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User perceptions in workplace productivity and strategic FM delivery

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Abstract

Purpose – The purpose of this paper is to explore the importance of user perceptions within an organisational context, and more specifically, how user perceptions are evidenced and positively applied within facilities management (FM).

Design/methodology/approach – A conceptual approach is adopted suggesting that user perceptions should be viewed as a holistic process within FM. Via comprehensive literature reviews the paper determines the importance of user perceptions, first, in the context of the user achieving productivity in the workplace as their input and functionalities within the physical environment can inevitably enhance their later experience, and second, in the context of the user later achieving customer satisfaction via strategic FM delivery.

Findings – Argues that user perceptions in FM can be analysed through a two-fold approach: user perception through their input and functionalities in the workplace, and their consequent application of workplace productivity; and user perception through strategic FM delivery and the achievement of customer satisfaction. Identifies an intrinsic linkage between the two and how they are integral to the overall strategic FM process.

Originality/value – Strategic FM delivery is now essential for business survival, where the impetus on ensuring high customer satisfaction coupled with high workplace productivity is illustrated via the "logical customer performance ladder" (LCPL). This paper provides an intriguing insight into how both of these crucial factors can be strategically implemented into FM.

Keywords Individual perception, Job satisfaction, Employee productivity, Customer satisfaction, Service delivery

Paper type Research paper

1. Introduction

Business processes and objectives operate and survive because they are primarily providing an effective and meaningful service to their customer (i.e. the user). For that service to be effective, the perceptions and expectations of the user must be met in order to provide a successful service delivery outcome. Moreover, the perceptions of the user to the initial input of the service delivery process of the organisation is of equal importance, as it will determine the strategic and operational objectives of the organisation, and consequently provide the added value needed in achieving the end product of customer satisfaction. An important distinction is worth highlighting at this early stage in order to clarify and distinguish the authors' usage of certain terms used within the paper:

- *User:* refers to the customer or client in an organisational sense receiving facilities management (FM) services within a workplace environment. In this case, the user is applicable to all stages of the delivery process, from their initial

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input and expectations (pre-delivery), to their functionality and productivity (mid-delivery), through to their final opinions (post-delivery).

- *Perception:* refers to the users' observation, opinion, and awareness of both the environment they are in, and the service they are receiving. In order for the user to reach a final conclusion of the environment and service they have received, they will distinguish a level of satisfaction, based on the difference between their initial expectation and their final opinion. Therefore, customer satisfaction must not be confused as being the same as user perception, but interpreted as the end product of one's perception.

Hence, we can contend that user perceptions are a holistic process, not a snapshot in time, meaning that the way in which we manage user perceptions is not simple. This paper focuses on user perceptions in the organisational context, and more specifically, its application to FM. The paper contends that user perceptions in FM can be analysed through a two-fold approach:

(1) user perception through their input and functionalities in the workplace, and their consequent application of workplace productivity; and

(2) user perception through strategic FM delivery and the achievement of customer satisfaction.

In both cases, the "user" is defined as the client/customer receiving FM services. However, the important distinction between the two is the context in which they are interpreted. First, we investigate what impacts user perceptions within a workplace environment in terms of their functionality and productivity, and second, how FM can strategically apply user perceptions through effective service delivery.

Perceptions of services provided by FM play an important role in users' overall experience of the facility. Research has suggested (Fleming, 2004) that perceptions may be more significant, and therefore more relevant than reality. This is likely to be true of any service industry and this paper draws conclusions from various pieces of service research, which can be applied to FM.

User perceptions are now a critical element of achieving strategic FM. They ensure that organisational learning and growth can be implemented and integrated into core objectives by effectively being able to react to change. They also perform a fundamental dimension to contemporary FM performance measurement systems. According to Varcoe (1996), traditional, or financial measures, are past their "sell by date", and there is a growing acceptance to account for a range of measures, in addition to cost (Kincaid, 1994) to achieve this. A key difference Fitzgerald *et al.* (1991) identified between the service sector and the manufacturing sector was "intangibility". Services are not easy to measure, they are not physical objects, and thus performance measurement techniques and theories need to be more sophisticated.

To put user perceptions into context, a justification of the macro processes of the organisation, and how and where user perceptions can fit into them is needed. One would contend that the "input-process-output model" (Figure 1) from Fitzgerald *et al.* (1991) exemplifies the importance of user perceptions, which illustrates the basic organisational processes in which performance is generated. For example, if we take the customer influence to this process, customer perceptions/experiences will influence

what processes the service delivers and will then consequently be delivered back to the customer to the desired standard, hence increasing their satisfaction.

