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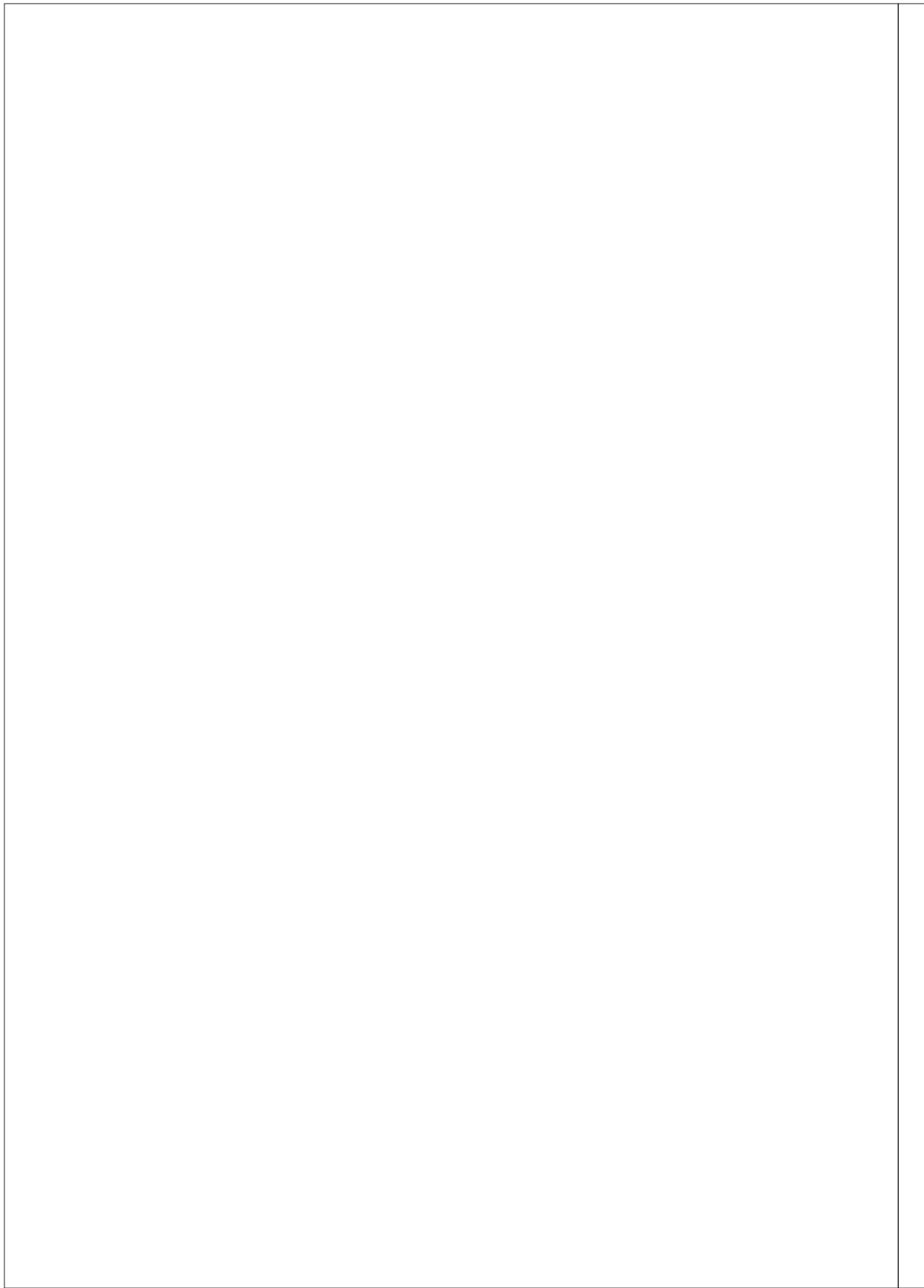
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Editorial Note

Welcome to the current issue of Journal of Business Strategies. The Journal of Business Strategies acts as a global platform for the researchers and academics of management studies to extend ideas to meet the challenges of global compatibility in higher education. It also provides an environment to foster innovative an entrepreneurial thinking benefiting the both business and management in the contemporary social and business environments.

The Journal fosters discussion on developments in the theory and applications of business and entrepreneurship, innovation strategies and methods and incorporates ethical, moral and transcendental vision in research ventures in the field of business and management.

The eighteenth issue of the Journal of business Strategies contains eight research articles.

The first paper “Reflection of Vision Accomplishment through Financial Statements” is a joint venture of Dr. Aamir Firoz Shamsi, Dr. Iqbal Panhwar, Dr. Akhlas Ahmed, Liaqat Ali & M. Faraz, Benazir Khoso” examining the ways and methods of vision accomplishment in the organization usually set for long term as companies try to align all business practices according to the vision. In this article they presented handful samples of annual reports in support their argument.

The second paper “Managing Global Human Resources – Recommending An Effective Set of Instruments” written by Dr. Akhlas Ahmed (Greenwich University), Dr. Akbar Ali, Dr. Junaid Hussain, Ms Novera Ansar (National University of Sciences & Technology, Islamabad, Karachi Campus) discuss concepts of HR functions, operations, activities and required strategies. Being professionals working into the industry they elaborated the need of HR policies and practices.

The third paper “ABC Practices in Textile Sector of Pakistan” in which Danish Iqbal Godil and Usman Ali Warraich assess the determinants that affect the practices in the Pakistani textile industry.

In the fourth paper role of MFPs on the economic and social welfare of people is studied. It shows how profitability of MFPs has positive effect on the PCI.

The fifth paper “Impact of Macroeconomic Factors on Capital Market of

Pakistan” Sadaf Alam and Mishal Nadeem is an empirical study. Their findings indicate that interest rate and oil prices are negatively related while some others do positively.

The sixth article “To Maximize the Profit of Low Cost Carriers Aviation in Pakistan by Unified Aircraft Operation Policy” by Abdullah Dewan, a research scholar and Dr. Hiranao Takahashi embark on the discussion of present aviation business in Pakistan and suggest the Low Cost Carrier (LCC) model as the solution for low cost airlines operations under demanding situation.

In the seventh article, Mr. Muhammad Ali of Iqra University examines Islamic Banks profitability in Pakistan under time series analysis and suggests there exist unidirectional causality from inflation to profitability of these banks.

In the last article, “Synergic Relationship between Total Quality Management and Marketing Management in Creating Customer’s Value”, Umair Mahmood, Syed Sohaib Zubair and Dr. Abdus Salam of University of the Punjab jointly discuss that how customer value is affected by total quality management practices and marketing policies of any firm.

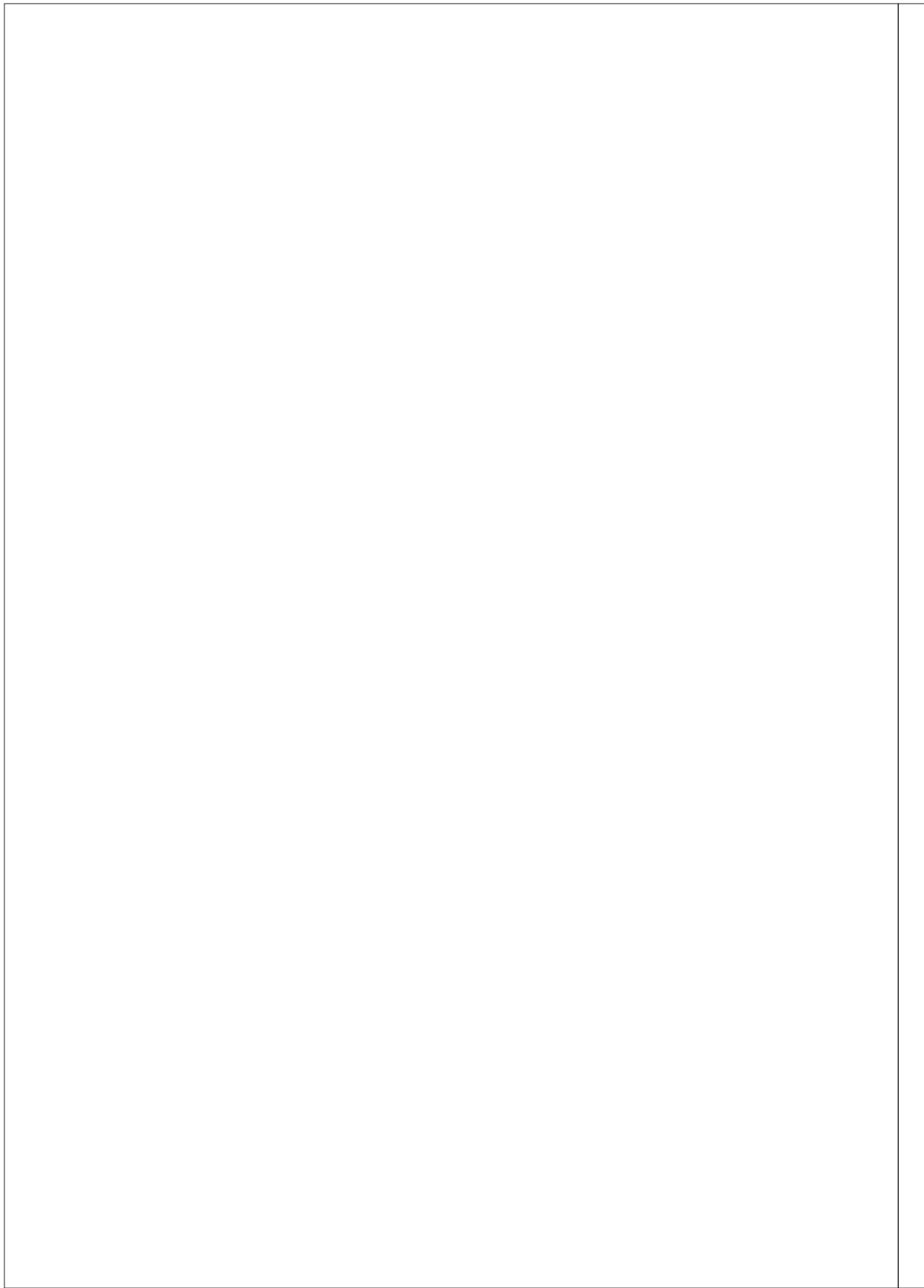
Hence, the current issue of Business Strategies has emphasis on the need of extensive research in business and management. This volume takes up series of research articles from reputed and established educationists who have focused on educating young business-minded leaders with the dynamic principles of ethico-morals, rationality, wisdom and organizational behavior in business education. I have great expectations from this journal and look forward to its growth in future.

Editor

Prof. Dr. Akhlas Ahmed

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“Reflection of Vision Accomplishment through Financial Statements”

Aamir Firoz Shamsi*, **Iqbal Panhwar****, **Akhlas Ahmed*****,
Liaqat Ali & M. Faraz****, **Benazir Khoso*******
and M. Ali Pasha*****

This research examines the usage of vision, its importance in the organization and tools that reflect vision accomplishment. Vision is a company's goal for the long term. It is an idealistic and inspirational tool that a company wants to become or achieve in the long run. The term vision is used as a benchmark which determines the direction for strategies, level of hard work required and methods to evaluate performance. It is obvious that companies focus a lot on their vision and try to align all business practices according to the vision which will eventually lead towards accomplishment of vision and a better future.

The annual reports of a handful sample of companies show what companies set a framework for better short term future decision making. However, most of the companies mention in their annual reports that they achieve vision indirectly and measure them as accomplishment of short term goals. Similarly, financial statements mention in annual reports measure the vision accomplishment in hazy manner - indirectly with the help of short term goal - and not directly since they do not employ any sound corporate performance tool to measure the performance of companies along with their vision achievement.

Key Words: *Vision, Vision Accomplishment, Annual Reports, Financial Statements.*

Introduction

Businesses have always remained a battlefield in which one has to win and one has to lose. Everyone is striving to become no 1 but it's not really easy because it is not limited to exchange of goods or money but now it is building

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relationships with your customers, employees, suppliers, stakeholders and everyone associated with your business. Satisfying everyone's need has become an important element of company's success or failure. Drastic transformation have been seen in Pakistan's marketplace as the gaps in demand and supply is increasing, consumers are getting more savvy and knowledgeable, competition is intensifying, and new technology.

Julian Burke (2009) further describes that vision actually helps leadership as it gives the direction to the team and it really focuses on understanding what it really takes to get the job done. It really inspires and it actually creates. In businesses to sell your product or service, you need vision. To attract investors, you need vision. To market yourself, you need vision. As we enter into a business we need to have a clear picture of what we have to do in a particular time period as it serves to be framework for our future proceedings.

Vision

Julian Burke (2009) state that vision provides an organization a source of inspiration and a proper platform to work. Initially organizations spend plenty of hours to develop a vision as it has critical significance in this competitive world. A vision gives you a broader and bigger picture of future and it will open up your mind to all the possibilities of the future. When a person can envision a bigger picture of his dreams than he is more likely to make changes where he wants to reach. Vision should include who you want to be. It is to know very clearly who you are and who you want to become. This includes your interests, opinions, attitudes, behavior and points of view.

Importance of Vision

Julian Burke (2009) discussed the importance of vision and it is created and used for two different ways: inspiration and prediction. Firstly vision inspires you to reach something that you are wanting. It can even be used to make predictions for changes in the future and interests that you have. A vision connects with your passions and greatest potentials if it is strong and current. Regardless of whatever is happening in the world or challenges that are arising every day, a vision helps you know what and why you are doing the things you are doing.

Problem Statement:

Vision has great importance and is highly valuable for an organization to come into an existence. Companies operating in Pakistan has made proud sentences to provide them direction which we commonly known as vision statements. The main idea behind this study is to know by scanning annual reports of the sample

organizations that how much vision is followed in making strategic decisions and how easily it could be measured. So the problem statement is,

“to explore, with the help of scanning of annual reports, the practices of companies mentioning the vision and its impact on organizational performance and the tools which are used to measure this impact”.

Research Questions:

Actually the focus of this study is to know how vision is reflected in a company’s financial statements so there are some of the questions to go ahead with my study:

- What is the impact of vision in an organizational performance reflected in financial statements?
- How can the success of vision accomplished is measured with reference to its financial statement?

Research Objective: The objective of this research is:

“To study through explorative research that how companies mention their vision, its impact on organizational performance and which tools they use to measure this impact.”

The purpose of this research is to find out the measurement tools used to analyze company’s performance. This is an idea to know the importance and impact of vision on organizational performance.

Scope:

The scope of this research is to do the analysis of importance of vision for an organization, its representation in annual report, its impact on organization’s performance and its success measured through financial statements.

Limitations:

- It is non-survey based research.
- Research relied on secondary data in the form of articles, annual reports, and books.
- Number of companies is restricted to 50 only.
- Findings are generalized for this research

Hypothesis no 1:

- H₀: Null hypothesis: More than 90% companies mention vision statement in annual reports?
- H_A: Alternative hypothesis: Less than 90% companies mention vision statement in annual reports?

Hypothesis no 2:

- H₀: More than 90% companies are successful to accomplish their stated vision?
- H_A: Less than 90% companies are successful to accomplish their stated vision?

Hypothesis no 3:

- H₀: More than 50% company's measure success/failure with financial ratios as mentioned in financial statements?
- H_A: Less than 50% company's measure success/failure with financial ratios as mentioned in financial statements?

Literature Review

Vision:

The most essential obsession for an organization is its vision. Christopher S. Penn (2008) defines as Vision is about an extraordinary sense to see where you're going, to observe where to go ahead, in mutually accurate and abstract sense.

Wise Geek (2012) discussed the formation of a vision can be an immense benefit to any type of organization. Basically, a vision captures into account the present position of the business, and provides to point the route of where the organization desires to set off. The vision statement, by contrast, is not regarding what the company presently is, but what the company expects to suit. Importance declaration is purely an appreciation of the natural value of the business and the products it manufacture.

Need of vision statement:

C.L Williams (2007) says that there is no solitary more significant feature to the accomplishment of a mission than an understandable, hard, communal vision. There are a number of reasons why having a vision is so important: A vision facilitates each person on the team creates assessment; A vision is a constructive benchmark for venture conclusion, accomplishment, and collapse. To trade your invention or service, you need vision. To magnetize shareholder, you require vision. To promote manually, you need vision.

Development of vision

In (e how) website it is declared that in order for a business to be booming, there must be a clear vision of where it is direction. Without a vision for the future, a company will mosey about in the wilderness of the marketplace. Every member of the organization should know that where their efforts will lead them. With the

understanding of vision, every employee will shape up his efforts and behavior accordingly.

Role of vision in success or failure of organization:

Roeder Consulting said that one of these decisive achievement features is project vision. Basically affirmed, a vision sets a course; it is involved in indication modify to stakeholders. in addition, sustain project vision had momentous collision on flourishing achievement of projects, particularly on its appropriateness for conclusion appropriate to factors such as improved pronouncement and organization capacity move stealthily.

Relationship between vision and objectives:

Irena Huerta (2010) describes objectives as exact instructions as to what and when the organization will attain its vision, mission and values. Sutia Kim (2000) Alter has said that aim is a finish result, and it is often referred to as a “target” in progress text and proposal. Objectives provide as quantitative events within a programmed time surround that propel your communal venture in the direction of complete its mission. Objectives guide towards mission and mission leads towards vision.

Culture and vision:

Malcolm Tatum (2012) classifies Culture as a expression used to portray the cooperative beliefs, values systems, and procedure that offer a corporation with its hold sole savor and approach. Richard Barrett (2006) stated that Getting the “right” vision and mission statements for your organization is vitally important. Developing the vision and mission should be the job of the leadership team. Getting buy-in from the senior executives and employee population is essential before finalizing your statements.

Relationship among Vision, mission, balanced score card and values:

Vision can only be purposeful throughout the organization if targets are achieved. When desired level of state is equals to what you have achieved means that organization has achieved its success and has reached to its conclusion.

Kaplan & Norton (1996) says the fair scorecard keep conventional monetary procedures. But monetary procedures tell the narrative of past measures, an adequate description for industrial age companies for which investments in long-term ability and customer relationships were not significant for accomplishment. These financial measures are insufficient, however, for guide and appraise the journey that in sequence age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation.

- Financial: What financial returns are necessary by shareholder?
- Customer: What do our consumers want?
- Internal Process: What do we require to do to distribute?
- Learning and Growth: How do we continue the production?

Research Methodology

Data Collection: Secondary data is collected from internet, annual reports, articles and books. Annual reports are collected from company's websites. Primary data is collected by developing a telephone marking technique and filling it through understanding of financial data and description in annual reports.

Data Collection Tool: Data collection tool which is used in this research is fully based on the data available in annual reports of companies, which are selected randomly from Karachi Stock Exchange.

Data Collection technique: The technique which is used in this research is observations. The reason for selecting this technique is because of the focus of study is to collect, analyze and interpreting the usage and importance of vision and how vision accomplishment is stated in a given organization's annual reports.

Population: The collection of companies operating in Pakistan is population of this research. It is not industry or specific company but it is focusing all companies listing in Karachi Stock Exchange.

Sampling: It is difficult to include all the companies listing in KSE as the sample of this study. There are multiple business sectors in Pakistan under which hundreds of companies are operating and are registered in Karachi Stock Exchange.

Sample Size: Out of hundreds of companies, the sample size is restricted to 50 companies.

Sampling Technique: The sampling technique which is used in this research study is Simple Random Sampling in which a sample is drawn randomly from a list of individuals in a population. There are several local and multinational companies operating in Pakistan and listed in Karachi Stock Exchange (KSE) and among them 50 organizations were selected randomly.

Findings

Importance of vision statement and practice of mentioning in annual reports:

Organization vision is considered to be an important element of its existence; it is a framework to remain determined and focused and a direction to success. So almost all companies operating in Pakistan give importance to their reason of

existence (mission) and mention its vision in the initial heading of their annual reports. Most of the companies mention their vision statement in their annual reports to show importance of vision in their organizations. As vision statement serves to be a direction for organization to go ahead but some companies did not mention vision in their annual reports so how it is going to show commitment with reason of existence. Out of 50 companies, only 10% companies did not mention vision in annual reports and the rest 90% companies mention vision in their reports.

Representation of vision accomplishment in annual reports:

According to the analysis, as such no clear representation of vision accomplishment is mentioned in the annual reports that could be directly linked with the vision statement of the organization. But it is important to know that indirectly it is linked to vision because the vision is spread over into decades and yearly targets are to be achieved and annual reports only show yearly achievements. So it's clear depiction is hard to find in the annual reports. Financial statements show only yearly achievements. All these yearly achievements will be compiled into decades which will show the accomplishment as it was mentioned into vision statements. So it can be said that yes 90% companies indirectly mention vision accomplishment in their annual reports. However, there is apparently no gauge to measure the vision accomplishment.

Annual reports show short term goals:

It is very obvious that nothing can be achieved in a day. There is no dream that can be fulfilled in a day or two it needs many years to achieve it. Similarly, a vision cannot be achieved in a day or so. It requires decades to achieve its original theme behind existence. Annual reports are made on yearly basis and focuses on short term goals and achievements not on long term goals. They actually depict the results of the targets made in the previous year for the coming year. The analysis of financial statements is short term in nature as the survey determines that 100% companies who participate in survey agree that their annual reports show short term goals. Actually these short term goals are part of long term goals which will help to achieve long term goals in the longer run. However, very few companies depict this continuation precisely in their annual reports.

Financial statements provide an avenue for future predictions, decision making and strategies:

To some extent it is yes because companies do use their past records, achievements and targets in making of new targets and goals. It is hard to make future predictions and opportunities through past records because new changes occur all the time and it is company's internal people who assess the environment

in which the organization is operating. It could be a source to make future decision making and required changes could be made in the strategies that could easily achieve the targets meant for current year. But somehow, past cannot stretch far in future and for effective far reaching forecasting; one has to consider current challenges and opportunities rather than past alone.

Main Variables:

Variables that are identified are Quality enhancement, profit maximization, diversification, expanding businesses, innovation, gaining market share, product development, and employee development. These all variables are interconnected, interrelated and interdependent as achieving one needs other variables to work with it for organizations' success. Such as; quality enhancement increases market share, profits, and employees development. Similarly if companies go for diversification than they are expanding their business, company's need to come with new innovations, increased market share and new employees will be hired and developed which will leads to profit maximization in the longer run. In other words, all these short term variables make the long term vision of an organization and without their interconnectivity; the long term success of organization cannot be assured.

Employee aspect of the organization:

Employees are considered to be an organization's assets which are really important and they determine the organization's success or failure. A lot of emphasis is given and is mentioned in the annual reports in the form of staff retirement benefits, loans to employees, gratuity funds, bonuses, training and development and health and safety programs. It is the employee who turns the dreams into reality and gives an organization a meaningful start and an unforgettable altitude of achievement. But it actually misses the internal satisfaction of employees with respect to culture, environment and employees behavior towards each other.

Financial ratios as a tool to measure organization's success or failure:

It is true that company's performance is measured in numbers and those are financial ratios and financial statements present in annual reports. It is a tool to measure/determine organization's current position after a series of actions and reactions. These ratios have bundles of meaning which covers various and different aspects of organization's objectives set to achieve part of its vision for a particular year. Annual reports have detailed analysis of current organization's status in terms of its Balance sheet, Income statement, Cash flow Statement, Statement of changes in equity and on the other hand ratios cover a broad spectrum of company's financial performance, its leverage, its status of liquidity,

its expenses, its profitability, valuation of its bonds and shares and percentage of returns for shareholders. However, this financial based measurement does not measure the achievements of strategic goals (both short term goals which are aligned with the respective organizational vision). These are the requirements of modern corporate performance measurements.

Conclusion

In the end, it is very clear and obvious that vision, mission, objectives are **important** for any organization’s success and achievements because corporate world is changing very rapidly. The more importance is given to the vision, the higher will be the achievements. Now-a-days companies are evaluating performances on daily basis in order to have quick transformation of objectives into reality. Vision can only be achieved if companies seriously align its performance with its objectives. Strong focus on short term targets, collective and individual performances, quality of work, diversification of products, continuous innovation, increase in sales, quick and reasonable expansion, gain in market share ensures success in the long run which will eventually leads towards vision accomplishment. These short term accomplishments are stated in annual reports but not in the form of financial statements and financial ratios. They show past year’s performance in numbers and has great impact on organization’s reputation both internally and externally in the short run. It actually also determines the level of interest for investors, shareholders and all stakeholders. These annual reports show what company has done and it sets a framework for better short term future decision making. However, some of the companies mention in their annual reports that they achieve vision indirectly and measure them as accomplishment of short term goals. Similarly, financial statements mention in annual reports measure the vision accomplishment in hazy manner - indirectly with the help of short term goal - and not directly.

Recommendations

- Companies should show the division of vision and milestones they plan to achieve in decades.
- Tactics or strategies should be clearly mentioned that are set for that particular year.
- Vision accomplishment or target set for particular year needs to be mentioned for proper understanding of the reader to understand.
- Long term focus should also be clearly reflected in the annual reports so that the direction could be easily determined.
- Annual reports miss the internal satisfaction of employees so they need to determine the level of connectivity between organization and its employees.

