Factors affecting strategic plan execution process in public healthcare

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ABSTRACT

Background: The managers of healthcare Organization must confront numerous impediments and curbs issues that significantly contribute to the trial of quantifying, testing, and meritoriously use execution strategies that work in healthcare setting. The aim of the research is to explore and confirm the active factors of failure for the strategic plan execution in state healthcare in Namibia.

Methods: The research utilized quantitative approach, a survey design and questionnaire was employed to collect data. The study used Gaskin’s CFA/SEM procedure and applies the SPSS 23 AMOS plugins, Pattern Matrix Model Builder” (PMB), “Master Validity” (MV), “Model fit measures” (MFM) to validate and determine the interrelationships between variables.

Results: Studying literature, 17 variables were recognized and Implementation failure factors (IFF) model with two key factors was established, IFF for strategic plan formulation and IFF for strategic plan implementation. The factors were then reduced using exploratory factor analysis which is evaluated using Principal Axis Factoring with Direct Oblimin rotation. Structural modelling equation (SEM) approach was used, variables were assembled into 4 factors dimension measurement. This model, recognized four factors, contextual dimensions (0.34), content dimensions (0.31), operational dimensions (0.23) and Structural dimensions (0.04) are the main reasons for failure of strategic plan implementation in public health care in Namibia.

Conclusions: The research shows that exploring and confirming implementation failure factors in public healthcare organization in developing countries, it will be plausible to consider IFFs for strategic plan formulation and IFFs for strategic plan implementation. Structural equation modelling/CFA has been run to prove the validity of basic IFFs in this research.

Keywords: Strategy implementation, Failure of strategy implementation, Public healthcare, Factor analysis and structural equation modelling

INTRODUCTION

The final report of the Presidential Commission of Inquiry on health matters in Namibia points out critical concerns in the areas of management and begs the executives for effective strategic re-thinking of Ministry of Health and Social Service current practices in implementing its strategic decisions for the benefit of its clientele.1 The commission submitted further that, there is no doubt, the state institutions of health care delivery in Namibia have the best strategic policies but the greatest challenges lie in implementing effectively strategic decisions since strategic decisions almost fail during the implementation process. However, the commission fails to elaborate as to what these challenges are and at what level of the organisational structures the implementation is of a struggle.

Additionally, some researchers found that ineffective governance structure of Namibian state hospitals
negatively affects hospital management’s decision-making authority and ability. They highlighted that the current governance structure confines the authority of hospital management as they do not have efficient power to exercise key decisions required to improve service delivery, address bottlenecks, and realign services to meet the needs of the communities they served. Moreover, implementing strategic plans in an inherently complex social organization like public health care have been founded to be a headache for various health care managers.

A strategic plan is a company’s or organization’s game plan that enables it to compete successfully. A strategic plan is define as the art and science of formulating, implementing and evaluating cross-functional decisions that enables an organization to achieve its objectives. It is argued that the managerial task of implementing and executing the chosen strategy should entails assessing what it will take to develop the needed organisational capabilities and to reach the targeted objectives on schedule. However, a social organization like public healthcare seems to be struggling in implementing strategic plans. It had been argued that public healthcare are complex organisations characterised by complicated organizational structures and complex interactions, power of interest groups and internal politics, and vulnerability to the external environment. All of these factors strongly resemble the challenges faced by the three Namibian public intermediate hospitals under study.

Current researchers described some of the most common barriers which Public health organisations face toward effective strategic planning and these included barriers at different stages of effective strategic planning, like barriers in formulation of strategic plans, barriers in implementation of strategic planning. Some of the barriers experienced during planning usually continue through to execution and implementation. Thus it can be argued that, in order to achieve the goal of effective strategic planning, effective change management and leadership are indispensable.

The above views had supported earlier views which stated that a lack of creative strategic vision in the organisation could not motivate and boost up morals of the staff to obtain the determined objectives, besides, communication among the middle level management and high level management in the organisation remained very low. Owing to lack of communication, the top-level management could not convey their appropriate messages to low-level management. Another important reason of the failure of the strategic plan is lack of the leadership skills among leaders that engendered many ambiguities among the working staff and leaders who could not understand the situations of the organization.