Similarly, another organisational study emphasising the importance of user perceptions, one would argue, is Kaplan and Norton's (1996) Balanced Scorecard theory, a conceptual framework for translating the organisation's vision into a set of performance measurements (Amaratunga and Baldry, 2000) distributed within four separate, but interlinking perspectives: financial, customer, internal-business-process, and learning and growth. Two of these perspectives, the "customer" and "internal-business-process" strongly link the importance of user perceptions.

The internal-business-process identifies the internal processes that are critical for achieving customer satisfaction. Kaplan and Norton (1996) propose a "value chain model" in order for businesses to successfully implement internal processes to achieve customer satisfaction (Figure 2). The model illustrates that businesses should not merely look at existing operational measures to determine customer satisfaction, but should firstly look at the "innovation process", where they can identify the current and future needs of the customer, which consequently develops new processes in order to deliver the changing customer needs. Businesses are then in a more strategic position to look at the "operations process", and deliver the products and/or services to the customer.

Hence, user perceptions can have a significant impact upon the productivity and strategy of the workplace. The remainder of the paper focuses on the micro processes from the two-fold perspectives of user perceptions, providing an insight into:

- user perceptions in the workplace; and
- user perceptions in strategic FM delivery.

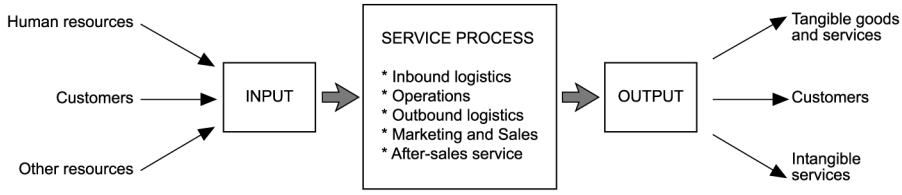


Figure 1.
Input-process-output model

Source: Fitzgerald *et al.* (1991)

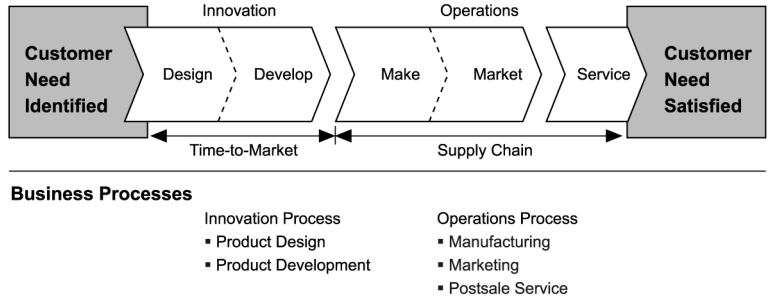


Figure 2.
Internal business process value chain perspective

Source: Kaplan and Norton (1996)

The paper concludes by applying the key findings from the literature reviews and provides a methodological approach to how this can effectively be implemented within FM, via the implementation of a "logical customer performance ladder" (LCPL).

2. User perceptions and workplace productivity

With evidence that employee disengagement is increasing (Pech and Slade, 2006), it is important to provide workplaces that positively influence the workforce. Pech and Slade argue that the focus is on symptoms of disengagement such as distraction, lack of interest, poor decisions and high absence, rather than the root causes. The working environment is perhaps a key root cause in employee engagement or disengagement.

Research has indicated that improving the working environment reduces complaints and absenteeism and increases productivity (Roelofsen, 2002). Workplace satisfaction has been associated with job satisfaction (Wells, 2000) and perceptions of workplace quality have a significant effect on building users' psychology.

This paper focuses on several of the key issues around perceptions of the workplace. A range of literature exists relating to different elements of the workplace such as:

- personal control;
- privacy;
- interior planting;
- personalisation;
- colour; and
- windows and lighting.

However, these separate elements have rarely been considered as a whole and this paper sets out to consider the impacts of this range of factors.

Lee and Brand (2005) found a positive correlation between perceived personal control over the physical environment and self-reported job satisfaction. They also found that perceived personal control was positively related to workplace satisfaction. However, Veitch and Gifford (1996) found that although choice led to perceptions of increased control, it also led to a performance decrement among the participants in their trial. They suggest self-presentation and fear of failure were heightened in those participants who were given a choice and that these findings have implications for the relationship between facilities managers and building occupants (Veitch and Gifford, 1996).

Perry and Mankin (2004) identified the importance of perception in influencing trust in management. They identified that staff perception of management turnover increases difficulty in attaining employee trust as it instils feelings of insecurity.

As FM is often cost driven, cost reduction efforts may lead to perceptions of insecurity among staff. Pech and Slade (2006) identify changes in the work environment as a factor contributing to declining trust. FM cost-cutting measures such as reducing the catering offering, reducing cleaning frequency or removing the office plants are likely to increase the perception of insecurity.

