Service innovation in the Facility Management industry

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Innovation is today one of the top challenges for the Facility Management (FM) industry. Despite having improved over the past 10 years, FM companies can do significantly more to create innovation. This requires solid innovation processes, an innovation culture and internal innovation champions.

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Executive Summary

Innovation is today one of the top challenges for the Facility Management (FM) industry. Despite having improved over the past 10 years, FM companies can do significantly more to create innovation. At the same time pressures from competition and client demands makes service innovation a must for FM providers.

Successful innovative FM companies share four characteristics. They a) have solid innovation processes, b) have developed an innovation culture, c) have visible innovation champions at all levels and finally, d) use an optimal mix of internal and external knowledge sources.

Three separate innovation processes should be used to optimise the total innovation potential. These are 1) management of best practices, which involve identifying, collecting, conceptualising and implementing practices throughout the organisation, 2) site level innovation – small incremental innovative initiatives close to the customer and 3) top-down driven innovation that focuses on larger transformational change based on strategic trends in the market.

Effective change management processes are necessary with all innovation initiatives, especially larger projects as they will lead to potentially larger disruptions. Important change management steps should include 1) user involvement, 2) plenty of honest and meaningful communication, 3) active resistance management, 4) sensitive handling of increase in job scope, 5) celebration of short-term wins, 6) anchoring of new behaviour and 7) use of a robust change management process.

The ultimate test of the success of an innovation is the effect on the customer's profit. This is, however, difficult to measure, but customers and providers agree that innovation will bring several benefits. These include increase in the quality of service, reduced costs, higher employee satisfaction and improvement in Health, Safety and Environment (HSE) and sustainability.

Introduction

Innovation is very important. A company cannot sustain its market share or its profit margin over a long period of time unless it is innovative. Without being able to continuously innovate its products and services the company will experience falling prices, declining margins and the commoditisation of its offering (Goyal & Pitt, 2007). This is true for all companies and it is also the case for the FM industry.

Despite the fact that the FM industry is relatively new – it has developed since 1978 when Herman Miller held a conference on Facilities Impact on Productivity – it has matured quite considerably, especially in the last 10–15 years. The industry emerged from three main areas: property management, property operations and maintenance, and office administration. Since then it has evolved from an operational non-core business support services function to a strategic position which supports and enhances both the core and non-core activities of the organisation.

Today, innovation to remain competitive is one of the top challenges for the FM industry (Frost & Sullivan, 2009). Innovation is not only an important theme because of increased competition amongst service providers. Innovation is also increasingly a requirement from clients. In the early days of outsourcing, cost saving was the primary driver behind business decisions to outsource, and was behind most deals. Later, as this trend matured, customers put more emphasis on access to new skill sets, better speed-to-market for new and better products and services (as well as best quality) and, most importantly, on greater innovation. Some deals were struck on a cost-neutral basis or even a higher initial cost, but in return for the expected value-benefits from innovation (Edgell et al., 2008).

Innovation in FM is however not as straightforward as it is in manufacturing companies or in centralised service companies, and for many reasons. Firstly, some of the services within FM are 'produced' on the customer's site with less-skilled people who sometimes have difficulties speaking even the local language. Secondly, because it is people dominated, the economies of scale are not as obvious as in a manufacturing industry and hence the margins are often quite low and price competition is often fierce. Thirdly, cost cutting is most often the primary driver behind the outsourcing of FM. The cost cutting strategies in the client organisations may be positive or negative factors for innovation as they may either stimulate the initiative for innovation in the FM organisation (by looking at new ways of doing things) or hinder it (by withholding the necessary resources for doing new things) (Mudrak et al., 2005).

This White Paper will address the issue of managing innovation in a Facilities Management company and examine how this can benefit the customers. It will answer three questions: 1. What is service innovation in FM? 2. What needs to be in place for innovation to happen? 3. What value does innovation add to FM customers?