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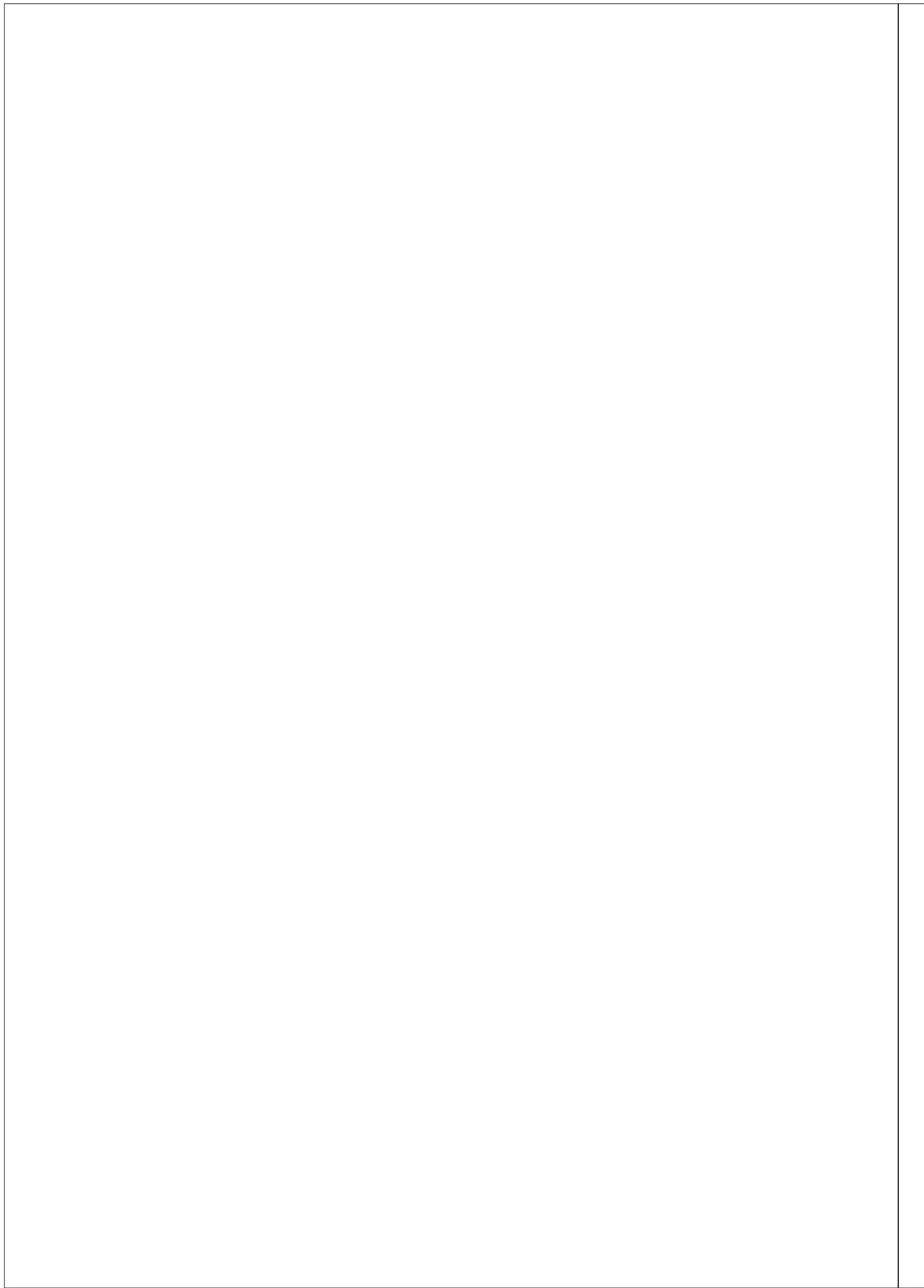
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Managing Global Human Resources – Recommending An Effective Set of Instruments

Akhlas Ahmed*, Akbar Ali**, Junaid Hussain***, and
Novera Ansar****

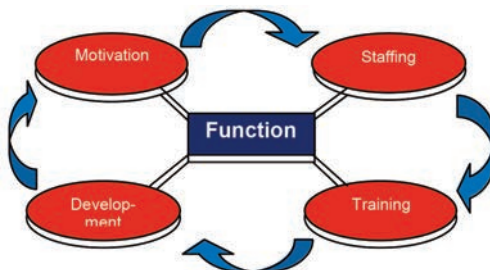
The very purpose of writing this paper is to rightly grasp the concept of HR functions, operations, activities and required strategies. Need of HR policies and practice has also been deeply elaborated in the paper. Very important researches by eminent scholars have been reviewed and necessity for the development of contemporary leaders has been well looked into. How these leaders or managers should run the local and particularly global organizations has been thoroughly explained. A set of instruments comprising of versatile competences required by every leader has been proposed to lead the organizations effectively and efficiently.

Keywords: HR Policies, Contemporary Leaders, Instruments, Competences, Synergy

Introduction

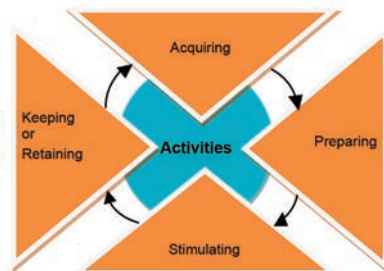
The ingredient of an organization, which is really relevant to the people's dimension, is termed as Human Resource Management. Decenzo and Robbing (1996) declared it a “support” and “staff” function of the organization. HRM deals with the matters of all the employees, including line and staff employees, who are committed in producing the goods and services of the organization. Regardless of the type of organization; be it social, recreational, business, health, public or private, it is always true that HRM is a mechanism which consists of following four functions and four activities as shown in figure 1 and 2 respectively:

Fig – 1: HR Functions



Source: Author's Design

Fig – 2: HR Activities



Source: Author's Design

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Today importance of people i.e. human element has enhanced manifold at organizational, country and global level. For example, Standard Chartered Bank, Sony Music entertainment and other MNCs view each “employee” as an asset and very essential component of the organization in order to achieve strategic goals. As reciprocal, needs of people must be realized and met. Colleges and universities are working hard to prepare HRM professionals through offering majors in disciplines. HR certification Institute concept has been realized by HR societies to handle HRM affairs.

After having a thorough survey of the contemporary studies and cutting edge research on HRM, it is proposed that following strategic components must be religiously adopted to make the organizational business a real success:

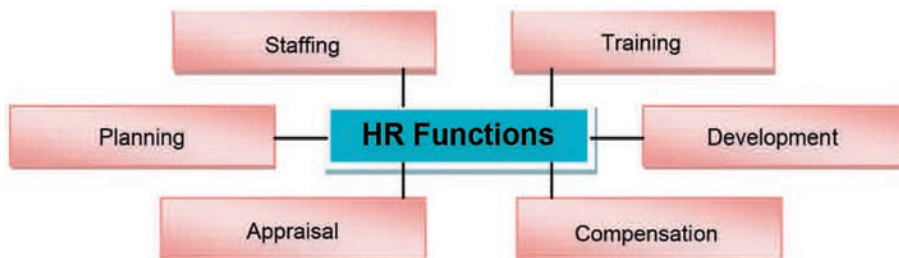
- Need of devising HR policies & practices
- Maintaining synergy & cohesiveness between all the organs of HRM
- Understanding of how to develop high performing leaders who can rightly overcome the contemporary challenges

Realization of need, basic concepts, functions and activities of HRM, leads to exploration of some innovative instruments or tools which can prove effective for current HRM mechanism. This set of instruments should comprise of skills, competencies, means and behavior that can really make a difference and transform the managers/leaders working in local or global organization into a high level potential capital.

Effective HRM Leads to Organizational Success

Huang (2000) compared the HR practices of 315 firms with their organizational performance in Taiwan. He proved very significant relationship between the performance and effectiveness of following HR functions as shown in figure-3:

Fig – 3: HR Huang’s functions



Source: Author’s Design

Performing HR functions effectively can result into better performance of the organization i.e.

$$E_f \text{ (Effectiveness of Functions)} \quad \infty \quad P_{org} \text{ (Organizational Performance)}$$

Subsequently, same relationship was proved and authenticated by a very high level research of Alan & Price (2004). The HR functions are performed while ensuring following factors:

- i. Quality.
- ii. Inter-relationship between these functions.
- iii. Sequential activity.
- iv. Each function complements the other functions.
- v. Functions act as a professional life cycle for the personnel.
- vi. Recognizing each function as mandatory components for a healthy and profitable organization.

In order to understand the co-relation between the corporate performance and HR practices, Michie and Sheehan-Quinn (2001) carried out a survey of more than 200 firms of manufacturing field in UK and they established that “low-road practices” are inversely proportional to the “corporate performance”. If we desire to increase the performance, then said practices are to be lessened and discouraged. Fig-4 (A and B) confirms this relationship and indicates names of low-road practices.

Fig – 4: Co-relation between performance and HR practices

A: Low - Road Practices



Source: Author's Design

B: High - Road Practices

Same researchers also proved that “high- road practices” are directly proportional to the “good corporate performance”:



It was also observed that when HR practices are launched as “comprehensive package” then “competitive success” is achieved in real terms. If integrated package comprising of coherent HR policies and practices is implemented, then HRM impact remains highest, supported by the evidence provided by the investigation of Kelliher and Riley (2002).

Progressive and high “performance” has been made conditional to provision of conducive work place climate along with other “HRM practices”. In this regard Rondeau and Wager (2001) surveyed 283 nursing homes in Canada. They proved that good qualitative performance is the result of following:

- a. More progressive HRM practices,
- b. Workplace climate of greater employee “participation”, “empowerment” and “accountability”,
- c. And strong commitment by HR Managers that can reflect them as best performers

Another very thorough and voluminous research on 2632 employees of 73 organizations was conducted by Gibb (2001) to consolidate their feelings about the HRM. Survey concluded that:

- a. Employees rated some HRM elements as positive i.e. “training and development”, “motivation”, “rewards and performance”.
- b. Employees rated negative to “recruitment”, “retention”, “staffing levels”, “communication” and “overall morale” in organization.

In author’s opinion all the investigations and studies carried out by above mentioned eminent evaluators carry potential wisdom and hold good for all the levels ranging from national to global organizations. Following are concluded:

- i. Appropriately performing all the entire functions and activities can lead to optimum organizational performance and success.
- ii. Formulation of good policies and implementation of right practices is also paramount for corporate success.
- iii. Management has to provide conducive working environment through employee’s “participation”, “employment” and “accountability”.
- iv. This has also been noted that employees should also perceive all the organizational activities as positive and beneficial.

Leading The Global HRM

Business success in contemporary world solely depends upon the positive role playing of the leadership. In case of absence of this factor, resources whether material, financial or workforce will be wasted and right potential shall not be available to earn desired results that may prove beneficial for the organization

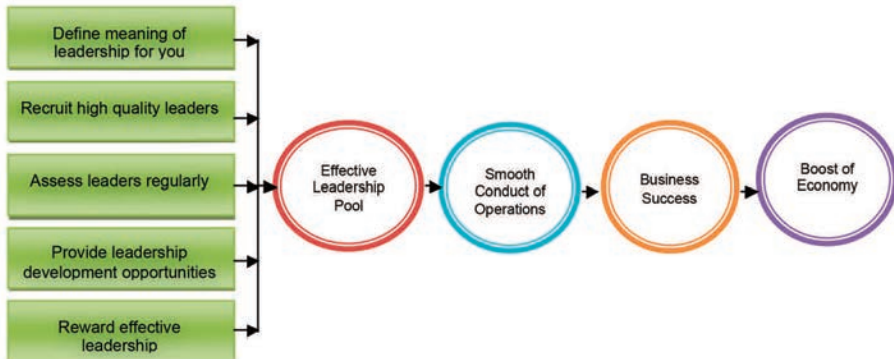
and employees. To address the challenges in HRM world at global level, need for developing the right leaders/managers cannot be over emphasized. Accordingly, following aspects are required to be especially looked into and addressed:

Leaders and Economy Wyatt’s (1997) conducted a mega global survey and sought the opinion of many executives at senior levels and observed that the real issue being faced by their company is “non-developing the right leaders” to reach at potential level. His survey questionnaire was completed by 1057 top leaders of 75 global companies in 18 countries of the world. The result of this report addresses three points:

- a. Organizationally, leaders are to create global organizations of high performance.
- b. Interpersonally, leaders are to create global personnel of high performance.
- c. Process to build step by step “leadership strength” should continue.

Report highlighted the strength and weaknesses of leadership in the organizations which were surveyed. It covers a definite relationship between the “leadership development” and subsequent “financial or economic success”. It was concluded in the report that there are ‘five key elements’ to create a pool of potential leadership as shown in Fig – 6:

Fig – 6: Five key elements



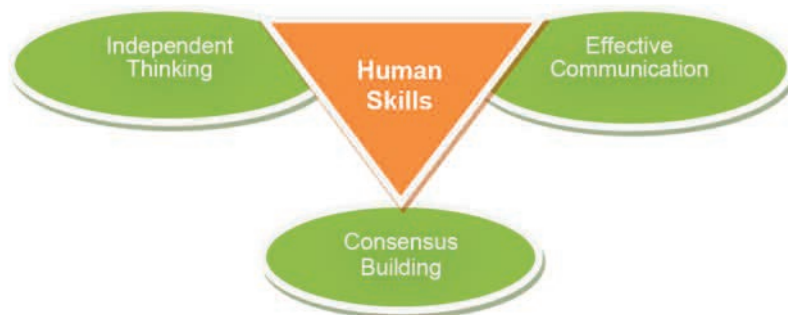
Source: Author's Design

Authors have noted that an effective pool of good leaders available in the organizations is now prerequisite for the smooth conduct of operations resulting into business success and subsequently boosting of economy. So in contemporary global arena economy cannot be optimally addressed without maintaining the infrastructure of “development and retention” of leaders.

Developing ‘Human Skills’ through Institutional Mechanism

Tariq Behram (2006) discussed in “The News Daily” that the World Education Forum celebrated the tenth anniversary on “education for all (EFA)” in Dakar (Senegal) in April 2006. EFA 2000 declared results that enough progress about realization of educational goal at primary level, has been made. Enrolment rate has increased from 10% to 70% between years 1990 to 1999. It is noteworthy that 75% of world’s illiterate personnel live in South Asia. In order to prepare youth for real participation in affairs of public, training in Human Skills illustrated at Fig – 7 is necessary:

Fig – 7: Training Elements



Source: Author's Design

Study also found that growth of youth is too steady in South Asia whereas it is fact that young people create the future of any country and they must be considered as major target segment of HR development programs and policies.

Authors observed that for the purpose of developing Human Skills a mechanism comprising of HR development programs and policies must be institutionalized in every organization.

Building Cross-Cultural Relations

Lorelei Carobolante (2007) observed that solution of all the HR issues can be sought through building or developing “cross-cultural relationship” with colleagues at overseas. Following three aspects should be reviewed to make organizational success possible:

Effectiveness of Diversity Programs

Since the people from different cultural background float diverse ideas therefore, trend of developing “diversity programs” is on rise. Kochan (2002) carried out study and found “there is no reason to believe that diversity will naturally translate into better or worse results”.

It was also deduced that only having diverse teams is not automatic advantage but if these groups or teams are organized as per “Integration and learning perspective” can enhance “synergy”, “value” and “business” as well as “strategic growth”. Kochan emphasized that in order to acquire cultural uniqueness for employees; firms have to consider the integration of “insights”, “skills” and “experiences”.

For the purpose of making the managers “multicultural environment” fit, many counter measures are adopted i.e. training of relevant culture and languages, hiring the personnel who can speak the “target market” language. To achieve desired goals it is crucial to build relationships with counter parts at national or global level who can lead and support to achieve “synergy”.

Relationship Building

Collaborative roles of the teams in HR arena bring about significant improvement in the relations between the companies/MNCs worldwide. “The chartered institute of personnel and development (CIPD) UK” has identified key skills and competences that are essential to perform “HR functions” in a global organization. One of these key skills, is the ability to develop collaborations at global level and share the strengths of each other. The advancement in information technology and telecommunication has afforded global outreach to the organizations. Accordingly, facilities such as virtual meetings, secure digital transactions, remote monitoring etc. are readily available. These facilities need to be effectively employed to build relationships across the globe.

Overcoming Challenges

- a. Concept of “positive change” has emerged when different HR groups from different countries started thinking “their organizations as one single global rather than multiple local systems”.
- b. HR group should well understand that any changes in attributes of personnel at local level may bring about changes at global level. In search of tangible solutions of the issue, different perspectives should be taken into account to promote synergy.
- c. People usually contain “diversified life and variety of professional experiences”. If their natural uniqueness is well appreciated, than it will ultimately result into better “learning and business growth”.

A very large number of research work and investigations have come up rather with the strong belief that effective diversified programs of learning,

focusing the techniques for building strong relations between the companies and developing and preparing the managers/leaders to face the emerging national and global challenges, can really bring a marvelous business success all around.

Global HRM Instruments – A Complete Picture

After thoroughly reviewing the research and investigation conducted by eminent scholars, eight competences have been notified to be mastered by all the organizations performing at local or global level. Fig-8 illustrates a “wheel” that can be termed as a set of ‘Global HRM instruments’. If these activities are performed after attaining sufficient skills level, a real difference shall be observed and same shall ensure the smooth, efficient and effective running of the organizations.

Fig-8: Instruments



Source: Author's Design

Conclusion

The basic functions of HRM are, by and large, well defined. These functions are motivation, staffing, training and development. The HR Activities are also well pronounced and standardized in the relevant research work. Barring few deviations, these activities are acquiring, preparing, stimulating and retaining. It is widely observed that the improvement in effectiveness of these HR functions also brings about positive effect on the performance of organizations. Low- Road practices tend to lower the performance and High-Road practices improve the performance. Job insecurity, inadequate training and short term contracts are among major Low-Road practices by employees. At global canvas, the HRM needs few additional traits such as building cross cultural relationships, developing diversity programs and global collaborations along with enterprising leadership. Embracing the advanced technology in the field of information technology and telecommunication is yet another organizational challenge. In that, virtual meetings, secure digital transactions and remote monitoring need to be availed at the most. Finally, a comprehensive set of Global HRM Instruments has been presented for the benefit of the Organizations/HR Leaders.

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ABC Practices in Textile Sector of Pakistan

Danish Iqbal Godil* & Usman Ali Warraich**

The purpose of this study is to find out the determinants affecting ABC practices in textile sector of Pakistan. Convenience sampling technique was used to collect the data through questionnaire. Cronbach's Alpha was initially applied to check the reliability of questions. Further binary logistic regression was applied to check the significance of factors affecting ABC practices. The identified factors i.e. organizational structure, organizational culture, behaviour and organization, technical and size of the firm have no effect of ABC implementation except for behaviour and organization. This paper is a contribution towards the current literature, but with respect to Pakistan's context this paper is first of its kind to examine the effects of different variable on ABC practices in textile sector of Pakistan. It also creates understanding among managers on the significance of having proper behavior and organizational factors to increase the success of ABC implementation in their organizations.

Key Words: *Binary Logistic Regression, Activity-Based Costing, Organizational Culture, Organizational Structure.*

Introduction

More precise costing details are required for useful decision making in today's advanced industrialized environment. According to (Cooper & Kaplan, 1988) the traditional costing system results in distorted costing information. According to (Majid et al. 2008) machine hours or direct labor hours are used for allocation of overhead cost due to which effect of indirect cost is not appropriately reflected in individual products. Cooper and Kaplan (1988) have introduced ABC system to address the weaknesses of the conventional costing system. Under ABC system, various allocation basis and cost drivers are used to track overhead cost to final goods and services (Cooper & Kaplan, 1992). The findings of numerous research i.e. Cooper and Kaplan (1992), Innes *et al.* (1995, 2000), Bjornenak (1997) and Banker *et al.* (2008) McGowan (1998), Yanren et al.(2008) showed that more accurate costing can be done through ABC system. Due to this ability more research is being done to find out the factors influencing ABC implementation and its success.

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Prior research indicates that organizational factors (adequate resources, training, top management support etc) are the main factors behind successful implementation of ABC in western countries.

Literature Review

Using a sample of manufacturing companies in Pakistan , the aim of this paper is to provide further insights on the impacts of five constructs i.e. behavioural and organizational variables, organizational culture, organizational structure, technical factors and size on ABC success.

Organizational Structure

According to Damanpour (1991) implementation of innovation depends upon organizational structure. Gosselin's (1997) research showed that diffusion of innovation process is affected by organizational structure. The concentration of decision-making power hinders innovation while the dispersion of power facilitates innovation (Thompson, 1965). Burns & Stalker (1961) discussed two types of organizational structure i.e. mechanistic structure and organic structure. Formalization and centralization are considered as the components of organizational structure. Formalization means standardization of procedures, rules and regulations whereas centralization represents the control of decision making rights by the top management level (Gosselin, 1997). High bureaucratic control (i.e., high centralization and formalization) inhibits innovation (Aiken & Hage, 1971; Pierce & Delbecq, 1977). Mechanistic organizations have not only more formalized rules and regulations but also level of centralization is also higher as compared to organic organizations which normally have informal control structure (Gosselin, 1997). Zmud's (1982) research about the outcomes of formalization and centralization on the adoption of modern software practices showed that less formalized structure is only beneficial at the initiation stage. However, more formalized structure is required for successful implementation of latest software practices once a management of an organization has decided to implement the latest software practices. Similar type of arguments could be true for the implementation of ABC process as Gosselin (1997) has found that ABC can be implemented more successfully in mechanistic organizations.

Organizational Culture

Prior researches have shown that successful implementation of business practices are generally influenced by cultural factors. For implementing a business practice successfully in an organization, it should be made compatible with the organizational culture otherwise, it might be less likely to succeed (Schneider et al. 1996) Organizational culture has a significant effect on ABC implementation as Skinner (1998) carried out a study which showed that uncaring culture leads

to ABC failure. Baird et al. (2007) used innovation, attention to detail, team orientation and outcome orientation to study the relationship between organizational culture and activity management success.

Organizational culture has been defined in many ways. Baird, Harrison and Reeve (2007) study have used the same definition about organizational culture as given by Higginson and Warder (1993) i.e. a set of shared norms; values and beliefs that head everybody in the same directions, to examine the effect of organizational culture on ABC implementation. The result of a study carried out by Baird et.al. (2007) among Australian business units indicates that successful implementation of ABC is associated with organizational culture.

Behaviour and Organization.

ABC implementation causes changes in behavioural and organizational variables (Bhimani and Pigott 1992; Innes and Mitchell 1995b). So, it was likely that behavioural and organizational factors would have a significant effect on successful implementation of ABC. Norris (1997) has also found that behavioral and organizational factors effects ABC success. Failure in implementing ABC is due to the ignorance of significance of behavioral and organizational factors (Shields and McEwen, 1996)

Organizational theory claims that organizational factors given by Shields (1995) play a fundamental role in accomplishment of managerial accounting and control system (Krumwiede, 1998; Ruhanita et al., 2006). Shields and Young's (1989) have identified several behavioural and organizational variables such as linkage of ABC to performance evaluation and compensation , linkage of ABC to competitive strategies, top management support, clarity of the objectives of ABC, non-accounting ownership, adequate internal resources and training.

According to numerous studies, top management support is considered to be one of the most important factors in the success of ABC (Shields, 1995; McGowan and Klammer, 1997; Krumwiede, 1998a; Lana and Fei, 2007). Support of top management also plays an important role in using ABC information to correspond it with non accounting staffs and encourage them to use this information (Shields, 1995).

Cooper et al. (1992) has surveyed eight firms and found that in most of these companies only accounting employees retain the ownership of ABC. They suggested that ABC could be implemented more effectively if non accounting employees take part at the initial stages of ABC implementation. Tait and Vessey (1998) and Ruhanita et al. (2006) research showed that the availability of well trained employees could influence the success of any venture. Chongruksut (2002) found that adequate resources, particularly internal resources are required both at the designing as well as

at the implementation stage of ABC. The term internal resources in general, refer to adequate time and fund, employees' know how and understanding on successful implementation of ABC (Clarke and Mullins, 2001; Mehmet and Douglas, 2001). According to Shields and McEwen (1996) employees could be provoked to implement ABC only when this system is linked with performance evaluation and compensation so that employees have a feeling that ABC system could show their performance fairly.

Technical

Lana and Fei (2007) have summarized the technical variables that effects successful implementation of ABC. These variables include gathering data on cost drivers, identifying activities, participation of external consultants, software packages and knowledge of data collection. The intrinsic difficulties with ABC design and implementation is one of the significant reasons for not adopting ABC. The time-consumption and complexity were referred as the most significant reasons for not adopting ABC, followed by difficulty in selecting suitable software packages and collecting information on the cost drivers. Similar type of results was reported by (Chung et al. 1997). Investigation showed that the success of ABC is linked more with behavioural and organizational variables rather than with technical variables (Shields, 1995; Krumwiede, 1998) whereas Anderson's (1995) study showed different results. Research carried out by Pierce and Brown (2004) on different sectors in Ireland showed that ABC implementation is restrained due to many factors which includes lack of software support, perceived complexity and difficulty identifying key cost drivers.

Size

Krumwiede (1998) researched on U.S. manufacturing firms to find out how contextual factors, such as size of firms, the potential for cost distortion; and organizational factors, such as training, top management support etc. affect each phase of ABC implementation.

Findings of researchers are not uniform in this respect. Size, measured in terms of number of employees, does not affect the decision related to ABC implementation or non implementation (Bjornenak, 1997). Cohen, S. et al., (2005) have also found no difference among ABC adopter and non adopters with respect to size of the company, calculated both as employees' strength and average of sales revenue.

On the contrary, Brown et al. (2001) found the positive relationship between the decision to adopt or reject ABC and the size of the company. A considerably higher rate of ABC adoption was seen among the larger Dutch firms i.e. in terms of number of employees (Groot, 1999). Research carried out by Pierce and Brown (2004) on different sectors in Ireland was divided into three parts. The reasons mentioned in the third part which were related to ABC deniers include small size

of organization. Innes and Mitchell (1995) and Innes et al. (2000) have also found a significant relationship between size and ABC implementation.

