

RISK MANAGEMENT STRATEGIES FOR FACILITIES MANAGER'S IN SRI LANKA

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ABSTRACT

Value is a function of risk and return. Every decision either increases, preserves, or erodes value (COSO, 2004). Given that risk is integral to the pursuit of value, strategic-minded enterprises do not strive to eliminate risk or even to minimize it, a perspective that represents a critical change from the traditional view of risk as something to avoid. Rather, these enterprises seek to manage risk exposures across all parts of their organizations so that, at any given time, they incur just enough of the right kinds of risk-no more, no less-to effectively pursue strategic goals. The Facilities Management (FM) industry delivers a range of services and products through the spectrum of the facility life cycle, all of which carry varying degrees of risk, identifying risks and being prepared to manage them will minimise any negative impact they may have. Effective Risk Management (RM) planning and practice is an essential component of the practice of FM. Delivering on strategies that enable the organisation to realise the opportunities in their activities while appropriately managing risk is the central to successful management of Facilities. The purpose of this paper is to provide leadership to manage risks within Sri Lankan FM context with an overview of risk assessment approaches and techniques that have emerged as the most useful and sustainable for decision-making.

Keywords: Facilities Management; Risk Management; Sri Lanka; Office Buildings; Case Studies.

1. INTRODUCTION

It is obvious that the secret behind returns on invested facilities lies upon proper and effective management of the built environment (Redlein and Poglitsch, 2010). Thus, the attraction of FM has become increasingly common as forward-looking organisations are beginning to realise FM as a function with clearly defined objectives and a strategic and commercially-oriented discipline (Pathirage *et al.*, 2008). FM is frequently described as “an integrated approach to operating, maintaining, improving and adapting the buildings and infrastructure of an organization in order to create an environment that strongly supports primary objectives of that organization” (Atkin and Brooks, 2000, P.4). According to Atkin and Brooks (2000), FM services encompass broad and a large number of functions and roles towards a strategic concern.

Gleisner (2008), defines risk in a company as a “the possibility of deviating from planned objectives resulting in the unforeseeable future caused by ‘incidental’ disturbances”. As far as Enterprise Risk Management (ERM) is concerned, COSO (2004) defines ERM as a process, affected by an entity’s board of directors, management and other personnel, applied in strategy-setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.

Risk Management (RM) is crucial for organizations to thrive and succeed hence; it’s the way in which enterprises get a handle on how significant each risk is to the achievement of their overall goals. To accomplish this, enterprises require a risk assessment process that is practical, sustainable, and easy to understand (COSO, 2004). The process must proceed in a structured and disciplined fashion. It must be correctly sized to the enterprise’s size, complexity, and geographic reach. While ERM is a relatively new discipline, application techniques have been evolving over the last decade (Redlein and Giller, 2008). ERM is recognised as good business sense and a way to demonstrate good governance (Alexander, 1992). Current global events have increased the focus on managing uncertainty. Given the nature of FM and the

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significance of infrastructure, assets, facilities and service supply, the responsibility for most of this planning and recovery or response rests with those who manage facilities (Alexander, 1992).

Since nature of managing risks is not well defined in FM context, applicability of RM strategies in to the FM profession is not well understood (Redlein and Giller, 2008). In Sri Lankan FM context, there are no adequate research done in the area of ERM, however, adopting ERM strategies to Sri Lankan FM industry is utter most important considering it's emerging and challenging nature. This created the knowledge gap for this research and emerged the research question for the study. Hence, the research question that was developed for the study is 'How to apply RM strategies to Facilities Manager's in Sri Lanka.' Due to the evolving nature of FM profession in Sri Lanka, exploratory case studies were carried out to explore answers to the research question. The key findings from the literature review are discussed next in this paper.

2. KEY LITERATURE FINDINGS

The buildings, installations and facilities to which FM is relevant represents important company assets. According to a study carried out by the International Facility Management Association (IFMA), these assets are the source of 10 to 19% of company expenditure and represent 25 to 50% of company assets. Therefore, in the case of all companies, and not just real estate companies, FM processes influence company figures and are formidably significant within the framework of ERM.

