A Study on Strategic Management Practices in Private and Public Sector Banks with Special Reference to Chennai City.

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ABSTRACT

Strategic management practices plays a pivotal role in Banking industry because many events such as deregulation of deposit rates, the fall of geographic barriers, an economic downturn, and increasing non-bank competition, have affected its efficiency. Management of people and management of risks are two key challenges facing by banks. Hence, for efficient functioning of banks, Strategic management is essential in present scenario. Strategic management is a continuous process of formulating strategies for the organisation that brings profit to the organisation. It brings about amicability among the organisation and its environment. It records the contemporary strengths of the organisation for the accomplishment of its objectives, weaknesses that may hinder in achieving its goals, opportunities that can be exploited in goodwill and threats that are present in the internal and external environment which is called as SWOT analysis. The present article aims to study the factors of strategic management practises in various dimensions that are practised in banking sector.

Keywords: SWOT Analysis, Strategic Management

INTRODUCTION:

Wheelen and Hunger (2002) say that strategic management is a set of managerial decisions and actions that determines the long-run performance of an organization. It includes environmental scanning (both external and internal) strategy formulation (strategic or long-range planning), strategy implementation and evaluation and control. The study of strategic management emphasizes the monitoring and evaluation of external opportunities and threats in light of an organisation's strengths and weaknesses (Kenneth, 1987). The strategy of an organization consists of the moves and approaches made by management to produce successful performance of an organization. Strategy is management's game plan for the business. Management develops strategies to guide how an organization conducts its business and how it will achieve its target objectives. Without a strategy, there is no cohesive action plan to produce the intended results. Core management functions are crafting and implementing a strategy for the business. Good management is exhibited by good strategy and good implementation. Powerful execution of a powerful strategy is a proven recipe for business success. The standards for judging whether an organization is well managed are based on good strategy-making combined with good strategy execution.

In 1988, Henry Mintzberg defined strategy as "the determination of the basic long-term goals of an enterprise and the allocation of resources and the adoption of courses of action, necessary for carrying out these goals". Strategies were established to define or clarify the organisation, focus effort, set direction and provide consistency or guidance in response to the environment. Management is the diversified and flexible subject of the new administrative period (Thompson, A.A, and Strickland, A.J 2003). But the present universe is always altering. New opportunities and problems are occurring daily. An old management strategy cannot adjust to the new conditions and new environment. Management has to adapt to new situations and environment must change its strategy and policy. Strategic management is considered as a systematic approach to the engagement and increasingly important responsibility of general management to position itself (Bilal Afsar, 2011), It relates the organisation to its environment in a way which will ensure its continued success and make it secure from surprises.

Strategic management is the process of formulating the organisation's objectives, examining both present and future environments, controlling and implementing decisions focused on achieving these goals in the current and upcoming conditions. In other words, strategic management is involved in minimizing its external threats/problems (Adeleke, Ogundele and Oyenuga, 2008). According to Drucker (1974), the principal task of strategic management is thinking through the overall mission of management. Studies on strategic management have proved that strategic management concentrates with deciding on planning and strategise how that strategy is to be put into effect.

REVIEW OF LITERATURE

Akingbade, W.A. (2007), this study emphasize the need for learning and for managers to change their dominant logic if firms are to survive the radical environmental changes that characterize the current business environment.

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Benita Steyn APR (2012), presents the theory which differentiates between enterprise, corporate, business unit, functional and operational strategy. Concerning these strategy levels, the author has provided directions to the literature communication function.

Bilal Afsar (2011) clearly puts forward the combination of arts and science which increases an organisation's chances of success. The study elaborates the process of planning of every variable of the organisation that can help in the achievement of objectives and goals of the management.

Gundars Benzins (2010), emphasizes that strategic management is one of the key tools available for managers in organisations. The study forecasts in the planning and administration processes by introducing a significant degree of uncertainty.

Konstantinos Zoumpatianos, Thenis Palpanas and John Mylopoulos (2010), defines the complete Business Intelligence (BI) problem starts with the analysis of business objectives, modelling, and specifications. The study motivates the need for the development of a whole Real Time BI stacks.

