mean by "modern"? Though we are charged with offering inspiring and innovative solutions, just how innovative are they? Most of our clients want to be shown solutions that work, solutions that, moreover, have proven track records. This inherent conservatism in approach may produce better organizations for the present, but will such "conventional" solutions produce organizations best prepared for the world of business in ten, twenty or fifty years' time?

While preparing the Organizational Development World Summit 2010 in Budapest, the authors got closer to understanding how the organization of the future might look (Németh, 2009). In this article – which might be regarded as a theoretical introduction to the study of future organizations – we review our approach to the exploration of the structure and functioning of future organizations, and we

*Author a:* PhD student, ELTE; Senior Consultant (Grow).

e-mail: [csigas.zoltan@grow-group.com](mailto:csigas.zoltan@grow-group.com)

*Author o:* PhD student, SZIE; Senior Consultant (Corporate Values).

e-mail: [gergely.nemeth@cova.hu](mailto:gergely.nemeth@cova.hu)

introduce our central concepts that might serve as a basis for further thinking.

## II. THE CONCEPT OF A NON-CONVENTIONAL ORGANIZATION – ORGANIZATIONAL DEVELOPMENT WORLD SUMMIT 2010

This event served as the global meeting of organizational development professionals, connecting a wide range of professional disciplines and societies. Alongside the objectives of mutual inspiration, knowledge sharing and networking opportunities, the event also had an "historical" goal. We wanted to analyze how the organizational development profession – and indeed organizations themselves – has evolved over time, from the origin of the profession in the late 1940s, to current practices and on to the foreseeable future. The non-conventional organization (NCO) program was specifically established to explore the future of our practice and of organizations. To facilitate this exploration, we spotlighted some inspirational organizations at our conference, organizations that are outstanding in terms of performance, sustainability and many other criteria. In short, we endeavoured to identify those organizations that are trendsetters and that can serve as blueprints for not only today's managers but also for current and potential entrepreneurs – as well as for consultants, as the agents of change – in terms of their structure and their operation.

## III. GRASPING THE FUTURE OF ORGANIZATIONS – A SNAPSHOT OF POSSIBLE APPROACHES TO ANALYZING AND DEFINING AN NCO

How can we peer into the structure and operation of future organizations? There are several widely used methods for predicting the future of organizations and plotting its possible variants. These methods are mostly based on strategic planning processes (Loveridge, 2008; Costanzo & MacKay, 2009; Mintzberg et al, 2002). There are up to forty accepted methods at present according to the methodological handbooks (e.g. Glenn & Gordon, 2009; Jackson, 2011), and all these essentially follow the main steps of



the general foresight paradigm delineated by Voros (2003). Despite the wide methodological palette available and the economic and social necessity to elucidate the future of business (e.g. Slaughter & Bussey, 2006), studies on the future of organizations have still applied only a very limited range of the available approaches and methods.

In the last few years, most descriptions of future organizations have been founded on scenario-based studies (e.g. Laubacher & Malone, 1997; Gray & Hovav, 2007). These studies were based on identifying major determinant forces (or "drivers") in different business fields and aimed to describe those organizational, leadership and operational models that could provide efficient, sustainable operations in the predicted business environment of the future.

In the 2007 Pricewater house Coopers study *Managing Tomorrow's People*, which attempted to forecast the nature of business and of organizations in 2020, the most probable future scenarios were examined based on the possible interactions of four antagonistic pairs of "global forces". These four pairs were business fragmentation vs. corporate integration, individualism vs. collectivism, globalization vs. reverse globalization, and the axis of technological penetration: "I control technology" vs. "Technology controls me". Based on these, three feasible economic realities were conceptualized, together with the associated corporate metaphors. The so-called "blue world", which combines the fulfilment of integration and individualism, will probably be ruled by monumental, hierarchical corporations ("Corporate is king"), while the "green world", emerging from the combined forces of integration and collectivism, will be characterized by companies organized along different values ("Companies care"). In the "orange world" of fragmented businesses the competitive advantage of "Small is beautiful" will be typical, and these small enterprises will emerge from the constantly changing social networks of individual employees. The PwC study describes the management practices of each corporate form in detail, and this way it gives quite an accurate picture of the prospective inner structures of the organizations.

The well-known disadvantage of this approach lies in its weakness in incorporating unusual and unexpected changes and the dynamic nature of the future (Schwarz, 2009). The hypothetical future cannot be any more diversified than that allowed by the creativity of the researchers composing the scenario. Just as in the case of Ashby's Law (1958), we cannot disregard certain frameworks. Another possible method of delineating the future, including the future of organizations, is through extrapolation of trends occurring in the present. Applying this approach we can only forecast the continuation and strengthening of currently existing processes (e.g. Cetron & Davies, 2010; Feldman, 2010).

We may base our presentation of the structure and operation of future organizations on the predictions and assumptions that have already been presented in the literature on management science (e.g. Hesselbein & Goldsmith, 2009). Even without an exhaustive review, we are able to summarize those key characteristics identified by contemporary academic authors and current business leaders of organizations that might best survive in both the current business environment and, moreover, proliferate in the business environment of the future. Three such characteristics are flexibility, agility and the preparedness for continuous change. These characteristics make assumptions about future organizations based on the continuation of diversified environmental states (which are almost unpredictable even today) and the necessity of corporate adaptation to these states. Another approach, which emphasizes the importance of individual and corporate identity as a stable point (often originating from the actual inconsistency of the environment believed to be constant), makes strong assumptions about the corporate culture of future organizations. The authors forecast the emergence of organizations that have a strong inner identity (rather than those characterized by processes that permit flexible, continuous inner changes): such organizations provide an extraordinarily stable environment to their members.

While preparing our research, we decided that in addition to a combination of academic knowledge and extrapolation methods based on contemporary mainstream trends, we should also incorporate the idea of organic development into our approach.

#### IV. DISCUSSION – WHO IS THE ENTREPRENEUR THAT CAN CREATE SOMETHING TRULY EXCEPTIONAL?

A full review of the literature pertaining to this question, which is almost big enough to fill a library on its own, is beyond the scope of this paper; however, we might provide a short summary of the identity of such an entrepreneur limiting ourselves to the outstanding work of Urban (ed. 2010) and a selection of other important analyses (Salgado-Banda, 2005; Audretsch et al, 2010; Dabkowski, 2011). According to Schumpeter (1934/1980), an entrepreneur is a person who is an owner of a small business in an competitive environment who manages to create a better management system, and who introduces new, innovative products and processes (Gray, 2002, p61). Entrepreneurs are individuals who operate an enterprise in the profit or non-profit sector and whose business behavior is characterized by innovation, growth, taking risks, reorganizing resources, and creating workplaces (Schumpeter, 1934; Knight, 1921; Bolton, 1971; Stanworth & Gray, 1991; Storey, 1994).

In a broader framework, entrepreneurs are individuals who operate a business enterprise and are growth-oriented. Their management capabilities and their focus on setting and achieving goals create added value to the customer, conferring a competitive advantage on their enterprises. Schumpeter (1934) also defines the entrepreneur as an agent of change, one who combines the concept of a product or service, or the use of the available resources, in an innovative way (e.g. Schultz 1975). This latter definition is a particularly fruitful one for the authors in the context of the evolution of organizations.

## V. THE BASIS OF THE EVOLUTIONARY APPROACH

The evolution of operational dynamics in the corporate world is believed by some authors to follow similar principles to evolutionary biology. In a given niche (where a market segment is equated to an ecological niche) the organizations (the "living creatures") compete with each other to survive and proliferate (expressed in terms of making a profit, realizing business goals, etc.). Those organizations having characteristics that provide a competitive advantage in the market place and which can best adapt to the prevailing environmental circumstances are better able to prosper (Kieser & Woywode, 2006). A new idea, either for a product or for the modus vivendi of the organization, can create added value and thus provide a competitive advantage. László Mérő (2007) gave the name *món* to these organizational phenomena. In our approach, being an NCO is a *món*, or a combination of a number of them (a *món*-pattern), which differs from the organizational *món*-pattern specific to the given period of time.

## VI. NON-CONVENTIONAL ORGANIZATIONS: TRACKING IMPERCEPTIBLE ORGANIC DEVELOPMENT

While preparing for the conference, we were looking for existing organizations which already have in place operational practices that we predict will be successful in the future, either the methods these organizations use or their organizational structure. We were looking for organizations that seemed to be able to successfully "pass on" their advanced, unorthodox practices to future generations of organizations. Both the existence of unorthodox practices and the ability to pass them on were defining characteristics in our view. We termed these exemplary, inspiring organizations non-conventional organizations (NCOs). We were looking for organizations and organizational practices which can be considered in the eyes of the futurists as "weak signals" or "future signs" (Ansoff, 1975; Hiltunen, 2010).

Since we had to conduct a complete search process, we had to provide a precise definition in order to be able to identify such non-conventional organizations. While formulating this definition, constantly interpreting it and working on its premise, we encountered many and mostly unforeseen questions. The process of considering and attempting to answer these questions took us significantly closer to establishing and forming our own ideas and expectations regarding the organizations of the future.

- Our definition consisted of two criteria*
  - First criterion*
    - The organization must show an above-average performance, or have the potential for such performance in its own field of operation or industry.*
  - Rationale for the first criterion*

Those organizations that exhibit poor performance in their current environment, that are not successful, and that lack the potential for success in the future, are less likely to survive to a future time. After exhausting their reserves and losing their investors, they will struggle to remain participants in the present: they also lose their ability to pass on to the future the advanced practices they were using. Thus, they will not play any role in the future; we cannot use them as exemplars. The evolutionary process makes its selection.