Methodology

This study is a causal research as it shows the effect of different factors on ABC implementation. The data has been collected through questionnaire from 26 textile companies in Pakistan. The questionnaire was developed from (Robbins, 1983; Shields's 1995 and Gosselin, 1997). From prior researches it was known that normally the response rate of questionnaire is not very high, so convenient sampling technique was used to circulate the questionnaire in textile companies. Questionnaires were sent through email and also by Hard copy. Cronbach's Alpha was initially used to check the reliability of questions. Further binary logistic regression was applied to check the significance of factors affecting ABC practices.

Dependent Variable

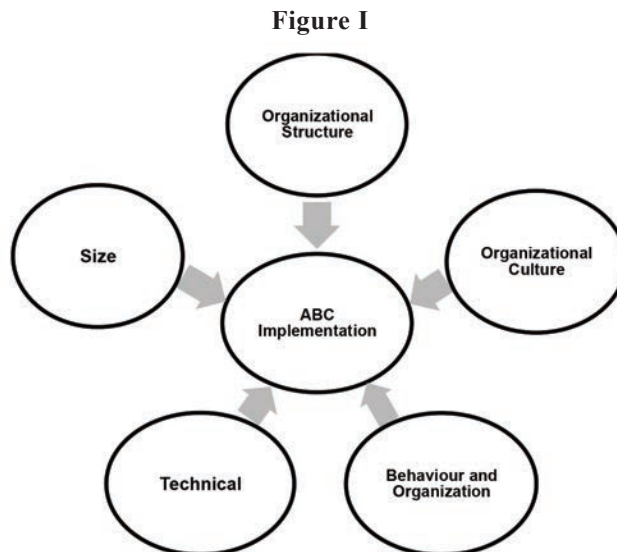
Dependent variable in this research was ABC adoption which is a categorical data and was measured through yes and no options.

Independent Variable

Organization culture, organizational structure, behavior and organization, technical and size are the independent factors which were measured through likert scale. Logistic regression model was used to analyze the data through SPSS.

Theoretical Framework.

In view of above discussion, following is the proposed framework shown in Figure 1



Hence following hypothesis were proposed,

H₁: There is a significant link between mechanistic structure and implementation of ABC.

H₂: There is significant link between organizational culture and ABC implementations

H₃: There is significant link between Behavioural and organizational factors and ABC implementations

H₄: There is significant link between Technical factors and ABC implementations

H₅: There is significant link between size of the company and ABC implementations

Data Analysis.

Table I
Reliability Statistics

Construct	Cronbach's Alpha	N of Items
FOL	.652	7
OS	.789	10
OC	.694	6
TEC	.806	8
BO	.728	10

Table I shows the Cronbach's Alpha of survey questions and shows that the survey questions confirms the reliability test as all the values are above 0.7 which shows excellent internal consistency except for two variables i.e. following ABC (FOL) and organizational culture (OC) which shows the acceptable internal consistency level i.e. 0.652 and 0.694.

Table II
Variables in the Equation

	B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1 ^a EMP	-1.082	.709	2.334	1	.127	.339
OS	-.428	1.428	.090	1	.765	.652
OC	-1.910	1.285	2.211	1	.137	.148
TEC	.338	.814	.173	1	.678	1.403
BO	3.235	1.473	4.822	1	.028	25.395
Constant	-4.529	5.406	.702	1	.402	.011

a. Variable(s) entered on step 1: EMP, OS, OC, TEC, BO.

It can be seen from the above table II that all the variables are insignificant at

5% level of significance except for behavioural and organizational factor. Exp (B) shows that there is 25 times more chance for implementation of ABC in those firms which has these behavioural and organizational factors as compare to those which do have these factors.

Discussion

Table II that shows that size of the firm shows an insignificant relation with ABC implementation which is line with the findings of Hicks(1999). According to him ABC is beneficial for both small and large firms. Organizational structure also shows an insignificant relation with ABC, as according to Gosseline (1997) in decentralized firms managers resist implementation of ABC due to fear of changes in existing system. One possible reason for this insignificance might be the Asian environment, as the factor which shows significant relation in Western culture might not show the same result in Asian environment and the research was done to explore these types of reasons. Technical factors also show insignificant relation with ABC where as behavioural and organizational factors shows significant relation with ABC. Both of these results are in line with the findings of Shields (1995), Krumwiede and Roth (1997) and Krumwiede (1998). According to them ABC success is more related to behavioural and organizational factors as compare to technical.

Conclusion and Recommendations

The study has investigated the relation between different variables i.e. Organization culture, organizational structure, behaviour and organization, technical and size with ABC adoption in textile sector of Pakistan. As the basis that Pakistan is an Asian country and it has its distinct culture, values and style of business which differs from those in western world, the constructs that affects significantly on ABC implementation and adoption in western world may not be similar as those in Pakistan. No data specifies what variables effects the success or failure of ABC in Pakistan. Thus, this research was carried out to address this issue. However it can be said that there are some other factors also which effects the implementation of ABC such as non integration with current costing system and also satisfaction of managers with current costing systems in Asian environment. (Chung et al. 1997; Chen et al. 2001). Similar results were evidenced by Nguyen and Brooks (1997). According to (Bescos et al., 2002; Cohen et al., 2005, Askarany & Yazdifar, 2007) the main reasons for not adopting ABM /ABC might be satisfaction with the existing cost system, high implementation cost, lack of management support and time consumption. Further research can be done in order to explore other variables which affect the implementation of ABC in Pakistan.

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Role of Microfinance Providers (MFPs) on the Economic and Social Welfare of the People in Pakistan

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This paper is designed to study the role of Microfinance Providers on the Economic and Social welfare of the people. The data regarding MFPs is gathered from the annual reports of PMR (Pakistan Microfinance Review) from 2006 to 2013. There are total of 36 companies that have worked in microfinance industries from 2006 to 2013. In 2006 there were 18 companies; however this numbers changed with the passage of time. Therefore sample size for this research is 185 on panel data bases. The study concludes that MFPs could not establish significant effect on the growth of entrepreneurship. However, the Profitability of MFPs has positive effect on the PCI. According to this study, the growth of MFPs has positive effect on the enrollment of Secondary education and the growth of MFPs has negative effect on the number of enrollments in primary schools.

Keywords. *Microfinace Providers, Economic welfare, Poverty*

Introduction

Slow economic growth is being faced all over the world (Holodny, 2014), but Pakistan is one of those countries which fall under the line of ‘poor’. According to census report 2013 and other different surveys which are held under the government officials show that there are 58.7 million of Pakistanis live under the poverty line which is 33%. That means every third person in Pakistan is caught to be poor. According to World Bank Report, World Development Indicator 2013, 60% of Pakistan’s total population living under the poverty line that is set according to international standards as \$2 per day which is 200 in Pakistani Rupee. If this line is put as \$1.25 which is Rs.125. then 24% of whole population is living under the poverty line. Having such unemployment figures are one of the major issues that is being faced by Pakistan. According to different surveys that occurred in Pakistan show that in December 2013, population of Pakistan was 184.35 million out of which there were 13.82 million people were

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unemployed. A person is said to be unemployed who is willing to work but is not able to get a job opportunity. The above statistics clearly show that economic conditions are worsening in Pakistan which should be an alarming sign for the governers. These issues do not only cause financial crisis to both households and the country's overall economy but it also affect the society very badly. Microfinance can play a very vital role to strengthen economic and social conditions as it has reached out in many different countries around the world. Microfinance provides financial services to those people who are considered to be 'poor'. Those people who can not avail the financial services from commercial banks because they do not have anything for collateral are perceived as poor. Microfinance provide services like small credits, small savings and other services like insurance to poor on very low or no collateral at all.

The intention of this research is to find out impact of microfinance on the basic performance-indicators that depict either improvement or deteriorations in the life of people in Pakistan. In this research an attempt is made to find out the impact of microfinance sector on society. Basic concept of microfinance is to facilitate the poor through providing them financial services; in that manner there must be a positive impact of microfinance on the society. In this research an analysis is conducted between the microfinance and its impact on society.

Microfinance was introduced in 1980s in Pakistan, when Aga Khan Rural Supporting Program (AKRSP) started its operation of micro credits in 1982 in northern areas, and also launched National Rural Support Program (NRSP) and Sarhad Rural Support Program (SRSP). These institutions provided financial services at very low rates and also there was very low rate of defaulters. Kashf foundation was established in 1996. In 1998 Pakistan Microfinance Network started to represent MFPs (Microfinance Providers). In 2000, Pakistan Poverty Alleviation Fund (PPAF) provided loan to MFPs and in the same year State Bank of Pakistan started a microfinance unit. Khushali Bank was established in 2001 by the help of government of Pakistan (Ahmed, 2008).

Literature Review

Chen (1992) concludes that there is no question that microfinance is a very significant tool to eradicate poverty which is not only faced in Pakistan but an issue faced throughout the world. Microfinance does not only reduce poverty but also may play a vital role in diverting income from rich segment to the marginalized sector of the society. Ahmed (2008) Microfinance thinks of a world where poor or near to poor households can have an easy access to range of high quality financial services like credits, savings, insurance, and fund transfers.

Hassan (2008) argued that borrowers prefer credits from friends and families where they might get leverage in terms of repayments and interest, and borrow from landlords only in their dire needs where there is a huge risk of being badly exploited is involved. Burki (2009) concluded Microfinance programs are widely known for the eradication of poverty, people consider microfinance to be financially sustainable in long-run due to its 95% repayment rates, health and educational improvements and high participation of women. Nasir (2013) conducted a research and found that MFIs have improved to some extent but still some questions lies on the performance of MFIs, like all the unprivileged people who intend to avail microfinance services being reached by any of these institutions? Have those people who acquired these services obtained required assistance in order to bring sustainability in their business? MFIs must sort this out for the betterment of the marginalized populace as well as for this sector. Hasan and Shahzad (2012) stated that microfinance can be used as a best tool to reach the marginalized section of society. State bank of Pakistan (SBP) stated in its report in February 2011 that MF sector was unable to reach its target of 3 million borrowers at the end of 2010 where current 2 million active borrowers are only 7% of the overall potential market. Microfinance was perceived to be a magic stick which will empower women and eradicate poverty; however there are some significant barriers which do not let this sector excel towards success. Ahmed (2008) pointed out Sustaining financial position of microfinance sector in Pakistan is very difficult because of not having a standardized funding system of NGOs and also unstable political conditions. Ibrar (2013) concluded Govt. of Pakistan set the goal of reaching 10 million borrowers of the microfinance by the end of 2015, for which SBP has laid down the strategic framework and provides instructions with time to time. Due to unavailability of sufficient funds these targets are not being achieved in order to eradicate poverty despite having such potential in the market.

Chant (1997) concluded efforts of women are not being appreciated in Pakistani society despite the fact that women are supposed to spend their whole income to fulfil family needs and do not spend for their own luxuries, whereby men do not share whole income at home. Alam (2009) stated that these organizations are working well to earn their profits but factually they are not contributing to improve the life of poor farmers, instead they worsen their condition and turned into impoverishment. Nenova, Niang and Ahmad (2009) found that Microfinance has a potential market of 25 to 30 million borrowers in Pakistan, yet less than 3 million borrowers are availing this service. Most of people prefer saving through informal means like committees and ROSCAs (Rotating Credit and Saving Association) as only 14% savers approach formal saving

means, 63% save at home while 25.7% save through committee system. Khuwaja (2009) stated Pakistan is a poor country where demand for micro loans is at peak; in such situation interest rate is always very high. Pakistan Microfinance Network (2009) highlighted that only 33% of branches are established in rural areas, despite the fact that 67% of the population of Pakistan inhabit in rural areas. Subhani and Usman (2011) argued Microfinance banks are working a lot better than different MFIs in Pakistan, due to their standardized infrastructure, proper management of staff and customers and their working environment. MFIs are targeting poor segment of its market therefore having troubles in covering their costs, whereas MFBs are focusing more on covering up their costs and revenues in a commercialized way therefore they focus more on less poor customers. A very high rise in the price of the household commodities has made it onerous for the people to even survive in such difficult conditions (Jamal, 2011). In such predicament it is observed that microfinance customers are using these small loans for their daily household expense instead of utilizing in productive activities. Kono and Takahashi (2010) found that there is a general opinion that increase in numbers of MFIs will make easier for poor populace to obtain financial services and there will be more opportunities for them to improve their livelihood. Shan-E-Ahmed, Batool, Anwar and Khan (2013) drew attention towards barriers in the mission of microfinance sector. Most of the NGOs that offer microfinance have a very weak management, Currently MFIs are providing micro-credits to poor that is useful for their consumption patterns rather than supportive for business capital. Hasan and Shahzad (2012) found that the establishment of MF sector some quantitative growths are being seen but as a matter of fact qualitative facet of microfinance growth is still negative. Saeed, Lodhi and Saeed (2013) found that microfinance has a considerable impact on the poverty reduction of small scale farmers in Pakistan. Jha (2013) found that microfinance has not only played an important role to alleviate poverty and reduction of unemployment but it has empowered most deprived segment of population. (Ahmed, S. et al. 2013) stated that microfinance can be used as one of the key tool to achieve MDGs (Millennium Development Goals) till the end of 2015. Saeed et al. (2013) conclude that Cost is a very important factor while providing microfinance to farmers, providing microfinance services at lower costs (e.g. processing cost, interest, and other financial costs) will further increase the potential of this market. Wang (2013) conclude there is a significant role of microfinance on development and growth of small size enterprise in China. Memon, Channa and Manganhar (2014) found that Microfinance is helping to generate employment opportunities in both urban and rural areas of Pakistan (Waithaka, Marangu, and N'gondu, 2014). The microfinance credit plays a vital role in development and growth of new enterprise. By the growth of entrepreneurship in the country the economy of the country will become better and the living standards of the people in the country become good.

Research Methods

This research is based entirely on the secondary data. For that purpose different official and credible reports are taken into account. All the data regarding MFPs is gathered from the annual reports of PMR (Pakistan Microfinance Review). While Pakistan Education Statistics annual reports that are published by the Government of Pakistan are studied for the data regarding education statistics, whereas all the data concerning employment statistics is gathered from the reports of Pakistan Employment Trends by Pakistan Bureau of Statistics which is published under the supervision of Government of Pakistan. Initially it was intended to carry this research on the basis of 20 years data. However data regarding MFPs for 20 years could not be gathered and credible data of all MFPs including MFIs, MFBs, RSPs and Others was available from 2006 and so on. Therefore convenience sampling technique was used in order to conduct research on the basis of authentic data. There are total of 36 companies that have worked in microfinance industries from 2006 to 2013. In 2006 there were 18 companies; however this numbers changed with the passage of time. Therefore sample size for this research is 185.

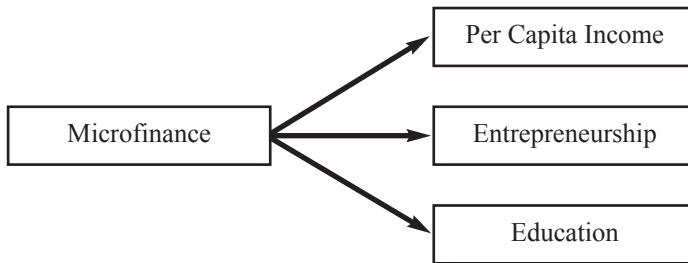


Figure 3.1: Research Model

Model of our research consist of following equations:

$$\text{Entrepreneurship} = \alpha + \beta_1 \text{ Firm Revenue} + \beta_2 \text{ Profitability} + \beta_3 \text{ Firm Size} + \beta_4 \text{ Loan Recovery} + \mu \quad \dots\dots\dots (1)$$

$$\text{PCI} = \alpha + \beta_1 \text{ Firm Revenue} + \beta_2 \text{ Profitability} + \beta_3 \text{ Firm Size} + \beta_4 \text{ Loan Recovery} + \mu \quad \dots\dots\dots (2)$$

$$\text{Primary School Education} = \alpha + \beta_1 \text{ Firm Revenue} + \beta_2 \text{ Profitability} + \beta_3 \text{ Firm Size} + \beta_4 \text{ Loan Recovery} + \mu \quad \dots\dots\dots (3)$$

$$\text{High School Education} = \alpha + \beta_1 \text{ Firm Revenue} + \beta_{12} \text{ Profitability} + \beta_3 \text{ Firm Size} + \beta_4 \text{ Loan Recovery} + \mu \quad \dots\dots\dots (4)$$

Results of the Study

Data that is organized to conduct this research was in a panel form therefore Panel

Regression test is applied. For this purpose Cross-Section Random Effect and Cross-Section Fixed Effect tests are used depending on the suitability of data. Hausman Test is applied to check if the data is convenient for the random effect test.

Entrepreneurship

For testing the hypotheses regarding entrepreneurship, first of all Hausman Test is applied to check out either it is suitable for cross-section random effect test or not. After applying this test following result is obtained:

Correlated Random Effects - Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob
Cross-section random	6.594419	4	0.1589
Equation: Untitled			
Test cross-section random effects			

Table 4.1: Hausman Test for Entrepreneurship

Above result shows that $P > 0.05$, which confirms that this data is suitable for cross-section random effect test, therefore after applying the test following results are acquired.

Cross-section fixed effects test equation				
Dependent Variable: ENTREPRENEURSHIP				
Panel Least Squares				
Periods included: 8				
Cross-sections included: 37				
Total panel (unbalanced) observations: 139				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	35.76809	0.10314	346.78	0
REVENUE	2.05E-07	5.27E-07	0.38871	0.6983
FIRM SIZE	-1.46E-07	1.20E-07	-1.2167	0.2267
PROFITABILITY	2.72E-07	4.08E-07	0.66594	0.507
LOAN RECOVERY	5.15E-08	1.79E-06	0.02881	0.9771

Table 4.2: Entrepreneurship Results

The results for the first model conclude that there is insignificant effect of revenue, firm size, profitability and loan recovery of the Microfinance providers on establishing the entrepreneurship. This suggests that MFPs in Pakistan has very insignificant contribution establishing the entrepreneurship.

High School Education

We got following results by applying Hausman Test following result.

Correlated Random Effects - Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob
Cross-section random	16.119473	4	0.0029
Equation: Untitled			
Test cross-section random effects			

Table 4.3: Hausman Test for High School Education

Above result shows that cross-section random effect test cannot be applied because $P < 0.05$. Therefore, to check the suitability of cross-section fixed effect test it is reconfirmed through Redundant Fixed Effect Test as follow.

Redundant Fixed Effects Tests			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.60768	(36,98)	0.0001
Cross-section Chi-square	93.3918	36	0

Table 4.4: Redundant Test for High School Education

Given the above result shows the confirmation of the suitability of cross-section fixed effect test for this data because $P < 0.05$. Therefore following results are acquired after applying the cross-section fixed effect test:

Cross-section fixed effects test equation				
Dependent Variable:LITERACY_HIGH_SCHOOL				
Panel Least Squares				
Periods included: 8				
Cross-sections included: 37				
Total panel (unbalanced) observations: 139				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOAN RECOVERY	-4.06E-06	5.85E-06	-0.6932	0.4894
PROFITABILITY	4.46E-06	1.36E-06	3.28937	0.0013
FIRM SIZE	-1.08E-07	3.12E-07	-0.3471	0.7291
REVENUE	1.50E-06	1.51E-06	0.98986	0.324
C	26.72168	0.27409	97.4929	0

Table 4.5: High Schools Education Results

The results from table 4.5 conclude that High School Education has no relationship with the loan written off, total assets and total revenue. However there has been a positive relationship established between net income and high school education. It

suggests that by the increase in the net income of MFPs there has been an increase in the enrollments of students in high school, similarly when there has been decline in the net income of MFPs, it results in the decrease in the enrollment of high school students.

Primary School Education

The Results of Hausman test for the third model are as follows:

Correlated Random Effects - Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob
Cross-section random	15.678405	4	0.0035
Equation: Untitled			
Test cross-section random effects			

Table 4.6: Hausman Test for Primary School Education

This result shows that cross-section random effect test cannot be applied as $P < 0.05$, therefore there is a clear indication that this data may be run through cross-section fixed effect test. For the purpose of reconfirmation, this data is run through Redundant Fixed Effect Test and following result is obtained:

Redundant Fixed Effects Tests			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.39242	(36,98)	0.0004
Cross-section Chi-square	87.6614	36	0

Table 4.7: Redundant Test for Primary School Education

After running a redundant test for the reconfirmation, the result confirms that it should be run through cross-section fixed effect test because $P < 0.05$. Following results are obtained by applying fixed effect test:

Cross-section fixed effects test equation				
Dependent Variable: LITERACY_PRIMARY_SCHOOL				
Panel Least Squares				
Periods included: 8				
Cross-sections included: 37				
Total panel (unbalanced) observations: 139				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
REVENUE	-2.14E-06	2.72E-06	-0.79	0.4309
FIRM SIZE	8.27E-08	5.60E-07	0.14763	0.8829
PROFITABILITY	-8.01E-06	2.44E-06	-3.2884	0.0013
LOAN RECOVERY	8.32E-06	1.05E-05	0.79167	0.43
C	153.117	0.49202	311.201	0

Table 4.8: Primary Schools Education Results

The results of the study show that net income of MFPs has a significant effect on primary school education. Moreover these results conclude an inverse relationship between net income and primary school education which means that increase in net income of MFPs results in decrease in the enrollments of primary school students, similarly decline in the net income of MFPs leads to the increase in enrollments of primary school students.

Per Capita Income

The Results of Hausman test for the fourth model are as follows:

Correlated Random Effects - Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob
Cross-section random	17.984427	4	0.0012
Equation: Untitled			
Test cross-section random effects			

Table 4.9: Hausman Test for PCI

This test results in $P < 0.05$ which indicates that random effect test cannot be applied, therefore to reconfirm the suitability of fixed effect test, Hausman’s redundant fixed effect test is applied as follow.

Redundant Fixed Effects Tests			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.61288	(36,98)	0.0001
Cross-section Chi-square	93.5275	36	0

Table 4.10: Redundant Test for PCI

In this test $P < 0.05$ which confirms the cross-section Fixed Effect test to be appropriate to test the panel regression.

Cross-section fixed effects test equation				
Dependent Variable: PER_CAPITA_INCOME				
Panel Least Squares				
Periods included: 8				
Cross-sections included: 37				
Total panel (unbalanced) observations: 139				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
REVENUE	0.026223	0.0159	1.64974	0.1013
FIRM SIZE	-0.00334	0.00328	-1.0186	0.3102
PROFITABILITY	0.040133	0.01426	2.81529	0.0056
LOAN RECOVERY	-0.04801	0.06153	-0.7803	0.4366
C	98348.67	2880.47	34.1433	0

Table 4.11: PCI Results

The results indicate that there is a direct relationship between net income and per capita income. This relationship depicts that by the increase in net income of MFPs per capita income also increases, whereas reduction in the net income of MFPs leads to the decline in per capita income. It means more the successful MFPs are, better the per capita income gets.

Conclusion, Policy Implication and Future Research

This research was conducted to find out the impact of microfinance on the society. These results conclude that performance of microfinance providers (MFPs) could not establish a considerable impact on the number of people that are running business as entrepreneurs; therefore no relationship could be found between the performance of microfinance and entrepreneurship on the basis of this data. It has been established during the tests that profitability of microfinance has a direct relationship with per capita income, which means profitability of microfinance sector enables to improve the overall income of people. Similarly more the loss MFPs bear lesser the income of people become. It indicates that microfinance may be profitable and successful for the betterment of the people. (Hermes, 2014) stated that microfinance is an influential and a very suitable tool to reduce poverty and can play a vital role to minimize the income gap between the rich and poor populace of developing countries. (Burki, 2009) stated that microfinance programs are widely known for the eradication of poverty, people consider microfinance to be financially sustainable in long-run due to its 95% repayment rates, health and educational improvements and high participation of women. Hence Microfinance is politically being supported due to its capacity of helping poor themselves. Results reveal that profitability of microfinance also has a significant impact on the enrollment of students in higher schools. The relationship between microfinance's profitability and number of enrollment of students in high schools is positive. It suggests that more the profitable MFPs get, higher the enrollment of students in high schools become. Likewise decline in the income of MFPs enables the lesser students to enroll in the higher schools. According to results there has been an inverse relationship between microfinance's profitability and number of enrollments in primary schools. The profitability of microfinance has a negative impact on the primary school education. It shows that by the increase in microfinance's profitability there has been a decrease in the enrollment of students in primary schools. Similary deline in the profitability of microfinance enables the increase in the enrollment of students in primary schools. (Memon et al. 2014) found that microfinance is considered to be one of the most important tools for reduction of poverty. (Alam, 2009 mentioned that MFIs policy to charge high interest on small loans has

dazzled small scale farmers, due to which they are compelled to mortgage their remaining assets to pay back their loans and get themselves into everlasting cyclic debt. Impact of microfinance has been established on the three important factors. It shows that more the microfinance earn profit, overall income of the people increases and there has been an increase in the enrollments of students in high schools but increase in profitability brings a decline in the enrollments of students in primary schools. Microfinance sector has been very profitable for the past few years therefore there has been an increase in the enrollments of students in high schools whereas there has been a continuous reduction in the enrollments of students in primary schools.

Policy Implications

This research is useful for the policy makers because it signifies the microfinance to be beneficial for the household income and high school education whereas no improvements could be seen for the primary school education despite having such success of MFPs. Findings of this research show both positive and negative aspects of the performance of microfinance. Relationships of microfinance profitability with Per capita income and high school education are encouraging for the MFPs, whereas they must find out the reasons behind the worsening facts and figures of primary school education and make such policies that allow the enrollments of primary school students to increase.

Future Research

This paper is helpful to understand the impact of microfinance on the life of people. It is totally based on the secondary data therefore in future further studies could be conducted on the base of this research with the support of primary research as well. An interesting relationship is established in this research that an increase in the profitability of microfinance sector increases the enrollments of high school students but reduces the primary school enrollments. However further research may be conducted to find the answer that why profitability of microfinance leads to decline in primary school enrollments.

