

# **The Role of Strategic Quality Planning in Continuous Improvement Efforts (CI) – Case of a Short-Term Insurance Company in South Africa**

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## **Abstract**

This paper presents findings on the extent of the role quality planning plays in CI efforts aimed at developing competitive advantage at a short-term insurer in South Africa. Data was collected using a structured questionnaire developed using a 5-points Likert Scale. The study used interviews and a questionnaire aimed at comparing data on current quality planning strategy at this insurer to best practice in the industry, in order to establish the extent to which quality planning is used in the effort to continuously improve customer satisfaction. Findings show that there is a lack of quality planning best practice at the insurer hindering its positioning amongst the top 10 performing short-term insurers in South Africa. Quality is vital in establishing a company as a leader in its industry that satisfy its customer needs beyond their expectations. Quality cannot be stagnant, as customer needs are dynamic. Therefore, quality needs to continuously improve in order to satisfy the ever changing customers' needs. This paper focuses on strategic quality planning in CI efforts from a South African perspective, contribution is made to body of knowledge relating to quality and CI in the short-term insurance environment.

## **Keywords**

Quality planning, Continuous improvement, Kaizen,

## **1. Introduction**

### **1.1 Background of the short-term insurance industry in South Africa**

Short-term insurance and reinsurance companies in South Africa are required to be registered with the Financial Services Board (FSB) for the types of covers that they address, and the South African Insurance Association (SAIA) addresses the interests of the country's short-term insurance. Mukwakungu and Mbohwa (2016) demonstrate that the short-term insurance sector in South Africa is especially broad, giving an assortment of short-term insurance policy covers, for example, vehicle, family dwellings, medicinal, individual risk, travel and business insurance. As per the South African Financial Services Board, short-term insurance is protection that you take out on your belonging, for example, your home, auto, mobile phone, furniture, and so on against misfortune because of events, for example, fire, thievery or harm (The Financial Services Board, 2013). As indicated by the Short-Term Insurance Act No 53 (1998) a short-term insurance is expressly defined as:

“an engineering policy, guarantee policy, liability policy, miscellaneous policy, motor policy, accident and policy, property policy or transportation policy or a contract comprising a combination of any of those policies; and includes a contract whereby any such contract is renewed or varied;” (xviii) (p. 12).

Mukwakungu and Mbohwa (2016) have stated that the insurance industry in South Africa is considered to be one highly developed sector on the African continent. It is critical to state that South African clients' surprising condition of trust in the local insurance service, fortified by the country's refined financial sector and the presence of competitors, guarantee the insurance sector's high entrance rate in the country. The South African short-term insurance industry is empowered by (1) the quality and trust in the local financial sector, (2) a solid lawful framework important to authorize legally binding contracts, and (3) insurance is not by any means the only way by which one can disseminate or stay away from dangers in South Africa (KPMG, 2016). The KPMG's 2016 Insurance Survey gives different variables, for example, behavioural components that may impact insurance positively or negatively, especially the particular needs of the people, human mindlessness and in addition accessibility predisposition. It is imperative to mention that, as illustrated in Figure 1 which shows the top three countries with the highest insurance penetration rate in Africa, South Africa has the most elevated insurance penetration rate at 14.1%, followed by Namibia at 7% and in third position is Mauritius at 6% (KPMG, 2016). Figures 2 and 3 show comparative figures related to the gross GDP in US\$ billion and GDP per capita in US\$ for the top three countries with the uppermost insurance penetration in Africa.

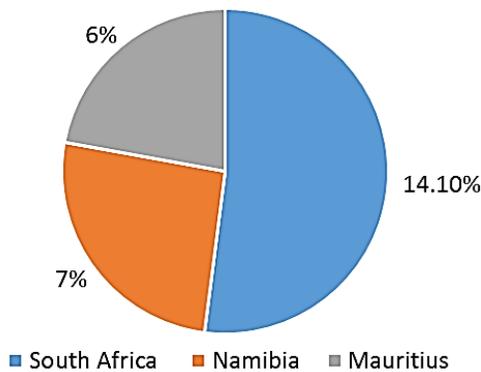


Figure 1. Insurance Penetration Rate in Africa\*

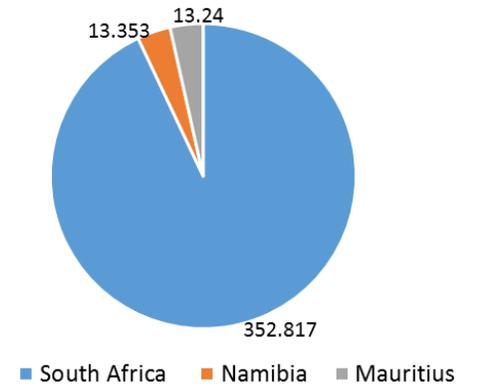


Figure 2. Gross GDP of Countries with the Highest Insurance Penetration in Africa\*