The perception of management support will positively impact upon trust. Research has found (Stokols *et al.*, 2002) that greater perceived support for creativity at work is associated with lower stress and greater job satisfaction. Providing an appropriate workplace to support creativity is key to the perception of support for creativity. They

also found that higher levels of distraction are associated with lower job satisfaction (Stokols *et al.*, 2002).

The behavioural reasoning behind user perceptions and the direct impact of the physical environment was explored by Sommer and Augustin (2007) in their research on spatial orientation of office cubicles. They discovered that users' facing in to the cubicle tended to assume that they wanted to limit their interaction with other workers. Users facing out were more open to communication. Interestingly, however, Sommer and Augustin found that this physical layout did not decrease work-related interactions, but did reduce non-work-related interactions, contending that social exchanges can influence morale and cohesiveness. This also linked to the "status" of workers, where higher-level positions tended to face out. In some cases workers facing inward considered this demeaning.

Privacy is a key requirement of workplaces and Sundstrom *et al.* (1982a) reported an approximately linear increase in perceived privacy with each number of enclosed sides around the workspace. Maher and von Hippel (2005), however, found that the number of partitions were not correlated with perceived privacy but they did find a positive correlation between the height of partitions and perceived privacy. Sundstrom *et al.* (1982b) reported that office workers moving from enclosed to open-plan offices perceived a reduction in privacy, the most important component being the ability to hold confidential conversations. They found a parallel between physical workspace enclosure and privacy satisfaction. Their results led to extra panels being installed at workstation entrances to limit visibility and absorb sound.

However, Goodrich (1982) points out that some design solutions might unintentionally reduce perceived privacy by creating more spatial privacy. Partitions make individuals blind to their surroundings. Noises and movements outside are sudden and unanticipated, making them more distracting (Goodrich, 1982). Maher and von Hippel (2005) also found that, although higher partitions provide visual privacy, they might fail to block noise. Like Goodrich (1982), they suggest that this noise may be more intrusive when employees do not have visual cues to determine the locus of the noise.

Duvall-Early and Benedict (1992) completed a survey of perceived privacy. They found that those working in private workspaces felt they could better use their abilities, had better perceptions of accomplishment and were able to keep busy all the time. A study of private offices with interior glass panels (Goodrich, 1982) found that these create a fishbowl effect. The glass invites passers by to look in, making users feel exposed and constantly distracted. Circulation routes are also a consideration in perceived privacy. Although Kupritz (1998) found support for partitions, these were considered less important than having minimal traffic routed through the worker's area and the workspace being located away from the main traffic flow. The engineers studied perceived that loss of production time and mistakes occur due to distractions (Kupritz, 1998).

There are, however, positive distractions, such as trees, plants and water (James, 2007) that may be incorporated into buildings to improve workplace quality and productivity. Goodrich (1982) also advocates using large plants to increase privacy perceptions. He states that workers agreed that plants made the office more pleasant and informal and this seemed to reduce their need for high privacy levels. Shibata and Suzuki (2002) found that people's mood might be affected by plants although they

concluded that further research was necessary. Serpa and Muhar (1996) found that plants can be used to influence spatial perceptions outdoors, in that smaller trees and light texture can be used to enlarge an open space, while large trees with coarse texture have the opposite effect. These results may be relevant to the indoor environment in the selection of office plants.

Kaplan (1993) asserted that those with a view of nature such as trees and greenery were more satisfied and that even a short exposure to a natural setting can serve a restorative function. Kaplan states:

> Those with a view of nature felt less frustrated and more patient, found their job more challenging, expressed greater enthusiasm for it, and reported higher life satisfaction as well as overall health (Kaplan, 1993).

Kaplan (1993) suggests that having natural areas at the workplace can be useful for views or direct involvement such as lunch areas and areas to walk. Bringing nature into buildings is becoming increasingly popular with the use of landscaped atria and "streets" within buildings.

Larsen *et al.* (1998) add support for workplace plants, finding that office plants increased participants' perceptions of office attractiveness and comfort. Surprisingly, however, they found that productivity reduced with greater numbers of plants. They suggest this may be due to the repetitive nature of the task.

In Shibata and Suzuki's (2002) research on the effect of foliage plants on task performance and mood they noticed perceptual differences according to gender. Females found plants less distracting and they had greater feelings of familiarity towards the plants than did the male subjects. This is also true of other perception research. In private offices, female occupants have been found to be less likely to close the door to attain privacy than males (Goodrich, 1982). Maher and von Hippel (2005) found individual differences unrelated to gender in privacy perceptions.