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Impact of Macroeconomic Factors on Capital Market of Pakistan: An Empirical Study

Sadaf Alam* and Mishal Nadeem**

This study aims to examine the impact of macroeconomic factors on capital market of Pakistan. It assesses the extent to which key macroeconomic variables influence stock performance and which variables out of these have highest impact on capital market.

The study involved six independent variables; Interest rate, money supply, gold price, oil price, foreign direct investment and dummy variable of political stability are selected as independent variables and for capital market KSE-100 index is selected as dependant variable. The time period examined is 1994-2014 (21 years). Stationarity of the data was checked through Augmented Dickey Fuller (ADF) unit root test. Data was analyze using regression analysis. Descriptive statistics, pair-wise correlation were also calculated.

The findings indicate that interest rate and oil prices are negatively related while money supply, gold prices and FDI are positively related with the stock market performance. Among all these variables, interest rate is moderately correlated with the stock market while money supply, oil prices, gold prices and FDI are strongly correlated with the KSE. The results also indicate that stock market index rises up during dictatorial tenure while declines or shows instability during democratic period. The outcomes of the research might facilitate investors in taking effective investment decisions by estimating the expected trend in macroeconomic factors. It will also help the policy makers to develop robust institutional and regulatory reforms that would strengthen the stock market and safeguard investors' interests.

Keywords: *Karachi stock market, Interest rate, Money supply, oil prices, gold prices, Foreign direct investment, political stability.*

Introduction

Introduction

The stock market of Pakistan remained highly volatile during the period of 2000-

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2010. Three severe financial crises were reported for the duration of this period. Stock markets were first crashed in March 2005. Second collapse was observed in the second quarter of the year 2006. Third, and the most intense, crash was recorded from May 2008 to January 2009. In this period, KSE-100 index dropped by more than ten thousand points (Haroon & Jabeen, 2013). The key reason behind this volatility for the last collapse in stock market was political instability and uncertainty in the country, such as terrorist attacks, judiciary crisis, and assassination of Benazir Bhutto. However, the reasons behind first two crises were speculators' hold and poor governance in the capital market (Sohail & Hussain, 2009).

Since year 2008, the inflation rate of Pakistan has been continuously increasing due to which the prices of commodities have also increased (Nishat and Shaheen, 2004). Likewise, rise in interest rate has resulted in increased expected rate of return and risk of investments, and thereby, company's earnings reduced as the cost of capital increased, consequently led the stock value to decline (Haque & Sarwar, 2012). In addition, East Asian Crises resulted in disruption in currency as well as the stock market. It led towards local currency depreciation, which increased the price of imported merchandise and decreased cash flows of companies relied on imports; hence resulted in diminution of value of stocks (Shah et al., 2012). In view of this discussion, it is, therefore, paramount need to examine the stock market's behavior and determine the economic factors to recommend policymakers in a way that can strengthen the stock market and safeguard the investors.

Research Questions

The study is an attempt to findout the answers of the following questions:

- What are the key macroeconomic variables which can have an impact of capital market of Pakistan?
- To what extent the key macroeconomic variable have an impact on capital market of Pakistan?

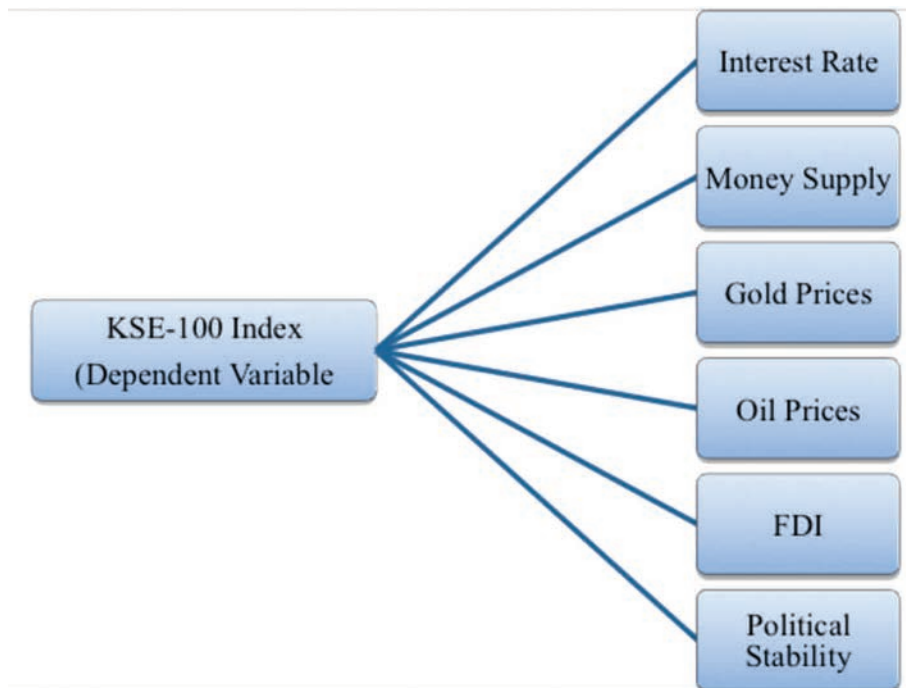
Research Objectives

- 1 To explore key macroeconomic factors those can have an impact on capital market of Pakistan.
- 2 To find out to the extent to which key macroeconomic variables influence stock performance.
- 3 To investigate which variable(s) have highest impact on capital market.
- 4 To suggest attractive macroeconomic policies and measures that can lead the capital market towards betterment.

Research Hypotheses

- H1:** There is a significant negative effect of interest rate on KSE-100 index performance.
- H2:** There is a significant positive effect of money supply on KSE-100 index performance.
- H3:** There is a significant positive effect of gold prices on KSE-100 index performance.
- H4:** There is a significant negative effect of oil prices on KSE-100 index performance.
- H5:** There is a significant positive effect of Foreign Direct Investment (FDI) on KSE-100 index performance.
- H6:** There is a significant positive effect of Political Stability on KSE-100 index performance.

Theoretical Framework



Literature Review

Kunt & Levine (1996) reflects that countries having lesser discount rate have strong equity market as compared to the countries having higher discount rate. This is also supported by Huang (1996), who reveals that equity price equals to the anticipated present value of potential cash flows.

The research conducted by Papapetrou (2001) reported a negative influence of oil prices on stock market performance that extended over four months. Claessens, Klingebiel, & Schmukler (2001) studied whether FDI is an alternate of stock market development in the economies that are financially underdeveloped and more risky. Using regression technique, this study reveals the findings that there is a strong positive association among development of stock market and foreign direct investment.

Bernanke & Kuttner (2005) argue that money supply tightening would result in increasing the risk premium that would be required for compensating the investor to hold risky assets. This would make the stock unattractive, hence lowering the price of the stock. Tully & Lucey (2005) also studied the relationship between stock market and gold prices using APGARCH examination of the key pressures on the gold prices and suggests that historically gold was utilized as a hedge against stocks and responds to rising prices in the times of collapse of equity market.

Positive association among money supply and stock market performance in U.S. is advocated by the study of Ratanapakorn & Sharma (2007). These changing effects of non-anticipative and anticipative money supply on the stock prices' development are also advocated by Maskay (2007). Gokdemir et al. (2007) argue that political and economic conditions impact frequently on gold prices. Consequently, the global economy, Turkish economy and gold trading are all affected by the fluctuations in gold prices.

The study of Anokye & George (2008) suggests that a positive response of structural changes in attracting FDI and its resulting effects on the capital markets particularly equity market is noticeable. They provide evidence by showing that the FDI to developing nations in West Africa increased from \$1.9 billion to around \$15.8 billion during the period of 1995-2006 and over the same period market capitalization of emerging market economies almost tripled from approximately \$2 trillion to approximately \$5 trillion. Yartey (2008) argues that FDI is related to the regulatory and institutional reforms, since it encourage and boost the confidence in local markets, which consequently increases investor base.

The study of Al-Fayoumi (2009) suggests that oil price increase is expected to have a positive effect on equity markets in oil exporting countries through wealth and income effects. This is because of the increase in government revenues and public expenditure on infrastructure and such other projects. The work of Adam and Tweneboah (2009) represents that there exist a positive and long run correlation among stock market development, FDI, and nominal exchange rate. Similarly, Kalim & Shahbaz (2009) support a significant positive association among FDI and the development of stock market.

The study of Narayan and Narayan (2010) explored the relationship between stock prices and oil prices in Vietnam with daily series and reported the evidence of oil price, exchange rates, and stock prices sharing a long-run association. However, the research of Jammazi & Aloui (2010) does not suggest any association among stock market returns and oil price shocks. Buar & McDermott (2010) explored the function gold in the international financial system and reported the importance of gold as hedging instrument and reliable asset for the U.S. and major stock exchanges in Europe. Similarly, the study of Sharma & Mahendru (2010) examined long run relationship of macroeconomic variables with the Bombay Stock Exchange. Their findings also suggest that there is a high correlation among gold prices (90.2%) and stock prices of BSE.

Richard, Adekunle & Hammed (2012) reflect that in case there is an increase in the interest rate paid by banks then investors will invest less in capital market and attract more towards the bank investments, which will result in declining the capital investment in the country. Ray (2012) suggested that money supply positively influence the stock market prices in case of India. Similar is the case in Pakistan, as Akber et al. (2012) advocated a positive influence of money supply on stock market returns in the Pakistani equity market. The study of Rahaman, Hasan & Ahsan (2012) reveals a relation between political regime and stock market performance by indicating that stock market performance was better throughout dictatorship government in all aspects as the average return of market was highest and volatility was lowest along with considerable growth of other market indicators. However, in case of democratic government, stock market performance showed high volatility and low returns.

The study of Ali (2014) on developed markets including South Africa, Zimbabwe and Botswana reflects that in case the interest rate is higher, stock market deteriorates. Nguyen (2014) suggests that counter cyclical monetary policy can have varying impacts because of share price asymmetries, which must be acknowledged by the policy makers at the time of formulating a monetary policy.

Research Methodology

The research type is causal and explanatory while the design is quantitative. Time series annual data is collected for the period of 21 years, covering the time frame from 1994 to 2014. In order to create consistency in the study, existing monthly data of KSE-100 index is converted into annual average data. Secondary data is collected to gather the statistics and information regarding KSE-100 index and chosen macroeconomic variables. Data is analyzed by computer generated results via Eviews

Data Integration & Analysis

Descriptive Statistics

Table 1: Descriptive Statistics

	KSE	IR	MS	OP	GP	FDI
Mean	6572.723	0.127598	3195110.	3583.677	18163.98	1615919.
Median	4407.167	0.122250	2188049.	1935.807	8454.542	890353.0
Maximum	20862.61	0.201400	9200349.	10581.56	58693.33	5590000.
Minimum	1147.538	0.075000	192586.0	495.6700	5089.000	308000.0
Std. Dev.	5790.725	0.038890	2723594.	3315.798	18208.28	1629524.
Jarque-Bera	2.313739	1.290429	2.298238	3.022015	5.032951	9.245578
Probability	0.314469	0.524550	0.316916	0.220688	0.080744	0.009825
Observations	21	21	21	21	21	21

The maximum value of KSE is 20,863 and minimum value is 1,148 that are observed in 2013 and 1999, respectively. The average value (mean) of KSE throughout the period is 6572 and its SD is 5790. Likewise, the maximum and minimum value indicated by statistics for MS is 9,200,349 and 192,586, which are observed in the year 2013 and 2002, respectively. Mean and SD of MS is 3,195,110 and 2,723,594. However, the minimum value of IR represented by statistics is 0.0750, which can be observed in both 2003 and 2004. The maximum value of IR is observed in 1996 i.e. 0.2014. The average value of IR during the period is 12.76% and the SD is 3.89%. Similarly, statistics demonstrate maximum value of GP and OP is 58,693 and 10,582, which are observed in 2012 and 2013, respectively. Though minimum value of GP and OP are observed in the same year i.e. 1994, where the values are 5,089 and 496. Mean and SD of GP is 18,163 and 18,208. The average value of OP during the period is 3584 and the SD is 3315. The maximum and minimum values of FDI shown by statistics are 5,590,000 and 308,000, which can be observed in 2007 and 2000, respectively. The mean and SD of FDI during the period under consideration is 1,615,919 and 1,629,524. Jarque-Bera Statistics for all the variables reveals that the data is normally distributed as for all the variables p-values are greater than 0.05.

Pair-Wise Correlation

Table 2: Pair-Wise Correlation of Variables

	KSE	IR	MS	OP	GP	FDI	PS
KSE	1.000000						
IR	-0.433890	1.000000					
MS	0.937255	-0.275434	1.000000				
OP	-0.931716	-0.331174	0.971515	1.000000			
GP	0.852758	-0.190586	0.948104	0.967081	1.000000		
FDI	0.523823	-0.324602	0.357425	0.352001	0.162431	1.000000	
PS	0.154420	0.687497	0.319806	0.262442	0.436575	-0.317378	1.000000

Results indicate that all the independent variables except PS have value greater than 0.2, which means that they are all either moderately or strongly correlated with the dependant variable. Interest rate is moderately negatively correlated with the KSE as its value is -0.434. Gold price and FDI are strongly positively correlated to KSE with the values 0.853 and 0.524, respectively. Money supply is strongly positively correlated with the KSE as its value is 0.937, while oil prices are strongly negatively correlated with stock market with the value 0.932. The value of political stability (dictatorship) is 0.154, which means it is weakly but positively related with the KSE.

Unit Root Test

Table 3: Augmented Dickey Fuller (ADF) Unit Root Test

Variables	With Trend & Intercept	p-value	N	Critical Values		
	Level			1%	5%	10%
KSE	-5.741057	0.0016	21	-4.66788	-3.7332	-3.31035
IR	-3.331595	0.0990	21	-4.72836	-3.75974	-3.32498
MS	-5.986785	0.0013	21	-4.72836	-3.75974	-3.32498
OP	-3.764702	0.0439	21	-4.57156	-3.69081	-3.28691
GP	-3.576266	0.0650	21	-4.66788	-3.7332	-3.31035
FDI	-3.90081	0.0376	21	-4.66788	-3.7332	-3.31035

*At 10 percent level of significance

Augmented Dickey Fuller (ADF) test is used to determine the unit root in the time series. The data of all the variables under consideration is transformed into log form. As results indicate that test statistics of all the variables are greater than critical values at 10% and p-value is less than 0.10 ($p < 0.10$) for all the variables, the data is stationary and null hypothesis (hypothesis of a unit root) is rejected. Thus, it is revealed that all the time series data used for this study is stationary and the unit root does not exist.

Regression Statistics

Table 4: Regression Statistics

Variables	Coefficient	Std. Error	t-Statistic	Prob.
IR	-1.398105	0.406105	-3.442717	0.0040
MS	1.000483	0.613589	1.630543	0.1253
OP	-0.057333	0.366159	-0.156578	0.8778
GP	1.550255	0.392136	3.953364	0.0014
FDI	0.468615	0.094244	4.972379	0.0002
PS	4069.254	1674.834	2.429647	0.0304
C	4.392010	5.534231	0.793608	0.4407
R-squared	0.953630	Mean dependent var		3.623994
Adjusted R-squared	0.937070	S.D. dependent var		0.442606
F-statistic	57.58438	Durbin-Watson stat		1.603099
Prob(F-statistic)	0.000000			

* At 5 percent level of significance

The adjusted R square value is 0.937, which indicates that interest rate, money supply, oil prices, gold prices, FDI and political stability account for 94 percent variation in the capital market(KSE 100 index). Regression coefficient presented in the above table are used to form regression equation.

$$\text{KSE}_t = 4.392 - 1.398 \text{ IR}_t + 1.000 \text{ MS}_t - 0.057 \text{ OP}_t + 1.550 \text{ GP}_t + 0.469 \text{ FDI}_t + e_t \quad (1)$$

Coefficient of interest rate equation (1) signifies that one unit increase in IR shows 1.398 or 1.4% increase in the KSE 100 index. KSE 100 index will increase by 1 unit if money supply(MS) increases 1 unit, KSE 100 index will increase by 1.55 unit with a 1 unit increase in gold prices (GP) and 100 index will increase by 0.46 unit if FDI increases by 1 unit, whereas decreases by 0.057 unit and 1.39 units with a 1 unit increase in oil prices and interest rates respectively. P-value of Interest Rate (IR), Gold Price (GP), FDI, and Political Stability (PS) are less than 0.05, revealing a statistically significant relationship between these variables and KSE. Whereas, P-value of Money Supply (MS) and Oil Prices (OP) is greater than 0.05, indicating them as insignificant. Coefficient signs also reveal that interest rate and oil price have negative relationship while money supply, FDI, gold prices, and political stability have positive relationship with the stock market.

All coefficients follows expected signs. Negative relationship between interest rate and KSE 100 index is consistent with the findings of Papapetrou (2001), Positive sign of money supply is consistent with the findings of Bernanke & Kuttner (2005), Ray (2012) and Akber et al. (2012)/ Positive sign of FDI is consistent with the findings of Anokye & George (2008), Adam and Tweneboah (2009) and Kalim & Shahbaz (2009).

On the basis on regression results the null hypotheses of no effect of interest rates, gold prices, FDI and political stability on KSE 100 index performance are rejected.

Money supply's regression coefficient is positive but its p-value is 0.1253, which represents that coefficient money supply has lost significance. Hence, null hypothesis (H_0) of cannot be rejected.

Oil price's regression coefficient is -0.057, which reveals oil price is negatively related with KSE. However, its p-value is 0.8778, indicating that oil price has insignificant effect KSE-100 index. Therefore, null hypothesis (H_4) cannot be rejected.

Conclusion

This study analyzes the impact of macroeconomic factors on capital market of Pakistan. Five macroeconomic variables are selected, including interest rate,

money supply, gold price, oil price and foreign direct investment along with a dummy variable accounting for political regime and KSE-100 index is selected as dependant variable. Data is collected for the period of 21 years, covering the time frame from 1994 to 2014. In order to create consistency in the study, existing monthly data of KSE-100 index is converted into annual average data. Eviews is used for different models and tests that include regression analysis, descriptive statistics, pair-wise correlation and ADF unit root test. The findings suggest that interest rate and oil prices are negatively related with the stock market performance while money supply, gold prices and FDI are positively related with the KSE. Among all these variables, interest rate is moderately correlated with the stock market while money supply, oil prices, gold prices and FDI are strongly correlated with the KSE. The results also indicate that stock market rises up during dictatorial tenure while declines or shows instability during democratic period.

Recommendations

In order to foster economic growth of the country, policy makers in Pakistan should engage the excellent quality analyst and experts who can make prompt decisions and better judgments. Following steps need to be considered:

Regulatory authorities must focus on robust regulatory and institutional reforms, listing requirements, adequate disclosure, and fair trading which inspire and increase the confidence in domestic markets and therefore can enhance the participation by foreign investors that would result in more equity flows.

The State Bank of Pakistan must take initiatives to maintain the monetary policy for stabilizing interest rate as interest rate has a tendency to affect stock market performance.

Political risks must be minimized and better infrastructure should be developed to attract more FDI in the country.

Government should focus on check and balance and more security measures must be taken to avoid political instability which negatively influence the stock market.

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To Maximize the Profit of Low Cost Carriers Aviation in Pakistan by Unified Aircraft Operation Policy

Dewan Abdullah* and Hironao Takahashi**

The airline business is highly dynamic and at the same time volatile in nature that necessarily require strong, consistent and unvarying management structure. At present aviation business in Pakistan is operating on traditional model managed by semi government sector and a few private sector carriers. The low cost aviation management is not established yet in Pakistan. The Low Cost Carrier (LCC) model is the solution for low cost airlines operation that requires adjustment according to the situation of aviation demand in the country. This paper proposes cost effective LCC operation in Pakistan by implementation of unified aircraft operation policy. Aircraft management strategy is a major factor for cost reduction and generation of profits. The paper evaluates the serviceability of unified aircraft based on the case of ten flights a day on a certain sector. Based on the simulation result, passengers prefer airlines with frequent flights than the airlines with limited availability of flights on the certain route. The simulated result shows 10 passengers prefer airline that offering 6.5 flights per day as compared to airline offering 3.5 flights per day. The result emphasizes use of a smaller narrow body aircraft on domestic and regional flights as compared to large wide body aircraft that limits airlines' ability to offer flight frequencies. This paper also estimates the cost impact of operation based on unified aircraft policy that reduces more than 50% Maintenance Cost and generate new profits from the total Operational Cost. Eventually, the evaluation shows 8.7% increase in net profits from original value. Generally, the net profits of efficient conventional carriers lie under 5%, but our proposal based on unified aircraft fleet model has the potential to increase net profits up to 13.7% from the total income of operation.

Keywords: *low cost carrier, unified aircraft, aviation*

Fundamental Operational Requirements of the Airline Business

The airline's operational management is a complex set-up that comprises of its core business functions i.e. primary business of an airline operation and the support functions that facilitate and assist its core operation. Fundamental

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requirements of the airline business are clearly depicted in the value and supply chain analysis that describes the activities within and around an organization. The airline's core business operations comprise of the activities associated to providing services to its customers which is inclusive of all the activities related to its operations both at ground and on-board services. The supporting services include the activities that facilitate and assist its core business functions e.g. accounting and finance, human resource management, staff and crew training and recruitment, ground-handling, reservation system, in-flight catering, engineering and maintenance, information technology (IT) supports and systems etc.

Primary Activities

The airline's primary activities refer to all those activities that are directly concerned with creating and delivering a product/service to its customers. Primary activities cover five basic functions; that are inbound logistics, flight operations, and outbound logistics, marketing and sales, and after-sale-service.

Inbound logistics.

It refers to all those activities concerned with receiving and storing externally sourced materials i.e. relationship with the input suppliers and vendors. The most critical operational activity that marks the foundation of airline's operation lies on its route and network strategy. Typical network carriers those rely on the hub-and-spoke network model build their route network on the basis of market share, demand patterns, and growth potential. Unlike the traditional network carriers, the low-cost-carriers (LCCs) operate on model that concentrates on connecting point-to-point stations as oppose to the hub-and-spoke model carried-out by the network carriers. The LCCs give preferences to route profitability rather than on formulating network on the market share basis. The airline's route selection strategy give ways to other critical operational decisions such as selection of the right sized aircraft, determining of flight frequencies and scheduling based on market demand patterns and growth potentials. Accordingly, crew scheduling is made after consideration of the flight schedule and abiding with both local and international safety and security regulations.

The reservation systems are the software which allows the airlines to perform comprehensive management of passenger reservations, inventory control, ticketing, and departure control functions. Most of the major airlines now are outsourcing their reservation system to the independent global distribution systems (GDS); they are the reservation companies that specialize on providing reservation systems such as Amadeus, Galileo, SABRE etc. Airlines decide or fix-on the price of the ticket as per the cost associated on each seat-mile and

determine the revenue that would be collected according to the prevailing demands in the market. Most of the airlines now have adopted the flexible revenue and yield management system that allows them to charge adjustable and flexible fares according to the cyclical and seasonal market demand patterns. Fuel price has become highly instable and is the major part of the airlines' variable-cost structure. As a result, airlines tend to prefer negotiating deals (hedging fuel prices) with the fuel suppliers to ensure uninterrupted and smooth fuel supply at the predictable and the most economical rates, thus, minimizing their vulnerability to the instability in fuel prices.

The major factor that contributes greatly to the successful airline's operation lies on its policy towards fleet induction plan. The aircraft capacity and operational economics give airlines the abilities and strengths to maintain low and optimal operational cost. Most airlines negotiate deals directly with the aircraft manufacturers to acquire the right-size, technologically advance and fuel-efficient aircraft enabling them to reduce their operational cost. The right fleet plan and aircraft induction policies considerably reduce airline's operational cost and expenditures associated with the aircraft engineering and maintenance, flight-crew training, spare parts sourcing and supply, as well as savings on the aircraft's fuel burn-out rate.

Flight operations

The flight operation activities include passenger services and facilitations, gate operations, baggage handling, ticketing, crew management and scheduling, aircraft operations and ram services. The passenger services include activities that revolve on providing both ground and on-board services. The scope of on-board services is based on the cabin classifications and also on the airline's brand positioning strategies. Typical full-service premium carriers strive to provide high quality in-flight experiences to their passengers involving elaborate on-board meal and beverage services (in-flight caterings), in-flight entertainments (IFEs) and the seat comfort in different cabin classes. In contrast, LCCs provide their passenger-services on the value-proposition basis and strive to keep the low cost operation through their operational efficiency and punctuality. Baggage handling can be a critical factor for airlines choosing particular airports, as quick movement of baggage is important to ensure passengers are not waiting around and that the flights are kept on schedule time without any delays. Ticketing counters give airlines the opportunity to make direct sales and transactions with customers. This is an alternative to travel agents, thus cutting out the middlemen whilst providing advice and assistance for customer queries.

Outbound logistics

The airline's outbound logistics include all those activities of getting finished goods/services to the customer such as baggage handling, transferring of transit

passengers, and providing of destination services. These activities are much more complex and complicated for network carriers those rely on hub-and-spoke network model and require a very sophisticated and comprehensive ground handling and management system as opposed to the LCCs.

Destination services include packaging and promotion of services related to tourism, transportation, boarding and lodging of passengers in a particular airline's station or holiday destinations. Some airlines through their dedicated in-house travel and tourism services department offer lucrative holiday packages and deals in conjunction with the local ground transportation suppliers and service providers, tourism companies, and hotels at different destinations of their network coverage.

Marketing and sales

The airline's marketing and sales activities refer to all those activities related to sales generation and promotion and also creating awareness of its brand, products and services. Heavy spending by the major airlines on the media such as advertisements in newspapers, radio, television, and billboards etc. are all aimed towards generating sales and also to withstand the causes and effects of the cyclical and seasonal nature of the aviation market. The LCCs minimize marketing and distribution cost by relying heavily on advertising and sales through their internet websites.