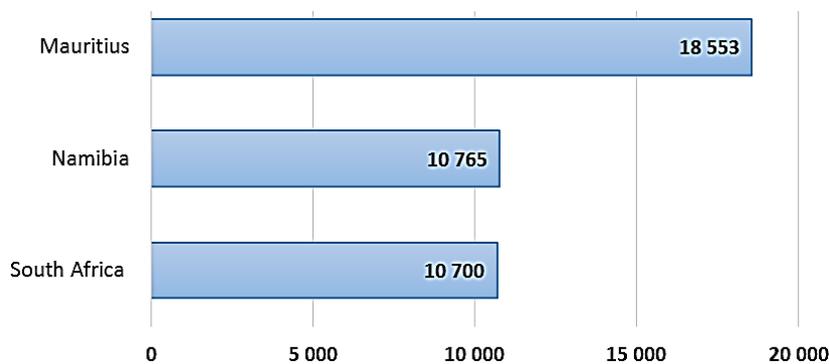


Figure 3. GDP per Capita of Countries with the Highest Insurance Penetration Rate in Africa\*

\* Source: (KPMG, 2016)

## 1.2 Purpose of the study

This paper focuses on strategic quality planning in CI efforts in a short-term insurance company, from a South African perspective, contribution is made to body of knowledge relating to quality and CI in the short-term insurance environment. The paper also presents the state of affairs of where the main players who should contribute in CI efforts at this short-term insurer stand and the outlook for future research.

## 2. Brief Literature Review

### 2.1 Quality planning, what is it?

The quality planning procedure and its related strategies, instruments, and systems have been created in light of the fact that in the history of modern society, organisations have rather generally exhibited a reliable inability to deliver the merchandise and services that absolutely please their clients. As a client, everybody has been alarmed on numerous occasions when flights are deferred, radioactive sullyng spreads, therapeutic treatment is not steady with best practices, a kid's toy neglects to work, another bit of programming is not as quick or easy to use as foreseen, government reacts with frosty speed (if by any means), or a home clothes washer with the most recent innovative contraption conveys at higher cost garments that are no cleaner than some time recently. Early and Coletti (1999) define quality planning as being an organised approach for creating products (goods and services) that guarantees that customer requirements are met by the final result. Based on the definition provided by Early and Coletti (1999), quality planning is conducted in order to improve the quality of services (or quality service), which Lewis and Booms (1983) describe as a degree of how well the service level delivered matches customer expectations as reported by Parasuraman, et al (1985).

Referring to the above definition, it is important to note that Gronroos (1982) came up with a model in which he argues that consumers compare the service they expect with perceptions of the service they receive in evaluating service quality, which in turn creates a gap that organisation have to fill up in an effort to provide higher customer satisfaction. Therefore the process of quality planning deals with developing and providing services that “fill up” the quality gap created by customers when relating their expectations of the service they would like to receive and their perceptions of the service delivered. Figure 1 shows the quality gap and its constituent gaps. Early and Coletti (1999) contend that quality planning gives the procedure, strategies, and in addition systems for shutting each of the segment gaps (as portrayed in Figure 4) and along these lines guaranteeing that the last gap is at a bare minimum.