Service innovation in Facility Management

Service innovation defined

Theories about innovation and innovation processes have been dominated by product innovation rather than by service innovation. However, despite the historical low focus there has been a recent surge in literature, research and interest in service innovation. This has resulted in a view that innovation can play a major role in improving productivity and customer satisfaction in services.

Innovation is a term with many – and often ambiguous – definitions. How much change and diffusion is needed before it can be defined as innovation? There are also many different views as to the circumstances under which it appears (Cardellino & Finch, 2006). Then how should service innovation be defined? In this White Paper we will use West & Farr's (1990) definition:

the intentional introduction and application with a role, group or organisation of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, group or organisation.

This definition emphasises that innovation has to be a planned approach which the organisation has adopted when creating new ideas. This means that if a service improvement comes accidently or a series of improvements come at random then this is not service innovation (Cardellino & Finch, 2006). Just as innovation should not come randomly the same applies to the benefits of innovation. The benefits – which include economic satisfaction, personal growth and productivity – should be anticipated in advance.

The definition also points out that it must be new to the unit of adoption. This can be at company level or even at site level. This means that innovation must be coordinated across the business. This can be done via Best Practice programmes where a Centre of Excellence drives the collection, definition, documentation and deployment of innovative practices in a structured way. In service companies especially, the burden of deploying innovative practices to service staff is cumbersome, due to the decentralised nature of the business. Innovation may hence be practiced bottom-up (at each site) or top-down (from a central location).

Finally, the definition suggests that the benefits should be significant to the individual or to the organisation. But how much is significant? Does that mean that small incremental improvements are not innovation? An innovation is significant if it improves the service beyond any doubt and benefits the customer. Either the customer should experience a better service, or receive a lower price or improved productivity – or all of these. If the customer cannot beyond doubt receive an improvement then it is not innovation.

How widespread is innovation in FM?

It is unquestionable that innovation does take place in services – although some theoreticians question this (Sundbo, 1997). The question is how much and how organised it is.

Statistics show that the costs allocated to innovation in the service industry are more than three times lower than in the production industry. There are many possible reasons why this may be the case. It could be because the sector is more mature compared to the production industry and therefore the need for innovation is lower. This is however unlikely as the service sector has been growing more rapidly over the last 25 years compared to the production industry. Another perspective on the lower innovation costs within the service industry could be that the decentralised innovation setup makes it difficult to measure the total resource allocation to innovation. This is a more likely reason.

Other barriers for innovation in service organisations including FM service providers could be the fact that they are often producing intangible products which makes them more difficult to perceive and therefore more difficult to change and innovate. That, combined with simultaneity (the fact that it is delivered and used at the same time) and heterogeneity (that two service deliveries are never quite the same) may explain why innovation is less widespread in services compared with products (Voss, 1992).

While there is very little industry data which indicates how much is spent on innovation in FM, there is however a significant amount of research which supports two general statements:

1. **The larger the service providers are the more likely it is that there will be innovation.** This fits well with surveys which have documented that the more multinational a service company is the more innovative it is. The reason behind this is that larger service providers are more likely to have robust innovation processes in place as well as many sites on which idea generation can take place.

2. **Outsourced FM innovates more than in-house FM teams**. The barriers for innovation for in-house FM teams are often significant and primarily fall into three categories: cultural inertia, lack of size and processes, and lack of outside inspiration. A survey showed that 92% of FM managers believed that innovation approaches differ between outsourced and in-house FM teams.

While it is unclear how much is being spent on innovation, it is clear that, when asking FM managers themselves, most respond that there is a great scope for innovation in FM – in one survey 79% responded that this was indeed the case (Goyal & Pitt, 2005). Another study by Cardellino & Finch(2006)of innovation in the UK FM sector concluded that "contrary to many outsiders' view of FM ... FM organisations are highly innovative".

