

Developing Key Performance Indicators using the Delphi technique

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Abstract

Key Performance Indicators (KPIs) serve as steering wheels which help to direct the resources of organisation to facilitate coordinated improvement on their levels of effectiveness, productivity, customer satisfaction, achieve their goals and gain competitive advantages. The KPIs are either adopted from generic list or mutually developed between the relevant stakeholders. The resulting KPIs developed from this mutual cooperation are the product of the consensus of opinions garnered from the anonymous opinions of the participants. The need to develop KPIs through consensus building effort gave rise to the use of the Delphi technique which allows participants to interact with a common subject anonymously; the end result can be trusted for addressing the purpose of the research. This technique was adopted for the development of operational KPIs for measuring the performance of the Facilities Management unit of a Higher Education institution in South Africa. The findings revealed that the developed KPIs was classified into categories which serve as guide to the service provider on how to invest its resources to achieve improved performance, customer satisfaction and the goals of the institution.

Keywords: Customer satisfaction, Delphi technique, Facilities Management, Key Performance Indicators, Service provider

Introduction

The standard, quality and functional state of the support facilities in any organisation influence the performance of the core function of the organisation, as well as project the image and mission of the organisation (Lateef *et al.*, 2010; Odediran *et al.*, 2015). The need for the service provider responsible for the operation and management of the support facilities to work in harmony with the actors responsible for the core function of the organisation provides the foundation for the development and use of suitable performance measuring systems. The major constraint of service providers is their inability to marry their performance priorities with the customers' priorities, perception and expectations (Hinks and McNay, 1999). In order to bridge this divide, there is need to adopt suitable performance measuring system, such as Key Performance Indicator (KPI), which is developed through the active participation of all relevant stakeholders (Beatham *et al.*, 2004). Operational KPIs may be adopted from a generic list, or developed using relevant consensus building tools such as the Delphi technique. The Delphi technique is useful where a proposed solution to a given problem is developed by harnessing the information from experts or people knowledgeable in the given field. The process involves circulating information on the subject to the panel in a series of rounds where each round helps to refine the information from previous rounds. The contribution of each participant is treated anonymously and consensus is reached by adopting the stipulated benchmark agreed upon at the beginning of the exercise.

This paper reports the research exercise used for developing a set of Key Performance Indicators (KPIs) for the operation of the Facilities Management (FM) unit in a higher education (HE) institution in South Africa. The resulting KPIs were developed through the mutual cooperation and active participation of both the academic (customers) and the FM unit (service provider), using the Delphi techniques as tool for data collection. For ethical reasons, agreed on during the research, the specific

name of the institution or the respondents will not be mentioned; instead generic names will be used in this report.

There is a continuous stream of research activities into performance measurement and its tools in different fields. This section will focus attention on literature dealing with the development of performance measurement tool, and its use in FM for the achievement of improved level of customer satisfaction.

Performance measurement and tools

In the effort to improve effectiveness, efficiency and customer satisfaction, organisations are compelled to adopt different tools for measuring performance of the whole or part of the organisation's operation. Management and operational tools, such as Total Quality Management (TQM), the Balance Scorecard (BSC), Key Performance Indicators (KPIs) and benchmarking, to mention a few, have been used with varied degree of success (Paranjape *et al.*, 2006). The application of TQM by service providers challenges the employees, from high officials to the lowest cadre, to have a sense of responsibility and commitment to achieve continuous improvement in service delivery which will foster improved customer satisfaction. The quality of results from using the TQM depends on the development of personally effective individuals committed to a common vision and an emphasis on customer needs (Morfaw, 2009). This concept of developing personally effective individuals to be committed to the vision of customers' satisfaction is crucial, because service providers may work as a team or as individual. Until the individual imbibe the culture of working with the view of customers' satisfaction, having customer satisfaction as a goal may end up as mere policy statement. This development requires the progressive implementation of the 'capacity building' component in TQM, which empowers the individual employee for effective and timely decision making when rendering service to the customer (Morfaw, 2009). If the employee encounters unanticipated changes the individual can take the necessary decision or communicate suggestions to senior officials for approval so that implementation can be executed, within a reasonable time limit, causing the least delay to the customer. Although the implementation of TQM may yield immediate, visible improvement, the goal is not to quick-fix things but to develop relationships and processes capable of generating and sustaining quality improvement now and in the future (Morfaw, 2009).