Gleissner and Romeike (2005) differentiate between financial and operational risks. Furthermore, operational risks are classified into strategic risks (e.g. the risk that a certain company strategy does not result in the best possible outcome) and operative risks that can arise as a result of inadequate performance of technologies, processes, personnel or organisations, or external events. The second area is particularly relevant to FM because it exposes to infrastructure for the core business and can, for example, be caused by false assumptions (an inadequate service level), production failure or even a high level of illness.

The Internal Control Systems (ICS) is part of ERM and is aligned with operative processes. According to COSO, an ICS relates to all processes, methods and control measures that are carried out under the order of the supervisory board and/or senior management and serve to ensure that business operations function correctly. The organisational measures of the ICS are integrated into operating procedures. This means that they occur during the course of work performed take place directly before or after a work activity (COSO, 2004). The methods by which companies should proceed with the implementation of a Enterprise Risk Management strategies and ICS are presented in below sections.

2.1. IMPLEMENTATION/OPTIMISATION OF AN ENTERPRISE RISK MANAGEMENT SYSTEM

First, senior management must define the company's risk appetite in order to align an organisation's inclination to take risks with its strategy (Redlien and Giller, 2008). In addition, this will enable risk-related decisions to be taken. As a second step, related key risks are defined and subsequently evaluated (Redlien and Giller., 2008). Both the risks and opportunities that are seen as significant to the company are defined at the senior management level using brainstorming techniques (Redlein and Poglitsch, 2010). In order to facilitate easier definition of a risk map, a best-practice map, is depicted in Figure 1.

In order to support the client in minimising risk, the graphic displays the opportunities and risks of large companies covered by FM through an internal department as well as those covered by facility service providers.

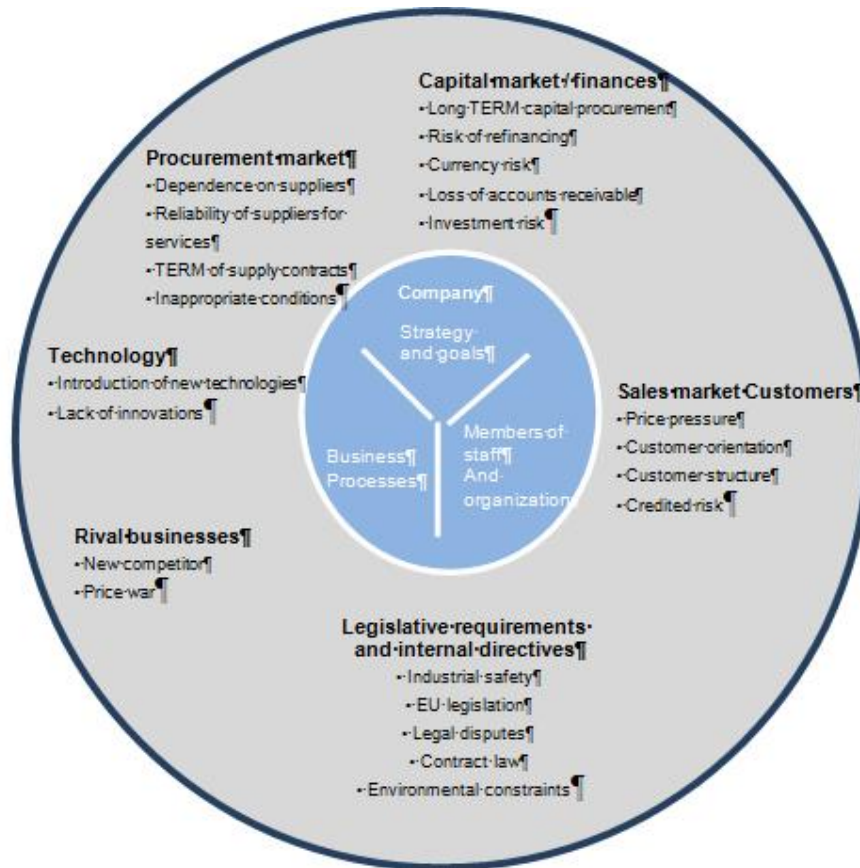


Figure 1: FM Risk Map
Source: Alexander (1992)

Particularly in the case of FM, large companies are faced with the strategic decision of whether to “make or buy” - this refers to whether they should carry out the implementation themselves or subcontract it to a professional provider of facility services and hence transfer risk. Many users also assess the area of legal compliance - meaning compliance with legal requirements - as a risk. This mainly involves the areas of industrial safety and fire protection but also covers environmental protection.

