The Impact of Generated Information on the Banks Efficiency: Strategic Planning as a Mediator: A Case Study on Al-Tadamon Islamic Bank in Sudan

Osama Mohamed Ahmed Enad*

Department of Business Administration, College of Sciences and Arts, Jouf University, KSA. *Email: Osamaenad3@gmail.com

ABSTRACT

The main objective of this study is to test the relationship among the generated information and bank's efficiency; the mediating impact of Strategic planning, the data have been collected from 60 employees and managers of Al-Tadamon Islamic Bank. The Questionnaire was used to collect the data; the overall response rate was 95%. Many statistic tools have been utilized, reliability test, exploratory factor analysis, correlation analysis and hierarchical regression to the goodness of measures and interrelationships. The outcomes revealed that generated information impact on the bank's efficiency, also strategic planning influence the bank's efficiency, besides the association between the generated information and strategic planning.

Keywords: Generated Information, Banks Efficiency, Strategic Planning
JEL Classification: G2

1. INTRODUCTION

Among the most significant consequences of digital media in last years is that they provide an environment where individuals are routinely exposed to a tremendous range of feelings, across abroad diversity of sources. Participating to this informational fecundity is a dramatic rise in user-generated content,'' where people not only consume, but similarly introduce numerous information resources available continuously The user generation of information is a possibly transformative expansion that nevertheless co-exists with more traditional and well-established information sources that have also been changed in important ways by the capacity of networked technologies. Flanagin and Metzger (2013) user contribution, as a system to gather information, has become gradually common in the last time Jansson (2017)The relative credibility of these information forms, or the degree to which each can be believed Andrew (Flanagin and Metzger,(2013. Besides the information generated the paper also focus on strategic planning, The planning paradigm was presented as a rational analytical

method to provide strategic direction to organizational actions, while the emergence perspective was presented as investigative the social procedures in which strategies are really understood and implemented and acknowledges SL as a key factor in a strategy process (Sirén and Kohtamäki, 2016)The significance of this study come-up from the necessity of information and, its important in the business organization and decision making, This study concentrates on the cross- relationship among the variables (Generated Information, Banks Efficiency and Strategic Planning) a few researchers who study this relationship.

2. LITERATURE REVIEW

To better explore the effects of the information-generated and system-generated information on services search, evaluation and decision-making, this paper draws from three variables of literature generated information, strategic planning, as well as the efficiency in the banks Yang et al. (2015) Beside the generated information the paper also focuses on strategic planning, The planning

paradigm was presented as a rational analytical method to provide strategic direction to organizational actions, while the emergence perspective was presented as investigative the social procedures in which strategies are really understood and implemented and acknowledges SL as a key factor in a strategy process(Sirén and Kohtamäki, 2016) Strategic planning is a systematic procedure through which an organization agrees on – and builds commitment among key stakeholders to – priorities that are essential to its task and are responsive to the Environment. Strategic planning guides the acquisition and allocation of resources to achieve these priorities. Strategic planning processes are: Mission definition, objectives setting, external analysis, internal analysis, strategic choice, strategy implementation and competitive advantages Chang and Chen (2015).

Strategic planning also is a corporate managerial practice by means of which a set of processes are undertaken in order to define a range of policies that will underwrite to the accomplishing of the establishment's mission statement León-Soriano et al. ((2010 Good strategic planning can assist in the startup of an institute and develop organizational performance. Strategic planning tools can be classified into three types: The first includes general internal and external analysis and contains SWOT, BCG, and PESTLE. The second relies on technology, such as simulations performed by a computer, to contribution to private or organizational improvement. The last utilizes group argument, work-shops, and brainstorming to encourage different kinds of thinking for the planning of strategies Chang and Chen (2015).

Formal strategic planning and emergent strategy making are frequently identified as separate and opposing methods for strategy formation. Whereas the planning school contends that a systematic, prediction-oriented, and formal method leads to superior performance, the learning school suggests strategic learning (creation, dissemination, interpretation, and implementation of strategic knowledge) is a source of competitive advantage. This distinction has sparked debate on the features of effective strategy improvement that has highlighted the benefits and limitations of both methods (Sirén and Kohtamäki, 2016).