Goodrich (1982) highlighted individual perceptual differences following a survey of responses to a new environment:

> Two themes emerged from the data. Theme one characterized the new setting as pleasant, attractive, nice to work in, modern and functional. Theme two characterized it as cold, mechanical, hospital-like, sterile, hard and antiseptic. Each theme focused on different aspects of the same environment, suggested different meaning attributed to it, and indicated different emotional reactions as a result (Goodrich, 1982).

Workspace personalisation is linked to privacy as it is a form of territorial behaviour whereby people mark their territory using personal belongings (Wells, 2000). Wells (2000) found gender differences in that women tend to personalise their workspaces more than men and that they personalise with aesthetic items such as plants, posters and personal items, whereas men are more likely to have items showing personal achievements. Personalisation was not found to be more important to the wellbeing of women than to men although the women interviewed perceived that it was.

Goodrich (1982) highlights that some workers will territorialise their space by personalising their surroundings and report feeling annoyed when others use their personal space. However, he also points out that some workers do not have these feelings and appear to be more flexible in how they use their space. Wells (2000) found positive associations between personalisation and workplace satisfaction. These were in the number of personal items displayed, the association between how much the

employee would like to personalise and how much he or she is allowed to personalise and the extent to which the employee determined the arrangement of his or her workspace (Wells, 2000). Haynes (2007) points out that adopting flexible patterns such as "hot-desking" and "hotelling" has led to employees no longer having a fixed workspace. He argues that this could overlook a behavioural need to express their identity by modifying their workplace.

Colour is an important determinant of user perceptions but it appears often to be overlooked. Wright (2005) points out that workplace colour decisions will influence staff motivation and absenteeism as well as portraying a certain image to clients. Stone and English (1998) undertook a study of the effects of task type, colour and the presence of a poster on subjects' mood, satisfaction and performance. They studied the effect of red and blue partitions in the workspace and found that perceived privacy was higher in the blue partitions than in the red. A study of red, white and green offices (Kwallek and Lewis, 1990) found that subjects preferred working in the white environment but significantly more errors were made in the white office than in the red. However, subjects working in the white office rated it less distracting than those working in the red office.

Stone and English (1998) found that perceived room temperature was affected by colour. Those working in blue partitioned areas perceived it to be cooler than those in red workspaces. This may have energy use implications. Building users could potentially be made to feel cooler in warm climates and vice versa. The detailed psychological effects of colours are beyond the scope of this paper but clearly workplace colour is an important consideration for FM and one that can significantly influence organisational performance.

Access to windows and artificial lighting will also affect the psychology of building users. There tends to be a strong preference for windows among occupants, however, Stone and Irvine (1994) found no evidence that windows effect higher performance levels. Their study found that a windowless room appeared to reduce stimulation from the environment, which was beneficial for tasks such as filing but potentially limiting for tasks benefiting from stimulation such as creative tasks (Stone and Irvine, 1994). Goodrich (1982) reported that having a window was psychologically important to workers as it provided more mental freedom, a chance to get away from the problem to gain new insight and a broader perspective as well as reducing fatigue and stress. However, negative effects were sunlight producing glare on computer screens and solar heat gain.

Boubekri *et al.* (1991) studied the effects of window size and sunlight on office workers. They found that window size did not significantly affect relaxation, satisfaction or excitement among workers but sunlight penetration significantly increased feelings of relaxation when sitting sideways to the window.

Goodrich (1982) found that artificial lighting providing higher light levels on primary work surfaces but lower ambient light levels create an unevenly lit space, producing an atmosphere similar to residential space lit by table lamps. This increased informality, reduced status distinctions and created a more relaxed work climate, which increased perceived privacy.

Fischer *et al.* (2004) explored the relationship between the characteristics of individuals' identity (sense of self or "self-schema") at work and how the physical work environment is perceived.

A model linking employee satisfaction with the work environment was proposed by Fischer *et al.* (2004) (Figure 3). They affirm that the formation of the professional self-schema is a result of repeated positive or negative feedback people receive in their work situations that reinforce either a positive (successful) or a negative (unsuccessful) sense of self, over time. They suppose that workspace has a role in this process, either through judgements employees make of the environmental characteristics of the spaces they occupy, or through information communicated to employees about themselves by the spaces they have been allocated (Fischer *et al.*, 2004).