The Balance Scorecard (BSC) has assumed prominent position as tool for performance measurement and management (Meng and Minogue, 2011). At the operational level, one of the four components of the BSC, "Customer Perspective", and its accompanying question, "How do customers see us?" (Kaplan and Norton, 1992), is appropriate to measure the level of customers' satisfaction in the provision, operation and management of support facilities. This is because customers' issues are situated within four clusters of concern, namely time, quality, performance of service, and the cost (Kaplan and Norton, 1992). This customer perspective of the BSC requires a delicate balance between how the functions of the service providers are to create value for the customer and how the customer perceive, demand or expect the values to be satisfied (Amaratunga and Baldry, 2000; Kok *et al.*, 2011). However, the complexities of data collection, analysis and translating general concept to concrete action, in the real world of performance measurement, negatively effects the use of the BSC, resulting in a high failure rate as much as 70% of its use (Neely and Bourne, 2000).

The Benchmarking exercise is an effective management tool that enables service providers to continuously measure the performance of its operation (Ho *et al.*, 2000). A Benchmarking exercise can be stimulated from internal or external sources, with the objective of continuous improvement (Ho *et al.*, 2000; Wauters 2005). Benchmarking can be described as the process of comparing a product, service or process with identical samples of a peer group, with the objective of identifying the 'best buy' or 'best practice' which stimulates the development and implementation of appropriate performance improvement strategies (Wauters 2005). Ho *et al.*, (2000) simply describe benchmarking as a tool that serves both the purposes of helping organisations to have an external focus and finding industries' best practices by constantly comparing their own performance against that of others. In this

regard Varcoe, (1996), observes that benchmarking is a continuous search for the application of significantly better practices that lead to superior competitive performance. The implications of benchmarking could be summarised thus: a process of constantly comparing a service provider's own performance against superior performances within a peer group of best practice. To achieve positive results from benchmarking requires commitment, involvement, and investment from both senior management and operation personnel. The potential factors that would affect the results include the level of competence, capacity and capabilities of the operating personnel, quality of data and commitment to their analysis. Similar to other performance measurement tools, benchmarking should not be seen as a 'quick-fix' solution (Morfaw, 2009) but an exercise that requires commitment to succeed.

Generally, adopting any performance measuring tool has advantages and disadvantages. There are two generic factors responsible for failure in the implementation of an effective performance measuring system; namely, the poor design of the measurement system and the fact that the designed systems are difficult to implement (Neely and Bourne, 2000). This has left a wide gap between what to measure and how to measure (Amaratunga and Baldry, 2003). Meeting these challenges require the use of performance measuring tools which can facilitate the ease of data collection, analysis and application; these and more can be achieved by adopting the tool of KPIs.

Key Performance Indicators

The term KPIs means different things to different people or units within an organisation. They are a set of measures which re-orient the focus of an organisation on the most critical items that guarantee performance improvement for the current and future success of the organisation (Parmenter, 2007). They are specific, significant and measurable standards; starting with few indicators and build on them (McNeeney, 2005). They are sensitive to each organisation depending on the effect the support facilities have on the performance of the core functions. A key significance of KPIs is that the resulting set of interlocking indicators provides feedback which challenges the individuals, groups and the entire organisation to channel their energy and resources towards achieving a common goal (McNeeney, 2005).