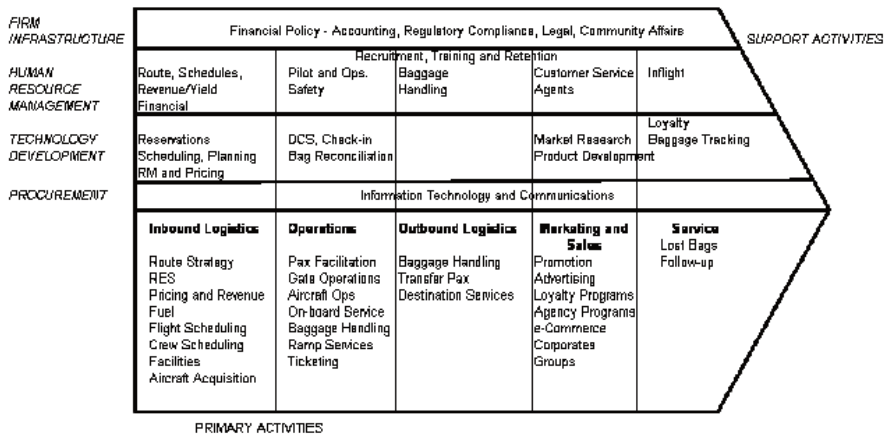
Airlines' frequent-flyer and loyalty programs (FFPs) induce consumers' loyalty and increase repeated sales. These airlines also extend free air-miles to their customers on the purchase of any of the airlines' related and affiliated products and services. Travel intermediaries and agencies act third parties for airlines selling tickets to the end-users and also help airlines to focus on their core activities while agencies handle the sales activities. Travel agencies are entitled to a certain percentage of sales, which is usually pre-negotiated with the airline. The increase proportion of selling directly through the internet creates great value to the airlines as it eliminates cost associated with the travel agents' commissions, reduces ticket processing charges, and allows greater flexibility to the passengers and the travel agents to make changes in the itinerary.

After-sale-service

The after-sale-service comprises of all those activities associated with the ground baggage handling, follow-ups and also providing and collecting feedback to and from the customers. Lost baggage can be a costly expense for airlines and when such an event arises, airlines are liable to pay heavy compensation to the customers. Follow-ups on customers' feedbacks, surveys and suggestions are the key factors in understanding customers' needs and demands and help airlines to ensure that their services are up to the customers' expectations.

Support Activities

Airlines’ supporting activities are not directly involved in the production but facilitate in increasing the organizational performance. These activities revolve around formulation of policies related to accounting, budgeting, community affairs, human resource management, regulatory compliance, legal issues and public relations etc. The airlines’ human resource activities include formulation of policies, administration, recruitment and training of their management staff and flight-crew members. Airlines need to adopt advance and sophisticated information technology (IT) systems for the smooth organizational functioning. The advance IT based systems and solutions related to airlines operations are available in the market globally at optimal prices to help airlines maintain profitability and operational proficiencies. There is a growing trend in airlines towards outsourcing of their supporting activities such as training of their staff and flight-crew members, ground handling, in-flight caterings and the aircraft engineering and maintenance activities. As a result, airlines are able to concentrate and focus on the activities centered and related only to their core activities. The following chart depicts and clearly illustrates the outline of the airline’s operation showing supply and value chain of both of its primary and support activities.



Source: Strategic Assessment Report to Dewan by Unisys, 2009

Management in Traditional Vs. Low Cost Carriers

Since the initiation of the commercial air travel, airlines strive to offer all sorts of amenities and comforts to their passengers in order to make their traveling experiences satisfactory and enjoyable. Prior to the liberalization of the aviation policies in the decades of the 1960s and the 1970s, air travel was limited only to the privileged and high-end customers; they were the only ones who could afford and spend a substantial amount of money. Those decades are still marked as the

golden period for the airlines businesses as their profit margins were soaring and the aviation business was protected by the stringent regulatory environment safeguarding the interest of very few state-run and mega-airlines. Those were the times when fuel cost was not at all a major concern and airlines were enjoying strict regulatory protections. The entry barriers and protections under the regulatory regimes were preventing the entry of new competition in the market e.g. in the form of limited issuance of airlines operating licenses and the route-permits were dedicated only to the specific airlines based on the bilateral agreements. In the mid 1970s, liberalization of the industry and open sky policies initiated by the Government of the United States (U.S.) marked the beginning of the end of the golden period of the aviation business. Many mega-carriers particularly in the U.S such as Pan Am, TWA, Braniff, and Eastern airlines etc. could not sustain the tsunami of the causes and effects of the post liberalization period. However, the major carriers in the Western Europe such as Air France, British Airways and Lufthansa etc. were all supported by their respective governments and were given sufficient time to adjust and make necessary changes in their organizational systems to withstand the new and tough requirements of the open-sky and the free-competition environment. Regardless of the brutalities of the liberalization of the aviation policies that caused the debacle of many mega-carriers and the considerable shrinking of airlines' profit- margins; its larger benefits were felt overwhelmingly by all types and stratum of the consumers globally. The free-competition environment gave way to the entry of highly efficient new airlines that brought the fare down to the level that it made possible for the masses to avail and afford air transportation with ease and convenience. A new breed of carriers came into existence which relied heavily on enticing customers solely on the basis of value-proposition. In order to cater to the needs of underprivileged market; Southwest Airlines in the U.S. initiated their operation in 1971 and became pioneer in offering services purely on low cost model. The airline focused on four principles: fly one type of aircraft to keep down engineering and maintenance overheads; turnaround aircraft as quickly as possible; and abandon loyalty or air miles schemes. Southwest Airlines is now the third largest airline in the world in terms of number of passengers carried and also one of the most profitable airlines in the world. Practices in traditional and low cost carriers differ in order to facilitate and serve different types of customers accordingly. Following are the key features of typical low cost model that revolutionized the practices and principles of the airlines management.

Single-type of Aircraft: The typical LCCs adopt the fleet plan that ensures single type of modern and fuel efficient aircraft in order to keep their aircraft operating cost as low as possible i.e. saving on aircraft engineering and maintenance

expenses, aircraft fuel-burn, flight-crew conversion and recurrent training cost, and spare parts carrying cost etc. One large fleet of single type of aircraft enables the airlines to achieve operational economies-of-scale and also allow them to formulate lean organizational structure.

High Aircraft Utilization: Unlike the traditional airlines, a LCC's aircraft is kept flying as much as possible with high frequencies between the pair-cities. A fast turnaround is critical to ensure the time spent on the ground is minimal. LCC's turnaround time on an average is 25 minutes; compared to 1 hour for a traditional carrier. On an average, LCC's utilization per aircraft is 12 block hours per day; a traditional aircraft on an average does about 8 block hours per day.

No-Frills: In contrast to traditional airlines, the underlying business for a LCC is to get a person from point A to point B and everything else is considered to be luxury item, which can be acquired for a small fee like on extra carry-on and checked luggage, food & beverages, internet access etc. Unlike traditional airlines, LCCs provide unassigned seating configuration, ticketless boarding, no refunds and no loyalty programs; such activities further reduce the overhead costs associated with traveling.

Secondary Airports: LCCs mostly serve secondary airports wherever possible and those airports are not necessarily to be the busiest and well-connected. Operating from the so called secondary airports is cheaper than the primary airports and they are also a lot less congested and the turnaround time for aircraft is a lot shorter. The benefits on saving of airport-related charges such as aircraft handling, landing, and parking fees etc. are transferred to the customers in the form of discounted fares on operating flights to and from the secondary airports.

Point-to-Point Network: Unlike traditional carriers, LCC shuns the hub-and-spoke system and embraces the simple point-to-point network. Almost all the LCCs' flights are short-haul (3-hour flight or less) with relatively high number of frequencies between the two cities. The point-to-point network enables them to generate significant savings due to less complex baggage handling system and also eliminates the complexity and high cost associated with handling of transit passengers.

Distribution System: Distribution costs are something that traditional carriers most often ignore and they mostly rely on travel agents and their own sales offices. LCCs keep their distribution channel as simple as possible and they rely on the internet (their own website) and call centers for the bulk of their sales; this means that the airlines do not pay any commission to the travel agents, which

would otherwise have been reflected in high-fares. LCCs offer flexible pricing to their customers and offer discounts on early bookings and in this way they are able to successfully implement high yield based revenue-management-system.

Lean Organizational Structure: The typical LCC's organogram depicts an organizational structure which is mostly lean, simple, less bureaucratic and without many layers of management. Unlike traditional carriers, LCCs prefer to outsource most of their support functions to the best service providers in order for them to concentrate and specialize on their core business activities. As a result, they have leaner organization structure with highly productive, motivated, and multi-tasked people working for the organization. The highly charged and motivated environment in LCCs gives their employees feelings of high empowerment; they experience delegated responsibilities and authorities and have a high sense of personal-responsibilities. The employee-per-aircraft ratio of LCCs is always much lower than the traditional carriers. The multitasking of activities in LCCs enables their employees to deliver high productivity and produce savings for their organization and at the same time they are able to draw high salaries, perks, and other benefits than the employees working in the traditional carriers. The proper delegation of authority, high visibility of company's leadership, clear articulation of the company's mission, encouragement to creative and innovative ideas and smooth flow of communication are the hallmarks of some of the best performing LCCs that create highly motivated and stress-free environment. Hence, the typical organizational structure of a LCC provides an opportunity to have win-win solutions for both the organization and its employees in the form of high productivity and savings derived from the multitasking and lean organizational structure. The employees receive benefits in the form of lucrative perks and high take-home salaries which are usually attached with the fair and the equitable reward system based on employees' productivity-ratios.

Management Challenges in the Airline Industry

The mushrooming commercial airlines have placed more strain on their management to persistently seek profits, reduce cost, and increase revenues. Increasing demand for air transportation service has compelled airlines' management to take advantage of opportunities in different markets in addition to their domestic and regional captive markets. It is highly evident that many airlines throughout aviation history have been unable to remain in business, and in most cases, it is agreed that the demise of these airlines has been attributable to their inflexible, rigid and deficient management. The development of innovative and advance management practices have contributed to recent rapid infiltrations of information technologies in all spheres of airlines' operations, more importantly,

the airlines now have compelling need to induce operational efficiencies through high productivity and cost-cutting measures. The airline business is characterized as being one of the most versatile and multifaceted involving various conflicting decisions that are all needed to be optimized at the same time. The followings are the environmental characteristics that inflict peculiar management challenges and are exclusive to the aviation business as per the information available on the website titled “Modeling Applications in the Airline Industry” by Ashgate:

Impact of many stakeholders in the industry

Airline management does not work independently of other players in the air transportation industry. The decisions of airline management are very much affected by other stakeholders in the industry that interact with the airline management and affect its decisions e.g. airports authorities, alliances with other airlines, direct and in-direct competitors, customers, governmental agencies, suppliers, labor unions etc. The airline’s management does not only have to comply with the regulations of its home country but also with the regulations of different countries where its serves and the airspace it crosses. Its management also considers and constantly verifies the diverse needs and preferences of its potential customers and strives to provide schedule convenience, competitive fares, punctuality, quality onboard and other customer services. Airline also participates in one or more alliances to expand its network coverage or share resources with other airlines. Its management is always dependent on suppliers to provide important items such as aircraft, fuel, spare parts, meals, employee uniforms, and so on. In many cases, LCCs tend to outsource support functions to vendors, such as aircraft maintenance, aircraft cleaning, ground handling, in-flight catering and sales distributions. Therefore, an airline has to keep healthy relationships with its suppliers to continue operating successfully. Airline’s management also has to deal and maintain cordial and close relationships with its labor-unions. Finally, airline’s management continuously keeps a sharp vigilance and monitors the decisions of their competitors that relate to providing capacity, fare levels, fare restrictions, and departure times. In many situations, the decisions of the competing airlines proceed in a leader-follower pattern, where one airline takes an action and the other competing airlines try to find the best way to respond to this action.

Interacting layers of decision

Like many other businesses, airline-management faces three levels of interacting decisions which are categorized under operation, planning and strategic decisions.

Operation decisions

They are those decisions that need to be verified or updated at least on an

hourly or maximum on a daily basis. They include, for example, the response to unanticipated incidents such as adverse weather conditions, flights delays and cancellations, aircraft breakdown, and absence of crew or staff due to their illness and un-foreseen circumstances. Operation decisions also include watching and keeping track of revenues, bookings, and anticipated-demand-levels in the different markets, matching prices with competitors, and managing seat inventory on each flight on a daily basis.

Planning decisions

Planning decisions have a few months' prospects, and it is defined as the process of efficiently using airline's available resources to maximize its revenue. The resources available to an airline include the facilities and the personnel that operate the business. The planning decisions include forecasting the demand between every origin-destination, flight schedule development, assignment of flights to the different aircraft fleet, aircraft routing across the different airports with its maintenance consideration, planning the line of flight for pilots and cabin crew, crew accommodations, flight-gate assignment, and catering. Planning decisions also include the number of staff required to operate flights, ramp agents, baggage handlers, and so on. Planning decisions are extremely inter-dependent on each other, which makes the planning process complex and require close coordination among key decision makers with flexible and free flow of information among the team members.

Strategic decisions

Typically require a long lead time before implementation and require a considerable monetary investment. They are also expected to have a significant impact on the form of the airline in the long term. Examples of strategic decisions include growth and expansion, fleet sizing (aircraft orders), hub locations, merging with other airlines, alliance participation, and location of maintenance facilities. Strategic decisions are expected to impact on planning decisions, which, in turn, affect the operational decisions. In addition, there is a continuous reverse feedback from the operations to the people at planning phase, which also, in turn, provide advices and suggestions to the strategic decision makers.

Macro events

The air transportation industry is highly sensitive to the effects and significant impacts of events related to economical, political, technological and social changes both in domestic and international regional environments. These events necessitate that airline's management must keep a vigilant eye on their market environment and take necessary actions to alleviate the harmful effects. To survive in business,

in many situations, airlines may be forced to respond quickly in the form of cutting schedules, reducing fares, laying-off employees, and cutting of salaries and benefits

Many groups to contribute

Another challenge faced by airline operations is the interaction process among several groups of workers who work together to operate the flights. The product that an airline generates is a passenger seat or a space for cargo and operating each flight requires significant cooperation among several groups of workers who all share the same objective of making the smooth and coordinated operation possible. There are about 12 different groups who work on each flight before its departure. These groups include pilots (cockpit crew), flight attendants (cabin crew), maintenance crew, ramp agents, baggage-handling crew, cargo agents, fueling agents, customer service agents, gate agents, catering agents, aircraft cleaning agents, and operations agents or dispatchers. While the personnel in these groups differ in their qualifications, nature of work, workloads, and salary; they all are equally important for the departure of the flight. It is important for airline management to adequately set the work plan for each group, facilitate their work, and alleviate any possible conflict between them in a team-spirited environment. The airline management must strive to create an environment and culture that motivates all the employees to have a high sense of belongingness and achievement to the common organizational goals.

Select Adequate Aircraft for LCC in Pakistan

To manage LCC aviation model in Pakistan, the biggest factor on airlines' cost of operation lies on the composition of their aircraft fleet. There are a few aircraft manufacturers in the market from which an airline can make the purchase based on the multiple factors, which are to be taken into consideration in relation to the operational, maintenance and financial management. Following are the five aircraft that has been chosen for our analysis:

The Airbus A320 Family

The A320 is a narrow-body twin-engined aircraft that revolutionized the short and medium-range aircraft markets. The aircraft has a maximum capacity of 180 passengers with a range up to 3,050 nautical miles. The first delivery of the aircraft was made in 1988 and since then the A320 family has become the bestselling Airbus jetliners. The A320 was the first aircraft with the fly-by-wire flight control system. The stretched version known as A321 can carry up to 220 passengers in a single class lay-out and the shorter-fuselage versions A319 and A318 can carry up to 156 and 132 passengers respectively. The A320 family is available with an option of two engine types i.e. CFM56 and V2500. (Airbus.com, 2014).

The Boeing 737(Next-Generation) Family

The Boeing 737-700 program was launched on June 19, 1993. The B737-700 is altogether a new narrow-body aircraft that not only shares the same series name but also having similar shape of the earlier B737-Classics. The B737 NGs were designed with improved aerodynamics and engine performance to compete economically at par with the A320 jetliners. The NG's are fitted with two CFM56-7 engines those are 7% more fuel-efficient than the CFM56-3 engines fitted on the B737 Classics. The aircraft's faster cruise and lower take-off and approach speed helps in less fuel burn. The flight deck with LCD displays, strengthened fuselage and improvements in flight controls, wings, and landing gear systems are some of the distinct features of the B737 NGs. The B737-800 is a stretched version of B737-700 that superseded the B737-400 and is in direct competition with A320. The -800 entered service in 1998 with the launch customer Hapag-Lloyd (now TUIfly) having a maximum capacity up to 189 passengers in a single-class layout. (Boeing.com, 2014)

The Embraer E-Jets

The new wave of narrow-body jets introduced by the Brazilian aerospace conglomerate Embraer S.A. has stimulated and enhanced growth in the regional markets worldwide. The Embraer E-Jet family is a series of narrow-body medium-range twin-engine jetliners composed of two main families i.e. the E170s and the E190s. The E-Jet program have been a commercial success and well accepted amongst both mainline and regional airlines worldwide. The E170 and E175 make up the base model and E190 and E195 are the stretched variants with different engines and aerodynamic systems. The E-Jets were first launched in 1999 in Paris Air Show and entered production in 2002. The first E-170 was delivered in March 2004 to LOT Polish Airlines and the first commercial flight took place on March 17, 2004, from Warsaw to Vienna. The E-170/E-175 models have the capacity up to 80 passengers and a range up to 2,100 nautical miles. The E-190/195 models have a maximum capacity up to 114/122 passengers with a maximum range up to 2,300 nautical miles. The first flight of the E-190 took place on March 12, 2004 and the first delivery was made to the launch-customer New York based low cost carrier JetBlue. The two families share nearly 89% commonality, with identical fuselage cross-sections and avionics. In November 2011, Embraer announced E2-jet program with improved engines and with a new aluminum or carbon fiber based wings design. The first delivery of the E2 jet is expected in 2018.

The ATR 42 and 72 Turbo-propellers

The ATR is a French-Italian manufacturer based in Toulouse, France. The company currently produces two families of twin-turboprop, short-haul regional

aircraft; the ATR 42-600 and the ATR 72-600. ATR launched the new -600 series on October 02, 2007 and the first aircraft commenced the maiden flight on March 4, 2010. The new ATR 42-600 and ATR 72-600 features technological enhancements to the previous -500 series in terms of efficiency, dispatch reliability, low fuel burn and operating cost. The aircraft is fitted with new PW127M engines, Glass Cockpit, and new avionics with CAT III capabilities. The ATR 42 has the maximum capacity up to 42 passengers with a range up to 842 nautical miles at a maximum cruising speed up to 210 knots. The stretched version ATR 72-600 has the maximum capacity of 72 passengers with range up to 891 nautical miles at a maximum cruising speed up to 275 knots. (Atraircraft.com, 2014)

The Bombardier Q400

The Canadian based Bombardier Inc. currently produces twin-engined, medium range turboprop airliners the Q400. The aircraft has a maximum seating capacity up to 78 passengers with a range up to 1,567 nautical miles at a typical cruise speed up to 360 knots. The aircraft has a definite lead in terms of both range and speed that makes the aircraft in advantageous position in competing against similar size jetliners. In November 2007, Bombardier has announced development of a 90-seat stretch version of the Q400 called the **Q400X** project, targeting launch in 2019.

At times, a good fleet plan can be a combination of multiple fleet type or same / single fleet. All of this depends upon the objectives an airline wants to achieve. No matter what kind of fleet management is opted for, there are certain attributes which a good fleet plan should encompass. A good fleet plan should comprise of three attributes, which are Adaptability, Flexibility and Continuity. These characteristics are discussed in detail as follows:

Adaptability

Aircraft acquisition is mainly defined by the aircraft's type and range, matching the supply and demand as a major factor, which will influence the fleet plan. The goal for acquiring the right-sized aircraft for the Pakistani LCC model must be based on the principle of market dynamics i.e. frequency-starved market with the need of low fare price. For this fleet plan, the airline has to acquire such an aircraft, which will fall in line with both short and long-term goals i.e. an aircraft of the size which should have both, "Speed and Range," to cover domestic and regional markets. This entitles us for the selection of the aircraft; a jet or a turbo-prop, small or big, etc. After transiting through all the assessment and analysis stages, which are discussed in this plan later, it has come to the conclusion that Embraer E190 carries more weight age, as it can cater both

domestic and regional markets because of its range, which is 2,300 nm. It has also got added advantage of number of seats having maximum seating capacity up to 114 passengers on single class configuration. The A320s and B737s having seating capacity up to 180 passengers would be non-viable on most of domestic routes due to their large capacity. Hence, the airline will need to induct small capacity turbo-props in combination with A320|B737NG to provide network to smaller domestic cities and towns. As compared to narrow body aircraft i.e. A320 and B737NG, the E190 has more versatility on all domestic thick and thin routes. The E190 will provide adaptability later at the time when the airline will focus on expanding operations to regional markets from all major cities of Pakistan. Hence, the single large fleet of E190s will cater both domestic and regional routes. The aircraft due to limited seating capacity will provide more frequencies on domestic primary and secondary routes and will also provide viable network on socio-economic routes.

Flexibility

Flexibility is defined as the aircraft's ability to meet the requirements of the market in the most efficient manner. This is the reason why airlines clearly need as much flexibility in their fleet as they can get. While making an assessment between the short listed aircraft, the E190 has the sufficient versatility and the aircraft meets the goals of low cost operation. Following points highlight the aircraft positives:

- Better interior floor space/volume makes the terms of seat layout, position of lavatories, galleys and overhead stowage.
- The cabin allows the cost effective and rapid reconfiguration in order to address the market changes.
- While significantly having lower fuel burns, the result of the E190 helps in giving lower operating costs per seat in the regional aircraft market as compared to turboprops. The flexibility of E190 allows it to operate profitably in a wide range of markets - from full service regional feed to the ultra low fare markets.

Continuity

Once the planners make a decision for a particular type of aircraft, then the logic forces the planners to stick with the technology standards as the fleet develops. This will reduce the maintenance burden and will also help in efficient parts ordering. For example, this continuity will help us for standard inventories on engine parts and auxiliary power units (APUs). The E190 has the range to cover

all the domestic and regional routes within and from Pakistan. In our case the E190 provides continuity i.e. the aircraft can reduce the expenses such as spare parts support on engineering, spare engines, cockpit, avionics, pilot and crew training, etc. Eventually, by having a long-term approach and following the continuity principle, the E190 will be able to reduce the overheads cost many folds.

Market Segmentation and Spill

Motivations of travel demand. Passengers have different motivations while traveling through an airline. Some travel for leisure, some travel for visiting family and friends and some for business etc. In Pakistan, it generally segment the market in two classes-business travelers and economy; business travelers are those who prefer to be treated exclusively with first class service like the most important with welcome drinks, spacious seats and separated from the noisy cabin. The others are those who prefer economy class because of being price sensitive. They like to travel through aircraft but can avoid treated exclusively at the cost of low price. A brief introduction of the cities is given below to understand the profile and demand of the travelers originating from the respective cities.

The two major sectors, which are focusing initially, are KHI – LHE & KHI – ISB which comprise of the 70% of the total domestic payload. The distance between KHI – LHE & KHI – ISB is 1700 km and 1800 km respectively.

Karachi is the largest city, main seaport and the main financial centre of Pakistan, and the capital of the province of Sindh. With an estimated population of 17 million, it is Pakistan's premier center of banking, industry, and trade and is home to Pakistan's largest corporations, including those involved in textiles, shipping, automotive industry, entertainment, the arts, fashion, advertising, publishing, software development and medical research. The city is a major hub of higher education in South Asia and the wider Islamic world.

Lahore is the capital of the Pakistani province of Punjab and the second largest city in Pakistan, after Karachi. The estimated population is approximately 10 million. In 2010 it was ranked by The Guardian as the 2nd Best Tourist Destination in Pakistan. Islamabad is the capital of Pakistan and the tenth largest city in the country. The Rawalpindi/Islamabad Metropolitan Area is the third largest in Pakistan with a population of over 4.5 million inhabitants. The segmentation of travelers / business profile in the above mentioned cities can mainly be divided as follows:

Visiting Family & Relatives (VFR), Business – Businessmen, Armed Forces, Diplomats, Government Officials, Students, Financiers etc.

Variation in travel demand over time

Travel demand varies with time. Business-oriented routes' flight time mainly have demand peaks in the morning and evening. Routes that fall in this category are KHI – LHE, KHI – ISB and ISB – LHE. With large aircraft, it can have problem with the load availability. An aircraft scheduled for peak timings to a destination has to return back with lower load factor, which in turn will eventually affect the revenue margin. Thus, E190 will be justified in such a scenario, as it is easy to occupy less number of seats as compared to narrow body jets. The peak demand time can easily be met by increasing the frequencies on primary routes.

Modeling spill for fleet plan

Pakistan's aviation market is not fully served. There is insufficient capacity and the need for a new entrant is on demand. There are a number of occasions when all the flights of the current operators in the most demanding sectors are full, especially in the peak hours (morning and evening) and peak seasons (like summer or winter holidays). The average load factor, therefore, can be considered as 90%. This high demand and low supply by the aviation players provides a spill. This situation offers an opportunity for a new airline to be absorbed easily in the existing pool of airlines by taking the spill-over passengers. To cater to such a spill-over, the choice of a regional jet will be the right assessment, as the motive underneath is to gradually get the grip on viable business and then penetrate.