Innovation processes

Innovation is more than simply coming up with a good idea; it is the process of growing them into practical use – Thomas Edison

Creativity and innovation is often thought of as being something mystical which comes 'out of the blue' when you least expect it. While ideas may sometimes come unexpectedly, it is clearly demonstrated that companies who are very innovative all have four things in common which need to be in place for innovation to happen on a consistent basis:

1. **Solid innovation processes.** It cannot be overemphasised how important solid innovation processes are. Indeed, it is questionable whether innovation can exist over a longer time frame without such processes. These processes are highly complex and rarely linear despite many parts of facilities service seeming simple and sometimes being delivered by less-skilled people.

2. **Innovation culture.** In order to effectively execute an innovation strategy, it must hard-wire innovation and innovativeness (understanding the difference between intellectually grasping the concept of an innovation and knowing how to implement it) into its culture (Hicks et al., 2007).

3. **Innovation Champions** are necessary in FM for innovation to flourish (Cardellino & Finch, 2006). In a study examining 11 case studies of innovation in FM all had an identifiable innovation champion. This person was generally in a managerial position and was confident that the innovation would fit the company's strategy and ultimately solve the problem at hand.

4. **An optimal mix between internal and external knowledge sources.** Depending on the type of innovation a company wants to achieve it is important to find external knowledge sources from which to draw inspiration. How much, and from which sources, is entirely dependent upon the type of innovation.

The design of an innovation structure must take all four points into consideration; the design should build strong processes which draw on internal and external knowledge, recruiting and training internal innovation champions as well as fostering an innovation culture.

Building solid innovation processes seems easy but such are few and far and between in FM compared with many other service industries. In order to build Best Practice innovation processes three elements are required: 1) an understanding of different types of innovation, 2) use of innovation process building blocks and finally, 3) creating an organisational structure to support innovation. All three will be described below.
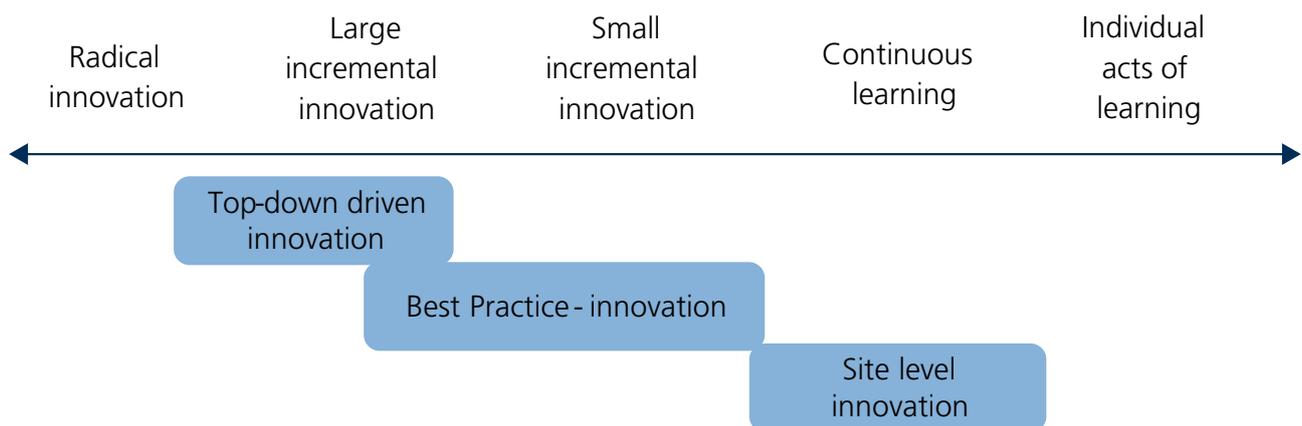
Types of service innovation in Facilities Management

Innovation can come from many different sources (Nutt, 1999), including:

- Operational origins. This is practice-led innovation where those with operational experience and knowledge find ways in which current (best) practice can be modified or replaced.

- Problem origins. This is where an improved understanding of a problem through theory will lead to a better way of doing things.