For service providers, this entails competitive pressure, price wars and maintaining/ optimising quality. After listing risks and opportunities in the risk map, a quantitative evaluation of risks and opportunities with respect to the extent and likelihood of occurrence has to be performed.

Two examples are mentioned here:

1. Server room: Failure of the server infrastructure resulting from overheating can have dramatic consequences depending on the IT infrastructure dependencies of the organisation (insurance companies, banks). Therefore, the company, in the course of identifying risks, will analyse the issue, classify the risk according to the likelihood of occurrence and impact, and thus determine appropriate corrective action. Naturally, these can also affect FM: Service level agreements with subcontractors, backup solutions, investment in better cooling systems, adaptation of the maintenance intervals, and so on.
2. Elevators: In production areas, failure of a goods elevator can result in grave disturbances to the flow of material. Therefore, in this area also, during the course of the risk evaluation process, risk is classified and appropriate measures are taken. Based upon this data, the risks are entered into a company-wide risk matrix (see Figure 2) and classified into the following groups: significant risks, risks that should be monitored, risks to be observed.

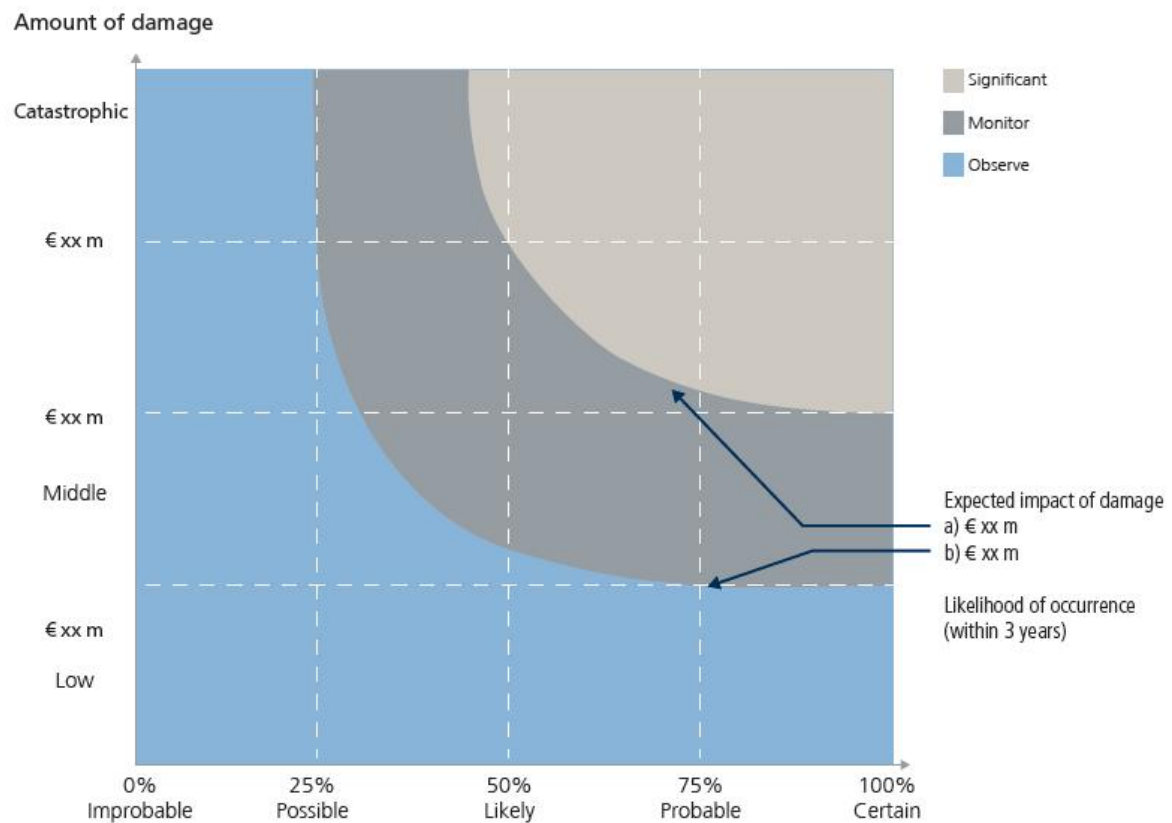


Figure 2: Risk Matrix
Source: Alexander (1992)

