CRITICAL SUCCESS FACTORS AND STRATEGIC CHANGE MANAGEMENT IN SELECTED DEPOSIT MONEY BANKS IN UYO, AKWA IBOM STATE

BY

Ubong Augustine AKPAETOR

Department of Business Administration, Faculty of Management Sciences Akwa Ibom State University, Obio Akpa Campus.

Email: ubongakpaetor@gmail.com

and

Emmanuel Soludo MADUBUIKE

Department of Business Management, Faculty of Business Administration, University of Uyo, Uyo, Akwa Ibom State. Email:esoludo86@gmail.com +2348182028674.

Strategic change is an integral part of contemporary business operation. In the Nigerian banking industry, strategic changes have occurred, which affected banks in different ways and magnitude. Surviving in such uncertain and turbulent periods would require careful and systematic implementation of critical success factors. As such, this study is an attempt to assess critical success factors and strategic change management in selected deposit money banks in Uyo, Akwa Ibom State. Two specific objectives were developed for the study, as well as two research questions and hypotheses. Survey research design was applied in the course of the study. The population of the study was 454 employees of the studied deposit money banks, while the sample size was 213 respondents as determined using Taro Yamane sample size determination technique. Structured questionnaire was used in eliciting the required primary data. A total of 213 copies of the questionnaire was administered, while 208 copies were returned in a useable form. Data analysis was done using Pearson Product Moment Correlation (PPMC) analysis. Results from the analysis revealed that the studied variables showed positive and significant relationship with strategic change management in the selected deposit money banks in Uyo, Akwa Ibom State. It was concluded that critical success factors have positive and significant relationship with strategic change management in the studied deposit money banks in Uyo, Akwa Ibom State. On the evidence of these findings, it was recommended that top level managers in the studied deposit money banks should maintain the habit of supporting their employees during strategic change periods in the banks by giving them the necessary resources

that is required to cope with the change; and the outcomes of strategic change should be communicated to the employees ahead of time regardless of the effects it will have on them.

Keywords: Top Management Support, Honest and Timely Communication, Critical Success Factors, Strategic change Management.

Background to the Study

The Nigerian bank industry has undergone diverse and rigorous reforms with the objective of offering improve banking services to their customers as well as meeting global standards and best practices. The strategic effects of these reforms have often caused downsizing and deep restructuring, thereby making most bank staff unemployed and dissatisfied (Agwu, Carter and Murray, 2014). Different measures have been applied, at different times, to cushion these effects, however, the outcome has been undesirable as critical success factors have been ignored (Alani, Akeem, Edwin and Omotayo, 2016). Successful management of strategic change in service organizations such as banks is necessary if banks are to survive, grow and enjoy sustainable performance overtime.

Hills and Jones (2001) conceived strategic change management as the movement of an organization from where it is to where it desires to be in order to enjoy competitive advantage. Consistent with this view, Harigopal (2006) maintained that strategic change demands firm's strategic move from its present state to a desirable state. There are plethora of reasons that could easily trigger strategic change in an organization. Few among them include: global, market or industry competition, technological changes/innovation, merger and/or acquisition, change in customers' taste, and change in government policies (Alani, Akeem, Edwin and Omotayo, 2016).

Accordingly, Bruno and Lidker (1984) as cited in Pourhanifeh and Mazdeh (2016) submit that critical success factors are those factors that enhance the competitive positioning of an organization when properly applied. Relatedly, Ward and Peppard (2002) posit that they are factors that help corporate organizations to allocate their resources effectively and efficiently so as to achieve corporate results. Basic features of critical success factors are top management support, honest and timely communication, employee involvement, and corporate culture that promotes and accept change (Pourhanifeh and Mazdeh, 2016).

The Nigerian banking industry experienced strategic change in the form of recapitalization through the Central Bank of Nigeria (CBN). One of such strategic changes is stiff competition. DMBs, having been faced with some offensive strategies resulting from the pressure of globalization and competition from non-banking firms, introduced new ways to add value to their service (Uford & Joseph, 2019). This kind of change comes with obvious challenges. Yet, strategic change of that nature is inevitable and integral part of today's banking industry. The essence of applying strategic change management is to ensure that strategic changes are properly planned, directed, conducted and completed in an effective and efficient manner and at the right time. Thus, effective implementation of strategic management strategies require banks to review their traditional methods of managing change by incorporating critical success factors in that regard. Successful strategic change management in the Nigerian banking industry is pivotal in order to turn strategic change outcomes into competitive advantage.