- Personal insights. Here innovation is based upon ideas and personal insights. The individual creativity creates unique developments in products and processes.

- Contextual origins. Here the ideas are triggered from external rather than internal sources. These may include global trends, politics, general business trends, competitive developments and fashion

The different types of origins for ideas and innovation will lead to different types of innovation. Most theory around process and product development within the services industry theorises around radical or transformational innovation. But there are many other types of innovation. These range from individual learning, to small incremental innovation (improving upon existing services and processes) over to radical innovation (creating radical new ways of doing things) as illustrated in figure 1.

Figure 1: Categories of innovation

| Radical innovation | Large incremental innovation | Small incremental innovation | Continuous learning | Individual acts of learning |

Top-down driven innovation

Best Practice - innovation

Site level innovation

Source: Aspector

The different types of innovation can, in theory, take place at all levels in the organisation. In practice however, due to the day-to-day nature of decision making at site level, only small incremental innovation and continuous learning takes place at site level. The other types of innovation take place above site level.

Best practice
Collecting and adopting best practice throughout an organisation is probably one of the most effective ways of innovation. When one great idea has been created and successfully implemented at one site or region this may successfully be transferred to another site or region.

Best practice cannot stand on its own, however, as it is 'merely' collecting already existing ideas within the organisation and adopting them in all other relevant parts of the organisation. New ideas must be generated, implemented and subsequently distributed throughout the organisation. These new ideas can either come top-down (i.e. from headquarters level) or bottom-up (i.e. from individual sites).

Site level innovation
At the site level, it is unlikely that radical change or transformation will happen simply, due the fact that the FM provider deals mostly with the incremental day-to-day changes at client organisations (Mudrak et al., 2005). Looking at it from that perspective, innovation in FM at site level may be more like organisational learning rather than pure innovation in the traditional sense (Cardellino & Finch, 2006).

There are many reasons for that. Firstly, it can be argued that clients themselves are expecting better products and services on an evolutionary base, rather than a radical transformation (which may however occur when the service provider initially takes over the contract). Indeed when looking at most Key Performance Indicators (KPIs) on innovation, this is primarily linked to being able to deliver a large number of small improvements rather than to significantly alter the way the service is being delivered.

A second reason is that innovation in the Facility Management industry is often rapidly implemented and can be copied by competitors with ease (Voss, 1992). This means that service providers must be able to perform continuous innovation to remain competitive.

Top down
Because each site manager is concerned about the day-to-day running of the site and often has limited resources at hand, large innovation projects have to come from outside the site.

Moreover, while it is true that much of innovation in FM is incremental, sometimes new and innovative ways of performing FM services do come along. This has been true in many areas such as sustainability, workplace design, performance measurement, KPI and Service Level Agreement (SLA) creation, use of social networks in customer management, etc.

In practice, top down innovation often means headquarters driven innovation. This is partly because this innovation is seen as strategic – this is the location of the resources and the knowledge centre in the organisation.

Innovation infrastructure

The challenge to any FM operation is to support and improve the core business by ensuring that the employees working in it are comfortable and satisfied with the facility from which they do their work. The more similar the FM operations become and the more FM professionals there are, the greater the potential for innovation. This however requires an "innovation infrastructure" that:

- Identifies and gathers innovative ideas (inside and outside the organisation).
- Conceptualises and documents the innovative ideas in a way that can be transferred.
- Deploys and implements the innovative ideas throughout the business.
- Deploys and implements the innovative ideas throughout the business.

Innovative Identification

The "innovative infrastructure" should capture both the ideas generated in the service teams on site and the transformational ideas that come from strategic analysis and external sources. This should be ensured via regular knowledge forums between site level / regional level and regional level / headquarters.

Innovative Conceptualisation

Innovative ideas that have been identified must be conceptualised for them to be transferred to other parts of the organisation. This includes making them available in a language that is understandable for others, in terminology that makes sense for others and in a structure that can be deployed in a variety of contexts.