While there is empirical support for a positive relationship between strategic planning and performance, there is also evidence suggesting that no such relationship exists Organizations, through strategic planning, anticipate environmental turbulence and allocate resources accordingly. By being flexible alternative decision options are generated and considered, which may be deployed as and when particular opportunities or threats arise within the environment. As this process occurs before the impact of turbulence, flexibility in the organization is anticipatory and preparatory. Rudd et al. (2008) Strategic decisions are significant in the recent competitive business world for those administrators who want to retain their firms viable for a long time. Tactical and operational decisions are important due to their influence on strategic decisions. Some of the decisions can be considered as a strategic decision in a firm, whereas the same decision is considered as a tactical decision in some other firms. These differences emerge because of different decision policies in firms (Bashiri et al., 2012) A broadly used and powerful style for

strategic planning, integrating market and technology strategies, Konstantin Vishnevskiy et al. (2015) One or more companies in a manufacturing are often argued to have attained "competitive advantage" relative to the majority of rivals (Porter, 1985). A common challenge facing strategic management scholars is to identify objectively the leading competitors and assess the reasons for their superiority Chen et al. (2015).

The theoretical literature reiterates that SIS and the appropriate and timely use of IT/IS effectively support the phases of strategic planning in order to maintain or gain competitive advantage and organizational performance Yoshikuni et al. (2018). Performance valuation is a vital mission for a decision - making unit (DMU) to find its weaknesses so that subsequent enhancements can be made. Since the pioneering work of Charnes et al. (1978), data envelopment analysis has established to be an effective technique for measuring the relative efficiency of a set of DMUs what utilize the same inputs to produce the same outputs Kao (2009).

Efficiency and productivity measurement is a longstanding matter of interest in economics. Furthermore, over the last years, environmental performance and the valuation of the costs of abating negative environmental externalities have received growing attention from both researchers and policy decision-makers. As an outcome of this interest, from the eighties onwards rising literature has arisen devoted to incorporating environmental issues into traditional production theory, which has, to date, produced a wealth of contributions review the literature). In doing so, it has been common practice to consider environmental externalities as unwanted outputs in production processes. Picazo-Tadeo and Prior (2009) Supply efficiency is the ratio of outputs to inputs within the system, in which optimal equilibrium is the degree to which extracted virgin resources remain relevant in an input- output product or process cycle Koh et al. (2017)

3. DATA COLLECTION AND METHODOLOGY

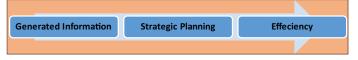The research conceptual framework is presented in Figure 1.

3.1. Hypotheses
- There is a relationship between generated information and Banks efficiency
- There is a relationship between generated information and strategic planning
- There is a relationship between strategic planning and Banks efficiency
- Strategic planning mediates the relationship between generated information and Banks efficiency.

3.2. Administrative of the Field Works
Al-Tadamon Islamic Bank has provided information relating to research. A total of 60 copies of the questionnaire were sent to the Target

Figure 1: The research conceptual framework

respondents and a simple random sample was used to collect data. In an expectation of high expected response rate, email and recommendation from some managers were used to give assurance contribution among the target respondents. The questionnaire contained two parts. The first one collected the demographic profile such as gender, age, level of study, and marital status, whereas the second section was about the main focus of this study and gathered respondents regarding the four main variables namely, generated information, Bank's efficiency and, strategic planning. The data collected was keyed-in the Statistical Package for Social sciences (SPSS) version 21.0.

4. DATA ANALYSIS AND FINDING

Questionnaiers rate or return and general characteristics of the respondents are given in Table 1.