Stefan Nedelea, Laura Mariana Paun (2009), shines a light on the critical process of competitive organisation. The study draws attention on the information resources and knowledge assets depending on the knowledge and skills of its managers and employees, regarded as intellectual capital.

Takis Katsoulakos and Yannis Katsoulaeos (2007), emphasized that the strategic management framework supports the integration of corporate social responsibility principles into

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mainstream strategy of business. A top-down and bottom-up approach was used to develop the proposed framework.

Tim Mazzarol (2004), suggests that the contextual support and trust, play a significant role in determining the strategic management process, the satisfaction of employees at work, how employees perceive their flexible work arrangement and subsequent outcomes of it.

Tomit Vasile, Anica Iancu (2011), examined that the strategic management represents a modern form of company's management that is based on the prediction of the environmental changes. The study has put forward the methods to achieve the organisation's mission and to assure its lasting survival.

Woo Jun (2009), reviews the nature of Korean GTCs and Japanese Sogo Shoshas, including their characteristics and primary functions. The study theoretically examines the rationale for their existence from some different perspectives, including informational economies of scale, those of transaction cost economics, international marketing, and finance.

RESEARCH GAP

Extensive literature review suggested that not much emphasis has been given on exhaustively identifying the antecedents and predictors of strategic management. The role in improving the strategic management in the bank environment is a pertinent issue; focused efforts need to be undertaken by business organizations in that direction. Dimensions and characteristics of banking employees were not rightly identified and studied. Literature review also revealed absence of a holistic strategic management process. Hence it was decided to address these gaps in the scope of this study. Thus literature review brought out the importance of developing strategic management model to give organizations a sustainable competitive edge. The absence of a methodology which measures the same also surfaced through literature review. These research gaps have been identified and addressed through this study.

OBJECTIVE OF THE STUDY

To examine the factors influencing strategic management practices in public and private sector banks.

HYPOTHESIS OF THE STUDY

There is no significant difference among the factors of strategic management.

Research Methodology

Public and Private sector banks were studied to understand the impact of strategic management. This study undertook the design of descriptive research. Once the theoretical framework was developed, the data collection procedure was planned and executed. For the current study, the researcher adopted convenient sampling method to collect the responses from the employees of bank employees. The researcher collected 125 responses from the public sector banks and 112 responses from private sector bank employees. Hence the total sample size of the study is 237.

Preliminary Exploratory Research

An exploratory pilot study from the banking sector was undertaken. This was used to test the reliability and validity of the scales used in the study. Some items with lower factor loadings and cross loadings were deleted after pre-testing. The pre-testing also asserted that there were no issues on comprehensibility of the statements used in the questionnaire.

Limitations of the Study

This study focused on private and public sector banks. The results of this study are therefore limited to banks and may not necessarily be applicable in other financial institutions. The study also focused on strategic management practices in banks. Thus the scope of the study was limited to the strategic management practices in banks and not any other concept.

Analysis and Discussions:

Strategic management can be defined as an art and science of formulating, implementing and evaluating cross-functional decisions that enable an organisation to achieve its objectives. Strategic management is all about gaining and maintaining competitive advantage.

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The foremost objective of the research aims to analyze the factors influencing and responsible for strategic management practices in commercial banks. After reviewing national and international literature the researcher identified 50 variables pertaining to strategic management. The reliability of all the 50 variables are measured through Cronbach's Alpha Method and their existence over normal distribution is measured through KMO and Bartlett's Test.

KMO AND BARTLETT'S TEST FOR STRATEGIC MANAGEMENT

Cronbach's Alpha	No of Items
.906	50

Source: Computed data

From the above table it is found that the 50 variables expressed the Cronbach's Alpha values 0.906 which implies the 50 variable exhibits the variance 90.6% variance which is more than sufficient for the benchmark value of 75%. This shows that the 50 variables are highly reliable and suitable for data reduction process after the verification of sampling adequacy and normal distribution. The KMO Bartlett's Test is applied for all the 50 variables and the following results are obtained.