*Innovative Deployment and Implementation*

It is an ongoing task to ensure that knowledge is made available and understood by the right people in the organisation. This requires an internal certification programme that facilitates best practice deployment in regions and on sites. Since the goal is to implement innovative ideas it does require that the deployment to champions on various levels of the business reflects standard change management principles, as the ultimate goal is to change people's behaviour. The deployment setup should facilitate a two-way exchange of knowledge so that the best practice is always challenged and thereby continuously improved.

Organisational structure to support innovation

The combination of the different types of FM service innovation (large, incremental and best practice), origins of innovation (operational, problem, personal and contextual) and the innovation processes (identification, conceptualisation and deployment) described above must be captured in an organisational structure.

To fully embrace service innovation in FM, all three types of innovation (large, incremental and best practice) must be utilised. However, no one level in the organisation is able to deliver all three types. Figure 2 illustrates how headquarters, the regional level and the site level all must participate in the innovation processes.

Figure 2: Organisational structure for innovation
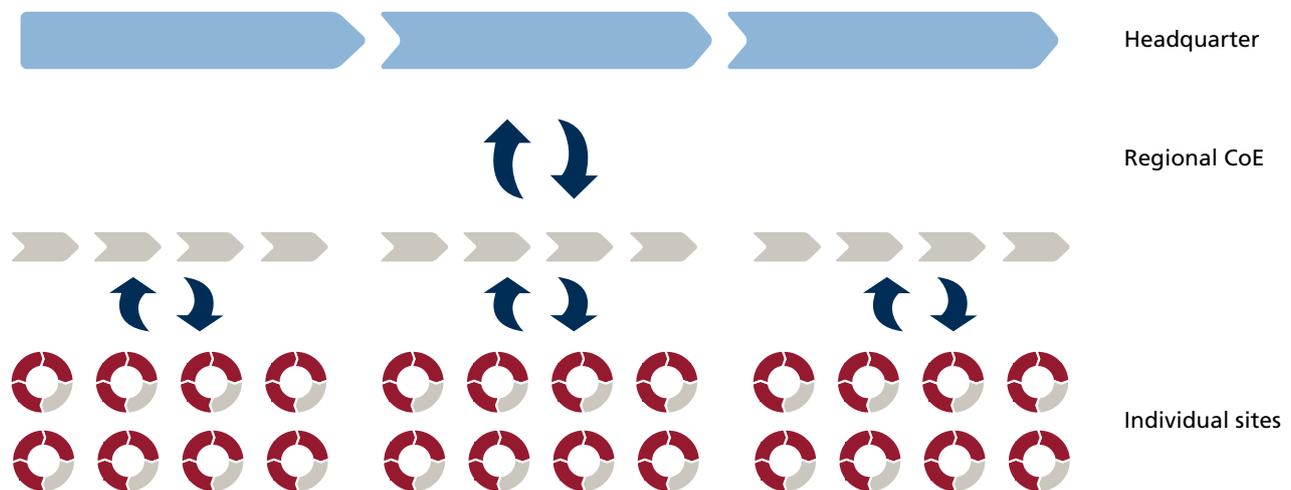
Source: Aspector

Headquarters level

The role of headquarters is four-fold. It must:

1. Manage the Best Practice process; it is responsible for the Identification and Idea Collection phase as well as the Conceptualisation and Documentation phase (both described above).

2. Have a process in place to perform large incremental innovation (and perhaps even radical innovation).

3. Offer training to the regional innovation managers and offer support in their implementation efforts.

4. Build and foster an innovation culture by engaging top level management.

A central department for innovation should be established to champion innovation throughout headquarters and help push the innovation culture outwards and downwards in the organisation.

Regional level

The regional level, which may be country level for international companies or regional level for national companies, is responsible for adapting best practice to the regional context and environment and then to perform best practice gap analysis for each site and to help the site managers close this gap through guidance and training. The regional level is also responsible for collecting innovative ideas from the site level when documenting or updating best practice in the organisation.