The possible control measures can be deduced from the matrix:

- avoid the risk → refrain from doing
- minimise the risk → internal measures, process improvement
- share the risk → transfer the risk to another, e.g. insurance companies, or outsource facility services to a professional partner to minimise risk
- accept the risk → consciously bearing the risk

The result of Enterprise Risk Management is that risk owners carry out and evaluate actions, and manage risks within defined tolerance limits.

2.2. ENTERPRISE RISK MANAGEMENT FRAMEWORK

Findings of literature is summarised in to the following framework of Enterprise Risk Management to facilitate adoption and application of it to the Facilities Management Industry.

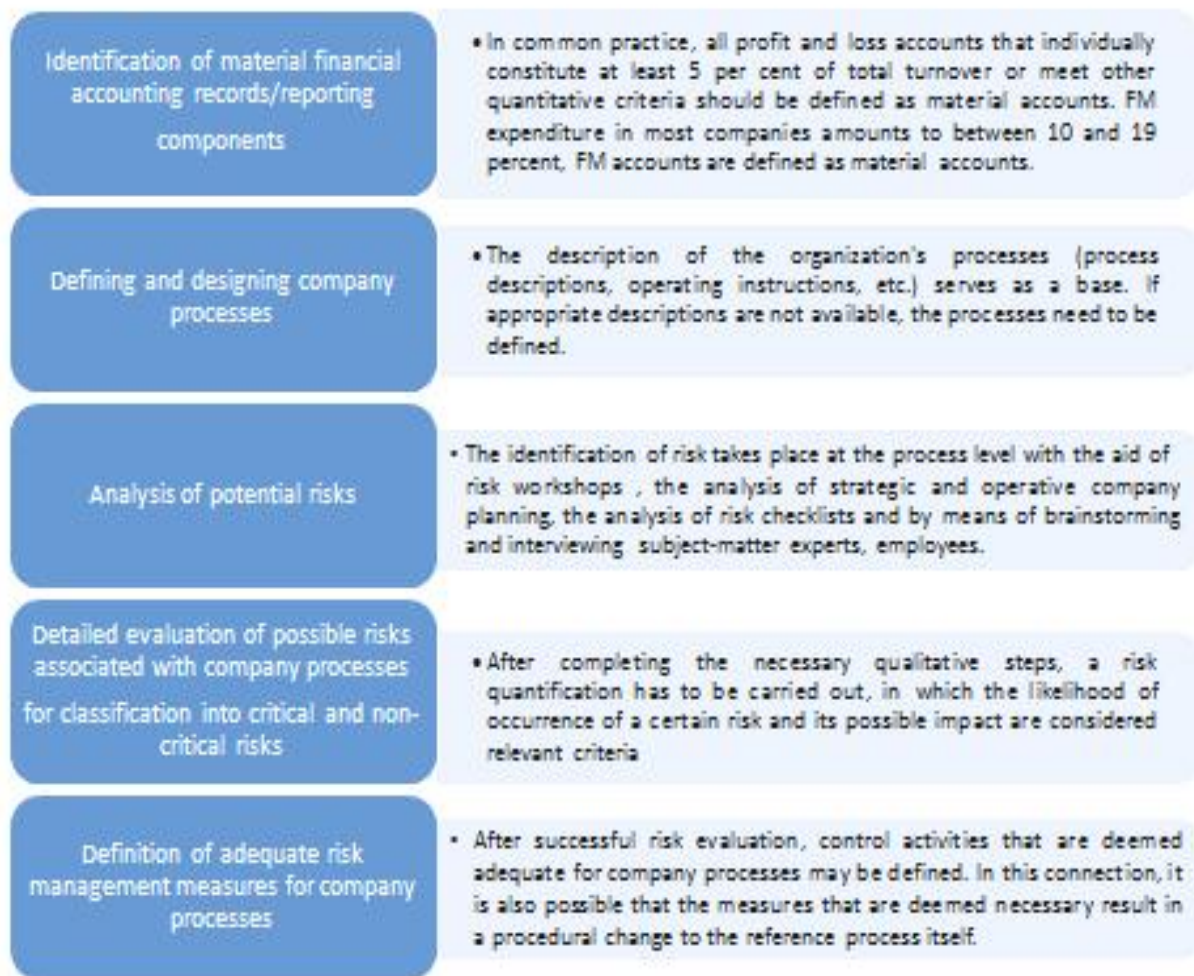


Figure 3: Enterprise Risk Management Framework
Source: Accenture (2013)

3. RESEARCH METHODOLOGY

This research took an exploratory nature and it required access to FM professionals, who could explain their views and experience. As such, case study has been selected for this research. In Sri Lankan office building sector, there are very few facilities management in-house divisions, who are practicing FM in its full sense. Three such FM divisions in office buildings were selected for these case studies. Within one organization, three professionals from the FM division were interviewed. The description of cases and professionals interviewed are given below.

CASE A

With over 750,000 square feet of prime office and retail space, this organization is an international business complex on par with premium grade buildings in major cities around the world. Built to the highest standards, this impressive landmark comprises two 39 storey towers connected by a 4 storey retail block. It has attracted prestigious local, international and multinational companies as tenants, making it the most sought after business address in Sri Lanka. With its prime location in the heart of the city in the Central Business District (CBD) and easy access to all main banks, major five star hotels, government offices, shops and headquarters of some of the largest businesses, this towering business complex is Sri Lanka's tallest and most impressive commercial landmark. Within this organization, interviews were conducted with the Facilities Manager, Assistant Facilities Manager and Electronic Engineer.

CASE B