Statement of the Problem

Ideally, strategic change management supposed to improve corporate outcomes in banks when it is properly managed. More so, it improves employee's loyalty, readiness to accept change, and effective allocation of corporate resources.

However, there is a growing evidence that although firms apply strategic change management measures, yet, most of those change management measures fail, resulting to wastage in organizational resources and efforts. This is a deviation from wide held expectations. Traditional measures of strategic change management need to be reviewed by placing much significance on critical success factors. This underpins the need for this study on critical success factors in successful strategic change management in selected deposit money banks in Uyo, Akwa Ibom State.

Objectives of the Study

The main objective of this study is to assess critical success factors in successful strategic change management in selected deposit money banks in Uyo, Akwa Ibom State. The specific objectives are:

iv. To find out the relationship between top management support and strategic change management in selected deposit money banks in Uyo, Akwa Ibom State; and

v. To examine the relationship between honest and timely communication and strategic change management in selected deposit money banks in Uyo, Akwa Ibom State.

Research Questions

The following research questions were developed for this study:

- i. What is the relationship between top management support and strategic change management in selected deposit money banks in Uyo, Akwa Ibom State?
- ii. What is the relationship between honest and timely communication and strategic change management in selected deposit money banks in Uyo, Akwa Ibom State?

Hypotheses of the Study

The following hypotheses have been formulated to guide the formulation of this study:

- i. H_{01} : Top management support has no significant relationship with strategic change management in selected deposit money banks in Uyo, Akwa Ibom State; and
- ii. H_{02} : Honest and timely communication has no significant relationship with strategic change management in selected deposit money banks in Uyo, Akwa Ibom State.

Scope and Limitations of the Study

This study was conducted with three scopes in mind: conceptual, analytical/unit scope and geographical scope. In terms of the conceptual scope, the concept of critical success factors, the concept of strategic change management, and critical success factors and strategic change management were all considered. Moreover, banks staff in the studied deposit money banks were considered as part of the analytical/unit scope. Under the geographical scope, deposit money banks considered are all located in Uyo, Akwa Ibom State.

The study was without no limitations. Copies of structured questionnaire was used in eliciting the right responses from the respondents. Therefore, the outcome of this study is highly limited on the truthfulness of the responses made available by the sampled respondents. More so, critical success factors that facilitate effective strategic change management may not be replicated in another bank or organization. Concerns on private issues were avoid by generating questions that do not elicit information on the private lives of the respondents.

Literature Review

The Concept of Critical Success Factors

Etymologically, the idea of critical success factors was first introduced by Daniel in 1961. In the early 1970s upwards, business organizations found witnessed splurge of information. This resulted in the birth of much information that are relevant in making key managerial decisions. Following this development, in 1979, the idea was popularized by Rockart when it was applied in assisting firm's CEO's in assessing the information that are critical to their firm's success. Initially, Daniel (1961) argued that firms to avoid information overload, they must concentrate on key factors that is instrumental to their success. Owing to this development, interest on critical success factor studies surged (Caralli, 2004).

As a construct, Zwikael and Globerson (2006) submit that critical success factors are those factors that have greatest influence on the success of a project. To Bullen and Rockart (1981), critical success factors entails limited factors that will guarantee satisfactory results and competitive outcomes for individuals, departments and organizations. Taking a broader prism, Rockart (1979) conceived it thus: (i). They are key factors that must go right for business to succeed (ii). They are factors that ensures the success propensity of an organization (iii). They are key activities that demands instant top-management attention (iv). They are relatively key factors which management should focus on.

In the Nigerian banking industry, critical success factors are always needed due to unforeseen change in work operations and procedures. Whenever strategic changes occur in banks, the implementation of critical success factors hinge on whether organizations can control it, manage it and whether it could be seen as being internal or external. Nevertheless, Rockart (1979) posit, as a rule of thumb that open interviews could be employed so assess which factor should be considered as being critical or not. In this study, top management support and honest and timely communication were considered as key critical success factors. These factors are considered as shown hereunder:

Top Management Support:

The unwavering support of top level managers during times of strategic change are non-negotiable. They are truly seen as change agents or change initiators.