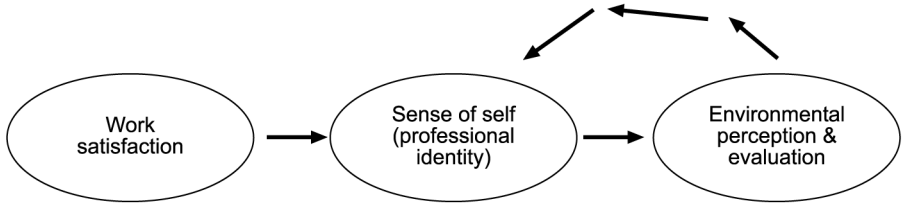
In summary, workplace design can have considerable impact on user perceptions, and a consequent knock-on effect to the overall strategic goals of the organisation's core business. Becker (1990) emphasised the importance of user perceptions in an organisational sense by explaining the importance of staff involvement and participation in workplace design. Becker contended that involving "end-users" directly within the design and briefing stages would enhance their overall perceptions of the workplace as it will influence and determine:

- the amount and quality of information collected;
- the nature and quality of solutions proposed and accepted;
- help determine employees' satisfaction with the process; and
- colour their view of the final outcome (Becker, 1990).

Hence, we can contend that user perceptions should be viewed as a holistic process within FM, as user input and their functionalities within the physical environment can inevitably enhance their later experience. The impact of user perceptions in terms of strategic FM delivery is now investigated to explain this further.

3. User perceptions and strategic FM delivery

Within the context of FM, behavioural studies of user perception are relatively sparse. It is probable however that, users apply differing perceptions of FM services based on their experiences and work patterns within a building, and one would contend this has a direct impact on strategic FM thinking. Fleming (2004) talks about behavioural research as being made up of a heuristic environment, where perceptions of a particular product, environment, service are "subject to heuristic bias" as they are derived from human memory, problem solving, and thus creating a "mental note" (Fleming, 2004). The most fascinating element to this discussion of behavioural research is the extension to the concept of an "availability heuristic", which is based on "the idea that people assess probabilities from an understanding of a particular occurrence" (Fleming, 2004) and is created based on their associated experiences.



Source: Fischer *et al.* (2004)

Figure 3.
Model linking employee satisfaction with the work environment

An excellent example of this behaviour comes from Fleming's acknowledgment of the work of Folkes (1988) in her study on students' perceptions with regards to the failure of an escalator in a university facility. The sample of students studied was split into those who habitually used a combination of stairs and the escalator and those who only used the escalator to attend classes on upper floors. The students were asked to estimate what percentage of time the escalator was broken. Those who used only the escalator perceived it was broken 54 percent of the time, while those who used the stairs and the escalator perceived it was broken 31 percent of the time (Folkes, 1988). The distinctive experience of using a non-functioning escalator is thought to have increased the importance of the failure to the habitual users (Fleming, 2004). It is also probable that those using only the escalator recalled failure incidents more easily because walking was distinctive and also comments made by themselves or classmates about having to use the stairs were distinctive (Folkes, 1988).

Fleming (2004) suggests that a move to a more holistic approach to FM performance assessment is required, using occupiers' perceptions as a key performance indicator (KPI). It is important to note the understanding of the availability heuristic in determining the "who should" and "what should" be used to provide a fair and justified basis for effective customer satisfaction measurement. More specifically, Fleming states that:

> There is a strong argument that a clear understanding of the availability heuristic applied to consumers which is formed from "good" and "bad" experiences within a building may explain the nature of the users' perceptions of the building as a whole (Fleming, 2004).

It is eligible therefore to contend that it is healthy to apply the inclusion of user perceptions within the strategic FM makeup in order to determine customer satisfaction levels of delivery, as although it will inevitably create bias to particular environments, based primarily on their perceptions and experiences, the bias will already exist from organisational representatives responsible for the existing application of performance measures, and the justifications behind their inclusion as an effective source of measuring current performance. Hence, the application of perception data as a form of performance measurement is a complementary source, to assist effectively in the strategic growth and improvement of the overall business objectives.

Another interesting linkage to strategic FM delivery and user perceptions is the connection between employee (FM Team) and user (customer) perceptions. Hinks and McNay (1999) found that the perception of an "FM team" towards the performance and importance of FM services was different to that of the "customers". In their study, discussions of KPI's indicated that the definitions being used tended to be particularised to their own business context, an issue which had rarely been associated with other attempts to identify generic performance indicators, thus reinforcing the need for a bespoke set of performance indicators (Hinks and McNay, 1999).