KPI is the most widely used performance measurement model in construction and FM practices. Hinks and McNay (1999), identified 23 indicators distributed across eight categories: namely, business benefit, equipment, space, environment, change management, maintenance/services, customers' satisfaction and general. Other research efforts in FM produced different numbers of KPIs for specific FM operations. Kincaid (1994) selected six for building maintenance. Shohet (2006) developed 11 indicators for the strategic maintenance of healthcare facilities. Lavy *et al.* (2010), through literature review developed a list of 35 KPIs and classified these indicators into four categories: namely, financial, physical, functional and survey based indicators. However, KPIs have their drawbacks. Mikušová and Janečková (2010) identified five such drawbacks as follows:

1. Variety of definitions of the same indicator;
2. Averaging;
3. Use of overly complicated indicators;
4. Control limits and variability of processes;
5. Complicated phenomenon that can be searched from various angles.

Furthermore, Pidun and Felden (2011) raised the following as limitations of using KPIs as a performance measurement system:

1. KPIs cannot successfully measure non-numeric indicators like customer satisfaction, milestone achievement, inherent complexity or maturity.
2. The use of KPIs is too reliant on generic framework, with little flexibility of adaptation to real context.

3. KPI is isolated and ad-hoc in usage, without appropriate performance measurement framework; it cannot be used to support an entire business system, or extended beyond local to global application.

The draw backs notwithstanding, the simplicity of the system has made KPI a more attractive model for performance measurement in FM industry. However, since there is as yet no comprehensive list of KPIs suitable for all FM operation under the different organisation and functions, the onus lies on each organisation to develop its own set of KPIs. The lists of KPIs required by any organisation are dynamic and elastic depending on the goals of the organisation or the effects of the support facilities on the performance of the core function of the organisation. The operational KPIs for any organisation can be developed and handed down to the service provider to adopt. Or they are mutually developed by the customers and the services providers. However, the most effective KPIs are those developed through consensus building with the active participation of the operators of the core and support services or customers and service providers; preferably using the Delphi technique (Hinks and McNay, 1999; Grisham, 2009; Xia and Chan, 2012).

Consensus building tool

The idea of obtaining solutions to strategic or operational problems through the ‘group’ decision or ‘consensus’ building process is a well-established management approach. Some of the common tools used to achieve this objective include the Value Engineering (VE) seminar (Cheah and Tsing, 2005), Focus Group (FG) session (Brown, 2015) and the Delphi method (Grisham, 2009; Hallowell and Gambatese, 2010). The Delphi technique, a consensus building tool, can be described as “a method used to obtain the most reliable consensus opinion of a group of experts by a series of intensive questionnaires interspersed with controlled feedbacks” (Hasson and Keeney, 2011, p. 1696). The Delphi technique is useful where information gathering and feedback from stakeholders (experts) are difficult due to busy schedule (academics), geographical barriers and the need to guarantee anonymity (Geist, 2010; Xia and Chan, 2012). The unique feature that distinguishes the Delphi technique from other group decision methods is that decisions are reached through informed consensus of experts rather than through the opinions of many uninformed participants, as in the case of a general survey (Grisham, 2009). Furthermore, the results stem from group opinion, which is assumed to be more valid than a decision made by a single person and the process is based on expert opinion from the ‘real world’ providing confirmative judgements on the subject (Hasson and Keeney, 2011).

The basic principles underpinning the Delphi technique include the identification and use of cognate participants capable of addressing the issues raised in the research question (Franklin and Hart, 2007). The group interacts with the same issue through a series of iteration processes, where the information from previous iterations is communicated to all participants. All submissions are processed through a central coordinator or facilitator, who recycles the feedback to participants after each iteration (Green and Price, 2000; Franklin and Hart, 2007). The contribution of each member of the panel is treated in confidence and no participant can be traceable to its contribution/and no contribution can be traced to a particular participant. (Green and Price, 2000). The size of a Delphi panel, commonly referred to as a ‘panel of informed individuals’, may be as small as three members and as large as eighty (Mullen, 2003; Day and Bobeva, 2005; Grisham, 2009; Xia and Chan, 2012). It is important to select people who are knowledgeable in the field of study and are willing to commit themselves to multiple rounds of questions or interactions on the same topic (Grisham, 2009). In order to reduce the negative effects of high attrition rates, efforts should be made to recruit a large number of participants at the initial phase, exceeding the set mark for ‘preferred group size’. In this regard, it is helpful to adopt the ‘Delphi funnel’ concept of Donohoe and Needham, (2009). The participants are selected by following the ‘purposive or criterion sampling’ rather than random sampling (Hasson *et al.*, 2000), because the participants are selected for a purpose, i.e. to apply their knowledge or expertise to a certain problem situated within the confine of the area to be investigated. There are no strict rules on the sample size using the Delphi technique for data collection; however, the sample size of eight participants is an acceptable minimum (Hallowell and Gambatese, 2010; Hasson and Keeney, 2011). The best approach to securing effective participation is to engage prospective participants on a one-on-one interaction