- Our dilemmas regarding the first criterion*
  - Our first dilemma emerged from the interpretation of the word "organization", specifically whether we should include project teams which were specifically established to achieve a single concrete goal. For instance, should we consider the election campaign organization of Barack Obama – which we regarded as being non-conventional because of their creative use of statistical methods and the Internet – an "organization"? Is it necessary for an organization to work continuously? In our opinion it is not, and we made our decision accordingly. We believe that these one-time or transient organizations can also serve as extraordinarily inspiring examples for the organizations of the present and future; they can pass on their characteristics to the future simply by being memorable, embodied in the *món* established and created by them.*
  - In our initial definition we only used the word "success". But by which criteria can an organization be considered successful? If it is financially successful? If it endures? (and, in this case, how long must it endure?) It seemed logical to establish several parallel success criteria, but to use them in a search process seemed to be impossible.*

In addition to the difficulty of defining success as a business concept (especially given the "cult of

success" characteristic of the present day and the speed at which information and efficient solutions spread), we also assumed that the modern operating methods of those organizations considered successful are actively imitated and adapted by competing companies. As such, they would not fit our next criterion. They are no longer the "new" innovative thinkers, rather they are determinative agents of already existing trends: they have become trendsetters. These organizations might be considered the "NCOs of yesterday". In connection with this dilemma, we will mention as examples the car manufacturers Toyota and Ford. Ford were pioneers in the field of standardized production, in the use of the assembly line, technological sequence, etc. Toyota, on the other hand, can be considered one of the NCOs of the 1970s and 1980s because of their development of a number of innovative methods, such as lean, Just in Time, kanban systems, value-oriented management, 5S, etc. (Likert, 2004; Spear & Bowen, 1999; Likert & Hoseus, 2008; Hirotaka et al., 2008). Both organizations incorporated some unusual, sometimes unique solutions in their time; however, the adaption of those solutions is already remarkably widespread in the corporate life of our days. There are some organizations, for example Google, that have built themselves up by combining some of their new, innovative móns and some older ones, in doing so establishing a highly successful organization (Iyer & Davenport, 2008; Hagiu & Yoffie, 2009).

Consequently, and as a compromise, we resolved to use both high performance and the potential for high performance in our definition. We defined performance by the evident or potential achievement of the goals set by the organization. We assumed that those organizations that could achieve their own goals would be able to endure. Performance, on the other hand, does not necessarily mean financial success or satisfied customers and employees. For example, we considered the Hotel Panda in Budapest a good example of our definition. This three-star hotel works almost exclusively with employees with some sort of learning or physical impairment. The enterprise works, in the sense that it has endured; it offers a service to its clients and provides a job for its employees. We can consider it a well-performing organization, but not necessarily, in today's common meaning of the word, successful; for example, there is no Hotel Panda chain.

#### iv. Second criterion

Success and the related dilemma of imitation have a direct and close relationship in the second criterion for our definition.

The abovementioned high performance of an organization must be reached by an unusual, non-conventional method of operation, by value proposition, a unique business model and management, or by a unique process system.

During our research, simply having a unique product or service was not in itself enough to achieve the status of NCO.

#### v. Rationale

We wanted to capture the essence of non-conventionality in this point. The list is only for guidance, but it also represents our own open approach we wanted to apply during our search. We found it important that innovation be a central element of the operation of the organization, that is, it had to unequivocally contribute to the high performance or make high performance possible.

#### vi. Our dilemmas regarding the second criterion

We faced two serious dilemmas during our research created by the second part of our definition. The first one is the previously discussed question of uniqueness, of novelty, that underpins the organization's success. For example, can we consider the web-based commercial models of eBay or Amazon.com unique? Is the business model of AnyMeeting.com unique in that it provides all the necessary systems for its clients to hold webinars completely free of charge? Is the idea of "full vertical ownership" (motivational share options available for the whole employee group) special? These solutions are interesting but clearly not unique. Webshops and business models based on free services are widespread these days, but in the 1980s and 1990s these models were NCOs.

The dilemma of judging "uniqueness" can be resolved into several questions. The first question is the one illustrated by the examples above, that is, the question of "absolute uniqueness": Does the organization show an attribute or characteristic that we have not seen before? The second question is whether the organization exhibits a unique characteristic combination (*món*-combination). For example, does it make Radical Inclusion, the boutique consultant company, which is conventional in many aspects, "unique enough" in the way they apply fully virtualized internal co-operation processes? Looking for the answer to this question leads us, theoretically at least, to the next question, which is to identify the typical *món*-combinations of an era (in terms of the variables of time, geography, economy, or the ecosystem of an enterprise). How unique should an NCO be? Answering this question completely reaches far beyond the scope of this article, but it may be worthwhile to have a look at how we might begin to tackle it. For example, one recent analysis identified the typical characteristics of a successful start-up and its typical development curve, highlighting the optimal structure of the group, the business model, and its financing (Marmer et al., 2012). Such an analysis could help us recognize successful start-ups that do not fit the typical *món*-combination or "conventional" model.

The uniqueness of the *món*-patterns, based on the evolutionary approach, must be defined in relation to the environmental conditions of the given organization. Those current surveys presently known to us concentrate on the ranking of the business environment (e.g. cities, countries, industrial branches) along the lines of a specific viewpoint-system rather than on a differentiated comparative analysis. To our knowledge, there have only been a few case studies in which the characteristics of successful organizations in a given environment have been studied. In an analysis that examined Israeli start-ups (Chorev & Anderson, 2013), business factors were categorized according to how important they were to the ecosystem and to the start-ups' ultimate success. Among the most important factors were strategy, the business "idea", marketing, and the loyalty and expertise of the employees; less important ones were judged to be management, public relations, and research and development; the least important ones were the economic and political environment (Magos & Németh, 2014).

Our second dilemma about the second criterion was in judging whether non-conventional character is central to the organization, or more precisely whether the uniqueness we believed to have identified in the organization did indeed significantly contribute to its performance. Is the unique, regularly changing management structure of the counselling company Vialto (which is based on the controlled rotation of the senior circle) a central element of their success? Do the logistics innovations of the Indian company Akashaya Patra, which provides food to children to help them perform better at school, play a significant part in the company's work? To what extent do the spiritual teachings followed by both the founders and healers of the Aravind Eye Hospital contribute to the operational efficiency and celebrity of the hospital? Based on the correspondence with the people involved and the documents that we collected, we decided that the answer is in the affirmative in each case.

## VII. CONCLUSION

In summary, we were looking for organizations that have introduced a significant degree of innovation in some field (or fields) of their operation, but do not yet have a large number of followers applying this innovation. Our search focused on mutations, positive deviations from the ordinary, and exclusively ones that are capable of survival. In addition, the organization must demonstrate its uniqueness not only in its phenotype but in its genotype as well, on the level of the organizational DNA (Morgan, 1998; Neilson et al, 2003; Bray et al, 2011; Baksin, 2012). We were looking for organizations that were already employing the potential operational methods of the future organizations and that

show the potential to be effective, indeed successful, in the future with the help of these methods.

In order to classify those organizations we found, we established a 2x2 matrix categorization system (this can be viewed at the end of this article, complete with examples). One of the dimensions in this matrix was the organizational phenomenon, expressed either as an introverted or extroverted factor. For example, a HR process or a development in organizational culture is an introverted factor; on the other hand, a development valuable to the clients of the organization, e.g. self-service or wandering in the warehouses of IKEA, are extroverted: these reach over the boundaries of the organizations. Our other chosen dimension for the matrix was whether the organizational phenomenon/innovation affects value creation directly or indirectly. Using the examples above, the introduction and operation of an innovative talent-management system does not provide a direct contribution to the value creation, rather it contributes indirectly; on the other hand, in the IKEA example we can definitely speak about a direct contribution, although we have highlighted only one element of the value-creation chain (Porter, 1995).

### a) *Detour: Tracking down the non-conventional organizations*

In the preparation phase of our research we mainly used as sources of information to reveal NCOs Internet forums, innovation webpages, community networks, industrial sources, and recommendations from fellow consultants. After identifying interesting candidates, we tried to clarify through personal contact whether the given organization matches our research criteria and also whether they might wish to join our conference program. Eventually, we identified just over a hundred possible NCO candidates. During the analysis of our research we found several possible explanations for this relatively low number of NCO candidates.

It is conceivable that we established a definition which was too strict, even in its current modified form. We might have been able to include more organizations as candidate NCOs by leaving out the first criterion. However, this would have meant us discarding the importance placed on the evolutionary aspect.

During our research, we also identified the difficulty in acquiring information as a main obstacle. Our research team found it particularly difficult to gather sufficient information and impressions related to our first criterion. Notwithstanding the practical difficulties, we finally came to the conclusion that the number of NCOs is indeed quite small. Whether this small number means that we should be concerned for the flexibility and endurance of present or future organizations is a pertinent question, but one that we cannot begin to answer in this current article.

b) Examples for the non-conventional organizations

i. Radical Inclusion

Radical Inclusion is a consulting company that provides services to organizations anywhere in the world. Their main field of service is the reform and improvement of work processes through the introduction of tools for virtual cooperation, and the support subsequently given for the professional application of these tools. However, the true non-conventionality of Radical Inclusion does not lie in the service it provides, but in the way their own internal operation has perfected this virtual cooperation. The members of the five-strong team of the company live in four different countries. They have no personal contact with each other in their everyday work; they communicate through different technical solutions (e.g. Skype, phone, AIM, cloud-based document libraries, forums). They have built up their shared virtual work surface according to a definite system, and there you can find a virtual client space, a coffee room for joint relaxation and inspiration, as well as their personal work surfaces. According to the founders, in the first year following the foundation of the company they met up only virtually and never face-to-face.

The key element of the company's strong performance, in addition to the virtual or blended work processes they offer, is their own special modus vivendi, which gives them maximum credibility in the eyes of their clients in the field of virtual organizations.

ii. NESsT

During our research, the global organization NESsT also caught our attention by virtue of its distinctive operating model and the philosophy that lies behind it. Combining the models of venture investment and philanthropy, the organization applies the approach of "Venture Philanthropy". Using this approach they support social enterprises, that is, organizations working for social objectives. However, their support is not limited to financial aid; NESsT handles the money given for good purposes as investments. Through a wide range of consulting services, experience sharing and other tools, it builds on the initial success of the investment so that the clients' social objectives are sustainable, as well as ensuring the initial investment is financially worthwhile. The combination of the two operational models – venture investment and philanthropy – makes this organization unique.