The involvement of top level managers play a significant role in determining the success propensity of strategic change in an organization. To this end, there are various ways top managers could support change management process in an organization. One of such means is through proper provision and allocation of corporate resources. As opined by Pfeffer and Salanick (2003), corporate resources here entail inputs that are used for production. Kagumu (2016) sees it tangible and intangible resources. In higher level analysis, corporate resources include physical, human and technological resources (Njoroge, 2017).

The direction of strategic change in an organization ultimately determines how corporate resources are allocated. In banks, for instance, strategic change do not necessarily involve all employees in decision-making process. Thus, effective management of change in the industry would not require much of financial resources. Regardless, allocation of corporate resources is never synonymous with successful strategic change management. Thus, it is how corporate resources are allocated during strategic change process that would determine the success of change management implementation process.

Honest and Timely Communication:

As strategic change is certain to occur, management in most banks ignore affected employees by not communicating to them in honest and timely manner. Trying to communicate to employees after the change consumes time and is collectively seen as being irrelevant among employees. Deposit banks seek to serve their customers satisfactory, and this objective ought to begin with how well banks treat their employees during uncertain periods (IshaqBhatti, Zafarullah, Awan and Bukhari, 2011).

Honest and timely communication during strategic change periods should serve as a process where information are exchange between management and the subordinates as well as the customers. When banks experience strategic change such as merger and acquisition, it naturally breeds job insecurity and high level of ambiguity between bank staff and customers alike (Aguilera and Denker, 2004). Communications that are designed and tailored in this direction enhances employee's loyalty, commitment and citizenship behaviour (Turner, Biehi, Golochinsky and Black, 2010). It successfully reduce the shock that customers are likely to encounter, which in turn, improve the trust and corporate image of banks (Aguilera and Denker, 2004; Allatta and Singh, 2011). Honest and timely communication, therefore, is a glue that holds banks, bank staff and customer together, especially when such strategic change involves merger and acquisition (Weber, Tarba and Oberg, 2014).

The Concept of Strategic Change Management

Strategic change management refers to how strategic changes that occur in an organization are reasonably controlled (Baker, 2004). The society for Human Resources Management (2015) sees it as the careful approach to the application of knowledge, tools and resources that are required to deal with change. Elsewhere, Korir, Mukotive, Loice and Kimeli (2012) conceived it as proper management of strategic change by top level managers, functional managers and frontline employees in order to successfully implement the needed processes and technology that are required for organizational change. Basic features of strategic changes are downsizing, mergers and/or acquisition, new technology, and new management system or practices (Senge, Kleiner, Roberts, Ross, Roth and Smith, 1999).

Effective strategic change management involves managing the people's side of an organization. It calls for collaborative efforts that cut across all functional units of an organization. It requires expert interpretation of changes in an organization so as to achieve success and strategic fit between the internal arrangements of an organization and evolvement from the external environment. Strategic change management do not implement itself. For a sustained and positive impact, there is need for properly crafted strategies such as coherent and extensive strategies. Properly crafted strategies of this nature provide a map and compass that would guide an organization in identifying the required changes, how to manage them effectively and the best strategy to apply.

Critical Success Factors and Successful Strategic Change Management

Evidence from prior studies are replete of findings that shows the close relationship between critical success factors and successful strategic change management. For instance, posit that when employees are dishonestly and lately communicated to on strategic changes in an organization, they easily become reluctant to embrace such change, which altogether affects successful strategic change management objectives.

More so, Smith and Kofron (1996) submit that just like top level managers, employees play key roles in successful implementation of strategic change management process. Poor understanding and implementation of this point lead to poor between management and the employees, which ultimately instill natural barrier to successful strategic change management implementation. Furthermore, most employees interpret strategic change management as the management style of their superiors. Seen this way, behaviourial disposition of

the managers should be the one that their subordinates will feel easy and cooperating. Failure to understand this, managers can disrupt effective implementation of strategic change management process.

Theoretical Framework

Theory of Constraints (TOC): This theory was propounded by Goldratt in 1984, in his book that is titled The Goal. The theory of constraints is premised on the idea that every system has at least constraints that prevents it from reaching high performance level and to reach such level, removing the bottlenecks is the best thing to do.

In service rendering firms, there are factors that could serve as constraints to business processes and operations. It could be inadequate corporate resources, lack of market demand for a product, decline in customer base, poor relationship with suppliers and distributors, change in government policies, among others. These resources which determines the strategic direction of an organization must be strategically determined to avoid constraints (Gupta and Boyd, 2008).