where possible (Day and Bobeva, 2005; Donohoe and Needham, 2009). Using the data base of professional bodies, institutions, etc. are possibilities but may not be reliable due to changes in the location of the individuals.

The process can be administered using either or both the Paper and Pencil (PP) Delphi or Real Time (RT) Delphi using the computer system (Geist, 2010; Hasson and Keeney, 2011). Geist (2010) confirmed that the results obtained when he used both methods to address the same problem were identical. The rules of engagement should be clearly spelt out at the beginning of the exercise and followed through to the end. Depending on the variant of the Delphi tool, the procedure is to circulate the information to the participants who are to interact with the document and submit their response to the coordinator within the stipulated time. The coordinator collates the responses and re-circulates the feedback to the panel members. The process continues until consensus is achieved. There are no firm rules regarding the number of rounds in the Delphi exercise; one or many rounds of information-gathering suffices, as long as the facilitator is satisfied with the level of consensus or convergence of opinion or the participants are no longer modifying their earlier decisions (Franklin and Hart, 2007; Adnan and Daud, 2010). However, some literature suggests consensus ranges of between 51 and 80% of agreement amongst participants (Hasson *et al.*, 2000). The method of determining convergence of opinion should be spelt out at the beginning of the exercise (Hinks and McNay, 1999; Day and Bobeva, 2005), applied and communicated to all participants through the different rounds and in the final report. The use of descriptive and inferential statistics are standard ways of ascertaining the level of collective opinion; computing and disseminating information on central tendencies (means, medians, and mode) and levels of dispersion (standard deviation and the inter-quartile range) to participants allows them to see the trend about the collected opinion (Hasson *et al.*, 2000; Day and Bobeva, 2005; Adnan and Daud, 2010).

A variant of the classic Delphi technique is known as the modified classic Delphi technique that can be used as tool for data collection during mutual development of KPIs. The difference between the classic and modified classic Delphi is that in the former, which is basically a qualitative approach, the participants generate prospective solutions to the research question, in the first round, in the modified classic, participants are provided with a list of generic solutions to the research question right from the first round (Franklin and Hart, 2007). Iteration of opinion commences from round two in the classic Delphi and commences in round one in the modified classic Delphi. The consensus process and conclusion of the exercise follow the same principle.

METHODOLOGY

For this report, the modified classic variant of the Delphi technique was used as the tool for data collection. A generic list of 112 KPIs arranged around seven main headings and eight sub-headings was circulated to participants (Franklin and Hart, 2007) and adopted the paper and pencil Delphi approach (Geist, 2010). The participants for the research were selected from the strategic level of leadership among the academics (Dean of faculties), tactical level of leadership (Head of departments)

Table 1: Participants in the Delphi exercise

Classification	Willing to participate in 2 nd phase		2 nd phase (Rounds)		
	Yes	No	1	2	3
Deans	4	3	2	2	2
Heads Of Departments	16	4	9	7	7
OD Strategic leaders	3	1	2	2	2
OD Tactical leaders	8	-	4	4	3
Total	31	8	17	15	14

and leaders in the strategic (Directors) and tactical (Managers) levels of leadership among the service providers (FM unit) (Hasson *et al.*, 2000; Musonda and Pretorius, 2015). To qualify, each participant was expected to have served in their current position for not less than one year or not less than five

years as staff of the respective department. In order to manage the attrition rate, a large sample size was recruited at the initial stage from the target population who satisfied the selection criteria, knowledgeable in the subject of the research and willing to participate in the exercise. Therefore, 31 persons were recruited, with a target size of between 12 and 18 (Donohoe and Needham, 2009). However, 17, 15 and 14 respectively participated in each of the three rounds of the Delphi exercise, as shown in Table 1, and still satisfied the minimum condition of sample size for Delphi participants (Hallowell and Gambatese, 2010).