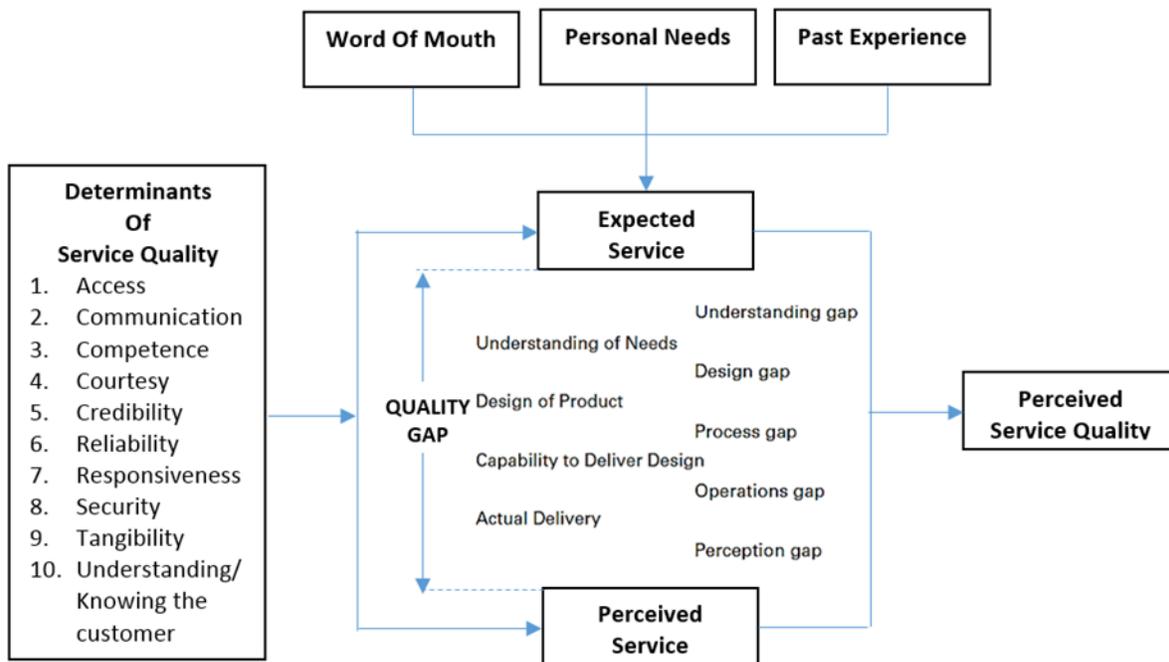


Figure 4. Determinant of Perceived Service Quality and the Quality Gap (Parasuraman, et al., 1985, & Early and Coletti, 1999)

Quality, like some other estimation of business performance, must be managed purposely. Various quality change attempts focus only on quality change instruments and the framework to improve specific techniques and disregard their impact all in all business (Beecroft, 1999). It is important to indicate that as noted by Beecroft (1999), the process

of strategic quality planning should include (1) the development a quality policy, (2) the development of goals and objectives, (3) identifying detailed quality drives and (4) executing plans of action.

## **2.2 The theoretical role quality plays in CI efforts**

From the literature on quality management program, it is clear that management support is an essential factor to the successful implementation of quality programs in organisation. As reported by Lam et al., 2015), many authors have documented management support has being important in a variety of operations management settings, such as Just-In-Time purchasing drives (Kaynak and Hartley, 2006), environmental projects (Gattiker and Carter, 2010), ERP implementation (Stratman and Roth, 2002), patient safety (McFadden et al., 2009), and TQM (Carman et al., 2010; Deming, 1986; Grover et al., 2006; Laohavichien et al., 2011; Saraph et al., 1989).

## **2.3 Continuous Improvement (CI)**

Early development of the concept of continuous improvement can be attributed to the training within industry service (TWI) in the USA, as reported by Brown et al. (2008). It is vital to indicate that as stated by Brown et al. (2008), the TWI promoted “Job Methods” for process development, with a four-stage cycle involving: break down the job – address everything aspect of job - build up the new strategy – apply the new technique. Huntzinger (2002) states that the TWI methods were then taken to Japan during the post-world war period, where the “Job Methods” have been said to have become the father of *Kaizen*.

*Kaizen* means “continuous improvement”, in Japanese. The term suggests enhancement involving everybody in the organisation—including managers and workers—and requires fairly less cost (Imai, 2012). While the Western way to deal with change reveres advancement which is dramatic in nature as it is activated by real changes in the wake of technological achievements and the most recent management ideas or production techniques – a genuine attention-getter, *Kaizen*, on the other hand, is frequently undramatic and inconspicuous. Be that as it may, advancement is one-shot, and its outcomes are frequently hazardous, though the *kaizen* procedure, in view of sound judgment and minimal effort approaches, guarantees incremental advance that pays off over the long haul (Imai, 2012). *Kaizen* is additionally thought to be an okay approach. Managers dependably can about-face to the old route without causing huge expenses. It is important to say that *Kaizen*, eventually, works toward improving the quality, cost and delivery (QCD) aspects of the organisation (Imai, 2012).