We determined that NESsT was successful by virtue of the steadily growing number of organizations they support and the growth of the capital available for this support.

iii. Mumbai Dabbawalas

This Mumbai-based food distribution company employs several thousands of couriers, most of whom are illiterate or lacking basic educational skills. With their help they deliver daily more than two hundred thousand

home-cooked meals in lunch boxes from the residence of their clients where they are prepared to work places and schools all around the city, often to places which lack an address or telephone number (e.g. construction sites). They also do this with such punctuality and reliability that they can manage to compete with the services of professional logistic companies that employ high-tech equipment. Their reported error rate is 1 in 1,000,000, equivalent to the results of the six sigma methodology. The success of these food couriers, evidenced not least by the winning of numerous international prizes and invitations to give presentations at countless conferences, is based on the efficient inner organization, trust and strong loyalty. In the maintenance of the system the common ownership and the equitable share of wages within the organization, which has a flat management structure despite it having 5000 members, plays an important role (Covell, 2009).

c) The non-conventional organizations of the recent past

During our research, we identified several organizations whose unique operational models and special practices have already been copied by other organizations. We have not included these organizations in our research, but some of them are worth mentioning as the trendsetters of yesterday. Studying their examples can guide us in understanding how the NCOs of today might affect the world of the organizations of the near future.

i. Amazon.com and ebay.com

These two companies have remained pioneers in e-commerce over the last couple of decades. They have established the world's biggest webshops and social "marketplaces" (Darren, 2004; Ho, 2008). Virtual commerce is an orthodox solution today; however, the success of these organizations raises the question as to which new commercial platforms we might see in the years to come.

ii. Zara (Inditex group)

The world-famous clothing retailers achieved an industry-level competitive advantage by shortening the design and production cycle for their merchandise. In contrast to other retailers whose seasonal collections are typically planned one year in advance, this shorter cycle has allowed Zara to keep their customers' interest by offering them fresh collections in the same season (Ferdows et al., 2004). Control of the entire production process, from the design stage to the clothes hitting the shops – a kind of democratization of the fashion industry – has played a key role in the success of the Inditex group (Bonnin, 2002). Zara was able to step out of the circle of expectations and, in the vernacular of the time, "think outside the box". Which will be the next box that high-output manufacturers leave behind?

## iii. Southwest Airlines (SWA)

Southwest Airlines was the pioneer of the budget airline business model (Raynor, 2011; Kaplan & Norton, 2004). To offset the loss of revenue from sales of cheaper airline tickets, the company cut back on extra services (in-flight meals, waiting rooms, etc.). Although these steps might first have appeared as a loss in value for the passengers, the airline was able to increase the number of flights per day on a given route and also fly to more destinations, thereby increasing the interconnectivity of their network. Their operational model has since been copied by several other airlines. The example of Southwest raises the question as to where the boundaries of services lie: which are the elements of service that will no longer be provided free of charge in the next few years?

## iv. NetFlix

The NetFlix organization has an original way of managing its talents and high-performing employees. It places great emphasis on its corporate values, aligning selection of new employees with these values and making them clear to new recruits; these values also permeate the workplace. The organizational culture is founded on understanding and logic rather than being rule-based. In the terminology of transactional analysis, NetFlix treats its co-workers as "adults" and it counts on their intelligence, encouraging their creativity in an inspirational and supportive atmosphere, instead of just expecting them to adapt to certain rules (as "children"). There are no performance bonuses; on the other hand, the workers can work in excellent, comfortable premises (Mc Cord, 2014).

	Indirect effect on creating values	Direct effect on creating values
Effect outside the organization	ZARA (Inditex)	Radical Inclusion; NESst; SWA; Amazon; Ebay; Toyota; Ford;
Effect within the organization	Semco; Vagas.com; Statoil; NetFlix	Mumbai Dabbawalas

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Ansoff, I. H. (1975): Managing strategic surprise by responding to weak signals, *California Management Review*, Vol. 18:2 p 21-33 (NO).
2. Ashby, W.R. (1958), Requisite Variety and its implications for the control of complex systems, *Cybernetica* Vo1 1, No 2, 1958.
3. Audretsch, D.B. – Falck, O. – Heblick, S. & Lederer, A. (Eds)(2011) Handbook of Research on innovation and Entrepreneurship. Edward Elgar Publishing.
4. Baksin, K (2012). Corporate DNA. Routledge.
5. Bolton, J. (1971), Small Firms ± Report of the Committee of Inquiry on Small Firms, Cmnd 4811, HMSO, London.
6. Bonnin, A. R. (2002): The Fashion Industry in Galicia: Understanding the 'Zara' Phenomenon, *European Planning Studies*, Vol. 10 Issue 4, p519-527.
7. Bray, N - Gregersen, H. & Christensen, C.M. (2011) The Innovator's DNA. Harvard Business Review Press.
8. Cetron, M. J. & Davies, O. (2010): Trends Shaping Tomorrow's World: Forces in the Natural and Institutional Environments, *Futurist*, Vol. 44 Issue 4, p38-53.
9. Choref, Sch. & Anderson, A. R. 2006: Success in Israel High- Tech Start-ups; Critical Factors and Process. Working paper
10. Constanzo, L. A. & MacKay, R. B. (2009): Introduction, In: Constanzo, L. A.; MacKay, R. B. (szerk) (2009): Handbook of Research on Strategy
11. Covell, S. (2009): Achieve six sigma the Mumbai way, *Supply Management*, Vol. 14 Issue 2, p14-15 (NO).
12. Dabkowski, A (2011) CASE Network Studies & Analyses No.427 –Entrepreneurship and Economic Growth: An Investigation into the relationship between Entrepreneurship and total factor productivity growth in the EU. © CASE – Center for Social and Economic Research, Warsaw,
13. Darren, F. (2004): The Impact of E-Commerce Strategies on Firm Value: Lessons from Amazon.com and Its Early Competitors, *Journal of Business*, Vol. 77, pS135-S154.
14. Feldman, M. S. (2010): Managing the Organization of the Future, *Public Administration Review*, Vol. 70, ps159-s163.
15. Ferdows, K. – Lewis, M.A. - Machuca, J.A.D. (2004) Rapid-Fire Fulfillment. *Harvard Business Review* 2004 November.
16. Glenn, J. C. & Gordon, T. J. (2009): Futures Research Methodology Version 3.0, The Millennium Project (NO).
17. Gray, C (2002) Enterpreneurship, Resistant to change and growth in small firms, *Journal of Small Business and Enterprise Development*, 2002, Vol. 9. No. 1 pp61-72.
18. Gray, P. & Hovav, A. Z. (2007): The IS Organization of the Future: Four Scenarios for 2020; *Information Systems Management*, 24:113–120.
19. Hagi A. & Yoffie D. B. (2009) What's Your Google Strategy? *Harvard Business Review* 2009 april.

20. Hesselbein, F. & Goldsmith, M. (Eds) (2009): *Organizations of the future 2*, Jossey-Bass Publishing.
21. Hiltunen, E. (2008): The future sign and its three dimensions, *Futures*, 40 247-260.
22. Hirotaka, T. – Emi, O. & Norihiko, S (2008) The Contradictions That Drive Toyota's Success. *Harvard Business Review* 2008 June.
23. Ho, J. K. (2008): Inter-brand comparison of online auction markets, *Electronic Commerce Research*, Vol. 8 Issue 1/2, p103-114.
24. Iyer, B. & Davenport T.H. (2008) Reverse Engineering Google's Innovation Machine *Harvard Business Review* 2008 April.
25. Jackson, M. (2011) Practical foresight guide, *Shaping Tomorrow*
26. Kaplan, R.S & Norton, D.P. (2004) *Strategy Maps*. HB press.
27. Kieser, A. – Woywode, M (2006) Evolúciós megközelítés. In: Kieser, A – Ebers, M (Eds)(2006) *Organisationstheorien* pp309-353.
28. Knight, F. H. (1921). Risk, Uncertainty, and Profit. Hart, Schaffner, and Marx Prize Essays, no. 31. Boston and New York: Houghton Mifflin Co.
29. Laubacher, R. J. & Malone, T. W. (1997): wo Scenarios for 21st Century Organizations: Shifting Networks of Small Firms or All-Encompassing "Virtual Countries"? Web-documentum: <http://ccs.mit.edu/21c/21CWP001.html> (2014.12.20)
30. Likert, J. K & Hosues M. (2008) Toyota culture. McGraw-Hill Professional.
31. Likert, J. K (2004) Toyota way. McGraw-Hill Professional.
32. Loveridge, D. (2008): *Foresight: The art and science of anticipating the future*, Routledge, London (NO)
33. Magos A. – Németh G. (2014) A vállalkozói kultúra fejlesztése nagyban in: Lukovics M. – B. (szerk.) 2014: *A területi fejlődés dilemmái*. SZTE GTK, Közgazdaságtani Doktori Iskola, Szeged, ISBN 978-963-306-344-6.
34. Marmer; M. (2012) Startup Genome Report Extra on Premature Scaling Downloaded from <http://blog.startupcompass.co/pages/startup-genome-report-extra-on-premature-scal> on 2014.12.20.
35. McCord, P. (2014) How NetFlix Reinvented HR. *Harvard Business Review*. January-February Issue pp3-8.
36. Mintzberg, H., Ahlstrand, B. & Lampel, J.B: (2002) *Safari Strategy: The Complete Guide Through the Wilds of Strategic Management*. FT, Prentice Hall,
37. Mérő, L. (2007) A pénz evolúciója. Tericum Kiadó, Budapest.
38. Morgan, G. (1998). *Images of Organization*. Berrett-Koehler Publishers.
39. Neilson, G. - Pasternack, B. A. & Mendes, D. (Winter 2003). "The Four Bases of Organizational DNA". *Strategy+Business* (Booz & Company) (33).
40. Németh, Gergely (2009) Changing the mindset of the entrepreneur – Non Conventional Organizations pp947-951 2009. *Erdei Ferenc Science Conference Book* ISBN 978-963-7294-79-2.
41. Porter, M (1995) *Competitive Advantage: Creating and Sustaining Superior Performance*. New York.: The Free Press.
42. Raynor, M. E. (2011): Disruptive innovation: the Southwest Airlines case revisited, *Strategy & Leadership*, Vol. 39 Issue 4, p31-34 (NO).
43. Rendell, M. et al. (Eds)(2007) *Managing tomorrow's people – The future of work 2020*. Az <http://www.pwc.com/gx/en/managing-tomorrows-people/future-of-work> downloaded: on 2010.02.17.
44. Salgado-Banda, H. (2005). *Entrepreneurship and Economic Growth: An Empirical Analysis*. Research Paper (pp. 1-46). Mexico City: Banco de Mexico.
45. Schultz, T. W. (1975) "The Value of the Ability to Deal with Disequilibria," *Journal of Economic Literature*, American Economic Association, vol. 13(3), pages 827-46, September.
46. Schumpeter, J. (1934): *Theory of Economic Development*, Harvard University Press, MA: Cambridge,
47. Schwarz, J. O. (2009): Business wargaming: developing foresight within a strategic simulation, *Technology Analysis & Strategic Management*, Vol. 21, No. 3, 291–305.
48. Slaughter, R. A. & Bussey, M. (2006): *Futures thinking for social foresight*, Tam Kang University Press & Foresight International (NO).
49. Spear S. & Bowen H. K (1999) Decoding the DNA of the Toyota Production System *Harvard Business Manager* 1999 september.
50. Stanworth, J. & Gray, C. (Eds) (1991), *Bolton 20 Years On*, Paul Chapman, London.
51. Storey, D. (1994): *Understanding the Small Business Sector*, Routledge, London.
52. Urban B (Ed) (2010) *Frontiers in Entrepreneurship*, Springer-Verlag, Berlin.
53. Voros, J. (2003): A generic foresight process framework, *Foresight*, 5 (3): 10-21 (NO).