KMO AND BARTLETT'S TEST OF SPHERICITY FOR STRATEGIC MANAGEMENT

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.876
Bartlett's Test of Sphericity	Approx. Chi-Square	9609.858
	Df	1225
	Sig.	.000

Source: Computed data

From the above table it is found that Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.876, Bartlett's Test of sphericity with approximate high square value is found to be 9609.858 which is statistically significant at 5% level. Therefore it can be concluded that all the

50 variables satisfy the normal distribution and more suitable for factor extraction process. The number of factors derived out of 50 variables is represented in the following total variance table.

TOTAL VARIANCE OF FACTORS OF STRATEGIC MANAGEMENT

Sl.No.	Factors	Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %
1.	Goal Formulation	6.250	12.501	12.501
2.	Environmental Analysis	5.748	11.496	23.997
3.	Strategy Formulation	4.267	8.535	32.532
4.	Organisational Learning	3.949	7.899	40.430
5.	Control and Evaluation	2.329	4.657	45.088
6.	Organisational Planning	1.845	3.690	48.778
7.	Plan Implementation	1.811	3.623	52.400
8.	Competitive Advantage	1.793	3.586	55.987
9.	Change management	1.581	3.161	59.148
10.	Retention Management	1.422	2.845	61.993

Source: Primary data

From the above table it is found that 50 variables are reduced into 10 predominant factors namely Goal formulation, Environmental analysis, strategic formulation, organisational learning, Control and evaluation, Organisational planning, Plan implementation, Competitive advantage, Change management and retention management with cumulative variance 12.501%, 23.997%, 32.532%, 40.430%, 45.088%, 48.778%, 52.400%, 55.987%, 59.148% and 61.993%. These 10 factors also process individual variances such as 12.501, 11.466, 8.535, 7.899, 4.657, 3.690, 3.623, 3.586, 3.161 and 2.845. Since the benchmark of total variance is 40%, in the present research work, the researcher was able to obtain the cumulative variance which is above the benchmark value. All these individual variance are above the required values.

The variable loadings in each factor are presented in the following approach.

The first factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
CE3	Management selects and develops control activities over the acquisition, development and maintenance of technology and its infrastructure to achieve management objectives.	.858
CE4	Management performs periodic reviews of evaluation policies and procedures to determine their continued relevance and refresher them when necessary.	.824
CE2	Management segregates incompatible duties, and where such segregation is not practical, management selects and develops alternative control and evaluation activities.	.799
CE5	Management has a process for the development, approval and implementation of evaluation policy updates and communicates those updates to staff.	.786
CE1	My management determines which relevant business processes require control activities.	.721

This factor can be called **"Control and Evaluation" (CE)**. Control and evaluation are the means of collecting whatever information the bank requires to compare plans against the actual events. The main benefits of control and evaluation are, they perform periodic reviews of various evaluation procedures and policies and provide direction to the management. They enable the management to make sure that the organisation is heading in the right direction and what corrective actions are to be taken wherever required.

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The second factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
OP5	The organisations periodically gather and analyze data about market and other external factors which affect the business planning.	.593
OP2	Strategic planning is a top priority activity, performed on a regular basis, every year.	.581
OP4	The organisation follows a defined set of procedures in its strategy planning process.	.579
OP1	Top executives take formal responsibility for the organisation's strategy business planning.	.578
OP3	The organisation provides resources, such as, manager's time, money, staff support etc. earmarked specifically for strategic planning	.485

This factor can be called **"Organisational Planning" (OP).** In organisation's strategy, the business planning is carried out by the top executives of the organisation. The strategic planning has to be performed regularly as it is the process by which every bank creates a clear, compelling picture of its future and implies the necessary procedures and actions to achieve that future. A sound planning process always involves the segregation of data from the customers, that their actual needs are known and acted upon, including the process of getting input from the external factors that affect the business planning. On the whole, planning provides a roadmap to chart the organisation's progress.