These differences may be explained by the users' perception of what FM is, differing to that of FM professionals. There is still a lack of understanding of the function of FM, particularly in strategic terms among its customer groups. FM is often perceived as purely the maintenance team, where repair activities occur on a reactive basis. This points to a lack of awareness of how FM can strategically add value. Hinks and McNay (1999) found that customers tended to interpret the FM department's role

in the organisation from an operational viewpoint and that attempts by the FM department to raise more strategic issues associated with their function remained unrecognised. Shaw and Haynes (2004) argued that facilities managers need to develop performance models that are more sensitive to customer needs in order to change the perception of FM as an expensive overhead towards a customer-focussed and essential business component, capable of adding real value. Thus, the customer is integral to the performance measurement systems in place within the strategic FM organisational setup. This is reiterated by Camp (1989) in the context of benchmarking, emphasising the importance and ability to satisfy the customer and react to their changing needs and aspirations.

Organisations require effective management of customers, assets and service levels. Managing user expectations and meeting their requirements implies a total quality approach to operating buildings and delivering support services to contribute to achieving business objectives (Alexander, 1996). In addition, Robben's (2004) study of quality measurement in a facilities environment places huge emphasis on the importance of the customer when dealing with quality performance measurement in which the "increased competition and greater demands by the end users of products and services, has resulted in a rethinking of how quality is measured and delivered to the customer". Robben suggests that a key factor in the importance of performance measures is to base them on "customer input". Robben reiterates that the most important requirement of the development of quality measures is through factors that are critical to the customers of facilities. In order to effectively deliver customer expectations however, Robben highlights that the most important issue is that expectations must be aligned with the "delivery mechanisms" of the organisation, and states that "by meeting the customers' expectations, you are 90 per cent of the way to providing quality service".

For this to be effective, there is a need to change the perception of FM as reactive maintenance to the strategic support service it should be, adding real value to organisations. Mechanisms therefore need to be put in place to enable user involvement in FM issues at an appropriate level so that users can gain an understanding of the function of FM and the feeling of being able to contribute to and influence decision making whilst maintaining appropriate management by FM professionals with specific knowledge and not detracting from core business tasks undertaken by the user.

Among FM teams there is often a perception that the department is looked upon negatively by its users. This may largely be due to the fact that many facilities managers only deal directly with the user when there is a problem or complaints are received. If FM services are working as they should the user is likely to have little need to interact with the facilities team. However, regular customer feedback may highlight positive service examples, which will help to change this perception. This perception barrier between the employee and the user is emphasised by Tranfield and Akhlaghi (1995) who contend that there is a link between the employee satisfaction and customer satisfaction, whereby employee satisfaction leads to better service and added value, which therefore influences customer satisfaction, and consequently leads to profit and growth within the organisation. This is known as the "service profit chain" (Tranfield and Akhlaghi, 1995) (Figure 4).

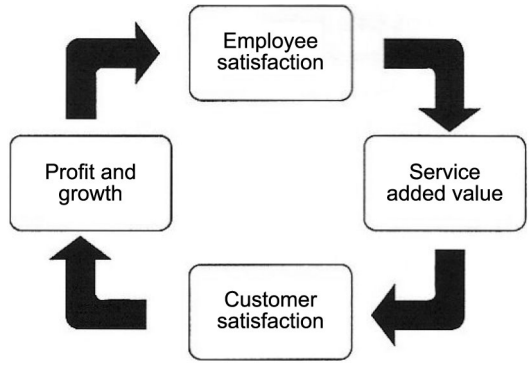


Figure 4.
Service profit chain

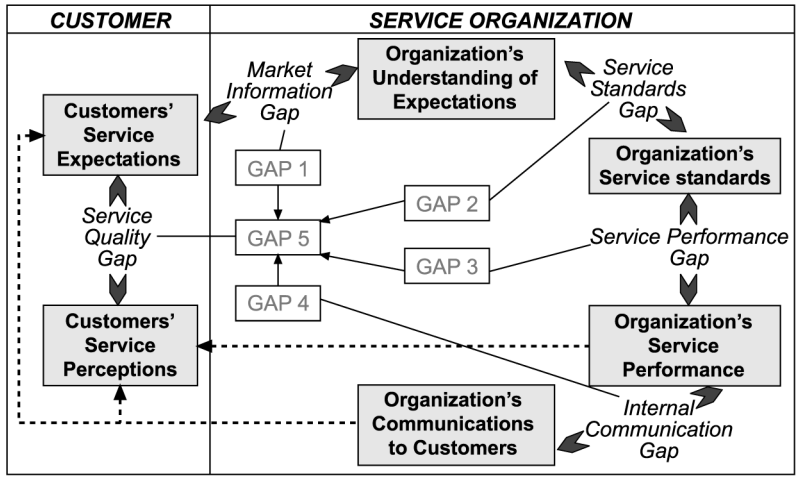
Source: Tranfield and Akhlaghi (1995)

FM can learn a great deal from the hospitality industry in terms of customer service and feedback and if it is to be recognised as a strategic discipline, concepts employed in other sectors and industries need to be considered in an outward-looking approach. Tranfield and Akhlaghi (1995) acknowledge that modern organisations achieve high quality and high productivity levels at the same time by being customer focused, people orientated, and adding value in everything they do. By this we mean that organisations must take the role of the "informed client function" (ICF) (Atkin and Brooks, 2005). This is essentially an integral function of an organisation to effectively acknowledge and implement customer perceptions and expectations. According to Atkin and Brooks, organisations need to act as informed clients if they are to be sure of delivering customer satisfaction and achieve best value.