Mackenzie et al joined the debate on the factors influencing strategic planning implementation failure in public healthcare with arguments focused on the leadership style of an organisation. They argued that one could obtain the desired goals and objectives of the company through creating the vision for the organisation according to the set-up of the firm. They argued for aligning the staff for the achievement of the goals of the firm rather than the personal goals, as well as providing support to the intellectual individuals in complicated settings and clarifying expectations of the organisation from the team and their performance in the organization.

Kalali et al explored and confirmed the main factors, which are the basis, and causes of failure of the health sector in Iran. They identified four factors involved in the failure of the strategic plan in the Iranian health sector as context, content, structure, as well as operational framework of the organisation. They then developed four dimension factors using exploratory and confirmatory factor analysis. The Kalali classic recognized these measurements as context dimension, content dimension, operational dimension and structural dimension as effective factors on the failure of strategic decisions implementation in Iranian health service sector.

Sial et al confirmed the Kalali model dimensions by applying them in Pakistan’s purely public sector organizations. These two studies confirmed the applicability of these dimensions to public healthcare organisations. Their contribution resulted in them defining these four Kalali et al dimensions as follows: Content dimensions include the ingredients involved in strategy formulation, Contextual dimensions include the internal and external environmental for the strategy implementation in public sector organizations, operational dimensions refer to the problems that happen in the operational level during the strategy implementation. Structural dimensions point out the organizational structure, power and responsibilities.

Additionally, their study showed variation on the most important reason for the failure of the strategic plans implementation in public healthcare system. In Iran, context dimension was first and contextual dimension has the lowest importance on describing the reason of managerial decision failure while operational and structural dimension were located between these extremes. Whereas in Pakistan, it was the operational factors of the implementation. The operational dimensions includes resources limitation, incompetent management and staff, poor planning for execution and lack of integration among the department are the main reasons for failure, after that context dimensions, structural and content dimensions. This variation necessitated the researcher to adopt Kalali et al and Sial et al model but add an item that covers service provision to their 16 effective failure factors which make the items of this study to be 17 items.

The study formulated its propositions that effective implementation of strategic decision will be affected by implementation failure factors (IFF) during strategic plan
formulation and by IFF during strategic plan implementation. These determinants are the content of the strategy, contextual, structural, and operational factors.

**Objectives**

To identify factors contributing to the strategic plan implementation failure in Namibian intermediate state hospitals and to determine the significant proportion of said factors contributing to the strategic plan implementation failure in Namibian intermediate state hospitals.

**METHODS**

The research utilized quantitative approach, a survey design and questionnaire was employed to collect data from the Ministry of Health and Social Services (MoHSS) operational staff and regional management from three intermediate public hospitals to identify factors contributing to the strategic plan implementation failure in Namibian intermediate state hospitals. The hospitals are Katutura Intermediate State Hospital (KISH) in Khomas region, the Rundu Intermediate State Hospital (RISH) in Kavango region and the Oshakati Intermediate State Hospital (OISH) in Oshana region. The study only covered those who have been continuously in the employment of MoHSS for the period February 2009 - February 2013. The population was 453 operational staff and regional management members. A representative of 290 staff was involved in this research. A good response rate of 72 percent was achieved. The study was carried out from May 2016- July 2016.

**Analysis**

Kaiser-Meyer-Olkin (KMO) test and Bartlett’s test of sphericity were performed. The study results showed that all the necessary conditions were met and that it was appropriate to conduct an Exploratory Factor Analysis and only items that contained factor loadings greater than 0.30 were considered to be significant and were thus retained. Gaskin’s SEM procedure was utilizes and SPSS AMOS plugins; “Pattern Matrix Model Builder” (PMMB), “Master Validity” (MV), “Model fit measures” (MFM) applied.

**RESULTS**

Table 1, shows the results, the respondents were asked to identify the barriers to the implementation of MoHSS strategic plan objectives for 2009- 2013. The 17-item statements used to identify the barriers to the implementation of MoHSS strategic plan objectives for 2009- 2013. The item factors are sorted in descending order of the mean and the results lower mean value (1) imply that the respondents strongly agree with item statement, while a higher mean value (5) would imply they strongly disagree with the item statement. The results show that the respondents agree on the importance of these items in impeding the success of the organisation in achieving its Strategic plan. However, there were mixed responses to statement that ‘Your hospital can’t implement strategic plan for the reason that it is public healthcare hospital’ (M=3.2, S. D=0.8), with a slight skewness to the right (-0.9) implying that a slight majority disagree with the statement. The skewness and Kurtosis values show that the results follow a normal distribution.