4.1. Factor All Analysis for Variables
4.1.1. Factor analysis of generated information
Exploratory factor analysis was conducted for the generated information construct, using principal component analysis with Varimax rotation. All items entered in the process and there were no items deleted. The KMO for this construct was 0.712 which is higher than the required point, while the Bartltt's test of sphericity was significant at 0.05 level. All items loaded into a single construct with a total variance explained of 52.770 % Factor loadings were higher than 0.60, ranging from 0.863 to 0.513. The highest loading belongs to the item (We track and record

Table 1: General characteristics of the respondents (n=57)

Variables	Categories	Frequency	Percent
Age	<30	23	40.4
	30<40	14	24.6
	40<50	14	24.6
	More than 50	6	10.5
Gender	Male	40	70.2
	Female	15	26.3
Education level	Secondary	1	1.8
	Bachelor	44	77.2
	postgraduate	11	19.3
Work's experience (year)	<5	21	36.8
	5<10	14	24.6
	10<15	7	12.3
	15 and more	13	22.8
Number of employees	<10	20	35.1
	10<25	12	21.1
	26<50	03	5.3
	50 and above	10	17.5

Source: Prepared by researcher, (2019)

Table 2: Rotated factor for generated information

Items no	Component
We track and record competitive activities	0.863
Much of our time is devoted to market research	0.815
We rely on informal means to gather information	0.585
We listen carefully to customer complaints	0.513
We are constantly focused on getting important information about competitors	0.790
Total variance explained	52.770
Kaiser-meyer-olkin (KMO)	0.712
Bartltt's test of spherecity	83.947

Source: Prepared by researcher, (2019)

competitive activities) with 0.863 whereas the lowest item is We listen carefully to customer complaints 0.513 (Table 2).

4.1.2. Factor analysis of strategic planning
A similar procedure was conducted on Strategic Planning before going further interpretation, suitability of running factor analysis was conducted and found very suitable. 5 items were included in the process and all of them loading into a single component. The total variance explained by these items was 61.062% with is above the recommended cut-point. The factor loadings ranged from 0.862 to 0.641. The higher loading was found to belong to the item (Our vision is focused on the dissemination of quality culture) with 0.862 and the adequate resources are allocated for the implementation of quality-focused strategies loading of 0.641 (Table 3).

4.1.3. Factor analysis on efficiency
Factor analysis on efficiency the latest concept conducted for the factor analysis of efficiency. This construct consisted of 4 items and

Table 3: Factor analysis on strategic planning

Items no	Component
Adequate resources are allocated for the implementation of quality-focused strategies	0.641
There is a system to measure the effectiveness of the work plan covering all our activities	0.812
Our mission is clearly focused on spreading quality culture	0.716
Our objectives are clearly focused on the dissemination of quality culture	0.853
Our vision is clearly focused on the dissemination of quality culture	0.862
Total variance explained	61.062
Kaiser-meyer-olkin (KMO)	0.790
Bartltt's test of spherecity	117.542

Source: Prepared by researcher, (2019)

Table 4: Rotated factor for efficiency

Items no	Component
We succeeded in doing the right thing	0.776
We succeeded in reaching the expected results	0.834
We achieve all the objectives	0.897
We have the ability to increase output in case of constant input	0.803
Total variance explained	68.676
Kaiser-meyer-olkin (KMO)	0.741
Bartltt's test of Spherecity	98.680

Source: Prepared by researcher, (2019)

Table 5: Cronbachs alpha for study variables

Variables	Number of items	Crombach's alpha
Generated information	5	0.751
Strategic planning	5	0.832
Efficiency	4	0.841

Source: Prepared by researcher, (2019)

Table 6: Person's correlation coefficient for all variables

Variables	GI	ST	Eff
Generated information	1.00		
Strategic planning	0.529	1.00	
Efficiency	0.167	0.246	1.00

Source: Prepared by researcher, (2019)

all of them loaded, as expected, into a single component. The factor loadings were very high compared to other constructs and ranged from 0.897 to 0.776. The lowest loading (0.776) obtained by the item (We succeeded in doing the right thing, whereby the first item (We achieve all the objectives) scored the highest factor loading (0.897) (Table 4).