The third factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
EA1	My organisation has a friendly work environment and gives space for expressing my views.	.722
EA2	My management is accessible to all employees.	.712
EA3	At times, the management helps the personnel, to address their personal needs.	.677
EA5	Every individual has a 'sense of belongingness' towards the organisations.	.633
EA4	There is a good grievance handling system.	.584

This factor can be called **"Environmental Analysis" (EA).** The organisational environment is the study of environmental factors that significantly influence the organisational operation in banks. Environmental analysis helps to develop the plans to solve the possible opportunities and threats that arrive in its internal and external environment. It plays an essential role in the internal management. A healthy environment includes a work friendly environment to the employees, by providing every individual a sense of belongingness towards the organisation. It puts forward the importance of proper grievance handling system, flexibility in work and the level of liberty given to the employees, to express their views to the management.

The fourth factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
GF5	There is recognition for every individual contribution towards organisational goals.	.706
GF4	There is a good control to check those who deviate from organisational goals.	.685
GF3	There is a good feedback system to hear about the personnel's performance towards organisational goals.	.619
GF1	The employees are clear about the organisational goals	.486

	and their role in achieving the goals.	
GF2	Every individual in the bank is motivated to move towards the organisational goals.	-.516

This factor can be called **"Goal Formulation" (GF)**. Goal Formulation is a set of action plan, designed in order to motivate every individual and guide a person or a group towards a specific goal. All commercial banks have written goals that are a part of the business plan. It is the responsibility of the management to make sure that the goals of the organisation are clearly explained to every employee in the organisation. Effective goal formulation techniques involve effective communication system, appreciation and recognition of employees contribution to the organisation, a regular follow up of the performance of all the employees and a proper response and timely action towards the queries and feedback that is put forward by the employees. When the goals are tied to all these techniques, it improves the motivational level of the employees in the organisation.

The fifth factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
SF5	The strategies are evaluated and revised on a regular basis in order to meet the changing needs and challenges of the business environment.	.619
SF1	The organisation implements the strategic plan in order to achieve success.	.594
SF4	Strategic objectives are defined based on performance targets and includes increases in market share, sales and production methods	.474
SF3	Competitive strategy includes an evaluation of the overall banking and market place and the bank's internal strengths and weaknesses.	.400
SF2	The management defines the strategic mission and ensures that the bank is able to identify its values,	-.547

	competitive advantage and vision for the future.	

This factor can be called **"Strategy Formulation" (SF).** Strategy Formulation provides a framework for the most appropriate courses of actions that will lead to the achievement of defined goals of the commercial banks. This process is essential to an organisation's success. Strategic plans and objectives are communicated to all employees, so that every individual is aware of the organisation's target. Strategy formulation helps the organisation to be prepared for the possible changes that may occur in the future and helps them evaluate and revise the strategies on a regular basis. It forces the management to carefully look at the changing environment providing guidance to meet the challenges of the business environment.

The sixth factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
PI3	Sufficient resources are allocated for implementation.	.708
PI2	The organisation clearly assigns lead responsibility for action plan implementation to a person or, alternately, a team.	.687
PI1	The organisation makes strategic decision like implementation action plans based upon the strategic plan.	.644
PI5	The individuals are responsible for the strategic planning and implementation rewarded for successful performance.	.561
PI4	The organisation set clearly defined and measurable performance standards for each plan element.	.524

This factor can be called **"Plan Implementation" (PI).** Plan Implementation is the process that illustrates the critical steps involved in starting and developing a project. An organised strategic plan helps the organisation to make strategic decisions, paving the way to create a clear measurable performance standard for each plan element. The organisation allocates sufficient resources for implementation, as it is a guide that helps the employees to be proactive rather than reactive in identifying the challenges and developing their program along the way.