**EFA- IFF**

The 17-item IFF scale based on Kalali et al model was evaluated using Principal Axis Factoring with Varimax rotation. However, the extraction was terminated by SPSS, it could not extract the 6 factors with eigenvalues of exceeding 1.0. Therefore, EFA was rerun by changing EFA method, in order to extraction 4 fixed factors or dimensions. However, for this study the factor loadings were not consistent with those in literature as Table 2, will show.

Table 2, show the significant factor loadings are bolded, FF-13, FF-15, FF-12 and FF-10 cross loaded but were included because of they would be included in CFA/SEM analysis. The results also show that four distinct factors emerged which explained a cumulative variance of 49.169 percent in the Implementation Failure Factors (IFF) scale. The results were consistent with the four dimensions suggested by Kalali et al. and Sial et al. model but inconsistent in terms of factor loading. The factor grouping was done using the definitions of Sial et al the four dimensions. The CFA/SEM model fit procedure was carried out for the confirmation and validation of the IFF scale. Figure 1 and Table 3 presents the results.

**Structural equation modelling (SEM)**

The research proposition suggested, was test by conducting CFA, goodness-of-fit measures and Maximum likelihood estimation with residual moments and modification indices. Using staff opinions, SEM was used to determine the structural relationships between the IFF (represented by IFF1, IFF2, IFF3, and IFF4).

According to Cohen et al.1988 correlational effects less than 0.3 are interpreted small or weak, with 0.3 to 0.6 as mild or moderate and values above 0.6 as strong relationships. The CFA/SEM analysis highlights poor correlational effects but strong covariance among the factors. This could be the reason for inconsistent factor loadings with those of Kalali et al and Sial et al model.
Table 1: Descriptive item statistics for IFF (n=210).

| Section : Questionnaire Item Statement                                                                 | Mean | S. D | Skewness | Kurtosis |
|-------------------------------------------------------------------------------------------------------|------|------|----------|----------|
| Your hospital can’t implement strategic plan for the reason that it is public healthcare hospital (FF2) | 3.2  | 0.8  | -0.9     | 1.2      |
| The people who execute the plan may agree to another plan too (FF6)                                | 2.3  | 1    | 0.4      | -0.6     |
| Strategic plans implementation failed due to lack of communication system of the ministry (FF3)     | 2.3  | 1    | 0.3      | -0.8     |
| The executive of the organisation helps organisational members in implementing the strategic plan (FF8) | 2.2  | 0.9  | 0.2      | -0.8     |
| The structure of the hospital may become a barrier in implementing the strategic plan (FF12)         | 2.1  | 1    | 0.5      | -0.8     |
| The difference of opinion among staff and management members affects performance of the hospital/region affects performance of the hospital/region (FF4) | 1.9  | 0.9  | 0.8      | 0.1      |
| The managers must adopt strict attitudes to implement the strategic plan once developed (FF15)      | 1.9  | 0.9  | 0.8      | -0.1     |
| Limited resources cause to implement or accomplish strategic Plan (FF1)                            | 1.9  | 1    | 0.8      | -0.7     |
| After completion of the strategic plan formulation, opinion of the operational staff must be obtained for its rejection or acceptance before its implementation (FF11) | 1.9  | 0.8  | 0.9      | 0.4      |
| New problems may occur while implementing the strategic plan (FF5)                                 | 1.8  | 0.7  | 1.2      | 2.5      |
| The strategic plan must be prepared in accordance to the system of an organisation (FF14)         | 1.8  | 0.8  | 1.1      | 1.1      |
| Whatever the strategic plan is, it must be prepared in accordance to information of the organisational objectives (FF13) | 1.7  | 0.7  | 1.1      | 1.6      |
| Lack of leadership or instructions of leadership cause failure of the strategic plan implementation (FF8) | 1.6  | 0.8  | 1.3      | 1.4      |
| Before implementation of the strategic plan, all materials or important information about the strategy need to be in place (FF10) | 1.6  | 0.6  | 0.8      | 0.7      |
| The people who are assigned to execute the strategic plan must have education and expertise in the strategic plan modelling (FF7) | 1.5  | 0.7  | 1.4      | 2.5      |
| Client’s satisfaction rating on services rendered by the hospital shall be the critical determinant factor for the success of the strategic plan implementation (FF17) | 1.5  | 0.7  | 1.6      | 2.4      |
| Before implementing the strategic plan, duties and nature of assignment of each manager must be clearly defined (FF16) | 1.4  | 0.7  | 1.8      | 3.6      |