The organisation at regional level can advantageously be done through a number of Centres of Excellence (CoE) where the centres are organised by service or by industry or a mix of both. It is however recommended that all regional levels are organised in the same way so the relevant CoEs can interact with each other and share practice and experience regarding implementation.

Site level

At the site level efforts should be concentrated on conducting continuous improvement (small incremental innovation) and implementing best practices and headquarters-driven innovation.

The site manager/contract manager must agree innovation KPIs with the customer and interact continuously to align the innovation efforts with the expectations of the customer. A good relationship between the service provider and the customer is vital to the acceptance of new initiatives, as some may cause minor disruptions during implementation. It is also the role of the site manager to use solid change management processes to alleviate any negative feelings from employees as they implement the innovation initiatives.

Change Management issues

Service innovation is, at its core, about doing things differently. To achieve this, employees must at a very basic level change work habits, roles and routines. As individuals we all approach change in different ways. For some, changing the way we do things comes naturally and is even welcome. For others, it represents something very difficult and worrying, and is therefore resisted.

While this seems obvious, it is evident that any manager involved in the innovation process – the site manager, the members at the Centre of Excellence and the head of innovation at the headquarters – all tend to underestimate how hard it is for employees to make even small changes to work habits. They often lack patience which sometimes results in resistance or even conflicts. A robust change management process will ensure that the service improvement is implemented well by managing the people side of the innovation implementation.

Not all types of service innovation will impact the employees and their work routines in any meaningful way. Generally, the larger the change the bigger the impact on the employees. It should therefore be expected that, from a change management point of view, continuous improvement is likely to add little disruption to the organisation.

This is especially true when it comes to bottom-up innovation, which is likely to have the support and involvement of many of the core team members.

Large innovation projects and large best practice implementations will lead to potentially larger disruptions. In these cases the change management building blocks will be fundamental.

There are no universal templates for exactly how Change Management should be implemented and attempts to simply copy from one company or context to another should be avoided. There are however a number of Best Practice steps which any implementation of service innovation should follow:

1. **Involvement**. Evidence suggests that a high degree of involvement during implementation of an innovation correlates highly with a successful outcome. Involvement can minimise the impact of the natural resistance which would otherwise occur and, conversely, a lack of involvement correlates with high levels of stress and poor work environment (Cooper et al., 2001).

2. **Communication must be honest, comprehensive and meaningful**. Honest communication about the process and the likely implications such as headcount reductions, job change, and pay and benefits changes is essential. It must be comprehensive otherwise rumours, gossip and speculation will prevail. Finally, the communication must be meaningful and related to the employees' situation.

3. **Overcome resistance as soon as it is observed**. Resistance to change occurs in all change processes but how much and in what forms is different from case to case. A robust and well-structured process will certainly limit the resistance, but it will not entirely remove it.

    Resistance Management is an important element in managing change. It is human to react with resistance simply because we prefer the status quo and stick with what we know. A common reaction from managers is to use rational arguments but this only works to a limited extent. The manger must also deal with the emotional side of the impact of the innovation initiatives.

4. **Careful management of increase in job scope**. Implementing the particular service innovation will mean change to how things are done but it may also mean an increase in job scope for some. The role and scope of work for the employee may completely change as a result. Interviews with employees who have been asked to perform new jobs suggest that they are generally open to take on new roles, however the outcome of such a process depends almost entirely upon how the process has been managed (Andersen & Ankerstjerne, 2010). In the cases where it was handled well by the site manager, job satisfaction increased and where it was not handled well, it led to lower productivity and higher employee turnover.

5. **Generate short-term wins and celebrate them**. Short-term wins have many functions. They provide evidence of progress, build momentum, remove resistance, reward change agents and bond teams together. While this is present in all change management books, studies and courses, research show that this is rarely used as much as it should be.