4.2. Reliability Analysis
To test the reliability of the study Cronbach's Alpha was used to measure the internal consistency of the variables; according

Table 7: Multiple regressions: Generated information and efficiency (Beta coefficient)

Variable	Efficiency
Generated information	0.173
R^2	0.030
Adjusted R^2	0.012
ΔR^2	0.030
F change	1.693

Source: Prepared by researcher, (2019)

Table 8: Hierarchical regression: Mediating effect of mediator of strategic planning on generated information and efficiency (Beta coefficient)

Variable	Model 1	Model 2
Generated information	0.572	0.014
R^2	0.331	0.331
Adjusted R^2	0.319	0.307
ΔR^2	0.331	0.000
F change	27.247***	0.014

Source: Prepared by researcher, (2019)

Table 9: Multiple regressions: Generated Information and strategic planning (Beta coefficient)

Variable	Strategic planning
Generated information	0.576
R^2	0.331
Adjusted R^2	0.319
ΔR^2	0.331
F change	27.247

Source: Prepared by researcher, (2019)

Table 10: Multiple regressions: Strategic planning and efficiency (Beta coefficient)

Variable	Efficiency
Strategic Planning	0.287
R^2	0.077
Adjusted R^2	0.061
ΔR^2	0.077
F change	4.616

Source: Prepared by researcher, (2019)

Table 11: Questionnaires rate of return

Total questionnaires sent to the companies	60
Returned questionnaire (not filled-up)	2
Completed questionnaires from the respondent	57
Returned questionnaires (partially answered)	1
Questionnaires not returned	0
Overall response rate	95%
Useable response rate	95%

Source: Prepared by researcher, (2019)

to Cronbach's Alpha the variable must score 0.7 to be internal consistency (Hair et al., 2010) (Table 5).

4.3. Correlation Analysis
The table below displays that Generated Information is significantly connected with Strategic Planning (r = 0.529, P < 0.01). Generated information is correlated with Efficiency (r = 0.167, P < 0.01) and Strategic Planning is positively associated with Efficiency (r = 0.246, P < 0.01); consequently, both independents and the dependents variable are sufficiently correlated and no multicollinearity detected (Table 6).

4.4. Hypothesis Testing
4.4.1. Multiple regressions for generated information and efficiency
The table below displays the result from hierarchical regression between Generated Information and Efficiency the table shows positive relations between the variables (β = 0.173; F change = 1.693), hence H1 (Generated Information and Efficiency) were somehow accepted (Table 7).

4.4.2. Multiple regressions for generated information and strategic planning
The subsequent hypothesis of the study showed that there is a positive relationship between Generated Information and strategic planning. The result shows (Table 8) that the Generated Information is a positive significantly influenced strategic planning (β = 0.423; F change = 652) (Table 9).

4.4.3. Multiple regressions for strategic planning and efficiency
Correspondingly the study tested that there is a positive relationship between strategic planning and efficiency. The result on the below (Table 10) displays that strategic Planning is a positively influenced efficiency (β =0.287; F change = 4.616) (Table 10). Questionnaries rate or returs are presented in Table 11.

To test the effect of strategic Planning as a mediator of the Association between generated information and efficiency, this study was applied a three-step hierarchical regression recommended by Baron and Kenny (1986). Table 8 below shows the result of hierarchical regression testing the mediation effect of strategic Planning on the Relationship between generated information and efficiency. In model 1, the result showed that generated information significantly influences efficiency (B = 0.572) and strategic Planning (B = 0.014) in model 2, As the result shown in the Table 10; that strategic Planning partially mediates the relationship between generated information and efficiency.

4.4.4. Hierarchical regression for mediating effect
Hierarchical regression results are presented in Table 8.

5. CONCLUSION

The target of this study was to examine the relationship between, generated information and bank efficiency besides the relationship between generated information and strategic planning and the relationship between strategic planning and bank efficiency Additionally, the mediating impact of strategic planning on the relationship between generated information and bank efficiency.

The results of this study showed that bank efficiency affected by generated information, besides the relationship between generated information and strategic planning. Similarly, the outcome reflected the positive relationship between strategic planning and bank efficiency moreover, the mediating impact of strategic planning effect partial on the relationship between generated information and bank efficiency.