Modeling on a single sector

In principle, modeling on a single sector in isolation is not recommended. Even the micro economic analysis does not relate results as positive for modeling on single sector. But, there are certain exceptions like the typical example of single sector modeling in Pakistan is on these 3 sectors:

1. ISB – GIL
2. ISB – KDU
3. ISB – CTL

Single- sector modeling on these sectors happens because of the following reasons:

1. Flight in narrow valleys which is mostly "*S-shaped*"
2. Diversions due to cloud built-up blocks the valley
3. Accumulated cancellation of flights due to weather
4. Two flights with narrow timings creates problem of parking at the runway

An aircraft must be selected keeping in view all sectors and future sectors that the airline intends to operate. By reviewing all the primary, secondary, and socio-economic sectors, the E190 is the most suitable aircraft to be operated as one large fleet on all local stations with in the country. The capacity of aircraft is suitable to be operated on all domestic routes providing much needed frequencies on

primary and secondary routes and at the same type providing a reliable and viable connection to all tertiary and socio-economic routes.

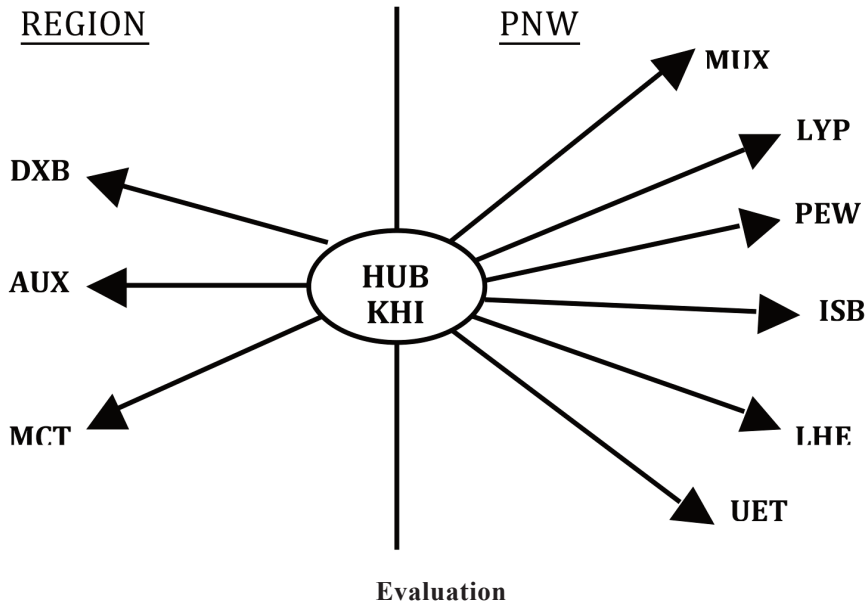
Modeling on a network

We took a base case of three E190 aircraft on the following routes to make a viable network for three years:

1 st Year		2 nd Year		3 rd Year	
	DOMESTIC:		DOMESTIC:		DOMESTIC:
1	KHI - ISB	1	KHI - ISB	1	KHI - ISB
2	ISB - KHI	2	ISB - KHI	2	ISB - KHI
3	KHI - LHE	3	KHI - LHE	3	KHI - LHE
4	LHE - KHI	4	LHE - KHI	4	LHE - KHI
5	KHI - LYP	5	KHI - LYP	5	KHI - LYP
6	LYP - KHI	6	LYP - KHI	6	LYP - KHI
7	KHI - PEW	7	KHI - PEW	7	KHI - PEW
8	PEW - KHI	8	PEW - KHI	8	PEW - KHI
9	KHI - MUX	9	KHI - MUX	9	KHI - MUX
10	MUX - KHI	10	MUX - KHI	10	MUX - KHI
11	KHI - UET	11	KHI - UET	11	KHI - UET
12	UET - KHI	12	UET - KHI	12	UET - KHI
13	KHI - SKZ	13	KHI - SKZ	13	KHI - SKZ
14	SKZ - KHI	14	SKZ - KHI	14	SKZ - KHI
15	ISB - LHE	15	ISB - LHE	15	ISB - LHE
16	LHE - ISB	16	LHE - ISB	16	LHE - ISB
			Total Domestic		Total Domestic
			INTERNATIONAL:		INTERNATIONAL:
		1	KHI - DXB	1	KHI - DXB
		2	DXB - KHI	2	DXB - KHI
		3	KHI - MCT	3	KHI - MCT
		4	MCT - KHI	4	MCT - KHI
		5	KHI - SHJ	5	KHI - SHJ
		6	SHJ - KHI	6	SHJ - KHI
		7	LYP - DXB	7	LYP - DXB
		8	DXB - LYP	8	DXB - LYP

As the distance in the domestic routes is in between the range of 191 nm to 610 nm, network modeling with E190 will be suitable. This will help airlines to cater maximum sectors without the fear of financial losses, as filling in the capacity of a small aircraft, of 114 seats, is comparatively reachable, as compared to a jet of 180 seats. This acquirement of seats can easily be obtained by the spill-over of the prevailing market. Even, if it considers the 70% load factor, the aircraft can easily reach the break-even. The E190 which is able to cover the range of 2,300 nm, the airline will not have to induct a new aircraft with a higher range, as it is able to cater the regional market, while operating international sectors from Pakistan.

The network modeling based on E190 is illustrated in the diagram below:



Evaluation

Cost Impact Evaluation by Uniform Aircraft Policy

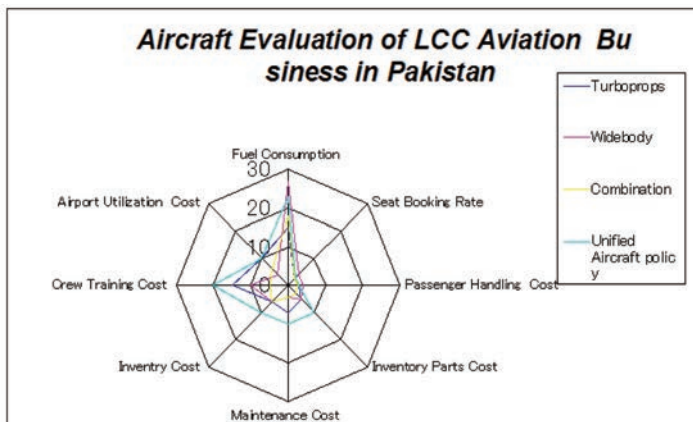
We evaluate cost impact by multiple case of aircraft configuration as Fig 2. While taking the final decision for the induction of aircraft in the airlines fleet, it should always be taken into account that the high asset value and costs of introducing a new fleet type into an airline are disincentives. Re-training of flight crew, maintenance crew, spare inventories, even customized ground equipment are all complex issues that cannot be changed overnight. There are eight items which are significantly related to aircraft cost of operations:

- Fuel Consumption
- Booking Sheet Rate
- Passenger Handling Cost
- Inventory Cost
- Human Cost of Maintenance
- Inventory Stock Storage Cost
- Airport Utilization Time Cost
- Crew Training Cost

The hypothesis of this evaluation is a) three propeller aircraft with seating capacity up to 70 passengers, b) One wide body aircraft with seating capacity up to 400 passenger seats. C) Combination of both aircraft i.e. two narrow bodies and one wide body. D) Three unified aircraft with seating capacity up to 114 passengers. The result of this evaluation, three propeller aircraft policy is 63.5, one wide body aircraft is 63

and two narrow bodies and one wide body is 46. Actually, wide cabin aircraft policy is better than combination of aircraft policy because of low fuel burn per seat and that is why most of the traditional carriers opt for wide body aircraft on primary and secondary routes but to cater smaller socio-economic routes, the airlines induct turboprops in their fleet and hence, they build network based on diverse aircraft in their fleet. The proposed unified aircraft with adequate size of aircraft model secured 89 marks. it has the potential of cost saving up to 8.7% due to savings in crew training cost, inventory parts cost, fuel, aircraft maintenance, and passenger management cost.

Factors	weight ratio (%)	Turboprops	Widebody	Combination	Unified Aircraft policy	
Fuel Consumption		30	15	27	18	23
Seat Booking Rate		5	2.5	4	2.5	3
Passenger Handling Cost		5	3	4	2.5	3
Inventory Parts Cost		10	5	5	3	10
Maintenance Cost		10	7	3	3	10
Inventry Cost		10	6	6	6	10
Crew Training Cost		20	15	10	5	20
Airport Utilization Cost		10	10	4	6	10
Total Marks		100	63.5	63	46	89



Evaluation the Adequate Aircraft Model in Pakistan

We evaluated the number of selected flight times per day by the number of passenger to analyze the preference of passengers. The selection ratio by accuracy was calculated by the following formula:

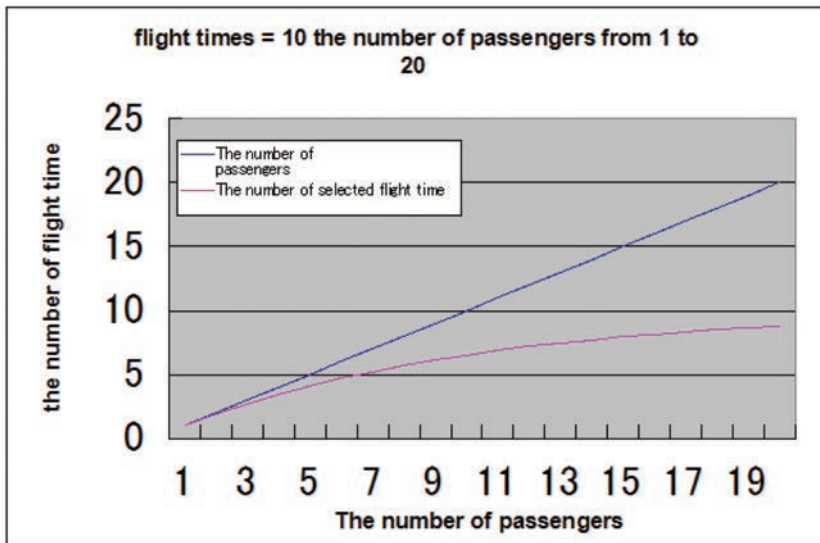
$$S = F \left\{ 1 - \left(\frac{F-1}{F} \right)^k \right\}$$

S= The number of selected flight time

F = The number of available flight time per day

K= the number of passengers

Number of flight time per day	The number of passengers	The number of selected flight time	utilization rate (%)	Available service capacity (%)
10	1	1	10	90
10	2	1.9	19	81
10	3	2.71	27.1	72.9
10	4	3.439	34.39	65.61
10	5	4.0951	40.951	59.049
10	6	4.68559	46.8559	53.1441
10	7	5.217031	52.17031	47.82969
10	8	5.6953279	56.953279	43.046721
10	9	6.12579511	61.2579511	38.7420489
10	10	6.513215599	65.13215599	34.86784401
10	11	6.861894039	68.61894039	31.38105961
10	12	7.175704635	71.75704635	28.24295365
10	13	7.458134172	74.58134172	25.41865828
10	14	7.712320755	77.12320755	22.87679245
10	15	7.941088679	79.41088679	20.58911321
10	16	8.146979811	81.46979811	18.53020189
10	17	8.33228183	83.3228183	16.6771817
10	18	8.499053647	84.99053647	15.00946353
10	19	8.649148282	86.49148282	13.50851718
10	20	8.784233454	87.84233454	12.15766546



The simulation result shows if ten passengers book their flight, then the number for selected flight time is 6.5. This mean, passengers prefer more frequencies and they will select airline offering more frequencies. Thus, if wide body operation policy is adopted, then the airline will be able to offer limited flights a day. On the other hand if unified aircraft policy is adopted then airlines can offer up to ten flights a day; giving passengers more choice to select their prefer time slots. Therefore, unified aircraft policy will be a suitable choice for a LCC aviation business in Pakistan.

Conclusion

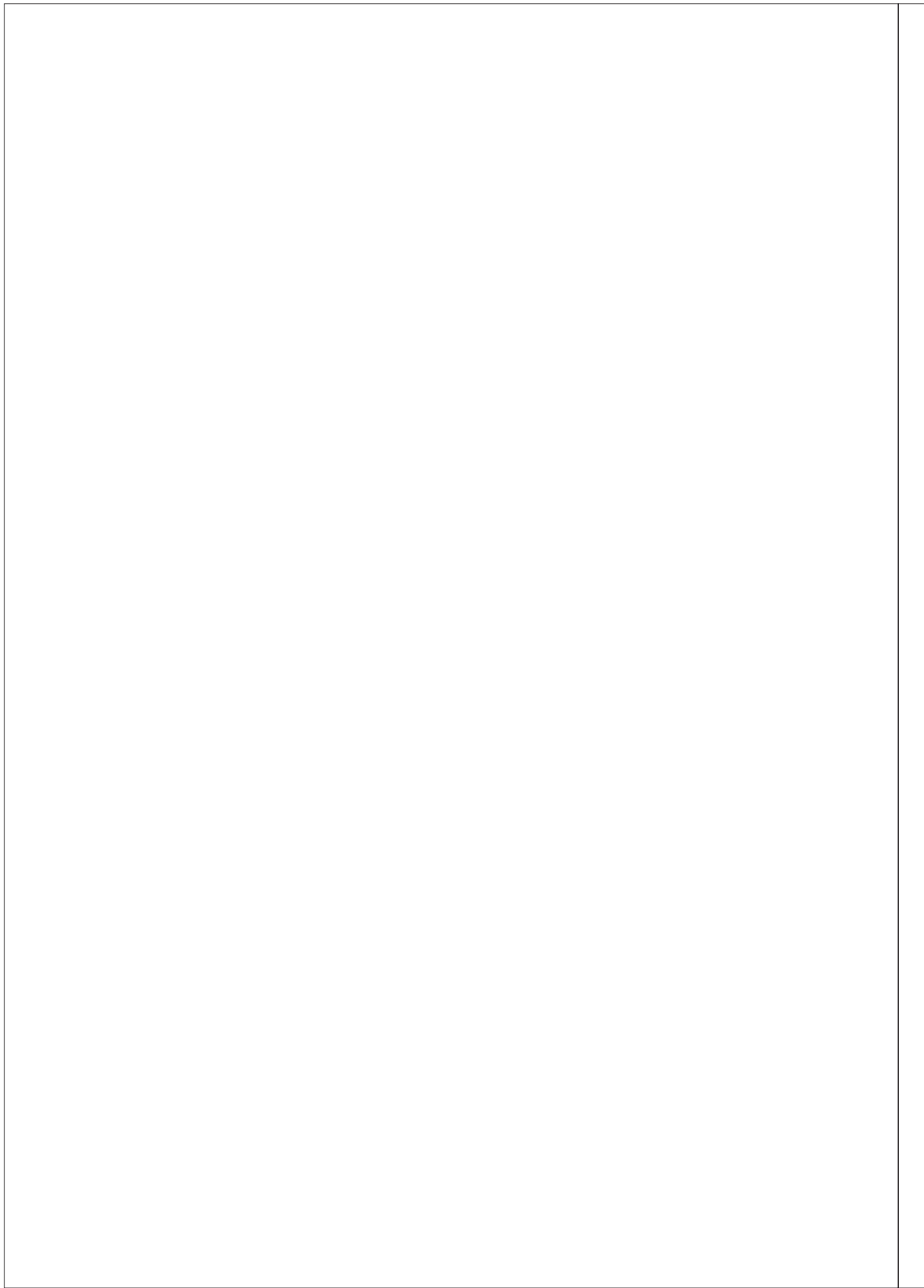
Today's Pakistan aviation business is still operating on traditional model. There is a semi-government organization and a few private players operating in the country having oligopolistic business environment. There is complete absence of LCC business in the country. This paper proposes the cost saving unified aircraft policy for LCC aviation management in Pakistan. The flight duration on domestic route is within two hours; therefore, unified aircraft policy with an adequate passenger capacity is the best choice to cover all domestic primary, secondary, and socio-economic routes viably. This policy can reduce the aircraft maintenance cost, parts inventory carrying cost, crew training cost, human resource management and operational cost. The paper also evaluates the serviceability of unified aircraft based on the case of ten flights a day on a certain route. The selected flight time by ten passengers is 6.5. The result reinforces use of small unified fleet of regional jets on domestic and regional routes. Later, this paper evaluates the cost impact by unified aircraft policy. The result of this evaluation, three propeller aircraft policy is 63.5, one wide body aircraft is 63 and two narrow bodies and one wide body is 46. Actually, wide body aircraft policy seems better than combination of aircraft policy because of low fuel burn per seat and that is why most of the traditional carriers opt for wide body aircraft. But these traditional carriers are compelled to induct turbo-props or smaller jets in their fleet to cater secondary and socio-economic routes and hence, they build network based on diverse aircraft in their fleet. The proposed unified aircraft with adequate size of aircraft model secured 89 marks. This policy has the potential of cost reduction up to 8.7% due to savings in fuel, maintenance, crew training cost, and passenger and human resource management cost. Generally net profits of efficient conventional carriers lie under 5%, but our proposal based on unified aircraft fleet model has the potential to increase net profits up to 13.7% from the total income of operation.

Our next research is based on our evaluation of international air routes by unified aircraft policy from Pakistan to GCC and other neighboring countries.

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Macroeconomic Determinants of Islamic Banks Profitability in Pakistan: A Time Series Analysis

Muhammad Ali*

This study examines the macroeconomic determinants of Islamic bank's profitability in Pakistan by using 7 years quarterly time series data from 2006 to 2012. In order to achieve study objectives, Unit root test, Johansen & Juselius Cointegration methodology, and Ordinary least square (OLS) and Granger causality test were used. The results from OLS model signify that interest rate and the inflation rate has a positive and significant effect on Islamic banks profit while exchange rate showed positive but statistically insignificant effect on Islamic banks profit. On the other side, the findings from granger causality test suggests that there exist uni-directional causality running from inflation to profitability of Islamic banks. In addition, exchange rate exerting uni-directional causality running from the exchange rate to the interest rate and the interest rate also showed uni-directional causality running from the interest rate to the inflation rate. There is no bi-directional causality is reported on the model. It can be concluded that there should be a separate interest rate and exchange rate policy developed by the State bank of Pakistan for Islamic banks so as to ensure maximum profit.

Key words: *Islamic banks profitability, Interest rate, Consumer price index, Exchange rate*

Introduction

Islamic banks have shown a remarkable performance since the very 1st bank which was established in Egypt in 1963 (Haroon & Ahmed, 2000). Currently, more than 170 Islamic banks are providing services throughout the world which included Islamic financial services. Islamic financial institutions are still growing with a very fast growth rate (Muhammad, 2000). Not only this, Islamic banks are gaining market share at a very fast pace globally and its presence in the market, giving competition to fixed interest transactions (Bashir and Hamid, 2003). Over the past 10 years, the Islamic banking network is expanding and the profitability, growth rate is a major threat to conventional banking system. In addition, Islamic

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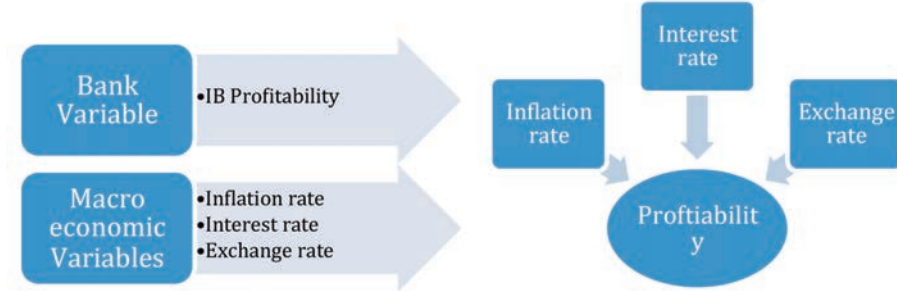
bank's growth can be measured by their branch network and the major portion of Islamic banks is situated in Asia and Middle East zone, Sudan, Malaysia, Iran and other parts of the world. Countries like Bahrain, Malaysia is contesting to be established a separate Islamic financial hub that serves 1.2 billion Muslims around the world (Khatib and Wafaa, 2007). On the other side, Islamic bank's profitability contributes in countries economy and Jordan's Islamic banking system is a good example of it. Facts and figures suggest that the Jordan Islamic bank has contributed around 5% of its country GDP for the year 07/08 as compared to conventional banking system which contributed around 40% of GDP¹.

The main source of funding for any bank is their clients. Banks are heavily focused on customer relationship management to generate more funds which lead to increase in banks' profitability. For this purpose, bank facilitates its depositor by offering different types of accounts and banking products. Generally, Islamic banks typically offered three types of accounts; (1) Current account, (2) Saving account and (3) investment deposit account. The current and saving account contains risk factor, but as compared to the investment account, current and saving account contains lesser risk (Bessadet & Karema, 2009). However, the guarantee of capital is not certain in Islamic banks, but they are liable to take care of investors' money for the time period they are in an agreement.

In Pakistan, Islamic banking started in 1970's and it came across a number of experiments along with some economic concepts and techniques. It includes bill of exchange, participation mode of financing, ledgers, promissory notes, cheques, loaning facility, etc. More focusly, profitability of Islamic banks has reached up to rupees 8 billion by the end of first quarter of 2011-12, that showed growth rates of over 58%². According to the Islamic Bank Bulletin released by State bank of Pakistan, the market share of conventional banks in overall profit of Islamic banks has marginally declined. Not only this, Islamic banks of Pakistan are progressing and are showing positive trend in the market despite of their return of asset (ROA) and return on equity (ROE). These factors showed insignificant changes over the quarter that was reviewed under the overall banking industry of Pakistan. Looking at the facts, the total asset of Islamic banks at the end of September 2011 were standing at Rs 568 billion contained the share of 7.3% of the overall banking industry. On the other side, the deposits of Islamic banks have reached up to Rs 463 billion during the same quarter, which showed a 8% increase its market share from 7.6% to the overall banking industry (SBP, 2011). In addition, the Islamic bank branch network has increased to 841 from 799 as compared to last quarter. These 42 new branches were expected to achieve the strategic annual plan of branch expansion in the year 2011. It is to be noted that, the deposit contribution

of Islamic bank customers witnessed 31.8% to 36.5% and 6.3% to 7.5% rise both annual and quarterly, respectively³

Modeling framework



Source: Author's construction

This paper is an attempt to explain the relationship between macro-economic factors and Islamic bank's profitability. To the best of the author's knowledge, this study has never been conducted before in Pakistan and the findings from time series analysis are unique because previous studies were conducted on panel data. Furthermore, the study is restricted to a small sample period due to data limitation.

Theoretical Background

Inflation rate is associated with the decrease unit of currency. Some currencies face extreme inflation and deflation (hyperflation) which disrupts the business, including banks where the profitability is heavily depending on currency significance. Furthermore, investor deposit its money in the form of current, term and saving accounts to the banks. But the increase in inflation rate depresses the savings, and it reduces aggregate savings. This cut in savings has strong impact on banks profitability. On the other side, banks encounter to raise savings by increasing the interest rate on saving deposits. Therefore, if the inflation rate is high, banks face hurdle in order to make profit on deposits.

In contrast, Interest rate has also an important role for any business to make profit while it influences directly bank's capital. Banks attract the capital by offering high interest rate to the current, savings and term deposit account. So, when interest rate increases, savings are more attractive while investments are less and banks pay more on saving accounts. Hamel (2009) argued that, most of the banks have shown a considerable amount of time, shaping up the interest rate on loans and accounts that results a balance and maximized profit. But focusing on high interest rates, it discourages borrowings which results high monthly

payments incurred towards depositors while the default on loan increases which directly affect bank's profitability. Thus, higher the interest rate, the higher bank's profitability through increase in capital and lesser borrowings.

Similarly, exchange rate as a determinant of Islamic bank's profitability is also a contributing factor, but it has considerably less significant impact in contrast with the conventional banking system. Since the currency market determines the exchange rate, so there are some transactions that happen in the conventional market share against the Islamic laws (including swaps, futures, options and forward contracts). Consequently, Islamic banks profit doesn't affect directly by the exchange rate but the variation in the prices of goods may have an impact on it.

Empirical Studies

Bashir (1999) examined the profitability and risk measures of Sudanese Islamic banks by using the data of two Sudanese banks. A Study performed unit root test and linear regression model. The results of the study suggest that bank size and profitability has a significant relationship while bank size and equity to capital ratio found negative association. It can be concluded that Islamic banks can grow their profitability by increasing their bank size.

Hassan and Bashir (2001) investigated the financial environment affect and profitability of Islamic banks by using panel data. Four macroeconomic variables, reserve to deposit ratio, bank to GDP ratio, tax ratio were considered while the Hausman specification test has been used. Results show that the profitability does not have a strong relationship with reserve requirement and it may increase if economic environment is in favor. On the other side, if the GDP growth rate is high, then Islamic banks can perform well. It is recommended that banks should analyze the financial and economic environment for better performance.

Isa and Ahmad (2003) examined the causal relationship between conventional and Islamic banks in Malaysia by using monthly data from Jan -1994 to Dec-2002. They have performed unit root and co-integration test. The results of the study suggested that Conventional bank term deposits cause term deposits of Islamic banks in all categories. The study concludes that consideration over interest rate is an important factor for Islamic banks before they adjust their return on deposits.

Maudos, and Guevara (2004) find out the determinants of the interest margin in the European Union banking sector by using a panel data of Spain, Italy, France Germany and United Kingdom over the sample period of 1993 to 2000. They have applied the Hausman test of the methodology on sample data. The results of the study show that the decrease in the bank's interest margin in the European banking

sector leads to reduce in the credit risk, interest rate risk and operating cost.

Haron and Ahmed (2005) empirically investigated the interest rate effect and the rate of profit in Islamic Banks by using Pearson's correlation and Vector auto regressive model. Monthly and quarterly time series data have been used while deposit amount, expected rate of profit, interest rate for fixed deposits, saving deposits, expected rate of profit, rate of interest in conventional banks were used. Results show that the depositors are more concern for return on their investment while negative relation were found between interest based banking and P/L sharing banking system. It is suggested that every individual has a different mindset while depositing their money in Islamic banks.