6. **Anchoring new behaviour**. The most effective way to anchor a new behaviour is to ensure that it is congruent with the overall culture of the company. It is therefore recommended that a service innovation culture is established so that the new behaviour can be framed as being part of this culture. It will make the new behaviour stick. Changes to behaviour are more likely to last if the result is a visible improvement.

7. **Process, process, process**. Using solid Change Management process which runs parallel to service innovation implementation is vital to any innovation success. The Change Management process must be planned well in advance of the opening initiatives and especially when and how to communicate is vital to the subsequent processes. Research shows that if this is not carefully planned in advance critical elements will not receive the proper attention, or will be completely overlooked.

John Kotter (1996) suggests three additional elements in quite large change programmes. These may be particularly relevant for implementing complex, large or radical innovations. These three elements include 1) creating a "burning platform" by the CEO, 2) making a guiding coalition and, 3) creating and communicating a vision and strategy for the change project.

Innovation as creator of customer added value

Innovation is central to successful service delivery within the FM industry for two reasons: because of the need to continuously deliver a cheaper service so that the service provider remains competitive and because the customers demand improved service through innovation.

When asked, customers are very clear about the wish for innovation in their FM delivery – regardless if this is performed in-house or if it is has been outsourced. In fact, many stipulate this in their contract with a service provider and some have specific KPIs for innovation. Some clients will even strike a cost-neutral deal in order to get access to innovation processes.

But how does innovation add value to the customer and its business, how is this best measured and how much is it worth? Furthermore, how can a customer assess the quality of innovation processes delivered by a service provider, and when does the customer know when this has been delivered?

These important questions are not very well documented, researched or even discussed in industry forums. It is even questionable if serious attempts to address these questions have been made.

The ultimate test of the success of an innovation is its effect on the company's profit. In the case of outsourced FM it is the dual effect on their own profit as well as on their customers' profit which is the success criteria. It is however difficult to measure this directly. Some are reported to measure this in terms of their success in extending their contracts with their customers (Cardellino & Finch, 2006). Another way to measure innovation – which often forms part of the KPIs – is by the number of improvements. In such a case quantity is regarded as a measure for quality. Both attempts fall short of being a real measure of innovation success.

Service providers and customers both agree that innovation does add value and that this value falls into one of five categories: 1) increase in the quality of service, 2) reduction of costs, 3) improvement in the satisfaction of the customer's employees, 4) improvement in HSE and finally, 5) increase in sustainability.

Case: Innovation measures at ISS

ISS measures its innovation efforts in several different ways. One of them is through a balanced range of KPIs where some are focused on a general progress, some at the service offering and others at deployment progress.

Examples of generic KPIs are:

• Number of new innovation initiatives.
• New releases of best practice.
• Number of people who are certified within a given innovation area.
• Number of countries and customers which use innovative ideas.
• Number of countries and subject matter experts participating in Knowledge Forums.

For each service offering, ISS tracks the impact of its innovation efforts as well as the progress of roll-out. This is done at all levels right down to each contract. Examples of KPIs include:

• Increase in productivity by customer (e.g. hours/m2).
• Improvement in contract profit.
• Benchmarking of productivity between contracts.
• Compliance between best practice and Quality Management System.
• Compliance between best practice and contract practices.
• Customer satisfaction.

No one measure is able to capture the total innovation effort but through a range of KPIs the company feels able to document a probable added value to itself and equally importantly to its customers.

Conclusion

Innovation is today one of the top challenges for the FM industry. It is not only important because of increased competition but also increasingly because clients demand a high degree of innovation from their service provider.

Statistics indicate that the service industry in general spends too little on innovation. However due to the decentralised organisational structure within FM it is difficult to exactly measure the total amount spent on innovation. It is clear though, that large service providers are more innovative than small ones and that outsourced FM innovates more than in-house FM teams.

Successful optimal innovative companies all have four things in common. They 1) have solid innovation processes, 2) have developed an innovation culture, 3) have visible innovation champions at all levels and finally, 4) use a mix of internal and external knowledge sources.