Continuous improvement, also referred to as persistent change is characterized as the condition of "being" beyond the condition of "getting to be". It is considered as the most elevated phase of development that a business as a whole can accomplish in its life time. Accomplishing this highest level of development does not occur without overnight; it requires significant investment over a period of time. (Van Aartsengel and Kurtoglu, 2013).

## **3. Methodology**

This research was performed at a short-term insurer situated in Edenvale, East of the city of Johannesburg, South Africa. The focus of the study was narrowed down to the Value Added Products and Services (VAPS) division at the insurance company since it is the greatest division as far as division size, and operational spending plan are concerned.

Table 1. Demographic Distribution of VAPS Division

| VAPS Division         | Management |        |       | Employees |        |       |
|-----------------------|------------|--------|-------|-----------|--------|-------|
|                       | Male       | Female | Total | Male      | Female | Total |
| Administration        | 2          | 5      | 7     | 9         | 36     | 45    |
| Customer Care Service | 0          | 2      | 2     | 14        | 18     | 32    |
| Claims Department     | 2          | 2      | 4     | 6         | 21     | 27    |
| <b>TOTAL</b>          | 4          | 9      | 13    | 29        | 75     | 104   |

Findings from the information gathered through interviews of administration group made of 13 managers from the VAPS division at the short-term insurance agency have been combined with the outcomes acquired from surveys disseminated in same division to 104 representatives, so as to frame a reasonable picture in regards to the degree to which the division, from the administration structure to workers, uses quality planning in the effort to continuously enhance consumer loyalty's. The VAPS is made out of Administration, Customer Care Services and Claims office and

populated according to Table 1. A convenience sampling was used to select the participants to the study due to the ease of access to the staff members of the VAPS division.

Data was collected using a self-administered structured questionnaire developed to assess the extent to which the company use quality planning in its efforts to implement CI and through a semi-structured interviews to provide more clarity on the questionnaire results. For that purpose, the study has adopted a Mixed Methods approach. Cresswell (2012) defines a mixed methods research design as a strategy for gathering, breaking down, and "blending" both quantitative and qualitative research and strategies in a single study to comprehend a research issue. Tashakkori and Teddlie (1998) also indicated that mixed methods approach combines both Qualitative and Quantitative research methods which is known to be a significantly thorough system for research in sociologies through combination of topical and measurable information.

As reported by Sambil and Mbohwa (2016), Jogulu and Pansiri (2011) indicate that business research has turned out to be increasingly mind boggling and multi-layered, necessitating new approaches for looking at research issues and investigating information to clarify and elucidate social phenomena. Tashakkori and Teddlie (1998) further specifies that the use of mixed methods technique allows the offset of the possible constraint of one method by the strength of the other. In this particular study, the use of mixed methods research design provides a profound understanding of the examined behaviour or a better idea of the meaning behind what is occurring in terms of strategic quality planning and its role in CI efforts at the short-term insurer. Tashakkori and Teddlie (1998) established a framework of six types of mixed methods studies as represented in Table 2. One vital aspect of mixed-method study, as stated by Sandelowski (2000), is that it provides a dynamic alternative for growing the degree and enhancing the explanatory power of studies.

Table 2. Mixed Methods Type

|                 |   |                |  |
|-----------------|---|----------------|--|
| <b>TYPE I</b>   | Confirmatory Investigation<br>Qualitative Data<br>Statistical Analysis  | <b>TYPE II</b> | Confirmatory Investigation<br>Qualitative Data<br>Qualitative Analysis |
| <b>TYPE III</b> | Exploratory Investigation<br>Quantitative Data<br>Statistical Analysis  | <b>TYPE IV</b> | Exploratory Investigation<br>Qualitative Data<br>Statistical Analysis  |
| <b>TYPE V</b>   | Confirmatory Investigation<br>Quantitative Data<br>Qualitative Analysis | <b>TYPE VI</b> | Exploratory Investigation<br>Quantitative Data<br>Qualitative Analysis |

The use of Mixed Methods in this study permits subjective findings obtained through interviews conducted at the short-term insurer to elucidate quantitative results accordingly enhancing the validity and dependability of the study as depicted in Figure 5. Greene et al. (1989) provide five very comprehensive purposes for using mixed methods design: (1) triangulation, (2) complementarity, (3) development, (4) initiation and (5) expansion.