Parasuraman's (2004) two-decade-long research on assessing and improving service performance contended that service quality fails when there is a gap between customers' service expectations and perceptions. The reason for this gap is due to the shortfalls of the service providers' organisation (Parasuraman, 2004). From this theory, a conceptual framework known as the "GAPS model" was developed (Figure 5), clearly illustrating the organisational dysfunction with regards to customer satisfaction. Hence, in order to improve the service quality delivered to customers (GAP 5), the internal deficiencies of the organisation (GAPS 1-4) must be effectively cured.

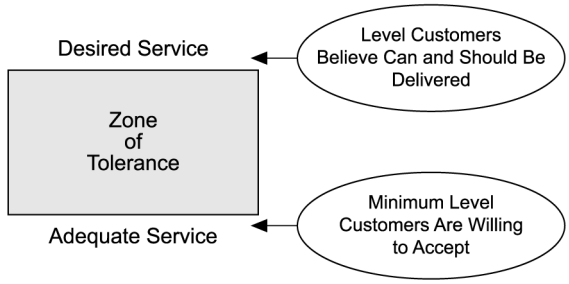
Moreover, Parasuraman (2004) believes that customers have an "ideal" level of service that they expect. However rather than having a single level, they have a range of levels, which is known as the "zone of tolerance" (Figure 6). If a delivered service falls within the zone, customers will be satisfied. The area above the zone is what customers believe can and should be delivered, and conversely falling below the zone is the minimum standard customers are willing to accept.

Hence, when assessing user perceptions within the context of strategic FM delivery, users will have their own threshold of tolerance, and to the importance of staff involvement within the organisational planning and processes of the workplace (Becker, 1990), it is crucial that this is managed and utilised effectively and efficiently in order to maximise FM productivity within the workplace. In turn, this will have a dramatic impact on the level of customer performance measurement achieved.



Source: Parasuraman (2004)

Figure 5.
GAPS model



Source: Parasuraman (2004)

Figure 6.
Nature and determinants of service expectations

4. Methodological approach

Through the two strands of perception literature reviewed, one would contend that there is a "logical customer performance ladder" (LCPL) that organisations should aspire to climb in order to achieve the optimum levels from user perceptions (Figure 7). The ladder acknowledges the importance of the initial user input to determine innovative ways of delivering what is important; to the internal business processes that will enable this delivery to be successful; to the strategic direction of the performance measures in line with their core business objectives; and to the consequent added value by increased customer satisfaction. In addition, this ladder should not simply stop once the top is reached, it must go back to the beginning and work in a cyclical process to ensure change is managed effectively and learning and growth is achieved within the workplace. This is the only way in which businesses can eventually aspire to superiority.

The ladder illustrates the logical process mapping to achieve effective customer satisfaction performance within an organisation, where user perceptions and experience lead to thinking about how to effectively deliver the organisations' FM