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A  
ADMINISTRATION AND MANAGEMENT  
Volume 15 Issue 3 Version 1.0 Year 2015  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

## A Theoretical Approach to Customer Relationship Management and Communication

By Yakup Durmaz, Esra Çikmaz & Ercan Ince

*Hasan Kalyoncu University, Turkey*

**Abstract-** Nowadays customer relationship management process is a marketing approach used by various businesses. Management of customer relations provides businesses with great profits, especially in the case of gaining superiority in competition. This approach represents a process in the first place. It should be applied in an efficient and successful way by businesses. Moreover, ensuring customers' satisfaction while providing them with products and services plays a crucial role in increasing the profit rates. The efficiency level in communication among employees and customers forms one of the most important implementations enabling customer satisfaction.

**Keywords:** *customer, process of customer relationship management, communication.*

**GJMBR - A Classification :** *JEL Code : M19*



ATHEORETICALAPPROAHTOCUSTOMERRELATIONSHIPMANAGEMENTANDCOMMUNICATION

*Strictly as per the compliance and regulations of:*



RESEARCH | DIVERSITY | ETHICS

# A Theoretical Approach to Customer Relationship Management and Communication

Yakup Durmaz <sup>a</sup>, Esra Çikmaz <sup>a</sup> & Ercan Ince <sup>b</sup>

**Abstract-** Nowadays customer relationship management process is a marketing approach used by various businesses. Management of customer relations provides businesses with great profits, especially in the case of gaining superiority in competition. This approach represents a process in the first place. It should be applied in an efficient and successful way by businesses. Moreover, ensuring customers' satisfaction while providing them with products and services plays a crucial role in increasing the profit rates. The efficiency level in communication among employees and customers forms one of the most important implementations enabling customer satisfaction.

In this study, several concepts related to customer relationship management, including the management process and communication in this process, will be explained.

**Keywords:** customer, process of customer relationship management, communication.

## I. INTRODUCTION

In today's time, globalization removes boundaries among countries. This caused a furious competition environment with regards to all sectors (Farrell, vd, 2001; Bradyvd, 2002). All businesses are affected by this competition considerably. Therefore, in order to be able to survive in this competitive environment, today's businesses need to improve the process of customer relations management along with the quality of the products and services they provide. (Fowdar, 2007; İkiz ve Masoudi, 2008). Recent developments around the world, forces businesses to use marketing strategies on customers in order to gain advantage in the competition by ensuring customer satisfaction. Given that we live in a information age, improving the process of customer relationship management, offering products and services by using various advanced methods and therefore increasing customers' level of loyalty to businesses are the things which take place at the top of marketing strategies. (Eccless ve Durand, 1997; Akbaba, 2006; Hsiehvd, 2008; Kim vd, 2009).

Individuals have important role in presenting products and services produced by businesses according to wishes of customers (Özkul, 2007). The extent of communication between a customer and a

*Author a:* Faculty of Economics Administrative and Social Sciences, Hasan Kalyoncu University, Havalimanı Yolu Üzeri Gaziantep, Turkey. e-mails: yakup.durmaz@hku.edu.tr, yakupdu@hotmail.com

*Author a:* Phd. Student at Department of Business Administration of Hasan Kalyoncu University. e-mail: esra9824@gmail.com

*Author b:* Phd. Student at Department of Business Administration of Hasan Kalyoncu University. e-mail: ercanince82@gmail.com esra

staff member affects customer's perception of the quality of products or services (Olalı ve Korzay, 2004; Çikmaz, 2013) Communication level of a staff member not only affects customer satisfaction, but it also helps to eliminate the possible service mistakes done by the staff member. As a result of this, communication level of staff members is crucial in terms of customer satisfaction and the profit rate of all businesses (Sigala, 2003; Heung ve Lam, 2003).

## II. GENERAL CONCEPTS ABOUT CUSTOMER RELATIONSHIP MANAGEMENT

### a) Customer

A customer is a person or a foundation who/which buys a specific product of a certain business for administrative or private purposes. A current customer is a customer whom a business sells frequently and who buys products or services constantly from a certain business. Prospect is a customer candidate with whom a business negotiates about sales. An old customer is a customer who was a customer of a business, yet stopped being a customer for some reasons. A new cusotmer is a customer who buys products or services from a business for the first time. Target customer is a customer who is targeted by a certain business as to sell specific products.

### b) Customer Lifetime Value

The value of a customer in a lifecycle determines the concept of customer life. In an undefined lifetime, value of a customer life can not be measured. Customer lifetime value is determined with regard to a lot of criteria including customer holding costs, rate of order in a year, total income, direct cost, customer acquisition costs, discount rate. Customer value differs according to businesses in the way that customers' expectations changes from business to business. Therefore customers are ranged by their value and differ in accordance with their needs. (Yıldız, 2002:65-69).

### c) Customer Loyalty

Modern marketing concept is a business management philosophy including all units of a businesses to study coordinately in order to determine consumers' requests and needs and gain their satisfaction (Varinli, 2008: 2). Since modern marketing aims to gain a continuity in acquiring customer satisfaction by meeting their needs, it helps businesses

to make profit and gain customers' loyalty. (Durmaz, 2006:2).

Customer loyalty can be defined as customers' tendency of buying the same product or shopping from the same store to meet their needs. (WaltersandBergiel, 1989: 497).

A strong customer loyalty is one of the most important thing businesses could have. The strength of customers' loyalty and attitude towards a company makes it hard for its opponents to attract its customers. We can list some of the advantages of customer loyalty in terms of businesses as; easing the process of selling, maintaining marketing stability, gaining control over prices, customers visit relevant company more often, and they help companies with channel of distribution (Sharp, 1997: 473).

### III. CUSTOMER RELATIONSHIP MANAGEMENT PROCESS

Customer relationship management process consists of four stages. These stages are; customer selection, customer acquisition, customer retention and customer deepening. (Anton, 1996: 15).

#### a) Customer Selection

In this stage it is aimed to define and group the intended population. In CRM's philosophy customer selection is important since every customer and customer group carries different value and is integrated into different campaigns. Determining the target audience, segmentation and positioning for the target audience and developing campaigns in accordance with positioning data falls into this part also.

#### b) Customer Acquisition

The main purpose of this stage is "selling". It seeks the most efficient way of selling products or services to customers. Need analysis, developing offers and prerequisites about buying and selling are also done in this stage.

#### c) Customer Retention

One of the determining factors in CRM is customer loyalty. CRM gives importance to keeping the current customers as well as gaining new ones. Contrary to traditional belief, establishing relationships about sale with current customers is very important. Customer retention stage, seeks an answer to the question "How long a customer can be retained?" The purpose is to connect customers to institution and keep them by ensuring continuity and loyalty in relations. For this stage some marketing efforts, such as; order management, demand organization and problem management, should be developed.

#### d) Customer Deepening

This stage consists of steps for maintaining the loyalty and profitability of a current customer and raising

customer expense share. "Share of wallet" is one of the concepts which is questioned in this stage. The purpose is to profit the continuity of customer relationship. Need analysis for customers and cross-selling campaigns are suggested for this stage. (Arslan, 2013: 80).

### IV. COMMUNICATION IN THE PROCESS OF CUSTOMER RELATIONSHIP MANAGEMENT

Since finding an employment has become very hard these days, a good education by itself is not enough for it. One should follow certain rules along with education. It is an undeniable truth that individuals who can work with customers in harmony and provide customers with motivating and constructive feedbacks to reach target-driven solutions are able to ensure customer relationship management successfully. (Çikmaz, 2013: 33).

#### a) Communication Process

A communication process may change depending on individuals' knowledge, purpose and their cultural and psychological aspects. Therefore, for an efficient communication process to happen, several factors need to come together. Key elements to a communication process are; source, message, channel, receiver and feedback. (Mısırlı, 2007: 2).

Source is the one who/which starts the communication process and sends the message. It can be a person or a device which has different qualities. Source turns a notion or a behavior into a message by using words, numbers, figures, signs and other symbols when we want to convey them to the receiver. Source is crucial for a successful communication process to happen. If the source can not gain the receiver's confidence for any reason, communication process won't be successful. Thus, source should choose topics in which receiver have interest, talk comprehensibly and dress according to the receiver's culture. (Fidan, 2009: 36).

Message enables the relationship between source and receiver. Therefore it is the central point in communication process.

Receiver is a person or a group who interpret the message of source and respond to it. (Zillioğlu, 2003: 98). Receiver deciphers the message and answers using new codes. All customers in a store are considered as receivers. However, not all receivers perceive the same thing from the same message since every individual has different background, value judgement, prejudice and thought system. (Sezgin ve Akgöz, 2009: 22).