For this particular study, a TYPE III Mixed Methods has been used. It is important to indicate that a TYPE III is an exploratory study without predictions or hypothesis (Tashakkori & Teddlie, 1998). This kind of exploration outline can utilize both subjective and quantitative information accumulation and information investigation (Rocco et al. 2003). Figure 5 depicts the exploratory sequential design chosen in this study.

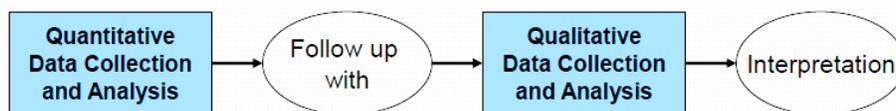


Figure 5. Exploratory Sequential Design (Fischler, n.d.)

The above design which is implemented in this particular study, started with quantitative data being collected using a structured questionnaire, and the data being analysed using quantitative methods, followed by the collection of qualitative through semi-structured interviews and the data from the interviews being analysed using qualitative data analysis. To conclude the process, quantitative results were used to shape the qualitative research questions, sampling, and data collection.

### 3.1 Questionnaire

The questionnaire was designed based on the Healthcare Team Vitality Instruments©, which was developed to repeatedly track the impact of changes to improve the quality of service in the healthcare environment (Upenieks et al., 2009). The survey instrument was adapted to this particular study in order to provide insight regarding: (A) *the particulars of the participants* (e.g. Gender, age, education level, and years of experience at the company), the assessment of (B) *Strategic quality planning in CI efforts* in terms of (B-1) *The division's employees are given adequate time to plan for and test improvements* (B-2) *Each department and work group within this company/division/team maintains specific goals to improve quality*, (B-3) *The company/division/department/team's quality improvement goals are known throughout the organization*, (B-4) *The company/division/department/team's employees are involved in developing plans for improving quality*, (B-5) *Middle managers (e.g., department heads, program directors, and first line supervisors) are playing a key role in setting priorities for quality improvement*, (B-6) *the extent to which quality objectives are defined by management*. The questionnaire was initially developed using a five-point Likert scale with responses varying from "a Strongly Disagree = (1)" to "Strongly Agree = (5)". A sixth category was added, "I don't know = 0" in order to allow those who did not know the answer to the questions listed in the questionnaire to feel comfortable in participating in the study. I don't know has been allocated a value of "0" so that the results of the questionnaire do not include them in the analysis.

The questionnaires were designed to maintain anonymity of the respondents as the responses would be used to develop the questions needed for the interviews with the managerial team. The questionnaires were distributed in the morning to all 104 participants via email, and instruction were given to the staff members taking part to the survey to complete the questionnaire before midday because of mental stress they might suffer from due to their daily activities which might have affected their objectivity.

### 3.2 Interviews

Meetings were led just with administrators at VAPS Division when interviews took place. A total of 13 managers were met and their perspectives on CI were assembled utilizing a semi-structured questionnaire. The information from the interviews were broken down as per qualitative content analysis, which as characterized by Mayring (2000) and Schreier (2012) is a strategy for deliberately depicting the significance of subjective information while decreasing the information and including adaptability in the investigation.

## 4. Discussion of the Study Findings

The participants to the study, across the VAPS Division, presented the following characteristics in terms of gender of participants (Table 3) and age of study participants (Table 4):

Table 3. Gender Characteristics of Respondents

| GENDER | MANAGERS |         | STAFF MEMBERS |         |
|--------|----------|---------|---------------|---------|
|        | Freq.    | %       | Freq.         | %       |
| MALE   | 4        | 30.77%  | 29            | 27.88%  |
| FEMALE | 9        | 69.23%  | 75            | 72.12%  |
| Total  | 13       | 100.00% | 104           | 100.00% |

Table 4. Age Characteristics of Respondent

| AGE RANGE    | MANAGERS |        | STAFF MEMBERS |        |
|--------------|----------|--------|---------------|--------|
|              | Freq.    | %      | Freq.         | %      |
| <25          | 0        | 0.00%  | 22            | 21.15% |
| 25-45        | 3        | 23.08% | 62            | 59.62% |
| 45-65        | 10       | 76.92% | 20            | 19.23% |
| >65          | 0        | 0.00%  | 0             | 0.00%  |
| <b>Total</b> | 117      | 100%   | 117           | 100%   |