Theory of Constraints (TOC) is seen as being relevant for this study. The rationale is premised on the fact that deposit money banks could experience strategic changes at any point in time. In Nigeria, such strategic change is frequent and come in different shape and dimensions. Most notably is the bank recapitalization experience that happened in 2004. While few banks survived, others merged or were acquired, plenty of them are no longer in operation. Even after the recapitalization, some deposit money banks in Nigeria are still struggling to survive as evidenced by some recent bank takeovers and mergers. This is an indication that these banks survived, they stopped incorporating critical success factors that are necessary for successful strategic change management. Such negligence, overtime, become key constraint that impedes the success of these banks. Thus, banks need well-planned strategy for successful change management that incorporates key critical success factors. As such, Theory of Constraints (TOC) provides better theoretical underpinning for the subject under consideration.

Empirical Review

Obonyo and Kerongo (2015) examined factors affecting strategic change management and the performance of commercial banks in Kenya: A case study of Kenya commercial bank in Nairobi Region. The objective of the study was to establish the strategic change that occurred in Kenya commercial banks. The

population of the study was 500 employees of the studied bank while 200 of them were used as sample size. Using descriptive analysis, results from the analysis showed that organizational culture, organizational structure, leadership and external environment are significant factors affecting strategic change management in the studied bank. It was concluded that organizational culture, organizational structure, leadership and external environment affected strategic change management in Kenya commercial bank in Nairobi Region. It was recommended that management of the studied bank should ensure that the existing organization culture is one that is strong enough to promote strategic change management in the organization.

Ringim and Bello (2013) carried out a study on radical transformation of small and medium financial institution: the effect of change management factors on organizational performance. The objective of the study, among others, was to examine the effect of the change management factors on the Nigerian banks. Using proportional random sampling technique, 500 employees of the studied banks were used as population of the study, while 200 of them were used as samples. Applying Structural Equation Modeling (SEM) in analyzing the generated primary data, results from the analysis showed that strategic change management factors such as reward system, people's involvement, empowerment, training and education significantly affected the organizations' performance in terms of turnover, profit margin, customer service delivery and operational cost reduction. It was recommended that future studies should be carried out in this regard in order to understand how to manage these strategic change management factors effectively for better organizational performance.

Al-Khaffal (2012) studied applying change management success critical factors in bank of Jordan and Capital bank. The objective of the study was to assess how critical success factors was applied in the studied banks and the impact it had compared to other factors. Primary data collected from forty-two respondents were analyzed using Analysis of Variance (ANOVA). Result from the analysis showed that resources, sponsorship, technology, systems and process, training employee satisfaction, and quality of services offered had more impact in the studied banks than other factors. It was concluded that the effects of these identified critical factors had no significant difference in change management in the banks studied. It was recommended, among others, that employees of the banks should realize that change is constant and therefore, have to embrace it.

Kivuva (2012) studied change management at commercial bank of Africa. The objective of the study was to find out how Commercial Bank of Africa (CBA) manage change. Using content analysis, results from the study showed that by establishing department saddled with the responsibility to manage and implement change, working closely with human resource manager and communicating expected change to the employees, CBA were able to manage change effectively. It was recommended that, further studies should be carried out on factors that hinder change implementation within an organization so that both positive and negative impacts of change could be known for proper change management plans.

Al-Hudhaif (2011) studied the critical success factors for implementation of customer relationship management in the banking sector of Saudi Arabia. The objective of the study was to assess the impact of critical success factors on customer relationship management. Twelve local Saudi Arabian banks were used for the study. Generated primary data were analyzed using Spearman Correlation. Results from the analysis showed that critical success factors such as top management support, clear Customer Relationship Management (CRM) strategy and Customer Relationship Management (CRM) software selection are all positive and significantly related to customer retention. It was concluded that in effective retention of customers in the banking sector of Saudi Arabia, the identified critical success factors are very crucial.