Table 2: Results of the factor analysis on IFF scale.

| Variable                                | Context | Operational | Content | Structure |
|-----------------------------------------|---------|-------------|---------|-----------|
| FF_4_Divergent_views                   | 0.632   |             |         |           |
| FF_3_Poor_Communication                 | 0.559   |             |         |           |
| FF_6_Disharmony                         | 0.537   |             |         |           |
| FF_5_Environmetal_Uncertainty           | 0.486   |             |         |           |
| FF_8_Lack_Leadership_guidance          | 0.476   |             |         |           |
| FF_13_Ineffective_operational_arrangement | 0.814   | 301         |         |           |
| FF_14_Non_convergence_varied_strategy  | 0.666   |             |         |           |
| FF_15_Lack_commitment_decisionmakers   | 0.483   | 0.309       |         |           |
There is consistency in factor dimension of Sial et al and Kalali et al.\textsuperscript{8,9} model as in both studies, FF10, FF16, FF15, FF4 and FF9 loaded on ‘content’. The content dimension was used on factors involving strategy formulation. While, FF11, FF14, FF2 and FF5 loaded on ‘context’. The contextual dimension included the internal and external environmental factors for the strategy implementation in public sector organizations. The structural dimension was for factors covering organizational structure, power, and responsibilities. These were FF12, FF6, and FF7 loaded on ‘structure’. Lastly, the operational dimension grouped factors that happen in the operational levels during the strategy implementation. FF13, FF3, FF1 and FF8 loaded on ‘operational’.

Figure 1: IFF model fitness.
The model fit measures of the IFF model are presented in Table 3.

Table 3 presents the model fit measures of the final IFF model, guided by the cut off criteria and validity concerns. The IFF model fit was excellent and did not have any validity concerns.

Table 4 shows the results of the IFF model and also support the classifying of the four dimensions into strategic formulation factors and strategy implementation factors. Figure 1 (IFF model) shows that there are dependency relationships IFF1 - IFF2 and IFF4 - IFF3. These relationships imply that IFF1 (context) and IFF4 (structure) are strategy formulation failure factors. Consequently, IFF2 (content) and IFF3 (operational) factors are strategy implementation failure factors. Therefore, it stands to reason that operational factors affect strategy implementation, while structural factors affect strategy formulation. In line with the research proposition, the content and contextual factors interchangeably affect strategy formulation and implementation depending on the success or failure perspective.

### Table 3: IFF model fit measures.

| Measure    | Estimate | Threshold | Terrible | Acceptable | Excellent | Interpretation |
|------------|----------|-----------|----------|------------|-----------|----------------|
| CMIN       | 148.196  | --        |          |            |           |                |
| DF         | 94       | --        |          |            |           |                |
| CMIN/DF    | 1.577    | Between 1 and 3 | >5   | >3         | >1        | Excellent      |
| CFI        | 0.914    | >0.95     | <0.90    | <0.95      | >0.95     | Acceptable     |
| SRMR       | 0.064    | <0.08     | >0.10    | >0.08      | <0.08     | Excellent      |
| RMSEA      | 0.053    | <0.06     | >0.08    | >0.06      | <0.06     | Excellent      |
| PClose     | 0.364    | >0.05     | <0.01    | <0.05      | >0.05     | Excellent      |