In terms of gender, on the managerial team side, 31 percent of managers were males and 69 percent were females, whereas 28 percent of the staff members were males and the remaining 72 percent were females. Regarding the age of participants across the VAPS Division, it is important to indicate that no manager was below the age of 25 or above the age of 65. 23 percent of managers fell between the age range of 25 and 45 years old, while 77 percent of managers were between the ages of 45 to 65 years old. However, 21 percent of staff members were below the age of 25 years

old, 60 percent of staff member were between the ages of 25 and 45 years old, 19 percent of staff members were between the ages of 45 and 65 years old. Still no staff members were above the age of 65 years old.

A representation of the educational level of the participants to the study is shown below. It is critical to note that as shown in Table 5, no member of the management team does not have matric, while 13 percent of employees who participated in the study do not have any school leaving certificate:

Table 5 – Level of Education of Participants to the Study

| Education Level   | Management |             | Employees  |             |
|---|------------|-------------|------------|-------------|
|   | Freq.      | % Freq.     | Freq.      | % Freq.     |
| 1. No matric (High School National Leaving Certificate)           | 0          | 0%          | 13         | 13%         |
| 2. Matric Only  | 4          | 31%         | 38         | 37%         |
| 3. College  | 2          | 15%         | 19         | 18%         |
| 4. Degree   | 1          | 8%          | 31         | 30%         |
| 5. Master   | 2          | 15%         | 1          | 1%          |
| 6. Other (Training certificate provided internally or externally) | 4          | 31%         | 2          | 2%          |
| <b>Total</b>  | <b>13</b>  | <b>100%</b> | <b>104</b> | <b>100%</b> |

Table 6 shows a summary of the analysis of the responses from the questionnaire. Analysing the data from the questionnaire, 38% of the respondents did not agree that the division's employees are given time to plan for and test improvements, 45% of respondents agreed that the each department and work group within this division maintains specific goals to improve quality, 44% of respondents did not agree that the division's quality improvement goals are known throughout the VAPS Division, 44% of respondent did not agree that the division's employees are involved in developing plans for improving quality, 48% of participants did not agree that middle managers (e.g., department heads, and first line supervisors) are playing a key role in setting priorities for quality improvement, lastly, 53% of respondents did not agree that quality objectives are well defined by management.

Table 6. Summary of Questionnaire Response

| Survey Scale: 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree 0=I don't know |       |      |      |      |      |      |     |      |      |            |
|--|-------|------|------|------|------|------|-----|------|------|------------|
| B-STRATEGIC QUALITY PLANNING   | # 1's | #2's | #3's | #4's | #5's | #0's | n   | MEAN | MODE | SEM        |
| B-1  | 17    | 23   | 39   | 18   | 5    | 2    | 104 | 2.80 | 3    | <u>0.1</u> |
| B-2  | 9     | 20   | 24   | 32   | 15   | 4    | 104 | 3.12 | 4    | <u>0.1</u> |
| B-3  | 19    | 27   | 28   | 13   | 12   | 5    | 104 | 2.59 | 3    | <u>0.1</u> |
| B-4  | 13    | 32   | 16   | 21   | 16   | 6    | 104 | 2.78 | 2    | <u>0.1</u> |
| B-5  | 16    | 34   | 21   | 20   | 9    | 4    | 104 | 2.62 | 2    | <u>0.1</u> |
| B-6  | 14    | 42   | 25   | 11   | 8    | 4    | 104 | 2.47 | 2    | <u>0.1</u> |

From the interviews, managers were of the view that quality planning would have played a more profound role in the company's efforts to implement continuous improvement provided that the quality objectives were well defined and staff were inclined toward familiarizing themselves with the documentation provided with regards to service improvement processes. Although efforts were made to have staff members participate in quality circle exchange of good practice session, there was lack of interest in participation by staff members attributed to heavy workload due to among other reasons (1) target to be met in terms of policy sold, (2) difficulty to identify with management because of racial barriers, (3) lack of interest shown by staff members to upgrade their qualification, and (5) lack of motivation in performing excellent work due to unattractive wages caused by budget cuts because of financial constraints and the South African economic slowdown.