A message is sent back to source from receiver through feedback. Feedback shows us the way receiver interpret the message. An efficient communication is formed by positive feedback. Positive feedback consists of several steps; (Tutar, 2009: 80-81):

- 1) Message is taken.
- 2) Message is perceived.
- 3) Message is interpreted correctly.
- 4) Receiver is ready for feedback.

*b) Effective Communication with Customers*

Communication means conveying ideas, feelings or information to others, using several methods including a message and feedback. It is not only information exchange, but also a comprehension activity. Communication starts within a staff member or a supplier and is reflected on customers with a smile, removing possible inconvenient situations. The next step for an individual who made the customer ready for the message is to develop a communication language in a harmony with the customer. Sharing the same language with customers does not mean that they ( salesperson and customers) share the same language in communication. They could have different communication frequency. (Çelebi, 2013: 160).

Knowing customers names and addressing them with their names makes customers happy. This should not be considered as a deception, on the contrary, this kind of motivation makes customers feel good. This makes it easier for salesperson to do his/her job. Bringing out the best sides of customers is considered as the begining of a good communication. Carefully watching customers and listening to them without prejudice makes people realize the reasons behind disagreements and false viewpoints. In this way, efficient communication comes into being. The best way to an efficient communication with costumers is to approach them in respect and without prejudice. (Dwight, 1996: 47).

In an efficient communication, mutual understanding is very important. In order to make understanding easier, one should convey the message according to addressee's level and perception management and feedback should be operated as a process. (William,1981: 22).

## V. CONSLUSION

Customer relationship management (CRM) will be important for future businesses as it is for today's businesses. Future customers will have limited time for shopping and higher expectations. It is predicted that companies which will serve the future generations will have very wide data bases for customers and manage customer relations by reaching vast amount of customer information thanks to developed technology.

CRM in businesses which want to be successful in the future, represents a process in the first place. Listening to customers comes first in this process. Then it continues with determinig the customers expectations of businesses. Businesses need to understand their customers and listen to them carefully in order to keep

their customers for a long time, since to be interested in customers is not solely enough. They need to serve customers with higher quality and different range of products and services at every turn. Businesses need to constract themselves taking CRM into the centre in order to have more profitable and loyal customers. In this construction, quality of service is directly proportional with personnels' attitude towards customers and their communication skills. Therefore, they need to have efficient communication skills to have a successful customer relationship.

## REFERENCES RÉFÉRENCES REFERENCIAS

1. Akbaba, Atilla. (2006). Measuring Service Quality in the Hotel Industry: A Study in a Business Hotel in Turkey, *International Journal of Hospitality Management*, 25, 170-192.
2. Anton, J.(1996)."Customer Relationship Management: Making Hard Decisionswith Soft Numbers", Prentice Hall: New Jersey.
3. ARSLAN, M, "Müşteri İlişkileri Yönetimi"(2013). Ders Notu, Harran Üniversitesi Birecik Meslek Yüksekokulu , s.80.
4. Brady, Michael K, Cronin, Joseph J. andBrand Richard R. (2002). PerformanceOnlyMeasurement of Service Quality: A Replication andExtension, *Journal of Business Research*, 55, 17-31.
5. Çelebi, O,(2013)." Müşterinin Kalbine Yolculuk",Hayat Yayın Grubu, 2. Baskı.
6. Çıkmaz, E. (2013). Otel İşletmelerinde Çalışan Personelin Sahip Olduğu İletişim Becerisinin Yükseköğretim Mezunu Müşteriler Tarafından Değerlendirilmesine Yönelik Gaziantep'te Bir Uygulama, Yüksek Lisans Tezi Hasan Kalyoncu Üniversitesi, Sosyal Bilimler Enstitüsü.
7. Durmaz, Y, "Tüketici Davranışı", Detay Yayıncılık, 2008, s:4.
8. Durmaz, Yakup (2006), "Modern Pazarlamada Tüketici Memnuniyeti ve Evrensel Tüketici Hakları" , Journal of YasarUniversity, July, No:3, Vol:1.
9. Dwight, R, "High Performance Branch Banking",IRWIN, ProfessionalPublishing, 1996.
10. Eccles, Gavin ve Durand, Philip. (1997). Improving Service Quality: LessonsandPracticeFromthe Hotel Sector, *Managing Service Quality*, 7 (5), 224-226.
11. Farrell, A. M.,Souchon, A.L. andGeoffrey R. (2001). Service EncounterConceptualisation: Employees' Service Behavioursand Customers' Service QualityPerceptions', *Journal of Marketing Management*, 17 (5), 577-593.
12. Fidan, M. (2009) İletişim Kurmak İstiyorum, Tablet Kitabevi,Konya.
13. Fowdar, Roma RoshneeRamsaran. (2007). Developing Service Quality Questionnaireforthe Hotel Industry in Mauritius, *Journal of Vacation Marketing*, 13 (1), 19-27.

14. Gökçe, O (2006) İletişim Bilimleri, Siyasal Kitabevi, Ankara.
15. Hsieh, Ling-Feng, Lin, Li-Hung and Lin Yi-Yin. (2008). A Service Quality Measurement Architecture for Hot Spring Hotels in Taiwan, *Tourism Management*, 29, 429-438.
16. Heung, V. C. S. & Lam, T. (2003). Customer-complaintbehaviortowardshotel restaurantservices. *International Journal of Contemporary Hospitality Management*, 15(5), 283-289.
17. İkiz, A.K. and Masoudi, A (2008). A QFD and SERVQUAL Approach to Hotel Service Design. *İşletme Fakültesi Dergisi* Vol 9, No:1 pp 17-31.
18. Kim, J. H., Tavitiyaman, P. and Kim, W. G. (2009). The Effect of Management Commitment to Service on Employee Service Behaviors: The Mediating Role of Job Satisfaction. *Journal Of Hospitality & Tourism Research*, 33 (3) 369-390.
19. Mısırlı, İ. (2007) Genel Teknik İletişim, Detay Yayıncılık 3. Baskı. Ankara.
20. Olalı, H., ve Korzay, M. (2004) Otel İşletmeciliği Beta Basım Yayıncılık.
21. Özkul, E. (2007). 'Müşteri İlişkileri Yönetiminin Otel İşletmelerinde Uygulanabilirliğine İlişkin Bir Değerlendirme', *Seyahat ve Otel İşletmeciliği Dergisi*, Mart Yıl: 4, Sayı:1, s. 16.
22. Sezgin, M, Akgöz, E. (2009). Genel ve Teknik İletişim Gazi Kitabevi, Özbaran Ofset Matbaacılık.
23. Sharp, P., Sharp, A. (1997). 'Loyalty Programs and Their Impact on Repeat Purchase Loyalty Patterns', *International Journal of Research in Marketing*, Vol: 14, 1997.
24. Sigala, M. (2003) "The information and communication technologies productivity impact on the UK hotel sector", *International Journal of Operations & Production Management*, Vol. 23 Iss: 10, pp.1224 – 1245.
25. Tutar, H. (2009) Seçkin Yayıncılık 2. baskı. Örgütsel İletişim.
26. Varinli, İnci (2008), "Pazarlamada Yeni Yaklaşımlar", 2. Baskı, Detay Yayıncılık, Ankara.
27. Yıldızel, A. (2002) Müşteri İlişkileri Yönetiminde Bilgi Teknolojilerinin Kullanımı, Yayınlanmamış Yüksek Lisans Tezi, Marmara Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
28. Zilloğlu, M. (2003) İletişim Nedir?, Cem Yayınevi, İstanbul.
29. Walters, G., Bergiel, B.J. (1989). Consumer Behavior: A Decision Making Approach, South Western Publishing, USA.
30. William, S, "Fundamentals of Marketing", 6.th. ed., 1981.

# GLOBAL JOURNALS INC. (US) GUIDELINES HANDBOOK 2015

---

WWW.GLOBALJOURNALS.ORG

## FELLOWS

### FELLOW OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (FARSB)

Global Journals Incorporate (USA) is accredited by Open Association of Research Society (OARS), U.S.A and in turn, awards "FARSB" title to individuals. The 'FARSB' title is accorded to a selected professional after the approval of the Editor-in-Chief/Editorial Board Members/Dean.



- The "FARSB" is a dignified title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FARSB or William Walldroff, M.S., FARSB.

FARSB accrediting is an honor. It authenticates your research activities. After recognition as FARSB, you can add 'FARSB' title with your name as you use this recognition as additional suffix to your status. This will definitely enhance and add more value and repute to your name. You may use it on your professional Counseling Materials such as CV, Resume, and Visiting Card etc.

*The following benefits can be availed by you only for next three years from the date of certification:*



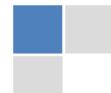
FARSB designated members are entitled to avail a 40% discount while publishing their research papers (of a single author) with Global Journals Incorporation (USA), if the same is accepted by Editorial Board/Peer Reviewers. If you are a main author or co-author in case of multiple authors, you will be entitled to avail discount of 10%.

Once FARSB title is accorded, the Fellow is authorized to organize a symposium/seminar/conference on behalf of Global Journal Incorporation (USA). The Fellow can also participate in conference/seminar/symposium organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent.



You may join as member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. In addition, it is also desirable that you should organize seminar/symposium/conference at least once.

We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.

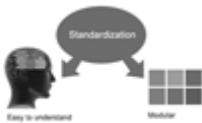




Journals Research  
indexing researches

The FARSB can go through standards of OARS. You can also play vital role if you have any suggestions so that proper amendment can take place to improve the same for the benefit of entire research community.

As FARSB, you will be given a renowned, secure and free professional email address with 100 GB of space e.g. johnhall@globaljournals.org. This will include Webmail, Spam Assassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.



The FARSB will be eligible for a free application of standardization of their researches. Standardization of research will be subject to acceptability within stipulated norms as the next step after publishing in a journal. We shall depute a team of specialized research professionals who will render their services for elevating your researches to next higher level, which is worldwide open standardization.

The FARSB member can apply for grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A. Once you are designated as FARSB, you may send us a scanned copy of all of your credentials. OARS will verify, grade and certify them. This will be based on your academic records, quality of research papers published by you, and some more criteria. After certification of all your credentials by OARS, they will be published on your Fellow Profile link on website <https://associationofresearch.org> which will be helpful to upgrade the dignity.