Kasriand Kassim (2009) investigated the factors affecting savings of Islamic banks in Indonesia by using Vector auto regressive model over the period of 2000 to 2007. They have considered the real rate of return on Islamic deposits, interest rate of conventional deposit, real income and number of Islamic Bank branches. Results show that the rate of profit has a strong positive relationship with Islamic bank deposit while the conventional bank interest rate showed strong negative impact. In addition, return to saving has shown to be the most significant factor to save in the Islamic Banks. But two other factors that are a number of Islamic Bank branches and real income were found to be insignificant in affecting the level of Islamic bank deposit in the long run.

Huapea&Kasri (2010) determined the Bank profit margin by comparing Islamic and conventional banks over the period of 1996 to 2006. They have included 5 banks and applied ARDL model. Evidence presented in their study suggests that there exists a long run association between bank margin and its determinants of Islamic banks. On the other side, interest rate volatility has negative impact on the Islamic bank's margin while conventional banks responded positive relationship.

Ali et.al (2011) empirically investigated the relationship between macroeconomic indicators and bank specific variables of profitability in Pakistan. The study sample consist over the period of 2006 to 2009 while correlation and regression analysis have been performed. Findings suggest that good economic environment and efficient management in the assets side provide significant impact on profitability while lower profitability found in high credit risk and capitalization. It can be concluded that higher the operating efficiency, higher will be the profitability.

Cevik and Charap (2011) examined the Islamic and conventional banks deposit

return in Turkey and Malaysia by using monthly data from Jan -1997 to Aug-2010. Unit root, co-integration, Granger causality test and Vector error correction model have been applied. The findings of the study suggest that there exists a long run relationship between PLS return rates and conventional bank deposit rate. In addition, the conventional bank deposit rate causes the return on PLS accounts.

Adebola et.al (2011) investigated the relationship between Islamic bank financing and macroeconomic variables in Malaysia over the sample period of 2006 to 2011. Their estimations are based on ARDL model and Granger causality test. Evidence of the study suggests that Islamic bank financing is significantly affected by interest rate in Malaysia while a long run relationship has been found among the variables. It is recommended that Malaysian Islamic banks must provide some products that are based on profit and loss sharing to be more profitable.

Abduh et.al (2011) draws our attention towards macroeconomic variables and crisis management on Islamic bank deposits in Malaysia by using time series monthly data over the sample period of 2000 to 2010. They have used interest rate, total deposits, GDP, Inflation, financial crisis and profit rate fluctuation as study variables and Vector error correction model along with co-integration test has been performed. Findings show that GDP, interest rate and change in profit rate has no impact on Islamic banks. On the other side, inflation showed a negative relationship with Islamic bank deposit while the financial crisis is positively associated with the Islamic bank deposit.

Idris et.al (2011) investigated the profitability of Islamic banks in Malaysia considering internal factors like liquidity, bank size credit risk, capital adequacy and expenses. They have applied the Hausman test and pooled regression model. The data are collected from foreign and local Islamic banks that are operating in Malaysia over the period of 2007 - 2009. The results of the study suggest that only bank size is a significant and a positive determinant of Islamic bank's profitability.

Masood & Ashraf (2012) empirically investigated the impact of macroeconomic and bank specific variables on Islamic bank's profitability. They have used panel data of 12 countries on 25 Islamic banks over the sample period of 2006 to 2010. The study considered banks internal factors are asset quality, asset size, liquidity, deposits, and operating efficiency gearing ratios. In addition, macroeconomic variables are real GDP growth rate and annual inflation. The panel data regression model is used for data analysis. The results of the study show that efficient management and larger asset size allow banks to generate greater return on their assets. It is also found that efficient management in operating expenses has significant & a positive impact on Islamic banks profitability.

Grassa (2012) investigation tell us the relationship between risk and income structure of Islamic banks from GCC countries by using the data of 42 Islamic banks. Study sample consist over the period of 2002-2008 and multiple regression analysis is used. Results suggest that listed and non-listed Islamic banks are associated with higher insolvency risk and greater risk on profit with profit-loss sharing products. On the other side, no relationship found between risk level and operating income of non-profit loss sharing product. It can be concluded that banks prefer to invest in non-profit loss sharing products, in contrast with profit and loss sharing products.

Ahokpossi (2013) investigated the determinant of bank's interest margin in Sub-Saharan African countries. They have used un-balanced panel data of 41 SSA countries with 456 banks over the period of 1995 to 2008 and applied random effect model. Findings suggest that banks specific factors (bank equity, liquidity risk and credit risk) are the main determinants of interest margin while interest margin and inflation are sensitive to each other.

Wasiuzzaman & Gunasegavan (2013) highlighted the comparative performance of conventional and Islamic banks in Malaysia by using panel data on 14 Islamic and non-Islamic banks over the time period of 2005 to 2009. They have used multiple regression analysis and independent sample t-test. Findings suggest that the return on bank size, average assets and board size of non-Islamic banks are greater as compared to Islamic banks. In addition, Islamic and non-Islamic banks differences were found to be significant except board independence and profitability.

Methodology

Time series data of the selected sample period are used to investigate the Islamic bank's profitability in Pakistan. Seven years of quarterly time series data are selected over the period of 2006 to 2012 for the purpose of analysis. Islamic bank profitability data are obtained from quarterly reports of an Islamic banking bulletin published by State bank of Pakistan. Data related to macro-economic variables (exchange rate, inflation and interest rate) are obtained from Economic Survey of Pakistan.

Since the data are based on time series, unit root test (ADF & PP methodology), co-integration (Johansen and Juselius methodology), OLS methodology and Granger causality test have been performed. Moreover, Augmented Dickey Fuller unit root test is used to check the stationarity of the data and co-integration is applied to find out the long run or short relationship. In addition, the OLS regression model is used to check the impact of the

independent variable on the dependent variable while the Granger causality test is then used to check the causal direction of the variables. Finally a stability analysis is performed by using CUSUM and CUSUM square.

Model Specification

After the study of some empirical and theoretical work, the model to examine the Islamic bank's profitability is as follows:

$$IBP = f(IR, EXR, INF) \tag{6.1}$$

The mathematical model for Islamic bank profitability is as follows;

$$IBP_t = b_0 + b_1 IR_t + b_2 EXR_t + b_3 INF_t + e_t \tag{6.2}$$

Where *IBP* is the Islamic banks' profitability, *IR* is the interest rate, *EXR* is the exchange rate and *INF* is the inflation rate. e_t is defined as the error term with the time.

Estimations and Results

Time series data some time show the time trend which causes overestimations in the results called spurious estimations. This time trend problem can be understood by graphically from Fig-2 and Fig-3.

From the Fig-2, it shows that there is an increasing trend exists in EXR, but a mixed trend can be seen in IR, INF and P. So this time trend can be removed by taking the first difference of the given series and then further this series will be tested graphically whether this data is converted into stationary or not.

Stationarity Analysis

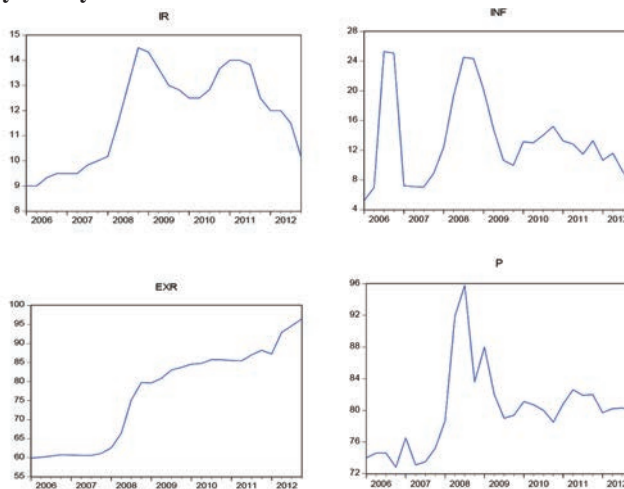


Fig. 2

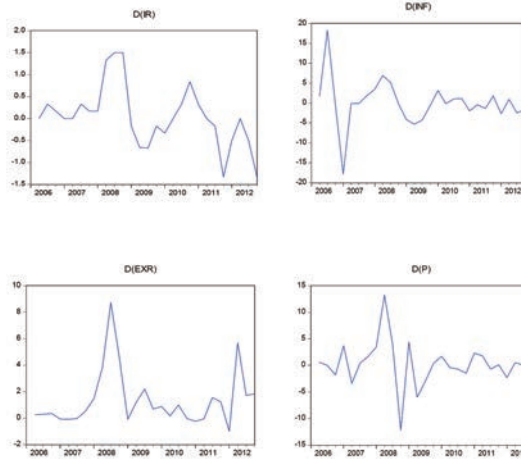


Fig.3

From the Fig-3 it is clear that all the data series, i.e. P, EXR, INF and IR has converted into stationary and the problem of time trend in the data is removed.

Unit root test

As long as the preliminary analysis, a conventional unit root is used to check the data integrating property. Since the data series contain likely structural breaks, the test for stationarity of the data, i.e. unit root test is performed by Augmented Dickey Fuller (ADF) test statistic as well as Phillips-Perron (PP) methodology. Both ADF and PP test were performed. The chances of non stationarity arise from the different source of structural unsteadiness and also from some external shocks over the period in which the country is examined

The unit root test is applied at both levels, i.e. at I(0) and I(1) which are used in comprehensive and basic model. The test is applied with two different models, i.e. with constant along with the assumption that variables do not have a trend in the level and the series difference persist zero meanwhile the second model i.e. with constant & linear trend is used. Thus the test of Unit root is reported in Table 4.1.

Table: 4.1: Stationarity Test Results:

Variables	ADF test				PP test			
	I(0)		I(1)		I(0)		I(1)	
	C	C&T	C	C&T	C	C&T	C	C&T
P	-2.326	-2.246	-5.218	-5.158	-2.326	-2.246	-5.232	-5.185
EXR	-0.078	-2.250	-3.321	-3.253	-0.258	-1.871	-3.341	-3.275
INF	2.906	-2.644	-4.627	-4.442	3.087	-3.103	-4.650	-5.017
IR	0.133	-2.847	-4.987	-5.008	3.173	-3.040	-6.571	-7.882

Note: The critical values for ADF and PP tests with constant (C) and with constant and trend (C&T) at 1%, 5% and 10% level of significance are -3.711, -2.981, -2.629 and -4.394, -3.612, -3.243 respectively.

Source: Authors' estimation.

From the Table 4.1, it is clear that, the null-hypothesis of a unit root (whether or not the trend is included) are accepted at level for each variable and the null hypothesis of unit root test (whether or not the trend is included) is rejected at first differencing for each variable. So on the basis of test results, it is concluded that all the variables are stationary at first difference i.e. I(1). It is therefore suggested that the given series combination may exhibit a long run association and we further can proceed with co-integration test.

Co-integration test

It is more important that when model have more than two variables, then there may be more than one co-integrating vector exists. The methodology was generated by Johansen (1988, 1991) which is further extended by Johansen & Juselius (1990) and considered this approach as superior to Engle-Granger method. The two test statistics were developed by Johansen & Juselius (1990) for test of co-integration commonly known as maximum eigenvalue test and trace test. These test values are then reported along with their corresponding critical values in Table 4.2.

Table 4.2: Cointegration test results

Null Hypothesis is No. of CS(s)	Trace Statistics	5% critical values	Prob	Max. Eigen Value Statistics	5% critical values	Prob
None	57.156	47.856	0.005	33.345	27.584	0.008
At most 1	23.810	29.797	0.208	19.949	21.131	0.072
At most 2	3.861	15.494	0.914	3.655	14.264	0.893

Source: Authors' estimations.

The null hypothesis of the co-integration test show that the trace statistics is greater than 5 percent critical value. Hence the result of both test statistics confirms that there is a stable, long run equilibrium relationship exists between the Islamic bank profitability and its determinants such as EXR, INF and IR.

Ordinary least square test

Table 4.3: Long Term Determinants of Islamic Banks Profitability

Variables	Coefficient	t-stats	Prob.	VIF
C	4.0942	63.4207	0.000	-
EXR	0.0005	0.4776	0.637	2.343
INF	0.0033	1.8309	0.079	1.340
IR	0.0169	2.0722	0.049	2.633
R²	0.50			
D.W stats	1.25			
F-stats (prob)	8.1434 (0.000)			

Note: at 10% level of significance

Source: Author's estimations

From the Table 4.3, results show that the inflation has a positive and significant impact on profits made by Islamic banks in Pakistan. These results are consistent with past studies Haffernan& Fu (2008), Bashir (2000), Guru et.al (2002), Athanasoglouet.al (2005) and Vong& Hoi (2009). This relationship suggests that Islamic bank's income increases more than its cost with the inflation rate.

The interest rate has a positive and significant impact on Islamic banks profit. This positive relationship is consistent with Hasan & Bashir (2003), Bourke (1989) and Molyneux& Thornton (1992). It is pointing to the fact that interest is used as a benchmarking in fixing their fees to their depositors of using the funds. This fact is also supported by Homoud (1994) which further revealed that the interest rate offered by conventional banks is equal to profit sharing ratio in Islamic banks. Therefore, Islamic banks increase their profit by increasing their charges (mark-up) to their investor.

The exchange rate on the other side has positive and statistically insignificant impact on Islamic banks profit. This result is consistent with Chortareas et al (2010) which implies that exchange rate increase profit. The reason is obvious in our case that Islamic banks focus primarily issues regarding foreign exchange currencies and has limited version of the exchange rate in their system. It includes Riba (Usury), uncertainty (Gharar) and speculation (Qimar). Therefore, the exchange rate has lesser impact on Islamic banks profit, but they deal with some Islamic foreign exchange instruments for remittances and some other currency transactions.

Causality Analysis

Granger (1969) causality test is used to analyze the direction of causality among the independent and dependent variables. This causality test has been performed on two lags as per Akaike information criterion and test for Granger causality is reported in Table 4.4.

Table 4.4: Results of Granger Causality Test

Dependent Variables	P	EXR	INF	IR
P		0.700 (0.695)	45.188 (0.004)	1.782 (0.344)
EXR	1.161 (0.500)		1.038 (0.544)	1.344 (0.444)
INF	3.155 (0.187)	13.994 (0.026)		6.626 (0.073)
IR	0.265 (0.940)	0.527 (0.791)	2.101 (0.292)	

Note: as per Akaike Information Criteria (AIC), Lag length in each case is two F-statistics Critical values can be found in Gujarati (1995), p. 814.

Source: Author's estimations

Results from table 4.4 suggest that there is uni-directional causality has been found running from inflation to profitability of Islamic banks. In addition, exchange rate exerting uni-directional causality running from the exchange rate to the interest rate and the interest rate also showed uni-directional causality running from interest rates to the inflation rate. There is no bi-directional causality is reported on the model.

Stability Analysis

The consistency and the stability in a relationship is necessary for the effectiveness of Islamic banks and macro-economic factors. Therefore CUSUM and CUSUM of the square of recursive residual (Brown et.al, 1975) is applied to test the consistency of the estimates of our model.

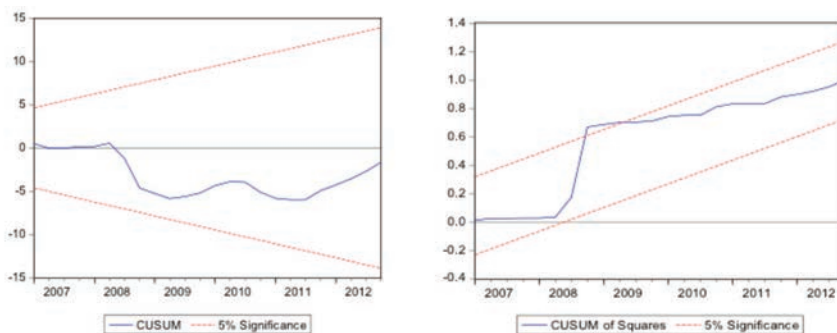


Fig. 4

Fig-4 shows the test of stability by using the CUSUM test. Results indicate

that the estimation is within the two standard deviations, but CUSUM of square test reflects that there is a slight fluctuation in 2008 quarter but there after it shows the stability over the sample period. The possible reason is that, banking sector in Pakistan faced global financial crisis in 2008. This fact is further confirmed by chow-break point test in our sample. The test results rejected the null hypothesis of beta is not inconsistent in favor of beta is inconsistent for 2008 period.

Conclusion

This study has a focus to examine the Islamic bank's profitability with key macroeconomic variables. The sample data was collected from Islamic banking bulletin published by State bank of Pakistan and World Bank database for macroeconomic variables while time series data is used from 2006 to 2012 on quarterly frequency. The unit root test is applied for data stationary and Johansen co-integration methodology is employed for the long run and short run association ship. OLS method was used to test the long run determinants and Granger causality test suggested the cause and effect or in other words direction among the variables.

On the basis of empirical findings, we found that inflation has a positive and significant impact on Islamic bank's profitability. This positive relation reported that Islamic banks in Pakistan are managing their "cost well under the increase in inflation" increment and obtaining higher profitability.

The impact of interest rate on Islamic bank's profitability in our findings is statistically significant and exerting positive impact on profitability. This fact implies that Islamic banks use interest rate as a benchmark. On the other side, Islamic banks do not offer cash in terms of the loan so the increase in interest rate allow Islamic banks to raise their profit by increasing their bank charges on customer investment.

The contribution of the exchange rate in our study is positive and insignificant on Islamic bank's profitability. An increase in the exchange rate depreciates the local currency and this change in exchange rate usually impact negatively towards banking sector. But we have taken Islamic financial environment where they deal with foreign exchange under sharia laws. Furthermore, Islamic banks have very small portions of foreign exchange trade along with risk free transactions while sharia scholars are engaged to develop a model for the arrangement of foreign exchange transactions.

Policy recommendations

It is suggested that State bank of Pakistan should form a friendly policy for interest rate with the investors and develop a separate interest rate plan for Islamic banks. In addition, Sharia scholars of Islamic banks should plan and suggest State bank of Pakistan for Islamic exchange rate policy so that Islamic financial institutions can trade in foreign exchange products.

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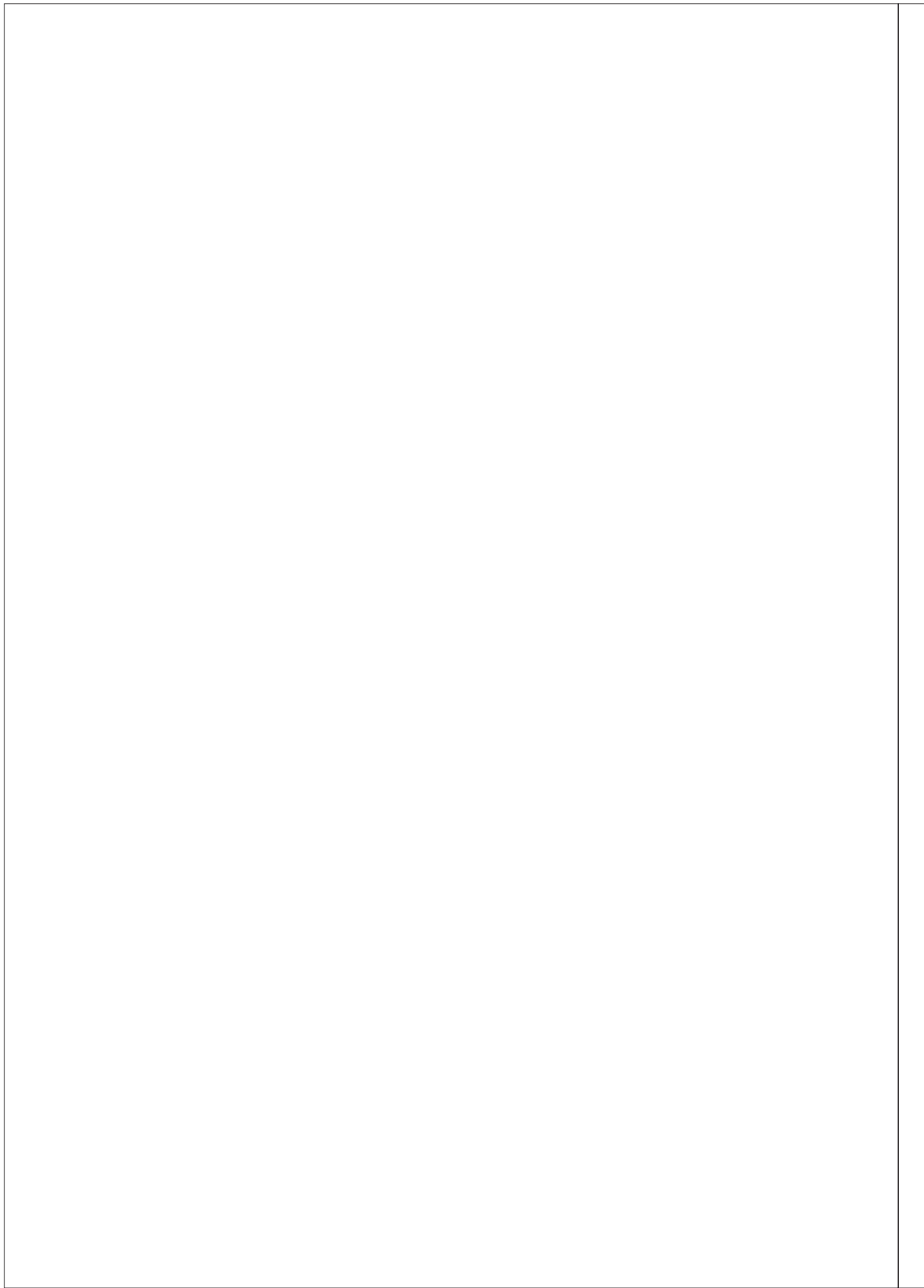
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Synergic Relationship between Total Quality Management and Marketing Management in Creating Customer's Value

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and Abdus Salam*****

The primary purpose of this study is to understand how customer value is affected by total quality management practices and marketing management policies of an organization. Total quality management is a complete managerial approach that if practiced provides ground for the identification of marketing strategies and processes. This management philosophy leads organizations towards gaining of competitive advantage through the proper enforcement of strategically fit and aligned strategies. However, customer relationship management plays key role in synergic effect of total quality management practices and marketing management on customer's value. This research study is primarily quantitative in nature. Data has been collected from different national and multinational companies of manufacturing sector in Pakistan and the sample size in total is that of 114. The data collection instrument was developed on the basis of literature and was found to be statistically reliable where Cronbach's alpha for all concepts under study was at least 0.800. In order address the objectives of this study and test the hypothesis of relationships between variables, Pearson correlation test was applied on the data set. As a result of analysis, strongly positive correlation was found between total quality management, marketing management, customer relationship management and customer's value. Hence, it would be fair enough to conclude total quality management practices provides basic ground to identify marketing management Policies, strategies and practices.

Key Words: Total Quality Management, Marketing Management, Customer Value, Quantitative, Customer Satisfaction, Marketing

Introduction

In this research study, synergic effect of total quality management (TQM) practices and marketing management (MM) on customer value (CV) has been

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discussed. Moreover, the role of customer relationship management (CRM) system has also been i.e. how does it support total quality management and marketing management in creating customer's value. For the purpose of the study, customer's value has been analyzed in four dimensions i.e. best quality products, competitive price, timely delivery, and after sale services. This research aims to build knowledge and provide practical applications on synergic relationship of total quality management and marketing management in creating customer's value.

Any organizations main and primary focus is satisfaction of its customers and this idea is a key component in determining organizational performance as well. Primarily organizations need to define customer's needs and expectations. These needs and expectation can be defined by market research and customer feedbacks. For market research and customer feedback company must possess and practices an effective customer relationship management system (CRM). This CRM can only be implemented properly through customer services department. So in order to achieve customers value organization must focus on customer relationship management. This research effort also analyzes the moderating effect of customer relationship management in creating customer value. Once organizations identify customers need and expectations, the next step is to identify resources for specifications and features which fulfill customer's needs and expectations and this is where all departments' integrated effort is required.

The word Quality may sum up the requirements of any customer in any sector of the industry and it's the idea of Total Quality Management that can assist organizations in material planning, production planning, quality control, quality assurance and the related, whereas marketing management techniques may help organizations to identify competitive price according to product's features and quality. Total Quality Management is basically a complete managerial philosophy (Zubair, 2013)

Synergic relationship of total quality management practices and marketing management strategies product best quality product which fulfill customers' needs and expectations at competitive price with timely delivery. The story must not end once a sale is completed, post-sale service and customer relationship is key to surviving and competing organizations in this dynamic environment. For this purpose organizations design customer relationship management for providing after sale services that helps in collecting feedback from customers and data of warranty claims and importantly customer relationship management also helps in customer retention.

Research Objectives

The basic idea of this study is to identify the relationship between Total Quality Management and Marketing Management and how do they create customer value through the moderating element of customer relationship management. This paper discusses the contribution of total quality management practices in defining marketing strategies. Precisely the objectives of this study include:

- To analyze the role of Total Quality Management practices in development of Marketing Policies and Strategies
- To study synergic relationship between Total Quality Management and Marketing in Creating Value to the Customers.
- To highlight integrated impact of Marketing and Total Quality Management practices for achieving total Customer Satisfaction through Customer Relationship Management

Significance of Research

Review of the literature shows that marketing and total quality management' synergic relationship has been studied and highlighted in the past and a few propositions have been developed and presented. This study uses some of the ideas and propositions presented in the past and tests them using the hypothesis approach taking data from the manufacturing industry in Pakistan. Moreover, it is relevant to mention that no such study has been conducted in the business environment of Pakistan.