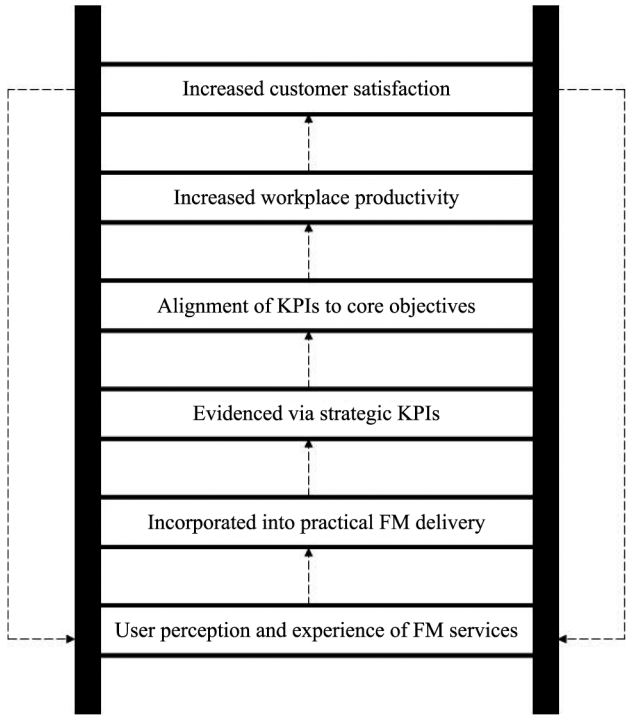


Figure 7.
Logical customer performance ladder

services. The service delivery then needs to be evidenced by strategic KPIs that are fully aligned to the overall business objectives of the organisation. In turn, this focused process will inevitably improve the productivity of the workplace. It is recommended that the LCPL is applied within an organisational context when considering one's FM strategy development. The LCPL is a vital tool in logically structuring a systematic process for obtaining the dual purpose of positive customer satisfaction and improved service delivery.

The crux of this discussion is that if performance measurement is to be effective, and complementary to strategic FM, we must make a transition from performance measurement to performance management (Amaratunga and Baldry, 2002). What Amaratunga and Baldry (2002) mean by this, is that results in performance measurement indicate what happened, but they do not expand on why it happened, or what the organisation needs to do about it, hence it is the role of the facilities manager to manage this process and not leave performance to chance. Varcoe (1996) emphasised that although performance measurement was a matured process in business, particularly in manufacturing, there was little effective evidence in FM. He outlines the key principles and benefits that performance measurement can offer FM. The primary notion set out is that measures must be "dynamic", whereby this dynamism is the key stimulant to achieving continuous improvement "by a constant adjustment of measures to focus on that which is vital to the organisation – both now and in the foreseeable future". The key phrase here being "constant adjustment", in which the LCPL provides organisations with an opportune customer satisfaction model that can

be strategically adjusted. User perceptions are not fixed in time, aspirations and expectations inevitably become higher, consequently meaning that performance measurement must change in its accordance. We believe, from a customer strand, the LCPL allows organisations to do this. To reiterate this point, Varcoe states that "only those measures that are of importance should be analysed", hence, an accountable performance matrix must be focused directly at helping to improve the strategic goals set by the organisation overall.

5. Research implications

It is acknowledged that the LCPL is based on conceptual research, as opposed to practical experience. Potential limitations of the model are therefore based around its practical application. To revert back to the introductory literature from Fitzgerald *et al.* (1991), the measurement of services is complex due to their intangible nature. Practically therefore, providing concrete methods for the effective measurement of user perceptions is not an easy task. However, it is deliverable, otherwise we would never know what our customers expect, and how they would like to expect it. Thinking back to Fleming's (2004) theory of the availability heuristic, one would contend that user perceptions can provide organisations with the opportunity to constructively evaluate what aspects of the business and environment work, and what aspects do not work so well, resulting in a continuous improvement culture. Hence, one would contend that although conceptual in its design, the LCPL provides a systematic framework that can be embedded into FM strategy. One is not denying the difficulty of design and setup of such a system. However, the fundamental reasoning is to raise awareness of its strategic application potential. Surely, the most difficult element of any system is its strategic alignment coupled with its sustainable potential. User perceptions will undoubtedly change in accordance with their environmental makeup. This paper aims to introduce a logical process for implementing a facet of strategic FM in order to facilitate such change.

6. Conclusions

The two strands of literature review have explored the role of user perceptions within the organisational context through their functionalities and productivity, and the importance of user perceptions from the context of strategic FM delivery, as inevitably the final output is customer satisfaction. This paper has attempted to unravel how differences in user perceptions and expectations can be effectively applied to a strategic management context within FM. The paper has explained that perceptions in the organisational context are two-fold – first, via the workplace environment and productivity, and second, via strategic FM delivery. FM must be aware of the inclusion of both perspectives as both are intrinsically linked. For example, failure to identify user perceptions in FM delivery will lead to indirect business process and objectives, resulting in a malfunctioning workplace. Simultaneously, failure to identify user perceptions within the workplace, will inevitably suggest an inefficient workplace, pointing to poorly aligned FM strategy.

It is argued that user perceptions need to be viewed as a holistic process within FM business planning. In terms of customer focus, this paper highlights that FM teams' perceptions of what FM entails are different to that of the user. There is still a perception that FM is purely an operational support service and the strategic qualities

of FM remain largely unrecognised. Quality measurement needs to involve the customer, and base measures on customer input.

Finally, user perceptions need to be strategic in FM, as illustrated by LCPL, which links the full organisational business process from start (user input and expectations) to middle (workplace functionality and productivity) to the finish (customer satisfaction). The organisation is a living dynamic organism, capable of learning and growth (Becker, 1990) to create a competitive advantage in which user perceptions are strongly aligned in shaping such ambition.

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