Participants were expected to rate the items on the list in a Linker scale of between 1 and 5, with 1 being the least rating and 5 the highest rating. It was agreed that only items that scored 3.0 and above would be escalated to the next round. The exercise went through three rounds of successive iterations of information before convergence of opinion was achieved. The statistical mean was used to obtain the level of consensus (Day and Bobeva, 2005; Adnan and Daud, 2010). After analysis of each iteration, items that did not measure up to 3.0 benchmark were deleted and not escalated to subsequent rounds.

RESULTS AND DISCUSSION

In FM industry, the use of Key Performance Indicators (KPIs) has been judged the most suitable tool for performance measurement; especially the KPIs that are mutually developed by the customers and the service providers (Hinks and McNay, 1999; Meng and Minogue, 2011). A synthesis of the information collected through the different research instruments shows that there are relational problems between FM operatives and academics, resulting in a misalignment of operation (Housley 1997). The academics as well as FM operatives identified with the widening gap in their relationship, and the effects in achieving the objective of the university. Each group actively interacted with the subject demonstrating their commitments to proffering solutions. In this regard, they embraced the idea of the mutual development of performance measuring standards (KPIs), noting that “it would be a very good idea in moving the institution forward”.

The sections on maintenance (in-house and outsource agents), Computerised maintenance management system (helpdesk and reporting) and General (Operations department and academics) will be used to illustrate the process used for developing the KPIs.

The generic list of KPIs was circulated in the first round. After analysis of submission from participants, the result is as shown in Table 2. Items which did not meet the benchmark of 3.0 are heightened in red, deleted and were not escalated to the second round.

Table 2: Results of the three rounds of iteration

S/N	Description of KPI	Round 1	Round 2	Round 3
Maintenance: In-house operations				
1	Communicate maintenance management policies to academics	2.6		
2	Adopt planned, preventive and condition based maintenance system	3.13	4.22	4.21
3	Conduct periodic customers' satisfaction survey	3.13	4.0	3.98
4	Regular maintenance inspection	3.6	4.44	4.29
5	Reduce the frequency of complaints	3.47	3.78	4.36
6	Executing maintenance work based on priorities	3.0	4.22	4.21
7	Practice Precision, Reliability and Timeliness in service delivery	3.47	4.44	4.36
8	Safety of working environments	4.0	4.56	4.64
9	Complete service the first time	3.4	3.78	3.88
10	Minimal disruption to academic activities during maintenance	3.33	4.33	4.47
11	Effective management of all warranties	3.2	4.0	3.71
12	Effective cleaning and removal of all working implements	3.13	4.22	4.0
Maintenance: Outsource agents				
13	Develop functional Service Level Agreement (SLA) with the academics	3.27	4.11	3.79
14	Set minimum standards of acceptable level of service delivery	3.47	4.67	4.50
15	Develop performance standard with the participation of the academics	3.13	3.89	3.57