The seventh factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
CA4	Value is added by cost leadership in the organisation.	.816
CA2	Employment security plays an important role in managing people towards competitive advantage.	.509
CA3	Managing people as a source of competitive advantage is more sustainable than other sources in the organisation.	.508
CA5	Differentiation strategies are the firms most promising means to competitive advantage	.438
CA1	High wages paid to employees plays an important role in managing people towards competitive advantage.	.431

This factor can be called **"Competitive Advantage" (CA).** Competitive advantage is the attribute that allows a bank to outperform its competitors. It is the favourable position the bank seeks in order to be more profitable than its competitors. For a successful organisation, the management should foremost take into consideration the employment security, maintenance of proper differentiation strategy in the organisation, by providing high wages for its performing employees and managing the people in the best satisfactory manner. Competitive Advantage requires being effective in communicating a greater perceived value to a target market than its competitors can provide.

The eighth factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
RM3	Our organisation's promotion and pay packages are comparable with others.	.791
RM4	Employees with long term are avoided.	.773
RM1	When employees plan to leave the organisation for better prospects, the management counsels them.	.745
RM2	Our organisational structure offers good promotion and pay packages to retain committed employees.	.729

RM5	Employees are happy about the retention policy of our organisation.	.404

This factor can be called **"Retention Management" (RM).** Retention management focuses on measures that lead to retention of employees. It includes activities that systematically influence the employee's performance and degree of loyalty towards the organisation. Retention management is well maintained when the employees feel that they are appreciated, trusted and valued. A good organisation provides a satisfactory salary package for the employees. It gives proper councelling to the freshers and the employees who plan to leave the organisation. Retention management is wholly about respecting the people and contribution to the organisation and keeping them satisfied and motivated in all aspects of work in the organisation.

The ninth factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
OL5	Knowledge, experience, information and working methods are shared and included into the development of organisational goals.	.590
OL4	The organisation invests into its employee's learning and development needs.	.455
OL1	The organisation has developed learning and operational procedures to help the employees to work efficiently.	-.680
OL3	Employees in the bank link their working activities with learning activities.	-.623
OL2	Employee teaching methods practised in the bank guarantee's the development of communication and problem solving skills.	-.489

This factor can be called **"Organisational Learning" (OL).** Organisational Learning occurs when groups of people give the same response to different stimuli. It is the process of creating, transforming and retaining knowledge within the commercial banks. An organisation improves over time as it gains experience. From its experience, it creates knowledge and information. The learning activities of the bank employees are linked with the working environment which in turn necessitates the requirement of development needs.

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The tenth factor consists of 5 variables with the following variable loadings:

Factors	Variables	Values
PCM1	The organisation keeps track of change that takes place around it.	.793
PCM4	The management convinces the employees regarding change.	.789
PCM5	Change affects organisational culture.	.744
PCM3	When the management wants to adapt to changes, there is resistance from the employees.	.603
PCM2	Whenever there is a change, the management convenes a general meeting to announce it.	.520

This factor can be called **"Perceptions of Change Management" (PCM).** Change management refers to the process of transition of individuals, teams and organisations using intended methods that re-direct the use of resources, budget allocations, business process or other modes of operation that reshape a commercial banks. Change management focuses on how people and teams are affected by an organisational transition. The organisation keeps a tract of the external environment and deals with different discipline while making changes.

With the various loadings in each factor the researcher hereby finally derives the 10 factors influencing strategic management practices in private and public sector banks. This verification leads to the analysis of inferring the variables influencing organisational communication climate in banking sector in India.

HYPOTHESIS TEST – 1: There is no significant difference among the factors of strategic management.

The application of factor analysis in principle component method derived 10 factors. Goal Formulation – 12.501, Environmental Analysis -11.496, Strategy Formulation - 8.535, Organisational Learning - 7.899, Control and Evaluation - 4.657, Organisational Planning - 3.690, Plan Implementation - 3.623, Competitive Advantage - 3.586, Change management - 3.161, Retention Management - 2.845.

This implies all the 10 factors are different with different variances. This implies that hypothesis is rejected at 5% level and concluded that there is a significant difference among the factors of strategic management practices.