Methodology

Survey research design was applied in the study on the basis that structured questionnaire was used in generating needed primary data for the study. The population of the study was 454 employees from the studied deposit money banks in Uyo, Akwa Ibom State. The population was assessed thus: First bank (204); Zenith bank (151); and Access bank (99). Using Taro Yamane (1967) sample size determination technique, 213 employees of the deposit money banks were used as sample size. Thereafter, proportional sampling technique was applied to ascertain copies of the questionnaire that are to be administered in each bank. Using Bryan and Bell (2007) proportional sampling formula, the following copies of questionnaire were administered in each bank: First bank (96); Zenith bank (71); and Access bank (46).

Face, content and construct validity of the research was properly assessed. A Cronbach alpha coefficient of 1.044 shows that the research instrument was reliable for administration. After the administration of 213 copies of the questionnaire, 208 was returned in a usable form. The analysis in this study

was done using the copies of questionnaire that were returned. Pearson Product Moment Correlation (PPMC) analysis was applied in analyzing the generated primary data for the study. The rationale for this choice of data analytical tool is to show the causal relationship between the studied variables.

Data Analysis

Hypothesis 1

 H_{01} : Top management support has no significant relationship with strategic change management in selected deposit money banks in Uyo, Akwa Ibom State.

Cori	elated Variables	TMS	SCM
TMS	Pearson Correlation	1	.675**
	Sig. (2-tailed)		.000
	N	208	208
SCM	Pearson Correlation	.875	1
	Sig. (2-tailed)	.000	
	N	208	208

Table 1PPMC Result of Hypothesis One

Source: SPSS Computed Result (2023)

Table 1 shows a correction coefficient of r = 0.675 and a probability value (P-value) of 0.000. From the Table, the correction coefficient of r = 0.675 is greater than the probability value of 0.000 (r = 0.675, p.>0.000) when tested at 0.05 level of significance. This implies that, top level management support has positive and significant relationship with strategic change management in selected deposit money banks in Uyo, Akwa Ibom State. This value prompted the rejection of the null hypothesis in favour of the alternative hypothesis.

Hypothesis 2

 H_{02} : Honest and timely communication has no significant relationship with strategic change management in selected deposit money banks in Uyo, Akwa Ibom State.

	Correlated Variables	НТС		SCM
HTC	Pearson Correlation		1	.728**
	Sig. (2-tailed)			.000

Table 2:	PPMC	Result of Hypothesis Two
		Result of Hypothesis 1 wo

	Ν	208	208
SCM	Pearson Correlation	.728	1
	Sig. (2-tailed)	.000	
	N	208	208

Source: SPSS Computed Result (2023)

Results in Table 2 showed a correlation co-efficient (r) of 0.728 with a probability value of 0.000. Since (r = 0.728 p.>0.000), we reject the null hypothesis and accept the alternative hypothesis. This shows that Honest and timely communication has positive and significant relationship with strategic change management in selected deposit money banks in Uyo, Akwa Ibom State. As such, the null hypothesis was rejected while the alternative hypothesis was accepted.

Conclusion

Findings from the study showed that there is a significant relationship between top management support and strategic change management in the studied deposit money banks in Uyo, Akwa Ibom State. The findings further revealed that honest and timely communication has positive and significant relationship with strategic change management in the studied deposit money banks in Uyo, Akwa Ibom State. It was concluded that critical success factors have significant relationship with strategic change management in the studied deposit money banks in Uyo, Akwa Ibom State.

Recommendations

Based on these findings, the following recommendations were made:

- i. Top level managers in the studied deposit money banks should maintain the habit of supporting their employees during strategic change periods in the banks by giving them the necessary resources that is required to cope with the change; and
- ii. Outcomes of strategic change should be communicated to the employees ahead of time regardless of the effects it will have on them.

References

- Aguilera, R. and Dencker, J. (2004). The Role of Human Resource Management in Cross- Border Mergers and Acquisitions. International Journal of Human Resource Management, 15: 1355-1370.
- Agwu, E., Carter, A. and Murray, P. (2014). Downsizing as a Strategic Tool for Effective Organizational Management: A Case Study of Nigerian

Banks. International Journal of Research in Management, Science & Technology, 2(1): 1-9.