This organization is a largest banking and financial services organization. It has more than 32,000 skilled professionals operating out of 15 group service centres present in five countries in Asia, including India, China, Malaysia, Philippines, and Sri Lanka. The service centre in Sri Lanka is managed by the business process outsourcing a ERM of the group and it is occupied by the bank's back offices service providing professionals within over 350,000 square feet. Interviews were made with the Facilities Manager, Assistant Facilities Manager and the outsourced Facilities Manager in this organisation.

CASE C

This organization is one of the leading government banks in Sri Lanka. This building is a 32 storied head office building with a total built up area of 600,000 square feet. It was constructed in 1987 to house all administrative offices, international division and corporate branch of the bank. Managing this building is done with the involvement of well qualified and experience FM related professionals. So, data has been collected from three key FM related professionals namely Maintenance Manager, Human Resource Manager and the Electrical and Plumbing Engineer.

While interviewing, note taking and tape recording (with permission of the interviewee) were performed to maintain the accuracy of data collection. The data gathered from the interviews were analysed by manual code-based content analysis. Finally, conclusions about the overall research problem were drawn by analysing the findings as described next.

4. RESEARCH FINDINGS

Applicability of Developed Enterprise Risk Management Framework was tested throughout the case studies. In doing so, following scenario was presented and used to test the successful application of the Enterprise Risk Management framework developed through literature findings.

4.1. IMPLEMENTATION/OPTIMISATION OF AN ENTERPRISE RISK MANAGEMENT SYSTEM (APPLICABILITY OF ERM FRAMEWORK)

Example: Inspection and maintenance of facilities and installations

The objective of the process is to analyse the current conditional state of facilities and installations as well as the maintenance or improvement of this state through maintenance measures. It comprises the planning and execution of inspection, and maintenance of facilities and installations, although it does not deal with specific activities in detail. Process steps have been added to this procedure, whereby inputs case studies via expert interviews have been taken into consideration.

Based on the activities defined in the detailed reference procedure, experts were subsequently interviewed in order to indicate possible risks and related enterprise risk management and control activities. The result of that is presented in Table 1.