FINDINGS AND CONCLUSION

- The factor analysis derived ten predominant factors for strategic management process. The factors are control and evaluation, organisational planning, environmental analysis, goal formulation, strategy formulation, plan implementation, competitive advantage, retention management and perceptions of change management. A brief description of each factor is given as under:

- Strategic management plays a vital role of identification and prioritization of opportunities in the present scenario of an organisation. The banks using strategic management concepts are more successful and profitable than those that do not. The banks using strategic management concepts show significant improvement in productivity, profitability, employee and customer satisfaction, compared to bank without systematic planning techniques. The systematic planning is carried out by high performing banks to face the future fluctuations in the internal and external environment. Besides helping banks avoid financial demise, strategic management practices offer other tangible benefits, such as, an improved understanding of competitor's strategies, increased employee productivity, awareness of external threats and reduced resistance to change. An effective strategic management enhances problem – prevention capabilities of organisations as it promotes internal communication between the managers and all divisional and functional level employees. Strategic management on the whole brings order and discipline to an otherwise floundering organisation. It is a beginning of an effective and efficient managerial system.

In a nutshell it is felt that the changing environment, the forces of globalization and liberalization and their advances in information technology and communication technology have major strategic Management implications for effective functioning of all the banks.

Scope for Further Research

The study was limited to banks where the researcher sought to determine the strategic management practices. Further research could also be carried out to determine the strategic management practices adopted by other non banking financial institutions that have excelled in the industry. This will guide other institutions in the industry on how to come up with strategies that will enable them to achieve their overall objectives.

REFERENCES

Adeleke, A, Ogundele, O.J.K. &Oyenuga, O.O. (2008), "Business Policy and Strategy", (2nded). Lagos: *Concept Publications*, (Chapter Three).

Akingbade, W.A. (2007), "Impact of strategic management on corporate performance in selected Indigenous Small & Medium Scale Enterprises in Lagos Metropolis, Unpublished M.Sc. Thesis, *Department of Business Administration and Management Technology; Lagos State University, Ojo; Lagos.*

Benita Steyn APR (2012), "From 'Strategy' To 'Corporate Communication Strategy: A Conceptualization" *7th International Public Relations Research Symposium*, Lake Bled, University Of Pretoria, South Africa.

Bilal Afsar (2011), "Strategic Management in Today's Complex World", *Business Intelligence Journal*, (p. 143-149)

Drucker P.F. (1974), "Management Tasks: Responsibilities and Practices", *New York: Harper and Row*, Chapter 4.

GundarsBenzins (2010), "Strategic Management", *Project,* University Of Lithuania.

Konstantinos Zoumpatianos, Thenis Palpanas and John Mylopoulos (2010), "Strategic Management for Real Time Business Intelligence", *University of Trento,* Italy.

Stefan Nedelea&Laura MrianaPaun(2009), "The importance of the Strategic Management Process in the knowledge based Economy", *Review of International Comparative Management,* Vol.10, Issue 1. (pp.95-105).

Takis Katsoulakos & Yannis Katsoulaeos (2007), "Strategic Management, Corporate Responsibility and Stakeholder Management. Integrating corporate responsibility and stakeholder's management. Integrating corporate responsibility principles and stakeholders approaches into mainstream strategy: stakeholder- oriented and integrative strategic management framework", *Emerald Group Publishing Ltd*, Vol. 7, No:4.

Thompson A.A. & Stickland A.J. (2003), "Strategic Management: Concepts and Cases", Twelfth edition, *New York: McGraw- Hill,* Chapter – 2.

Tim Mazzarol (2004), "Strategic Management of Small Firms: A proposed framework for Entrepreneurial Ventures", *University of Western Austra*lia, Brisbane Queensland, 26-29.

TomitVasile&AnicaIancu (2011), "A Model of Strategic Management Process", *University of Craiova.*

Wheelen and Hunger (2002), "Strategic Management and Business Policy," Pearson Prentice Hall, 2004, ISBN: 0131225510.

Woo Jun (2009), August, "The Strategic Management of Korean and Japanese Big Business Groups: A Comparative Study Between Korean General Trading Companies and Japanese Sogo Shoshas", *The University Of Birmingham.*