## 5. Conclusion and Recommendation

It is also important to indicate that quality is vital in establishing a company as a leader in its industry that satisfy its customer needs beyond their expectations. Quality cannot be stagnant, as customer needs are dynamic. Therefore, quality needs to continuously improve in order to satisfy the ever changing customers' needs. It is concluded that the company adopted management by objective (MBO) approach since quality objectives are not well defined as staff members indicated in their questionnaire response, which is supported by the management team. Therefore, the paper recommends that the Japanese methodology of *Hoshin Kanri* be implemented at this local short-term insurance company. *Hoshin Kanri*, just to borrow a few words from Beecroft (1999), is a technique for planning, implementing and reviewing quality plans that are vital to the organisation. Many North-American companies are practicing *Hoshin Kanri*, such as Xerox, Hewlett-Packard, and Intel, just to name a few. Figure 6 shows the *Hoshin Kanri* model which can be implemented at this local short-term insurer. *Hoshin Kanri* clearly defines quality objectives, allowing the organisation to do away with MBO.

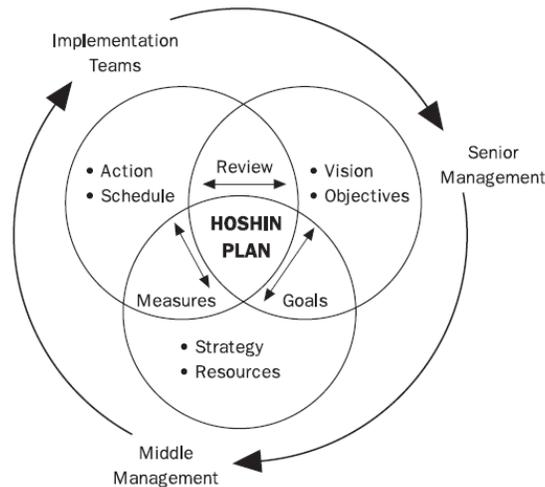


Figure 6. Hoshin Kanri model (Beecroft, 1999)

In terms of the way forward from this study, it is important to note that convenient sampling was used here, which has provided a certain degree of limitation to this research. As reported by Farrokhi and Mahmoudi-Hamidabad (2012) who cited Dörnyei (2007) indicating that convenience sampling is a sort of non-likelihood or nonrandom sampling in which individuals of the target population are chosen with the end goal of the research on the off chance that they meet certain useful criteria, for example topographical nearness, accessibility at a specific time, easy accessibility, or the readiness to volunteer. Since convenience sampling is not to be taken to be representative of the population (in this case staff members at other short-term insurance companies in South Africa), further research need to be implemented to present a clear view of the role quality planning plays in CI efforts.

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## **Biography**

**Sambil C. Mukwakungu** is an academic who has been lecturing Operations Management to first year students, Food Production, and Quality Management at the University of Johannesburg since 2009. His passion for teaching and learning has allowed him to make a difference in at least one student's life every year. He is a young researcher who is still establishing himself in the area of knowledge creation with keen interest in Service Operations Management, Lean Operations, Continuous Improvement, as well as innovation in Higher Education and in business environment. He serves as country chair for 2nd International Conference on Digital Economy Emerging (ICDEc2017).

**Prof Charles Mbohwa** serves as Vice-Dean: Postgraduate Studies, Research and Innovation in the Faculty of Engineering and the Built Environment at the University of Johannesburg (UJ). As an established researcher in the field of sustainability engineering and energy, Prof Mbohwa's specialisations include sustainable engineering, energy systems, Life-Cycle Assessments (LCA's) and bio-energy/fuel feasibility and sustainability with general research interests in renewable energies and sustainability issues. Prof Mbohwa's current research in sustainability engineering includes: Social and climate change comparison of bio-diesel life cycle impacts in Brazil and South Africa; Life Cycle Assessment and Comparisons of Rail and Road Freight Transportation in China and South Africa; The Potential, Energy and Environmental Impacts of Bio-energy in the Sugar Industry in South Africa; and the Economic, Energy and Environmental Evaluations of Biomass-based Fuel Ethanol based on Life Cycle Assessment. He is a co-author of the second chapter of the United Nation's Environmental Programme's (UNEP) Global Guidance Principles for Life Cycle Assessment Databases: A Basis for Greener Processes and Products 2011. In addition he is Project Leader for the Development of the Climate Change Response Strategy and Action Plan for the Gauteng Department of Agriculture and Rural Development: Use of indigenous knowledge.