The overall purpose of this study was to examine how generated information influence bank efficiency this study is an attempt to investigate the relationship between the generated information and strategic planning. Also, the study investigated the relationship between strategic planning and bank efficiency. Additionally, the mediating impact of strategic planning on the relationship between generated information and bank efficiency. The results reflect that generated information positively related with bank efficiency, and the same time connected to strategic planning positively. Additionally, the bank efficiency has a positive relation with strategic planning. The findings provided empirical support for the theoretical framework, demonstrating the fact that the study had sufficiently addressed the research questions.

REFERENCES

Baron, R.M., Kenney, D.A. (1986), The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173-1182.

Bashiri, M., Badri, H., Talebi, J. (2012), A new approach to tactical and strategic planning in production distribution networks, Applied Mathematical Modelling, 36, 1703-1717.

Charnes, A., Cooper, W.W., Rhodes, E. (1978), Measuring the efficiency of decision making units. European Journal of Operational Research, 2(6), 429-444.

Chang, W.L., Chen, S.T. (2015), The impact of world café on entrepreneurial strategic planning capability. Journal of Business Research, 68(6), 1283-1290.

Chen, C.M., Delmas, M.A., Lieberman, M.B. (2015), Production frontier methodologies and efficiency as a performance measure in strategic management research. Strategic Management Journal, 36(1), 19-36.

Chiu, T.F. (2014), A proposed IPC-based clustering method for exploiting expert knowledge and its application to strategic planning. Journal of Information Science, 40(1), 50-66.

Flanagin, A.J., Metzger, M.J. (2013), Trusting expert-versus user-generated ratings online: The role of information volume, valence, and consumer characteristics. Computers in Human Behavior, 29(4), 1626-1634.

Hair, J.F., Anderson, R.E., Tatham, R.L. Black, W.C. (2010), Multivariate Data Analysis. 7th ed. New Jersey: Prentice Hall Inc., Upper Saddle River.

Jansson, I.M. (2017), Organization of user-generated information in image collections and impact of rhetorical mechanisms. KO Knowledge Organization, 44(7), 515-528.

Kao, C. (2009), Efficiency measurement for parallel production systems. European Journal of Operational Research, 196(3), 1107-1112.

Koh, S.C.L., Morris, J., Ebrahimi, S.M., Obayi, R. (2016), Integrated resource efficiency: Measurement and management. International Journal of Operations and Production Management, 36(11), 1576-1600.

León-Soriano, R., Muñoz-Torres, M.J, Chalmeta-Rosalen, R. (2010), Methodology for sustainability strategic planning and management. Industrial management and data systems, 110(2), 249-268.

Picazo-Tadeo, A.J., Prior, D. (2009), Environmental externalities and efficiency measurement. Journal of Environmental Management, 90(11), 3332-3339.

Porter, M.E. (1985), Competitive Advantage Creating and Sustaining Superior Performance, Library of Congress Cataloging in Publication Data. New York: Free Press.

Rudd, J.M., Greenley, G.E., Beatson, A.T., Lings, I.N. (2008), Strategic planning and performance: Extending the debate. Journal of Business Research, 61(2), 99-108.

Sirén, C., Kohtamäki, M. (2016), Stretching strategic learning to the limit: The interaction between strategic planning and learning. Journal of Business Research, 69(2), 653-663.

Vishnevskiy, K., Karasev, O., Meissner, D. (2016), Integrated roadmaps for strategic management and planning. Technological Forecasting and Social Change, 110, 153-166.

Yang, H., Guo, X., Wu, T., Ju, X. (2015), Exploring the effects of patient-generated and system-generated information on patients' online search, evaluation and decision. Electronic Commerce Research and Applications, 14(3), 192-203.

Yoshikuni, A.C., Favaretto, J.E.R., Albertin, A.L., Meirelles, F.D.S. (2018), The influences of strategic information systems on the relationship between innovation and organizational performance. BBR Brazilian Business Review, 15(5), 444-459.