16	End-users' satisfaction	4.0	4.33	4.64
17	Effective supervision of service providers	3.67	4.33	4.21
18	Service delivered should provide Value for money	3.67	4.11	4.43
19	Selection and grading of service providers should be based on satisfactory performance	3.33	4.44	4.36
Computerised Maintenance Management Systems (CMMS): Help desk				
20	Help desk response timely	3.93	4.78	4.79
21	Customers able to communicate their requests to Operations Department	4.13	4.67	4.79
22	Customers able to track the status of their requests from personal workstation	4.0	4.11	4.14
23	Effective documentation of maintenance request	3.6	3.78	4.07
24	Provide a feedback system to allow for effective two-way communication system	3.73	4.11	4.21
25	Helpdesk target completion dates achieved	3.47	4.0	4.29
26	Effective documentation of completed works	3.53	4.33	4.29
27	Effective documentation of cost incurred for each maintenance exercise	3.4	3.89	4.21
Computerised Maintenance Management Systems (CMMS): Reporting				
28	Provide up-to-date list of deferred maintenance, and the estimated costs	3.27	4.0	3.71
29	Provide up-to-date information for any customer on the status of execution of their request	3.53	4.33	4.36
30	Provide periodic reports for every functional units to the heads of department	3.4	2.67	
31	Provide detailed asset analysis for all the facilities in the portfolio of the respective departments	3.0	3.89	3.57
32	Provide information on the content of facility to facilitate booking for internal and external use	3.07	4.11	4.07
33	Provide alternative solutions to address deferred maintenance item(s)	3.27	3.89	3.64
34	Provide up-to-date information on the "fitness for purpose" of teaching and research facility	3.6	4.0	4.14
General: Operations Department				
35	Effective communication with academic staff	3.8	4.56	4.57
36	Simple explanation of OD procedure	3.27	4.33	4.07
37	Circulation of OD contact persons	3.27	4.22	3.64
38	Regular interactions with academia	3.0	2.67	
39	OD staff friendly, polite and amiable to academic needs	3.2	3.89	4.0
40	Do not promise what you cannot deliver	3.33	4.67	4.50
41	Respect the time of the academia	3.27	4.11	3.64
42	OD staff should learn from mistakes	3.33	3.89	3.93
43	Practice effective supervision and monitoring	3.4	4.22	4.29
44	Appoint professionally competent staff to manage the strategic, tactical and operational levels	3.73	4.56	4.64
45	Periodic training to keep abreast with latest technology	3.4	4.11	3.93
46	Provide continuous professional development at all levels	3.07	4.22	3.79
47	OD to relate with academia to facilitate the promotion of good cooperate image of the institution	3.13	2.44	
General: Academics				
48	Communicate your request to OD on time	3.47	4.33	4.43
49	Remember your request follows certain procedure before addressed	3.33	2.56	
50	Procurement system takes time	3.20	2.82	
51	Communicate with OD politely	3.20	4.22	3.93
52	Treat OD staff with respect	3.27	4.22	4.29
53	Ask question when in doubt	3.6	4.22	4.21
54	Allow sufficient time between your request and expectation of it being addressed	3.0	3.89	3.93
55	Participate in safety exercises	3.47	4.11	4.21
56	Appoint contact person on OD matters	3.33	4.11	3.79
57	Academia should involve OD on 'branding' the institution	2.87		

In round two, more indicators were eliminated, an indication that the participants changed their opinion from the rating they provided in the first round (Hasson *et al.*, 2000; Mullen, 2003). Some of the critics of the Delphi technique suggest that the changes in participants' opinion from one round to another is a weakness in the system because some participants may be succumbing to the superior opinion of other participants. However, the criticism may not be substantive, realizing that participants for a typical Delphi exercise are experts (or knowledgeable persons) in their field and selected on purpose (Hasson *et al.*, 2000). Participants changing their opinion should be seen as strength and not weakness, because the Delphi technique is one of the research tools that allows participants to see the

contribution of other participants in the same research exercise. The controlled feedbacks allow participants to view their individual submissions in the light of the whole group, tailoring the opinion of the participants towards group consensus (Hasson and Keeney, 2011; Ogbeifun *et al.*, 2016). The ratings on each item improved in the subsequent rounds. The items which met the benchmark in round two were escalated to the third round for the participants to interact with again. After analysis, the number of items which translated from round two to round three was retained, thus suggesting that convergence has been achieved. However, the ratings in each item changed, indicating the order of priority. The developed KPIs were arranged and classified into three categories as high, medium and low priorities, shown in Table 3.