Table 1: Inspection and Maintenance of Facilities and Installations - Risk and Control Matrix

Activity	Risk or Risks	Enterprise Risk Management/Control Activity (ies)
Tactical level		
Analyse available information (evaluation, objectives, costs) and collect missing data	Undiscovered objects, lack of information	<ul style="list-style-type: none"> ▪ Periodic inspection of relevant facilities and installations, updating documentation
Define maintenance strategy and required infrastructure availability	False assumption(s) with regard to the necessary availability/the risk of infrastructure failure	<ul style="list-style-type: none"> ▪ Carrying out periodic review of the requirements of the core business and taking practical experience into consideration
Level of operative planning		
Update list of relevant objects	Undiscovered objects	<ul style="list-style-type: none"> ▪ Periodic inspection of relevant facilities and installations, updating

Activity	Risk or Risks	Enterprise Risk Management/Control Activity (ies)
		documentation
Define/Update activities per object	Failure to perform timely maintenance on facilities and installations (including necessary procurement)	<ul style="list-style-type: none"> Orientation of maintenance/inspection intervals to the life cycle data, relevant standards and the practical experience of experts, taking required time for procurement into consideration
Define maintenance/Inspection intervals	Maintenance intervals too frequent or too seldom	<ul style="list-style-type: none"> Verify standards and documentation
Preform economic efficiency. analysis and plausibility check	<p>Verification of check is not carried out by all responsible persons</p> <p>Specific requirements are not taken into consideration, e.g. as a result of the location of facilities or installations</p>	<ul style="list-style-type: none"> Verify allocation of responsibilities consideration of specific requirements during the cost effectiveness study
Create maintenance/inspection schedule	No Risks Involved	
Operative level	No Risks Involved	
Plan execution	No Risks Involved	
Use internal resources	No Risks Involved	
Procure service	Procurement risks	
Procure material	Procurement risks	
Inspect material quality and Quantity	No Risks Involved	
Accept material	<p>Material is not available</p> <p>Use of wrong spare parts or wrong material</p>	<ul style="list-style-type: none"> Stock spare parts and relevant material, check specifications
Preform maintenance/inspection	<p>Use of wrong material</p> <p>Inadequate execution of maintenance/ inspection</p>	<ul style="list-style-type: none"> Check performance and material check service manual
Review performance and consumption of material	Inspection cannot be carried out or cannot be carried out adequately because of lack of special knowledge on the part of the personnel responsible	<ul style="list-style-type: none"> Taking the availability of personnel into consideration, improving the selection and training of personnel
Document service/material	Incomplete documentation	<ul style="list-style-type: none"> Define standards for documentation

The second column of Table 1 can be considered a “risk inventory” of the reference processes. This is a basis for the risk and control matrix of the specific company. However, within the scope of implementation, an additional quantitative risk evaluation carried out by the specific company is necessary.

4.2. IMPLEMENTATION/OPTIMISATION OF INTERNAL CONTROL SYSTEMS

Example process: Carry out equipment management activities

The process “Carry out equipment management activities is associated with serious risks (e.g. server room, lifts) and has been identified as relevant to determination of the risk map. As a result, ICS activities

have been devised and introduced for the purpose of operative implementation in order to reduce the likelihood of a risk's occurrence (see Figure 2: risk matrix)