The FARSB members can avail the benefits of free research podcasting in Global Research Radio with their research documents. After publishing the work, (including published elsewhere worldwide with proper authorization) you can upload your research paper with your recorded voice or you can utilize chargeable services of our professional RJs to record your paper in their voice on request.



The FARSB member also entitled to get the benefits of free research podcasting of their research documents through video clips. We can also streamline your conference videos and display your slides/ online slides and online research video clips at reasonable charges, on request.





The FARSB is eligible to earn from sales proceeds of his/her researches/reference/review Books or literature, while publishing with Global Journals. The FARSB can decide whether he/she would like to publish his/her research in a closed manner. In this case, whenever readers purchase that individual research paper for reading, maximum 60% of its profit earned as royalty by Global Journals, will be credited to his/her bank account. The entire entitled amount will be credited to his/her bank account exceeding limit of minimum fixed balance. There is no minimum time limit for collection. The FARSC member can decide its price and we can help in making the right decision.

The FARSB member is eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get remuneration of 15% of author fees, taken from the author of a respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account.



## MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (MARSB)

The ' MARSB ' title is accorded to a selected professional after the approval of the Editor-in-Chief / Editorial Board Members/Dean.



The "MARSB" is a dignified ornament which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., MARSB or William Walldroff, M.S., MARSB.

MARSB accrediting is an honor. It authenticates your research activities. After becoming MARSB, you can add 'MARSB' title with your name as you use this recognition as additional suffix to your status. This will definitely enhance and add more value and repute to your name. You may use it on your professional Counseling Materials such as CV, Resume, Visiting Card and Name Plate etc.

*The following benefits can be availed by you only for next three years from the date of certification.*



MARSB designated members are entitled to avail a 25% discount while publishing their research papers (of a single author) in Global Journals Inc., if the same is accepted by our Editorial Board and Peer Reviewers. If you are a main author or co-author of a group of authors, you will get discount of 10%.

As MARSB, you will be given a renowned, secure and free professional email address with 30 GB of space e.g. johnhall@globaljournals.org. This will include Webmail, Spam Assassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.



---

We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.



The MARSB member can apply for approval, grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A.



Once you are designated as MARSB, you may send us a scanned copy of all of your credentials. OARS will verify, grade and certify them. This will be based on your academic records, quality of research papers published by you, and some more criteria.

It is mandatory to read all terms and conditions carefully.



## AUXILIARY MEMBERSHIPS

### Institutional Fellow of Open Association of Research Society (USA)-OARS (USA)

Global Journals Incorporation (USA) is accredited by Open Association of Research Society, U.S.A (OARS) and in turn, affiliates research institutions as "Institutional Fellow of Open Association of Research Society" (IFOARS).

The "FARSC" is a dignified title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FARSC or William Walldroff, M.S., FARSC.



The IFOARS institution is entitled to form a Board comprised of one Chairperson and three to five board members preferably from different streams. The Board will be recognized as "Institutional Board of Open Association of Research Society"- (IBOARS).

*The Institute will be entitled to following benefits:*



The IBOARS can initially review research papers of their institute and recommend them to publish with respective journal of Global Journals. It can also review the papers of other institutions after obtaining our consent. The second review will be done by peer reviewer of Global Journals Incorporation (USA). The Board is at liberty to appoint a peer reviewer with the approval of chairperson after consulting us.

The author fees of such paper may be waived off up to 40%.

The Global Journals Incorporation (USA) at its discretion can also refer double blind peer reviewed paper at their end to the board for the verification and to get recommendation for final stage of acceptance of publication.



The IBOARS can organize symposium/seminar/conference in their country on behalf of Global Journals Incorporation (USA)-OARS (USA). The terms and conditions can be discussed separately.

The Board can also play vital role by exploring and giving valuable suggestions regarding the Standards of "Open Association of Research Society, U.S.A (OARS)" so that proper amendment can take place for the benefit of entire research community. We shall provide details of particular standard only on receipt of request from the Board.



The board members can also join us as Individual Fellow with 40% discount on total fees applicable to Individual Fellow. They will be entitled to avail all the benefits as declared. Please visit Individual Fellow-sub menu of GlobalJournals.org to have more relevant details.

We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.



After nomination of your institution as "Institutional Fellow" and constantly functioning successfully for one year, we can consider giving recognition to your institute to function as Regional/Zonal office on our behalf.

The board can also take up the additional allied activities for betterment after our consultation.

#### **The following entitlements are applicable to individual Fellows:**

Open Association of Research Society, U.S.A (OARS) By-laws states that an individual Fellow may use the designations as applicable, or the corresponding initials. The Credentials of individual Fellow and Associate designations signify that the individual has gained knowledge of the fundamental concepts. One is magnanimous and proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice.



Open Association of Research Society (US)/ Global Journals Incorporation (USA), as described in Corporate Statements, are educational, research publishing and professional membership organizations. Achieving our individual Fellow or Associate status is based mainly on meeting stated educational research requirements.

Disbursement of 40% Royalty earned through Global Journals : Researcher = 50%, Peer Reviewer = 37.50%, Institution = 12.50% E.g. Out of 40%, the 20% benefit should be passed on to researcher, 15 % benefit towards remuneration should be given to a reviewer and remaining 5% is to be retained by the institution.



We shall provide print version of 12 issues of any three journals [as per your requirement] out of our 38 journals worth \$ 2376 USD.

#### **Other:**

**The individual Fellow and Associate designations accredited by Open Association of Research Society (US) credentials signify guarantees following achievements:**

- The professional accredited with Fellow honor, is entitled to various benefits viz. name, fame, honor, regular flow of income, secured bright future, social status etc.



- In addition to above, if one is single author, then entitled to 40% discount on publishing research paper and can get 10% discount if one is co-author or main author among group of authors.
- The Fellow can organize symposium/seminar/conference on behalf of Global Journals Incorporation (USA) and he/she can also attend the same organized by other institutes on behalf of Global Journals.
- The Fellow can become member of Editorial Board Member after completing 3 yrs.
- The Fellow can earn 60% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.
- Fellow can also join as paid peer reviewer and earn 15% remuneration of author charges and can also get an opportunity to join as member of the Editorial Board of Global Journals Incorporation (USA)
- • This individual has learned the basic methods of applying those concepts and techniques to common challenging situations. This individual has further demonstrated an in-depth understanding of the application of suitable techniques to a particular area of research practice.

#### **Note :**

""

- In future, if the board feels the necessity to change any board member, the same can be done with the consent of the chairperson along with anyone board member without our approval.
- In case, the chairperson needs to be replaced then consent of 2/3rd board members are required and they are also required to jointly pass the resolution copy of which should be sent to us. In such case, it will be compulsory to obtain our approval before replacement.
- In case of "Difference of Opinion [if any]" among the Board members, our decision will be final and binding to everyone.

""



## PROCESS OF SUBMISSION OF RESEARCH PAPER

---

The Area or field of specialization may or may not be of any category as mentioned in 'Scope of Journal' menu of the GlobalJournals.org website. There are 37 Research Journal categorized with Six parental Journals GJCST, GJMR, GJRE, GJMBR, GJSFR, GJHSS. For Authors should prefer the mentioned categories. There are three widely used systems UDC, DDC and LCC. The details are available as 'Knowledge Abstract' at Home page. The major advantage of this coding is that, the research work will be exposed to and shared with all over the world as we are being abstracted and indexed worldwide.

The paper should be in proper format. The format can be downloaded from first page of 'Author Guideline' Menu. The Author is expected to follow the general rules as mentioned in this menu. The paper should be written in MS-Word Format (\*.DOC, \*.DOCX).

The Author can submit the paper either online or offline. The authors should prefer online submission. Online Submission: There are three ways to submit your paper:

**(A) (I) First, register yourself using top right corner of Home page then Login. If you are already registered, then login using your username and password.**

**(II) Choose corresponding Journal.**

**(III) Click 'Submit Manuscript'. Fill required information and Upload the paper.**

**(B) If you are using Internet Explorer, then Direct Submission through Homepage is also available.**

**(C) If these two are not convenient, and then email the paper directly to [dean@globaljournals.org](mailto:dean@globaljournals.org).**

**Offline Submission:** Author can send the typed form of paper by Post. However, online submission should be preferred.



# PREFERRED AUTHOR GUIDELINES

## **MANUSCRIPT STYLE INSTRUCTION (Must be strictly followed)**

Page Size: 8.27" X 11"

- Left Margin: 0.65
- Right Margin: 0.65
- Top Margin: 0.75
- Bottom Margin: 0.75
- Font type of all text should be Swis 721 Lt BT.
- Paper Title should be of Font Size 24 with one Column section.
- Author Name in Font Size of 11 with one column as of Title.
- Abstract Font size of 9 Bold, "Abstract" word in Italic Bold.
- Main Text: Font size 10 with justified two columns section
- Two Column with Equal Column with of 3.38 and Gaping of .2
- First Character must be three lines Drop capped.
- Paragraph before Spacing of 1 pt and After of 0 pt.
- Line Spacing of 1 pt
- Large Images must be in One Column
- Numbering of First Main Headings (Heading 1) must be in Roman Letters, Capital Letter, and Font Size of 10.
- Numbering of Second Main Headings (Heading 2) must be in Alphabets, Italic, and Font Size of 10.

**You can use your own standard format also.**

### **Author Guidelines:**

1. General,
2. Ethical Guidelines,
3. Submission of Manuscripts,
4. Manuscript's Category,
5. Structure and Format of Manuscript,
6. After Acceptance.

### **1. GENERAL**

Before submitting your research paper, one is advised to go through the details as mentioned in following heads. It will be beneficial, while peer reviewer justify your paper for publication.

#### **Scope**

The Global Journals Inc. (US) welcome the submission of original paper, review paper, survey article relevant to the all the streams of Philosophy and knowledge. The Global Journals Inc. (US) is parental platform for Global Journal of Computer Science and Technology, Researches in Engineering, Medical Research, Science Frontier Research, Human Social Science, Management, and Business organization. The choice of specific field can be done otherwise as following in Abstracting and Indexing Page on this Website. As the all Global

Journals Inc. (US) are being abstracted and indexed (in process) by most of the reputed organizations. Topics of only narrow interest will not be accepted unless they have wider potential or consequences.