Three separate innovation processes and sources of innovation combined optimise the total innovation in FM companies. These are:

1. Best practice, which involves identifying, collecting, conceptualising and adopting best practice throughout the organisation.

2. Site level innovation which is small and incremental in order to constantly improve practice on site.

3. Top down driven innovation which may involve large and disruptive innovation programmes which require significant external knowledge, resources and processes not available to the individual site.

Each level in the organisation plays a vital role. The headquarters must manage the Best Practice processes, perform large incremental innovation, offer training at the regional level, and build an innovation culture. The regional level performs the Best Practice gap analysis and oversees the deployment of the best practice at site level and, finally, trains the site level managers. The site level performs constant incremental innovation as well as implementation Best Practices.

Service innovation, at its core, is about doing things differently. A robust change management process will ensure that the service improvements are implemented well by managing the people side of innovation implementation. Large innovation projects and large best practice implementations will lead to potentially larger disruptions.

There are a number of Best Practice Change Management steps, which any implementation of service innovation should follow. These are 1) use of involvement, 2) plenty of honest and meaningful communication, 3) active resistance management, 4) sensitive handling of increase in job scope, 5) generation of short-term wins and celebrating them, 6) anchoring new behaviour, and 7) use of a robust Change Management process.

For large change programmes, three elements should be included: 1) creating a "burning platform", 2) making a guiding coalition, and 3) creating and communicating a vision and strategy for the change project.

The ultimate test of a successful innovation is its effect on a company's profit. Although this is very difficult to measure, customers and providers agree that innovation will bring several benefits such as increase in quality of service, reduced costs, higher employee satisfaction and improvement in HSE and sustainability.

References

Andersen, M.K. & Ankerstjerne, P. (2010). Multiskilling and job satisfaction in outsourcing. ISS White Paper.

Cardellino, P. & Finch, E. (2006 I). Evidence of systematic approaches to innovation in facilities management. Journal of Facilities Management, Vol. 4, No. 3.

Cardellino, P. & Finch, E. (2006 II). Mapping IT innovation in Facilities Management. ITcon, Vol.11.

Cooper, C.L., Dewe, P.J. & O'Driscoll, M.P. (2001). Organizational Stress. A Review and Critique of Theory, Research, and Applications. Sage Publishing.

Frost & Sullivan (2009). European Integrated Facility Management Markets - Growth Opportunities in the European Market.

Goyal, S. & Pitt, M. (2007). Determining the role of innovation management in facilities management. Facilities, Vol. 25, No. ½, pp. 48-60.

Hicks, J., Alexander, M. & Dunlop, G. (2007). Translating military experiences of managing innovation and innovativeness into FM. Journal of Facilities Management, Vol. 5, No. 4.

Kotter, J. (1996). Leading Change. Harvard Business School Press.

Mudrak, T., van Wagenberg, A. & Wibben, E. (2005). Innovation process and innovativeness of facility management organizations. Facilities, Vol. 23, No. 3/4, pp. 103-118.

Nutt, B. (1999). Linking FM practice and research. Facilities, Vol. 17, No. 1/2, pp. 11-17.

Pires C. P., Sarkar S. & Carvalho L. (2008). Innovation in services – how different from manufacturing? The Service Industries Journal, Vol. 28, No. 10, pp. 1339–1356.

Pitt, M. & Tucker, M. (2008). Performance measurement in facilities management: driving innovation? Property Management, Vol. 26, No. 4, pp. 241-254.

Sundbo, J. (1997). Management of innovation in services. The Services Industries Journal, Vol. 17, No. 3, pp. 432-55.

Sundbo, J. (2002). The Service Economy: Standardisation or Customisation? The Services Industries Journal, Vol. 22, No.43, pp.93-116.

Voss, C.A. (1992). Measurement of innovation and design performance in services. Design Management Journal West, M.A. & Farr, J.L. (1990). Innovation & Creativity at Work: Psychological and Organizational Strategies, Wiley, New York, NY.

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