Marketing and TQM are synergistic and complementary for efficient management of value creation and value delivery process. Role of customer relationship management is very significant in this relationship. If marketing strategies and policies are not based on total quality management practices then it will directly affect organizational performance negatively. Hence company will poorly create and deliver value to customer. Results of this study not only empirically highlight the relationship between the major concepts under study, but also gives a snapshot of practices of Pakistan's manufacturing sector in particular.

Literature Review

This section of the study discusses different researches that have been conducted on the subject being explored. These studies not just help in further understanding several terms but also guide on development of dimensions, indicators and then the hypothesis.

Defining Customer Value

Customers want best quality product at competitive price with timely delivery and after sales services. If company's product does not fulfill customer's need or

expectations he or she will remain unsatisfied. So company must focus on market research through customer services in order to identify customer's perception regarding their products.

Customer's feedback also results in innovation or changes in product features or specifications. Next requirement after quality is usually the price. Companies should consider providing best quality product on competitive price to attract large number of customers. Main theme of this win-win strategy is to provide best competitive price which is acceptable for both company and the customer (Christopher et al., 2002). The next thing that customers look for after quality and price is the timely delivery of product and service. The practice of focusing only on sale volume has now become outdated and it is not possible to build strong customer relationships without providing after sale services (Zeithaml 1988).

Several businesses have developed their customer services centers and hot lines to provide after sale services (Piercy, 1997). Customer is only convinced when the person gets some guarantee or after sales services for product against which some amount is paid. Due to after sale services, companies also get a chance to satisfy the customer and build strong customer relationships (Prahalad, C.K, 2004).

Customer value is the source of obtaining competitive advantage (Woodruff, 1997; Prahalad and Ramaswamy, 2004). In today's customer oriented era, main concern of both manufacturing and service organizations is on customer value (Gupta et al, 2005).

Ideas like "value creation" and "value delivery" have become known (Slater and Narver 1994; Webster, 1994; Piercy, 1997). Customer value is the core focus of both quality and marketing. Customer evaluates utility of the product on what is given and what was promised (Zeithaml 1988). To gain competitive edge, company must focus and consider customer value (Webster; 1994).

Similarly relationship value is precedent for relationship quality and relationship marketing (Ulaga, 2006). Webster (1992) defines value creation and delivery process as "define value, develop value, deliver value and then communicate value to the customer". According to Christopher et al. (2002) relationship value is defined as chain of determination of value, value creation, delivery of value to customer and then assessment of value by the organization at various phases where required.

Role of Total Quality Management in Creating Customers Value

Now-a-days managements consider quality as their most competitive priority and prerequisite for growth and sustenance. Main objective of today's firm is quality

improvement (Corbett et al., 1998). Quality shifts from “products with zero defects” to “value generation by a continuously improving system in every respect” in order to satisfy explicit and implicit expectations of all stake holders including customers (Curry, 2002). To provide best value to customer every individual of firm must pay attention be committed as whole towards customer satisfaction (Mele, 2006).

According to Sluti (1992), relationship between quality and production is more significant than direct relationship between quality and business financial performance. Hence quality practices have mixed results towards organizational performance. As per research, strong relationship is found between organizational performance and quality measures (employee satisfaction, customer satisfaction and employee service quality). Quality has positive effects on operational performance and due to high operational performance; business performance is also improved (Maani et al., 1994). Quality management practices are directly linked with quality performances. So success in different quality dimensions are associated with proper implementation of different quality management practices.

Structured implementation of quality management systems ensures competitiveness. Total quality management not only focuses on customer satisfaction but also provide flattened organizational structure. Generally various supervision levels reduce effective communication and agility. Thus total quality management also helps to provide flattened organizational structure to hierarchical organizations. Due to this effective communication various departments can quickly react to the need of customers and market (Li et al., 2008).

Moving on, organizational or business performance can be measured by three levels within organization i.e. business performance, financial performance and organizational effectiveness (Samson 1999). These levels further can be measured through return on equities, return on assets and operating income.

Major driver of enhancing business performance is quality management. Most of the studies provide evidence that quality and its aspects have always considered as an important competitive strength (Corbett, 1994; Kim, 1995). Quality dimensions as customer satisfaction, employee satisfaction, and employee service quality are critical in improving organizational performance (Madhu et al., 1996).

According to US GOA (Govt. Accounting Office Study, 1991), TQM (such as empowerment, employee training, customer focus, leadership, application of systematic fact-finding and decision making process) and organizational performance (such as quality, customer’s satisfaction, productivity, profitability and employees relations) have very strong relationship.

Furthermore, significant differences are found in relationship between TQM and organizational performance when found with or without covariates. Industry size and type, defect rates, innovation and warranty costs directly effect relationship between them (Samson and Terziovski, 1999). If TQM is properly implemented then it positively affects customer satisfaction which enhances financial performance. However manufacturing firms are leading in effective deployment of TQM from service organizations, like in operational and cultural aspects (Yasin et al. 2004). According to Huq (2005) service organizations find shortcuts for success by identifying those aspects of TQM that apply to service organizations only. They do not invest money and time on fully fledged TQM.

Role of Marketing Management in Creating Value for Customer

Marketing now has shifted from traditional 4p's to focus on interactions, relationships and networks (Gummesson, 2002). Thus focus has moved on value and customer which was previously limited to firms and products. Customers and suppliers are considered as co-producers of products, services, value and experiences. Win-win strategy concludes as stakeholders including customers achieved satisfaction (Piercy, 1997).

To measure the performance according to marketing perspective marketing inputs have been studied by Neely (2002). Marketing and TQM are reflected as complementary business approaches for the enhancement of business (Lai and Weerakoon, 1998), when these two methods applied collectively in organization bring improved performance than applied separately (Kee-hung Lai; 2003). Marketing enhances the effectiveness and efficiency of the organization, it has the ability to make and retain the customer and the attainment of concentrated output from the minimum effort. Marketing acts to confirm “doing the right things” and TQM helps marketing to achieve continuous improvement for “doing right things” (Kee-hung Lai, T.C. Edwin Cheng; 2003).

Marketing links the external environment with the related functional areas within the organization (Gummesson; 1991). For effective marketing implementation the relationship between the organizational function, customers and organizational network should not be ignored (Webster, 1992).

The marketing orientation of a firm affects positively its organizational performance, when market orientation is high, it enhances the organizational performance. Marketing should work with other functions within the organization to achieve the business excellence and customer satisfaction, and assure (Kee-hung Lai, T.C. Edwin Cheng; 2003). Few researchers have suggested that nowadays market oriented culture leads to the superior business performance,

some researchers reinforced that market orientation culture increase the firms innovativeness and new product success, and these both together enhance the organizational performance (Neely, 2002).

Synergic Relation of Total Quality Management with Marketing

Many techniques and practices of total quality management have been introduced in service sector or in customer services department of manufacturing firms (Nilsson et al.; 2001). Customer Satisfaction is the common core value which synthesis marketing, customer services and quality (Bathie and Sarkar; 2002). Several managers think that quality management practices are based on marketing strategies. Management synthesis quality, marketing and customer services to create value and total customer satisfaction. Relationship marketing, market orientation and other conceptual developments in marketing are also due to contribution of total quality management in marketing (Kee-hung Lai, T.C. Edwin Cheng; 2003).

Techniques and tools of total quality management enhance efficiency in marketing techniques implementation, this less practical under the traditional marketing (Johnson and Chvala, 1996). Quality management practices and marketing strategies both are designed in order to deliver value and total satisfaction to the customers (Webster, 1992).

Customer is company's most essential stake holder and without satisfying him or her organization cannot survive. Customer's feedback also results in innovation or changes in product features or specifications (Kotler, 1999). Marketing is concern with exchange relationship between customers and organization through relationship marketing strategies. Customer services and quality are essential linkages in this relationship.

Today's challenge is to bring these three critical areas into closer alignment to create and deliver best value to the customer. In the past these three functions have been treated as separate and unrelated. As a result, marketing management has had a hard time to implement marketing strategies. Relationship marketing is actually the integration of marketing strategies with customer services and quality practices (Gummesson, 2002). So these concepts are well related and reap optimal results when integrated and aligned keeping in view the ultimate aim of the organization.

Conceptual Framework and Research Methodology

Conceptual Frame work for this research has been developed on the basis of literature review. Conceptual framework is designed in order to clearly depict

variables understudy and to explain the relationship among them and identify proposed hypothesis. Table 1 explains the categorization of variables, Table 2 discusses the development of dimensions and indicators of the key variables and concepts, whereas figure 1 shows the logical relationship between these variables.

Table 1: Variable Details

Sr. No.	Variables	Type of Variable
1	Total Quality Management	Independent
2	Marketing Management	Independent
3	Customer Relationship Management	Intervening
4	Customers' Value	Dependent

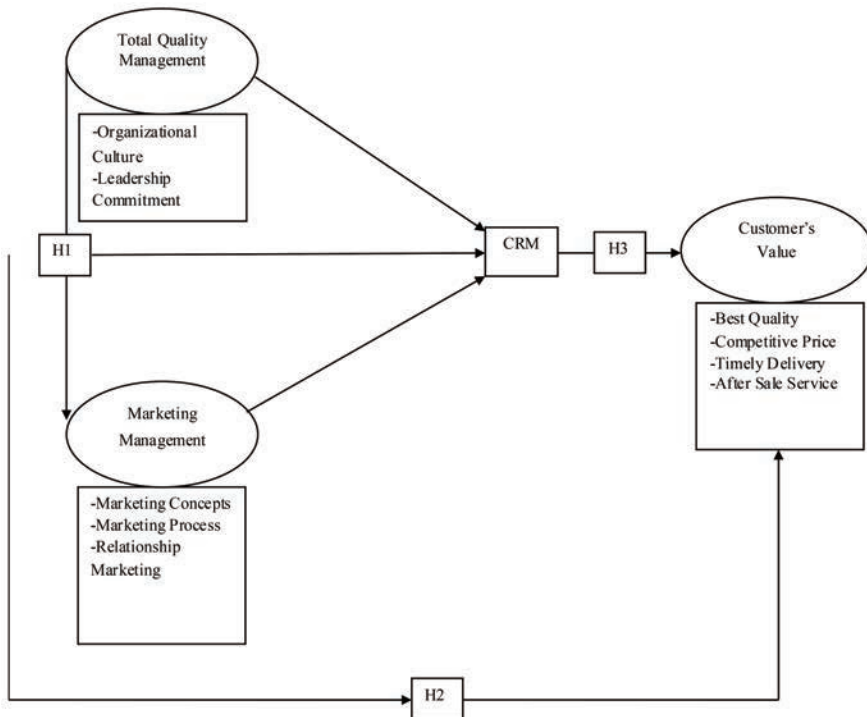
Table 2: Variables, Dimensions and Indicators

Sr. No.	Variables	Dimensions	Indicators
1	Total Quality Management	<ul style="list-style-type: none"> • Organizational Culture • Leadership Commitment 	<ul style="list-style-type: none"> • Customer Orientation • Continuous Improvement • Team Work • Management By Process
2	Marketing Management	<ul style="list-style-type: none"> • Marketing Concepts • Marketing Process • Relationship Marketing 	<ul style="list-style-type: none"> • Market Research • Segmentation • Marketing Targets and Strategies • Marketing Mix • Relationship with all stakeholders
3	Customer Relationship Management	<ul style="list-style-type: none"> • CRM 	<ul style="list-style-type: none"> • Customers Feedback • Customer Relations • Customers Support
4	Customers' Value	<ul style="list-style-type: none"> • Value Creation • Value Delivery • Value Communication • Competitive Advantage 	<ul style="list-style-type: none"> • Best Quality Product • Competitive Price • Timely Delivery • Product Knowledge • After Sales Services

Conceptual Framework

In order to test the hypothesis and meet the objectives of the study, following framework has been developed using the current literature:

Figure 1: Conceptual Framework
Idea Influences by Mele, C. (2007).



As per this framework, Customers' value will be affected the way total quality management practices are implemented. Similarly it will also change due to change in marketing management strategies. Dependent variable i.e. customer's value also changes with the change in combined effect of marketing management and total quality management. In this study, customer services is intervening variable which has significant effect and linkage between independent variables and dependent variable.

Variables or concepts are subjective in nature so hard to measure directly. Therefore, dimensions are derived from variables which further help in identification of objective indicators that lead to development of the data collection instrument.

Further in this diagrammatic demonstration of the framework, research hypotheses of this research have been shown, the next section now discusses these research hypotheses:

Research Hypotheses

H_{1A}: Total Quality Management provides ground for identification of Marketing Process and Strategies.

H_{0A}: Total Quality Management does not provide ground for identification of Marketing Process and Strategies.

H_{1B}: Total Quality Management and Marketing Management help in creating Customer's Value.

H_{0B}: Total Quality Management and Marketing Management do not help in creating Customer's Value.

H_{1C}: Total Quality Management and Marketing are complementary in creating Customer's Value through Customer Relationship Management

H_{0C}: Total Quality Management and Marketing are not complementary in creating Customer's Value through Customer Relationship Management

Research Methodology

This research study is quantitative in nature. Quantitative research requires measurable or numerical data for statistical analysis (C.R. Kothari, 2004). In order to test the hypotheses, a quantitative approach is more suitable as compared to qualitative.

Sampling and Sample Size

For the purpose of this study companies have been randomly selected from the manufacturing sector in Pakistan, whereas from within those companies, employees were conveniently selected for the purpose of data collection. A total of 148 questionnaires were distributed among respondents, whereas 114 responses were collected resulting in a response rate of approximately 77%.

Data Collection Instrument and Data Analysis Techniques

As mentioned earlier, on the basis of existing literature a questionnaire (on likert scale) consisting of four key parts had been developed. The questionnaire has been attached as appendix to this paper. In order to analyze data collected through this instrument, reliability and correlation tests were applied using the Statistical Package for Social Sciences (SPSS).

Data Analysis

Statistical analysis in this study is based on two parts; firstly, the reliability of the questionnaire has been checked for each of the concepts under analysis, followed by the main Pearson correlation test for testing of hypotheses.

Reliability Tests

Testing the reliability of the instrument is the foremost step in conducting analysis of any level. For the purpose of this study, Cronbach's alpha has been used as a reference for checking the reliability of items in the questionnaire. Table No. 3 shows the reliability statistics for all the constructs:

Table No. 3 Reliability Statistics

Variable	No. of Items	Cronbach's Alpha
TQM	8	0.856
MM	9	0.873
CRM	5	0.823
CV	7	0.857

As the aforementioned table shows, cronbach's alpha value for all variables is above 0.700, it can be concluded that the tool developed for this question is reliable, the data collected is appropriate for analysis, hence the researchers can proceed for further analysis.

Hypotheses Testing using Correlation Analysis

For the main purpose of this study i.e. to address the objectives, Pearson's Correlation test has been applied and the hypotheses have been tested against the standard criteria of P-value and Level of Significance (Alpha). Total scores for all the variables were calculated using transformation command of SPSS before executing correlation tests. As a last step prior to running the correlation test, another data checking or cleansing technique was used i.e. Box-Whiskers Plots were plotted to detect any outliers in the dataset as an outlier can cause type I and type II error (C.R. Kothari, 2004) and the researcher may reject null hypothesis when it is true or accept null hypothesis when it is false. It was found that no outliers were detected in the data and finally the main test for analyzing hypotheses was executed. Following the Box plot, hypotheses have been mentioned and analyzed:

Figure 2: Box Plot Diagram for TQM Responses

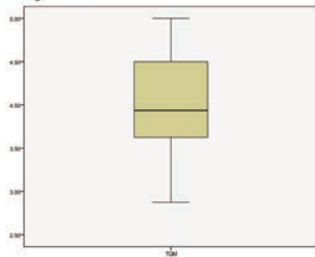


Figure 3: Box Plot Diagram for MM

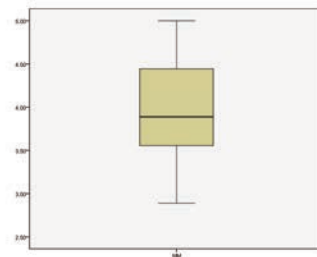


Figure 4: Box Plot Diagram for CRM Responses

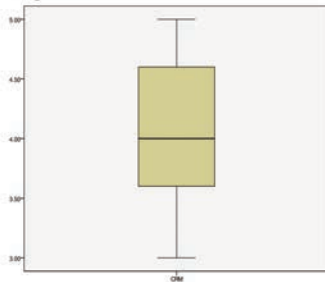
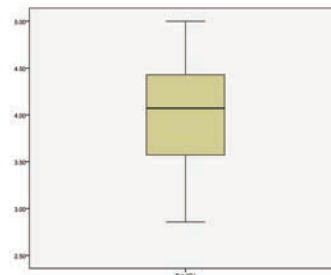


Figure 5: Box Plot Diagram for CV



Hypotheses A

H_{1A}: Total Quality Management provides ground for identification of Marketing Process and Strategies.

H_{0A}: Total Quality Management does not provide ground for identification of Marketing Process and Strategies.

Table 4: Pearson Correlation (TQM and MM)

		TQM	MM
TQM	Pearson Correlation	1	.745**
	Sig. (2-tailed)		.000
	N	114	114
MM	Pearson Correlation	.745**	1
	Sig. (2-tailed)	.000	
	N	114	114
**. Correlation is significant at the 0.01 level (2-tailed).			

As the P-value is less than Alpha for this hypotheses, researchers reject **H_{0A}**. Hence, it can be concluded that a relationship exists between TQM and MM and is of strong nature claiming a value of 0.745 thus it would be appropriate to say that Total Quality Management provides ground for identification of Marketing Process and Strategies.

Hypotheses B

H_{1B}: Total Quality Management and Marketing Management help in creating Customer's Value.

H_{0B}: Total Quality Management and Marketing Management do not help in creating Customer's Value.

Table 5: Pearson Correlation (TQM+MM and CV)

		TQM + MM	CV
TQM + MM	Pearson Correlation	1	.841**
	Sig. (2-tailed)		.000
	N	114	114
CV	Pearson Correlation	.841**	1
	Sig. (2-tailed)	.000	
	N	114	114
**. Correlation is significant at the 0.01 level (2-tailed).			

Table No. 5 explicitly shows that P-value for this correlation tests is less than the level of significance i.e. Alpha, therefore the null hypothesis (**H_{0B}**) stands rejected as per this data. The relationship is hence established and Pearson correlation coefficient value between TQM+MM and CV is 0.841 which is definitely statistically of strong nature. To conclude analysis on this hypothesis, it can be argued that Total Quality Management and Marketing Management combined, help in creating Customer's Value for organizations.

Hypotheses C

H_{1c}: Total Quality Management and Marketing are complementary in creating Customer’s Value through Customer Relationship Management

H_{0c}: Total Quality Management and Marketing are not complementary in creating Customer’s Value through Customer Relationship Management

Table 6: Pearson Correlation (TQM+MM and CRM*CV)

		TQM+MM	CRM*CV
TQM+MM	Pearson Correlation	1	.865**
	Sig. (2-tailed)		.000
	N	114	114
CRM*CV	Pearson Correlation	.865**	1
	Sig. (2-tailed)	.000	
	N	114	114
** . Correlation is significant at the 0.01 level (2-tailed).			

Hypothesis C, basically examines the impact of moderating variable which is Customer Relationship Management and tells how much effect it has on the relationship between the synergic value of Total Quality Management, and Marketing Management and Customer Value. As per the results, it is vivid that P-value is again less than Alpha so **H_{0c}** is declared statistically rejected. The relation being established, Pearson correlation coefficient between TQM+MM and CRM*CV is 0.865 which shows both variables have strong correlation and CRM, which is the moderating variable slightly has increased the strength of relationship between synergic effect of TQM and MM with CV. To sum up, **H_{1c}** i.e. Total Quality Management and Marketing are complementary in creating customer’s value through customer relationship management holds ground.

Conclusions and Recommendations

On the basis of analysis of hypotheses conducted in the previous section of this study, the researchers now draw some key conclusions and suggest some major recommendations that can be used by practitioners as well as members of academia particularly those involved in areas like Total Quality Management, Marketing Management and Customer Services.

Conclusions

In this research study three major hypotheses were developed on the basis if propositions available in the literature and were tested. First addresses the relation of total quality management with marketing management. As total quality management practices are essential and provide sound grounds to identify and design marketing plans, policies, strategies and process. In this research through Pearson correlation it is proved that total quality management practices are necessary for marketing management.

Moving next, the second hypothesis correlates the synergic effect of total quality management and marketing management with customer's value. Results of Pearson correlation test for second hypothesis prove that if total quality management practices are aligned with marketing policies then it will positively and strongly effect customer's value, thus leading to competitive edge and rapid growth in market shares.

Importantly, the third hypothesis examines the moderating effect of customer relationship management on synergic effect of Total Quality Management and Marketing Management on Customer Value. According to Pearson correlation coefficient, the synergic relation positively affects customer's value which can further lead to competitive edge resulting in increased customer value. Moreover customer relationship management system provides the customer needs, expectations and feedback which are necessary to design total quality management practices and marketing policies. By using findings and results of this study every manufacturing sector company either national or multination can implement synergic coordination between total quality management department, marketing management department and customer relationship department which will help them in escalating performance.

Recommendations

Researchers have come up with the following recommendations based on the findings drawn from analysis of the data collected for this study:

This empirical study shows that total quality management practices are essential and provide ground for marketing plans, policies and strategies. If marketing policies are not aligned with total quality management practices then company will be multi directional, diverting the focus of employees and losing customers.

Synchronization of total quality management and marketing management is necessary to carve out competitive advantage. If both are synergic and strategically fit in same direction, it is likely that market shares will have boost and customer retention will be high.

Customer relationship management provides customer's need and expectations in terms of customer's suggestions and feedbacks. When examined empirically, Pearson correlation coefficient value is 0.841 without CRM and 0.865 with CRM. Which means customer value is 0.024 times more if company aligns CRM along with TQM and MM.

Synergic relationship of TQM with marketing and customer relationship department will create customer's value and increase customer's satisfaction.

Customer satisfaction will provide competitive edge and increase in market share to respective organization.

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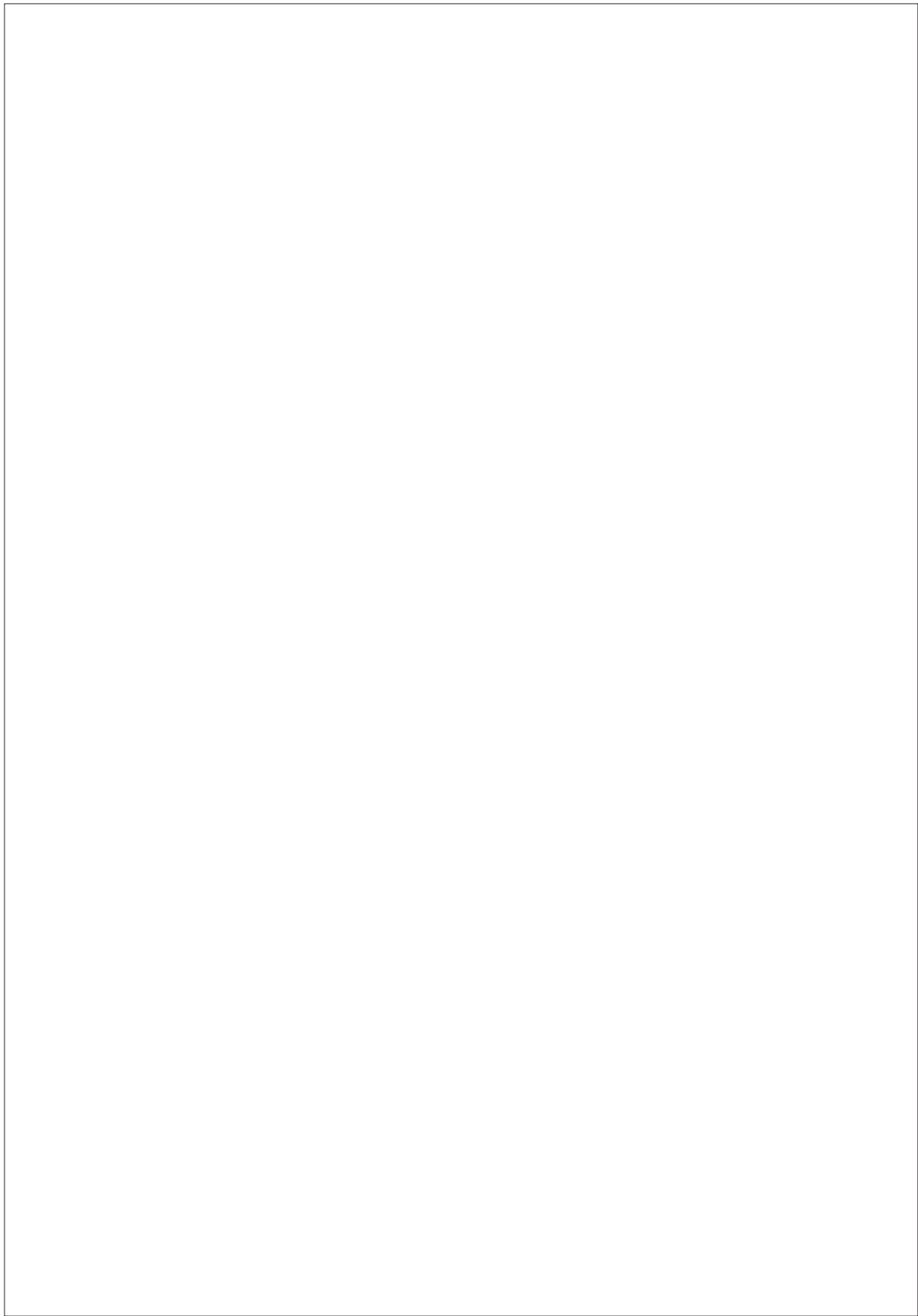
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