## **2. ETHICAL GUIDELINES**

Authors should follow the ethical guidelines as mentioned below for publication of research paper and research activities.

Papers are accepted on strict understanding that the material in whole or in part has not been, nor is being, considered for publication elsewhere. If the paper once accepted by Global Journals Inc. (US) and Editorial Board, will become the copyright of the Global Journals Inc. (US).

**Authorship: The authors and coauthors should have active contribution to conception design, analysis and interpretation of findings. They should critically review the contents and drafting of the paper. All should approve the final version of the paper before submission**

The Global Journals Inc. (US) follows the definition of authorship set up by the Global Academy of Research and Development. According to the Global Academy of R&D authorship, criteria must be based on:

- 1) Substantial contributions to conception and acquisition of data, analysis and interpretation of the findings.
- 2) Drafting the paper and revising it critically regarding important academic content.
- 3) Final approval of the version of the paper to be published.

All authors should have been credited according to their appropriate contribution in research activity and preparing paper. Contributors who do not match the criteria as authors may be mentioned under Acknowledgement.

**Acknowledgements:** Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

**Appeal of Decision: The Editorial Board's decision on publication of the paper is final and cannot be appealed elsewhere.**

**Permissions: It is the author's responsibility to have prior permission if all or parts of earlier published illustrations are used in this paper.**

Please mention proper reference and appropriate acknowledgements wherever expected.

If all or parts of previously published illustrations are used, permission must be taken from the copyright holder concerned. It is the author's responsibility to take these in writing.

Approval for reproduction/modification of any information (including figures and tables) published elsewhere must be obtained by the authors/copyright holders before submission of the manuscript. Contributors (Authors) are responsible for any copyright fee involved.

## **3. SUBMISSION OF MANUSCRIPTS**

Manuscripts should be uploaded via this online submission page. The online submission is most efficient method for submission of papers, as it enables rapid distribution of manuscripts and consequently speeds up the review procedure. It also enables authors to know the status of their own manuscripts by emailing us. Complete instructions for submitting a paper is available below.

Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.



To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

Complete support for both authors and co-author is provided.

#### **4. MANUSCRIPT'S CATEGORY**

Based on potential and nature, the manuscript can be categorized under the following heads:

Original research paper: Such papers are reports of high-level significant original research work.

Review papers: These are concise, significant but helpful and decisive topics for young researchers.

Research articles: These are handled with small investigation and applications

Research letters: The letters are small and concise comments on previously published matters.

#### **5. STRUCTURE AND FORMAT OF MANUSCRIPT**

The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also. Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

**Papers:** These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

- (a) Title should be relevant and commensurate with the theme of the paper.
- (b) A brief Summary, "Abstract" (less than 150 words) containing the major results and conclusions.
- (c) Up to ten keywords, that precisely identifies the paper's subject, purpose, and focus.
- (d) An Introduction, giving necessary background excluding subheadings; objectives must be clearly declared.
- (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, unless non-standard.
- (f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;
- (g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.
- (h) Brief Acknowledgements.
- (i) References in the proper form.

Authors should very cautiously consider the preparation of papers to ensure that they communicate efficiently. Papers are much more likely to be accepted, if they are cautiously designed and laid out, contain few or no errors, are summarizing, and be conventional to the approach and instructions. They will in addition, be published with much less delays than those that require much technical and editorial correction.



The Editorial Board reserves the right to make literary corrections and to make suggestions to improve brevity.

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

## **Format**

*Language: The language of publication is UK English. Authors, for whom English is a second language, must have their manuscript efficiently edited by an English-speaking person before submission to make sure that, the English is of high excellence. It is preferable, that manuscripts should be professionally edited.*

Standard Usage, Abbreviations, and Units: Spelling and hyphenation should be conventional to The Concise Oxford English Dictionary. Statistics and measurements should at all times be given in figures, e.g. 16 min, except for when the number begins a sentence. When the number does not refer to a unit of measurement it should be spelt in full unless, it is 160 or greater.

Abbreviations supposed to be used carefully. The abbreviated name or expression is supposed to be cited in full at first usage, followed by the conventional abbreviation in parentheses.

Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than  $1.4 \times 10^{-3}$  m<sup>3</sup>, or 4 mm somewhat than  $4 \times 10^{-3}$  m. Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

## **Structure**

All manuscripts submitted to Global Journals Inc. (US), ought to include:

**Title:** The title page must carry an instructive 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) wherever the work was carried out. The full postal address in addition with the e-mail address of related author must be given. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining and indexing.

*Abstract, used in Original Papers and Reviews:*

Optimizing Abstract for Search Engines

Many researchers searching for information online will use search engines such as Google, Yahoo or similar. By optimizing your paper for search engines, you will amplify the chance of someone finding it. This in turn will make it more likely to be viewed and/or cited in a further work. Global Journals Inc. (US) have compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Key Words

A major linchpin in research work for the writing research paper is the keyword search, which one will employ to find both library and Internet resources.

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

Search engines for most searches, use Boolean searching, which is somewhat different from Internet searches. The Boolean search uses "operators," words (and, or, not, and near) that enable you to expand or narrow your affords. Tips for research paper while preparing research paper are very helpful guideline of research paper.

Choice of key words is first tool of tips to write research paper. Research paper writing is an art. A few tips for deciding as strategically as possible about keyword search:



- One should start brainstorming lists of possible keywords before even begin 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 research paper?" Then consider synonyms for the important words.
- It may take the discovery of only one relevant paper to let steer in the right keyword direction because in most databases, the keywords under which a research paper is abstracted are listed with the paper.
- One should avoid outdated words.

Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

**Numerical Methods:** Numerical methods used should be clear and, where appropriate, supported by references.

**Acknowledgements:** *Please make these as concise as possible.*

#### References

References follow the Harvard scheme of referencing. References in the text should cite the authors' names followed by the time of their publication, unless there are three or more authors when simply the first author's name is quoted followed by et al. unpublished work has to only be cited where necessary, and only in the text. Copies of references in press in other journals have to be supplied with submitted typescripts. It is necessary that all citations and references be carefully checked before submission, as mistakes or omissions will cause delays.

References to information on the World Wide Web can be given, but only if the information is available without charge to readers on an official site. Wikipedia and Similar websites are not allowed where anyone can change the information. Authors will be asked to make available electronic copies of the cited information for inclusion on the Global Journals Inc. (US) homepage at the judgment of the Editorial Board.

The Editorial Board and Global Journals Inc. (US) recommend that, citation of online-published papers and other material should be done via a DOI (digital object identifier). If an author cites anything, which does not have a DOI, they run the risk of the cited material not being noticeable.

The Editorial Board and Global Journals Inc. (US) recommend the use of a tool such as Reference Manager for reference management and formatting.

#### Tables, Figures and Figure Legends

**Tables:** *Tables should be few in number, 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. Vertical lines should not be used.*

**Figures:** *Figures are supposed to be submitted as separate files. Always take in a citation in the text for each figure using Arabic numbers, e.g. Fig. 4. Artwork must be submitted online in electronic form by e-mailing them.*

#### Preparation of Electronic Figures for Publication

Even though low quality images are sufficient for review purposes, print publication requires high quality images to prevent the final product being blurred or fuzzy. Submit (or e-mail) EPS (line art) or TIFF (halftone/photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Do not use pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings) in relation to the imitation size. Please give the data for figures in black and white or submit a Color Work Agreement Form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution (at final image size) ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs) : >350 dpi; figures containing both halftone and line images: >650 dpi.

**Color Charges:** It is the rule of the Global Journals Inc. (US) for authors to pay the full cost for the reproduction of their color artwork. Hence, please note that, if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a color work agreement form before your paper can be published.



*Figure Legends: Self-explanatory legends of all figures should be incorporated separately under the heading 'Legends to Figures'. In the full-text online edition of the journal, figure legends may possibly be truncated in abbreviated links to the full screen version. Therefore, the first 100 characters of any legend should notify the reader, about the key aspects of the figure.*

## **6. AFTER ACCEPTANCE**

Upon approval of a paper for publication, the manuscript will be forwarded to the dean, who is responsible for the publication of the Global Journals Inc. (US).

### **6.1 Proof Corrections**

The corresponding author will receive an e-mail alert containing a link to a website or will be attached. A working e-mail address must therefore be provided for the related author.

Acrobat Reader will be required in order to read this file. This software can be downloaded

(Free of charge) from the following website:

[www.adobe.com/products/acrobat/readstep2.html](http://www.adobe.com/products/acrobat/readstep2.html). This will facilitate the file to be opened, read on screen, and printed out in order for any corrections to be added. Further instructions will be sent with the proof.

Proofs must be returned to the dean at [dean@globaljournals.org](mailto:dean@globaljournals.org) within three days of receipt.

As changes to proofs are costly, we inquire that you only correct typesetting errors. All illustrations are retained by the publisher. Please note that the authors are responsible for all statements made in their work, including changes made by the copy editor.

### **6.2 Early View of Global Journals Inc. (US) (Publication Prior to Print)**

The Global Journals Inc. (US) are enclosed by our publishing's Early View service. Early View articles are complete full-text articles sent in advance of their publication. Early View articles are absolute and final. They have been completely reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after sending them. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so Early View articles cannot be cited in the conventional way.

### **6.3 Author Services**

Online production tracking is available for your article through Author Services. Author Services enables authors to track their article - once it has been accepted - through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The authors will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript.

### **6.4 Author Material Archive Policy**

Please note that if not specifically requested, publisher will dispose off hardcopy & electronic information submitted, after the two months of publication. If you require the return of any information submitted, please inform the Editorial Board or dean as soon as possible.

### **6.5 Offprint and Extra Copies**

A PDF offprint of the online-published article will be provided free of charge to the related author, and may be distributed according to the Publisher's terms and conditions. Additional paper offprint may be ordered by emailing us at: [editor@globaljournals.org](mailto:editor@globaljournals.org) .

You must strictly follow above Author Guidelines before submitting your paper or else we will not at all be responsible for any corrections in future in any of the way.



Before start writing a good quality Computer Science Research Paper, let us first understand what is Computer Science Research Paper? So, Computer Science Research Paper is the paper which is written by professionals or scientists who are associated to Computer Science and Information Technology, or doing research study in these areas. If you are novel to this field then you can consult about this field from your supervisor or guide.

#### TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:

**1. Choosing the topic:** In most cases, the topic is searched by the interest of author but it can be also suggested by the guides. You can have several topics and then you can judge that in which topic or subject you are finding yourself most comfortable. This can be done by asking several questions to yourself, like Will I be able to carry our search in this area? Will I find all necessary recourses to accomplish the search? Will I be able to find all information in this field area? If the answer of these types of questions will be "Yes" then you can choose that topic. In most of the cases, you may have to conduct the surveys and have to visit several places because this field is related to Computer Science and Information Technology. Also, you may have to do a lot of work to find all rise and falls regarding the various data of that subject. Sometimes, detailed information plays a vital role, instead of short information.

**2. Evaluators are human:** First thing to remember that evaluators are also human being. They are not only meant for rejecting a paper. They are here to evaluate your paper. So, present your Best.

**3. Think Like Evaluators:** If you are in a confusion or getting demotivated that your paper will be accepted by evaluators or not, then think and try to evaluate your paper like an Evaluator. Try to understand that what an evaluator wants in your research paper and automatically you will have your answer.

**4. 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.

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

**6. Use of computer is recommended:** As you are doing research in the field of Computer Science, then this point is quite obvious.

**7. Use right software:** Always use good quality software packages. If you are not capable to judge good software then you can lose quality of your paper unknowingly. There are various software programs available to help you, which you can get through Internet.

**8. Use the Internet for help:** An excellent start for your paper can be by using the Google. It is an excellent search engine, where you can have your doubts resolved. You may also read some answers for the frequent question how to write my research paper or find model research paper. From the internet library you can download books. If you have all required books make important reading selecting and analyzing the specified information. Then put together research paper sketch out.

**9. Use and get big pictures:** Always use encyclopedias, Wikipedia to get pictures so that you can go into the depth.

**10. Bookmarks are useful:** When you read any book or magazine, you generally use bookmarks, right! It is a good habit, which helps to not to lose your continuity. You should always use bookmarks while searching on Internet also, which will make your search easier.

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



**12. Make all efforts:** Make all efforts to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in introduction, that what is the need of a particular research paper. Polish your work by good skill of writing and always give an evaluator, what he wants.

**13. Have backups:** When you are going to do any important thing like making research paper, you should always have backup copies of it either in your computer or in paper. This will help you to not to lose any of your important.

**14. Produce good diagrams of your own:** Always try to include good charts or diagrams in your paper to improve quality. Using several and unnecessary diagrams will degrade the quality of your paper by creating "hotchpotch." So always, try to make and include those diagrams, which are made by your own to improve readability and understandability of your paper.

**15. Use of direct quotes:** When you do research relevant to literature, history or current affairs then use of quotes become essential but if study is relevant to science then use of quotes is not preferable.

**16. Use proper verb tense:** Use proper verb tenses in your paper. Use past tense, to present those events that happened. Use present tense to indicate events that are going on. Use future tense to indicate future happening events. Use of improper and wrong tenses will confuse the evaluator. Avoid the sentences that are incomplete.

**17. Never use online paper:** If you are getting any paper on Internet, then never use it as your research paper because it might be possible that evaluator has already seen it or maybe it is outdated version.

**18. Pick a good study spot:** To do your research studies always try to pick a spot, which is quiet. Every spot is not for studies. Spot that suits you choose it and proceed further.

**19. Know what you know:** Always try to know, what you know by making objectives. Else, you will be confused and cannot achieve your target.

**20. Use good quality grammar:** Always use a good quality grammar and use words that will throw positive impact on evaluator. Use of good quality grammar does not mean to use tough words, that for each word the evaluator has to go through dictionary. Do not start sentence with a conjunction. Do not fragment sentences. Eliminate one-word sentences. Ignore passive voice. Do not ever use a big word when a diminutive one would suffice. Verbs have to be in agreement with their subjects. Prepositions are not expressions to finish sentences with. It is incorrect to ever divide an infinitive. Avoid clichés like the disease. Also, always shun irritating alliteration. Use language that is simple and straight forward. put together a neat summary.

**21. 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 to your topic. You may also maintain your arguments with records.

**22. Never start in last minute:** Always start at right time and give enough time to research work. Leaving everything to the last minute will degrade your paper and spoil your work.

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

**24. Never copy others' work:** Never copy others' work and give it your name because if evaluator has seen it anywhere you will be in trouble.

**25. Take proper rest and food:** No matter how many hours you spend for your research activity, if you are not taking care of your health then all your efforts will be in vain. For a quality research, study is must, and this can be done by taking proper rest and food.

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



**27. Refresh your mind after intervals:** Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

**28. Make colleagues:** Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

**29. Think technically:** Always think technically. If anything happens, then search its reasons, its benefits, and demerits.

**30. Think and then print:** When you will go to print your paper, notice that tables are not be split, headings are not detached from their descriptions, and page sequence is maintained.

**31. Adding unnecessary information:** Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

**32. Never oversimplify everything:** To add material in your research paper, never go for oversimplification. This will definitely irritate the evaluator. Be more or less specific. Also too, by no means, ever use rhythmic redundancies. Contractions aren't essential and shouldn't be there used. Comparisons are as terrible as clichés. Give up ampersands and abbreviations, and so on. Remove commas, that are, not necessary. Parenthetical words however should be together with this in commas. Understatement is all the time the complete best way to put onward earth-shaking thoughts. Give a detailed literary review.

**33. Report concluded results:** Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

**34. After 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 to 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 in 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 criterion for grading the final paper by peer-reviewers.

### Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.



Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

#### **General style:**

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 evade

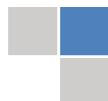
- Insertion a title at the foot of a page with the subsequent text on the next page
- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

- Use standard writing style including articles ("a", "the," etc.)
- Keep on paying attention on the research topic of the paper
- Use paragraphs to split each significant point (excluding for the abstract)
- Align the primary line of each section
- Present your points in sound order
- Use present tense to report well accepted
- Use past tense to describe specific results
- Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives
- Shun use of extra pictures - include only those figures essential to presenting results

#### **Title Page:**

Choose a revealing title. It should be short. It should not have non-standard acronyms or abbreviations. It should not exceed two printed lines. It should include the name(s) and address (es) of all authors.



**Abstract:**

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript--must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing 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 approach 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. Yet, use comprehensive sentences and do not let go readability for briefness. You can maintain it succinct by phrasing sentences so that they provide more than 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 maintain the initial two items to no more than one ruling each.

- Reason of the study - 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 quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

**Approach:**

- Single section, and succinct
- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness 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 to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled 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 with every section. If you make the four points listed above, you will need a least of four paragraphs.



- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose 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 sound written Procedures segment allows a capable scientist to replacement 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 for the least amount of information that would permit another capable scientist to spare 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 object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text 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:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

#### Methods:

- Report the method (not 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 - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

#### Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in 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 a 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. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.



## Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise 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 in manuscript form.

### What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

### Approach

- As forever, use past tense when you submit to 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 part.

### Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

### Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a 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 implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly 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 with prospect, and let it drop at that.

- Make a decision if each premise is supported, 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 the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One 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 available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.



## THE ADMINISTRATION RULES

Please carefully note down following rules and regulation before submitting your Research Paper to Global Journals Inc. (US):

**Segment Draft and Final Research Paper:** You have to strictly follow the template of research paper. If it is not done your paper may get rejected.

- The **major constraint** is that you must independently make all content, tables, graphs, and facts that are offered in the paper. You must write each part of the paper wholly on your own. The Peer-reviewers need to identify your own perceptive of the concepts in your own terms. NEVER extract straight from any foundation, and never rephrase someone else's analysis.
- Do not give permission to anyone else to "PROOFREAD" your manuscript.
- **Methods to avoid Plagiarism is applied by us on every paper, if found guilty, you will be blacklisted by all of our collaborated research groups, your institution will be informed for this and strict legal actions will be taken immediately.)**
- To guard yourself and others from possible illegal use please do not permit anyone right to use to your paper and files.



**CRITERION FOR GRADING A RESEARCH PAPER (COMPILED)**  
**BY GLOBAL JOURNALS INC. (US)**

**Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals Inc. (US).**

Topics	Grades		
	A-B	C-D	E-F
<i>Abstract</i>	Clear and concise with appropriate content, Correct format. 200 words or below  Above 200 words	Unclear summary and no specific data, Incorrect form  Above 250 words	No specific data with ambiguous information
<i>Introduction</i>	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
<i>Methods and Procedures</i>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
<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



# INDEX

---

---

## A

Asanghanwa · 4

---

---

## B

Boatright · 4

---

---

## C

Calantone · 6, 12  
Chongqing · 1, 2, 3, 4  
Chronbach · 56  
Cilliers · 54, 65  
Croasdell, · 6, 13

---

---

## D

Dabbawalas · 71, 73

---

---

## E

Ekonomika · 22

---

---

## I

Ikujiro · 6

---

---

## K

Kelloway · 53, 61

---

---

## L

Laissez · 52, 55, 56, 58, 60, 61

---

---

## M

Masoudi · 75

---

## N

Nuechterlein · 9, 13  
Nunnally · 9, 13  
Nyamwange · 15, 21

---

---

## P

Pluralist · 2  
Portfolio · 24

---

---

## S

Salovey · 51, 63  
Schoner · 27

---

---

## V

Vepsalaine · 16, 21

---

---

## W

Wisnosky · 16, 23

---

---

## Y

Yıldızel · 75

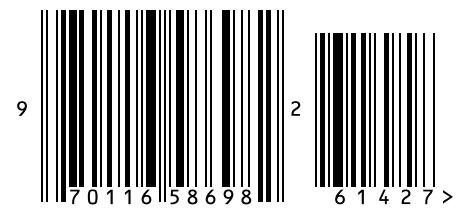


save our planet

# Global Journal of Management and Business Research



Visit us on the Web at [www.GlobalJournals.org](http://www.GlobalJournals.org) | [www.JournalofBusiness.Org](http://www.JournalofBusiness.Org)  
or email us at [helpdesk@globaljournals.org](mailto:helpdesk@globaljournals.org)



ISSN 9755853

© Global Journals