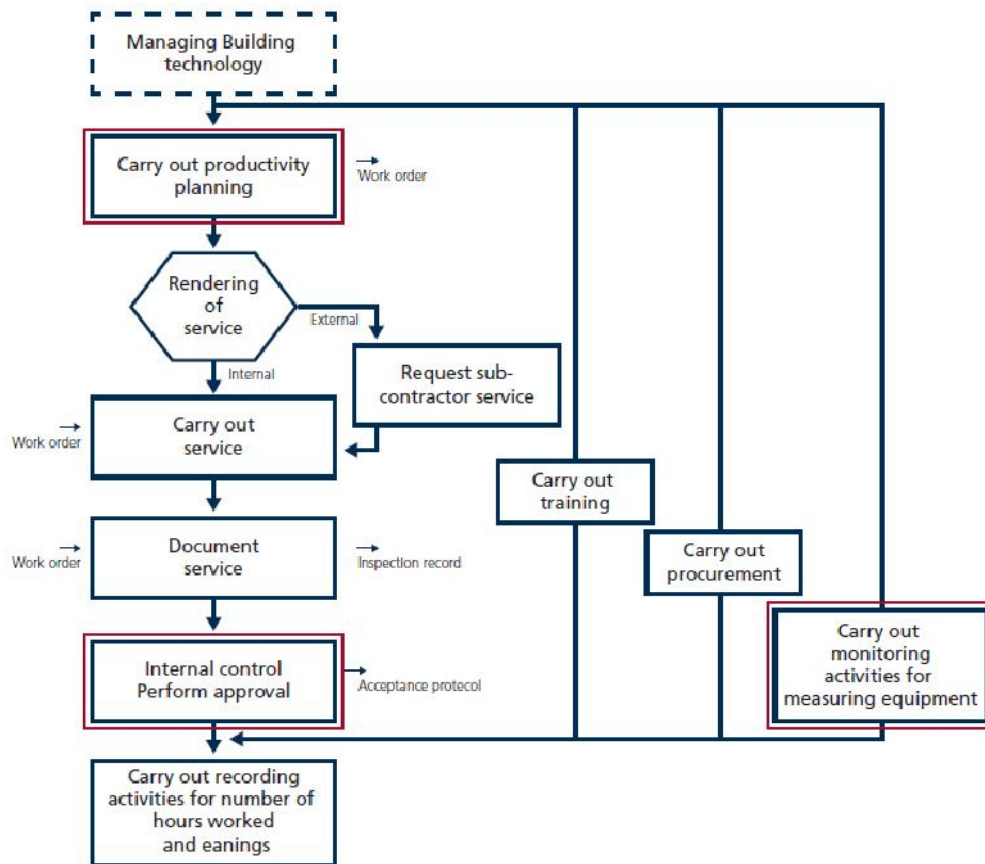


Figure 4: Building Technology Management Process

Overview of activities that are relevant to ICS (see marking above) including the control activities implemented:

Table 2: Overview of Activities that are Relevant to ICS

Activity	Risk or Risks	Enterprise Risk Management/Control Activity(ies)
Carry out productivity planning	<ul style="list-style-type: none"> • Installation failure due to lack of/poor maintenance • Statutory audits are not held 	<ul style="list-style-type: none"> • Illustration of all components maintenance schedule • Automatic escalation if deadlines are not met
Preform inspection/approval	<ul style="list-style-type: none"> • No accurate documentation of the activities performed • Individual implementation (no standard available) 	<ul style="list-style-type: none"> • The work order is created in the Computer Aided FM (CAFM) tool and defines exactly which activity is to be performed
Carry out monitoring activities for measuring equipment	<ul style="list-style-type: none"> • Quality statements are carried out with measuring equipment which has not been calibrated statements flawed and not understandable 	<ul style="list-style-type: none"> • Monitoring measuring equipment managed in the CAFM tool

5. SUMMARY

The research findings confirmed that the, profession of Facilities Management involves with great number of risks, hence, adopting ERM strategies in to the profession is utter most vital to ensure success of the profession. Risks needed to be identified, analysed and mitigated across business functions which include operations, business process and strategic and throughout the building and project life cycle to ensure smooth operation of the building facilities and delivering clients / occupants expectations.

Despite of it is application basic ERM approach (framework) follows its basic steps of risk identification, risk classification, analysis and mitigation. More importantly, case study findings revealed, despite of it is approach, Enterprise Risk Management Frameworks largely facilitates in identifying risks inheritant in it functions and analysing those, defining mitigation actions and appointing risk owners.

Mainly in addressing the research gap, conceptual framework developed based on the key literature findings was tested with the help of industry professionals. The outcome is mainly presented in the data analysis.

However, success of adopting ERM strategies in to Facilities Management largely depends on continuous monitoring of risks for its movement accordingly with its mitigation actions' implementation. After the initial setting up of risk registers are done continuous, brainstorming sessions and risk workshops needs to be carried out until its completion and throughout its continuous life cycle to ensure Enterprise Risk Management Strategy implementation within the Facilities Management functions and its profession.

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