- Alani, L., Akeem A., Edwin, A. and Omotayo, A. (2016). Strategic Imperatives of Managing Change in Nigerian Financial Institutions. Journal of Business Management Science, 2(3): 19-38.
- Al-Hudhaif, M. (2011). The Critical Success Factors for Implementation of Customer Relationship Management in the Banking Sector of Saudi Arabia. Journal of Global Business Management, 7(1): 1-7.
- Al-Khaffal, M. (2012). Appling Change Management Critical Success Factors in Bank of Jordan and Capital Bank. American Academic & Scholarly Research Journal, 4(3): 1-9.
- Allatta, J. and Singh, H. (2011). Evolving Communication Patterns in Response to an Acquisition Event Strategic Management Journal, 32, 1099-1118.
- Baker, D. (2004). The Strategic Management of Technology. Oxford: Chandos.
- Bryan, A. and Bell, E. (2017). Business Research Method (2nd Ed). UK: Oxford University.
- Caralli, R. (2004). The Critical Success Factor Method: Establishing a Foundation for Enterprise Security Management. Technical Report, Networked Systems Survivability Program Survivable Enterprise Management Team.
- Daniel, R. (1961). Management Data Crisis. Harvard Business Review. Sept-Oct, 111-112.
- Gupta, M. and Boyd, L. (2008). Theory of Constraints: A Theory for Operations Management. International Journal of Operations Production Management, 28: 991-1012.
- Harigopal, K. (2006). Management of Organizational Change: Leveraging Transformation (2nd ed.). Response Books.
- Hill, C. and Jones, G. (2001). Strategic Management Theory: An Integrated Approach. (5th Edition). Boston: Houghton Mifflin Co.
- IshaqBhatti, M., Zafarullah, M., Awan, H. and Bukhari, K. (2011). Employees' Perspective of Organizational Service Quality Orientation: Evidence from Islamic Banking Industry. International Journal of Islamic and Middle Eastern Finance and Management, 4(4): 280-294.
- Kagumu, J. (2016) Organizational Factors Influencing Strategy Implementation in the Anglican Church of Kenya: the Case of Kirinyaga Diocese, Kenya. International Journal of Current Business and Social Sciences, 1 (5): 350-385.
- Kivuva, E. (2012). Change Management at Commercial Bank of Africa. M.B.A Dissertation, School of Business, University of Nairobi.

- Njoroge, M. (2017). The Efficacy of Using Mother Language in the Teaching of Mathematics and Science in Primary Schools: Evidence from Grade One Classrooms in Kenya.
- Obonyo, E. and Kerongo, F. (2015). Factors Affecting Strategic Change Management and the Performance of Commercial Banks in Kenya: A Case Study of Kenya Commercial Bank in Nairobi Region. European Journal of Business and Management, 7(15): 109-117.
- Pfeffer, J. and Salanick, G. (2003) The External Control of Organizations: A Resource Dependence Perspective. Stanford Business Books, Stanford.
- Pourhanifeh, G. and Mazdeh, M. (2016). Identifying the Critical Success Factors of Organization with Analytic Hierarchy Process Approach (Case Study: Iran Argham Company). Problems and Perspectives in Management, 14 (4): 54-60.
- Ringim, K. and Bello, S. (2013). Radical Transformation of Small and Medium Financial Institutions: The effect of Change Management factors on Organization Performance. International Journal of Academic Research in Business and Social Sciences, 3(2): 308-327.
- Rockhart, J (1979). Chief Executives Define Their Own Data Needs. Harvard Business Review 57, 2 (March-April 1979).
- Senge, P., Kleiner, A., Roberts, C., Ross, R., Roth, G. and Smith, B. (1999). The Dance of Change. New York: Currency/Doubleday.
- Smith, K. and Kofron, E. (1996). Toward a Research Agenda on Top Management Teams and Strategy Implementation. Irish Business and Administrative Research, 17: 135-152.
- The Society for Human Resource Management (2015). Change Management. Retrieved from www.shrm.org/templatestools/ glossaries/hrterms/pages/c.aspx on 10/02/2023.
- Turner, T., Qvarfordt, P., Biehl, J., Golovchinsky, G. and Back, M. (2010, April).Exploring the Workplace Communication Ecology. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems.
- Uford, I. C. & Joseph, U. (2019). The Effect of Electronic Banking on the Marketing of Deposit Money Bank's (DMB) products in Uyo metropolis. *Journal of Business Sciences*, 3(1), 53-74.
- Ward, J. and Peppard, J. (2002). Strategic Planning for Information Systems (3rd Edition). John Wiley & Sons Ltd., Chichester.
- Yamane, T. (1967). Statistics: An Introductory Analysis (2nd Ed.). New York: Harper and Row.