Table 3: The developed KPIs, their distributions and classification

S/N	Category	Description and classification		
		High priority (4.5-5.0)	Medium priority (4.0-4.49)	Low priority (3.5-3.99)
1 a	Maintenance			
	In-house operations	Safety of working environments	Regular maintenance inspection Practice Precision, Reliability and Timeliness in service delivery Minimal disruption to academic activities during maintenance Executing maintenance work based on priorities Reduce the frequency of complaints Adopt planned, preventive and condition based maintenance system Effective cleaning and removal of all working implements	Effective management of all warranties Conduct periodic customers' satisfaction survey Complete service the first time
b	Outsource agent	End-users' satisfaction	Service delivered should provide Value for money	Develop functional Service Level Agreement (SLA) with the academics
		Set minimum standards of acceptable level of service delivery	Selection and grading of service providers should be based on satisfactory performance Effective supervision of service providers	Develop performance standard with the participation of the academics
2 a	Computerised Maintenance Management Systems (CMMS) Help desk	Help desk response timely	Customers able to track the status of their requests from personal workstation	
		Customers able to communicate their requests to Operations	Effective documentation of maintenance request	

Department

		Provide a feedback system to allow for effective two-way communication system Helpdesk target completion dates achieved Effective documentation of completed works Effective documentation of cost incurred for each maintenance exercise	
b	Reporting	Provide up-to-date information for any customer on the status of execution of their request Provide up-to-date information on the “fitness for purpose” of teaching and research facility Provide information on the content of facility to facilitate booking for internal and external use	Provide up-to-date list of deferred maintenance, and the estimated costs Provide alternative solutions to address deferred maintenance item(s) Provide detailed asset analysis for all the facilities in the portfolio of the respective departments
3	General		
a	Operations Department	Appoint professionally competent staff to manage the strategic, tactical and operational levels Effective communication with academic staff Do not promise what you cannot deliver	Practice effective supervision and monitoring Simple explanation of OD procedure OD staff friendly, polite and amiable to academic needs
			OD staff should learn from mistakes Periodic training to keep abreast with latest technology Provide continuous professional development at all levels Circulation of OD contact persons Respect the time of the academia
b	Academics		Communicate your request to OD on time Treat OD staff with respect
			Communicate with OD politely Allow sufficient time between your request and expectation of it being addressed

Ask question when in doubt
Participate in safety exercises

Appoint contact person on OD matters

A critical study of Table 3 shows that the classification of the developed KPIs brings to fore the items which require high consideration for success. Furthermore, the items rated 4.0 and above have overarching effects on those rated below 4.0, again suggesting areas of emphasis to ensure satisfactory service delivery to customers. In this regard, the service provider (FM) has sufficient information to guide its resource allocation for performance improvement by providing functional support facilities suitable for the performance of the core functions and improved levels of customer satisfaction.

CONCLUSION

The KPIs developed through a consensus building process are the product of the synthesis of the independent individual contributions. Ordinarily, if the traditional method of the committee or focus group session is used to develop these KPIs, the exercise will require several lengthy meetings. The exercise will also contend with two critical difficulties (among others), namely, the difficulties of getting members to attend scheduled meetings and managing the excesses of the vocal and domineering characters in the group. These problems were avoided by using the Delphi technique which allowed the individual participants to respond to the research question at their own convenience (within the given time frame), and each contribution was without coercion. The quality of the KPIs in the medium and high priority categories are suitable performance indicators which can guarantee improved performance, verifying that the Delphi technique is a reliable tool for consensus building.

In the exercise reported in this paper, the developed KPIs were seen as panacea to resolving the relational problem between the academics and the FM unit, closing the widening gap in the relationship between the two entities. The developed KPIs, classified into three categories, present a graphical picture of the performance measurement tool for easy implementation. The categorisation enables the service provider to channel its resources effectively for optimal performance, by addressing the items rated as high and medium priorities, without actually neglecting the others in the low priority category.

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