### Table 4: Interpretation of IFF model.

| Variable                                      | Category                        | Standardized regression weights | PHO | MoHSS | PSE |
|------------------------------------------------|---------------------------------|---------------------------------|-----|-------|-----|
| IFF_Content                                    | IFF_Content                     | 0.31                            | -0.52 | 0.02  | 0.08 |
| FF_11_Non_acceptor_organisational_culture     | IFF_Content                     | 0.57                            | -0.30 | 0.01  | 0.05 |
| FF_12_Divergent_organisational_culture        | IFF_Content                     | 0.54                            | -0.28 | 0.01  | 0.04 |
| FF_16_unclear_ambiguous_strategy              | IFF_Content                     | 0.52                            | -0.27 | 0.01  | 0.04 |
| FF_17_not_client_centered                     | IFF_Content                     | 0.41                            | -0.21 | 0.01  | 0.03 |
| FF_1_Resource_Limitation                      | IFF_Content                     | 0.30                            | -0.16 | 0.01  | 0.02 |
| IFF_Operational                               | IFF_Operational                 | 0.23                            | -0.38 | 0.02  | 0.06 |
| FF_13_Ineffective_operational_arrangement     | IFF_Operational                 | 0.66                            | -0.25 | 0.01  | 0.04 |
| FF_15_Lack_of_commitment_decisionmakers      | IFF_Operational                 | 0.56                            | -0.22 | 0.01  | 0.03 |
| IFF_Context                                    | IFF_Context                     | 0.34                            | -0.57 | 0.02  | 0.09 |
| FF_Operational                                | IFF_Context                     | 0.21                            | -0.12 | 0.00  | 0.02 |
| FF_3_Poor_Communication                        | IFF_Context                     | 0.59                            | -0.34 | 0.01  | 0.05 |
| FF_6_Disharmony                                | IFF_Context                     | 0.58                            | -0.33 | 0.01  | 0.05 |
| FF_5_Environmental_Uncertainty                 | IFF_Context                     | 0.54                            | -0.31 | 0.01  | 0.05 |
| FF_8_Lack_Leadership_guidance                 | IFF_Context                     | 0.46                            | -0.26 | 0.01  | 0.04 |
| IFF_Structure                                  | IFF_Structure                   | 0.04                            | -0.07 | 0.00  | 0.01 |
| IFF_Content                                    | IFF_Structure                   | 0.70                            | -0.05 | 0.00  | 0.01 |
| FF_7_Lack_capable_staff                        | IFF_Structure                   | 0.39                            | -0.03 | 0.00  | 0.00 |
| FF_10_Unclear_success_targets                 | IFF_Structure                   | 0.65                            | -0.04 | 0.00  | 0.01 |

The results show that the IFF structural factors (0.04) had little to no effect on the effective strategy implementation. While, contextual (-0.57) and content (-0.52) had moderate negative effects. The negative implies...
that the failure factors can be interpreted as success factors. For instance, an improving communication in PHO will result in a reduction in FF3 Poor communication (-0.34). Furthermore, the results show that context and content factors are very important to the effective implementation of strategic interventions in PHO.

DISCUSSION

The study identified 13 effective factors contributing to failure of strategic decision implementation in three intermediate public health care organisation in Namibia. These factors were recognized into four dimensions. In order of effect, the first factor is Contextual Factors with 0.34% which includes, Poor communication; Disharmony, Environmental uncertainty, Lack of clear leadership and guidance, second factor is Content Factors with 0.31% which includes, Non accepting organisational culture; Divergent organisational culture; An unclear and ambiguous strategy; Strategy not patient centered, Resource limitations; third factor Operational Factors with 0.23% which includes, Ineffective operational arrangements ;Lack of commitment of decision makers; and the lowest is Structural Factors with 0.04% which includes, Lack of inspirational leadership; Poor financial control and planning optimization; Poor project management skills are the main reasons for failure of strategic plan implementation in public health care in Namibia. The data achieved is reliable as it is in line with previous researches in public hospitals.

Additionally, the results confirmed that there are variations of factors contributing to strategic plans failure in public healthcare organisations despite their geographically location as shown by Kalali in Iran and Sail in Pakistan respectively. Despite this study carried out in Namibia, a developing country in Africa, this variations could be that Public healthcare are complex social organisations which operate in the different political, socio-economic environment and availability of both humans and materials resources are not in the same supply. The other reason could be that human beings are qualitatively different and their geographically environments could potentially influence their thinking on rating the dimensional measurement of these factors hence the variations will continue to exist and be different from one country to another. Thus managers of healthcare Organizations must confront numerous impediments and curbs issues that significantly contribute to the trial of quantifying, testing, and meritocratically use execution strategies that work in their environment where such public healthcare setting exist.

CONCLUSION

The study confirmed that there are variations of factors contributing to strategic plans failure in public healthcare organisations despite their geographically location. Contextual dimension top the list while structural is the least dimension contributing to strategic plan implementation failure in the public healthcare organisation in Namibia. However, the model fit, propose that it is reasonable to assembly these four failure factors into two major categories, failure factors for strategic formulation and failure factors for strategy implementation. Moreover, the IFF factor model suggests that the content of the strategy depends on the strategic context. Simultaneously, effective execution of the strategy depends on the operational factors which are predisposed by structural factors during strategy formulation stage.

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