



Exploring Health, Safety and Environment Management Practices across Small-Medium Enterprises in Oman: Review & Recommendations

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Abstract

Health and Safety can be described as regulations, policies and procedures which are put in place to prevent injury or adjacent unwanted events from occurring in the workplace and further afield. When individuals are approached by the topic of Health and Safety, they more than often unaware or uninformed of what it implies. However, they have unknowingly been practicing certain aspects of it all their lives. Research has shown that due to lack of resources, SMEs (Small and Medium Enterprises) tend to have poorer and less effective Health and Safety implementation due to several factors. This can lead to not only increased injuries but also a dark figure of Health and Safety violations, making it difficult to fully analyse the extent of the harm. In examining the development of H&S throughout the factory processes of the Industrial Revolution, significance is placed not only on greater transparency and attention paid to risk but also in ensuring uniformity of H&S implementation in the workplace hierarchy. In specific address to Oman, SMEs are attracted to the fiscal freedom the country provides. Oman has had a good track history adhering to international standards of H&S, also providing its own regulation. Most notably by the 2008 Ministerial Decree 286. Health and Safety in organisations is a significant tool used to protect the physical and mental well-being of the employees by identifying and eliminating safety hazards and creating a safety culture and Health and Safety management practices such as safety training, employee involvement and employee communication. There are characteristics of SMEs that impact HSE implementation which are important to understand as they are vital to working towards a more effective Health and Safety culture, implementation and therefore working environment. The major challenges facing SMEs in implementing H&S practices are costs, managerial commitment and safety culture.

Keywords: *Organisational Health, Safety and Environment, SMEs, Employee Safety, Health and Safety Culture*

Introduction

Health and Safety is, more often than usually, considered an organisational practice or activity. However, unbeknown to most, it very much so occurs at an individual level; Individuals have been and still are practicing it on the daily. Whether it is putting a seatbelt on before driving a car, baby proofing a house or putting a helmet on to ride a bicycle (Kendrick et al., 2013). Health and Safety is an important aspect to be considered both on an individual basis and as an organisational practice.

Health and Safety in the Workplace ensures that the employees are provided with the appropriate working environment and equipment to protect them from unwanted events or from illness due to an unsafe or non-hygienic workplace, it is however, not an

easy endeavor considering the legalities of it (Baron-puda, 2015). The author explains that Health and Safety can also be defined as the regulations, policies and procedures that are developed and implemented with the aim of preventing any unwanted events such as accidents, incidents and near misses happening in the workplace or the environment at large.

Various medium and large organisations incorporate Health and Safety into their daily operations. However, the use of it in small businesses remains relatively poor and in need of improvement (Harrison et al., 2013). SMEs generally are known to have fewer resources, due to this research showed that it makes it difficult for companies to manage health and safety execution effectively. In addition to the lack of sufficient consideration given to health and safety management, as it is not most SMEs primary concern (Kheni et al., 2010).

Eakin et al. (2010) investigates various literature and practices in order to improve organisational health and safety in small business. By linking the degree of threat to characteristics of the workplace and those who operate there, such as high-risk groups. Another factor they concentrated on was improving the deficits of management, where employers showed to have lack of knowledge, skills, resources, motivation and time to deal with HSE. Legg, Olsen, Laird, & Hasle (2015) conveyed that there is increasing evidence to show that those who operate in SMEs are more often subjected to hazardous conditions and endure more work-related injuries and diseases than those employed in large organisations. There is a high probability of unreported injuries in SMEs.

Literature Review

HSE: An Understanding Perspective and its Value

Agriculture, making and selling of products was the way people used to earn their living before the Industrial Revolution of 1760 (Allen, 2009; STEARNS. PETER N., 2018). According to Hopkins (2012), during the industrial revolution there was a surge of job opportunities. During this time, being paid wages depended on the number of hours worked. The job opportunities were not only offered to adults but also children. They would be given working shifts that would stretch over 12 hours a day (Hopkins, 2012; Jane Humphries, 2010). After several years, they noticed the number of injuries and deaths of employees were rising exponentially. This was mainly due to the working conditions in the factories which were quite hazardous and posed severe threats to the workers.

In 1784, a couple of years after the industrial revolution, there was an outbreak of a pernicious fever which ended up spreading within the community (Harrison, 2012; Meiklejohn, 1959). This fever was first observed in a Cotton Mill at Radcliffe near Manchester and got serious enough that physicians were called upon to investigate the nature of it. After a thorough investigation, one of the recommendations for the control and prevention of such an epidemic was to improve environmental conditions in mills and factories along with cutting down work hours for both children and women (Smiley, 2008). This is when the first 'Factory Act' was introduced and named as 'The Health and Morals of Apprentices Act' 1802. This act was introduced in the United Kingdom by Sir Robert Peel, 1st Baronet with the aim of improving the work conditions of apprentices working in the cotton mills.

Various benefits resulted from the introduction of legislation such as a fixed maximum twelve hour working day for children (Meiklejohn, 1959; Pollack, 1990). By current standards, it may still seem to be excessive, but it was an improvement to the uncapped working hours before the legislation was implemented. The authors further explain that the working environment was also a huge consideration in the mills as they had to ensure there were enough windows to allow adequate ventilation throughout the factory. Furthermore, walls and floors had to be cleaned regularly and much more. All these changes that the legislation introduced focused on the health aspect of the apprentices but not the safety of them. According to Crawley & Ashton (2002), the Health and Moral Apprentices Act 1802 has since then been extended and much more legislation regarding health and safety were incorporated as they realized that looking into just the health of the workers or apprentices is not the only thing to consider but their safety as well.

Health and Safety in organizations is a significant tool used to protect the physical and mental well-being of the employees by identifying and eliminating safety hazards (Khrais et al., 2013), and create a safety culture (Kaynak et al., 2016). Many accidents can

occur in an organisation as a result of either lack of health and safety management or there are no effective tools for implementing it (Fernández-Muñiz et al., 2009). The authors further explain that having successful management implemented in the organisation does not only reduce the accident rate but will also have an impact on the business performance, leading to a higher productivity within the workforce.

According to Papadopoulos et al., (2010), having health and safety management in place brings about public safety in the sense that there will be necessary policies and procedures in place that are going to guide responsible people working in specific operations. Moreover, specific hazards are to be dealt with regarding the hierarchy of risk control before they result in an accident or injury to the employees. The workers are also to be informed of these hazards before starting any operation. In considering this further, we must highlight the value of HSE culture. In a running business, there is a concept known as organisational culture where safety culture falls under it (Aboagye-Nimo., 2013). The authors explain that as organisational culture is adopted by the entire workforce with regards to the mission and vision statement of the company or what the top management reinforces. Safety culture is considered similar as it is only achieved when there is uniformity, starting from the top of its hierarchy all the way down through safety leadership.

Safety leadership has become a very important aspect while addressing HSE Culture in an organisation (Hoedt & Incorporated, 2012). This paper further elaborates that HSE Culture has shown to be a very significant factor to both the employers and the employees. Safety leadership should be shown not only by the supervisors and managers but also importantly by the top management, as they are going to have a higher impact. In most organisations, there are workers that do not believe in HSE or do not pay it much attention (Mohammadfam et al., 2013). Having the CEO demonstrate commitment to health and safety will impact the mentality of the workers into having a different perspective of HSE, as the CEO is perceived to have a great influence amongst his or her employees.

HSE IN SMEs AND OMAN

Many scholars have identified that there is no one single definition for Small-Medium Enterprises (SMEs) as different economies have different definitions for it. With the rise of globalization, SMEs play an important role in the development of an economy (Paul et al., 2017). In the United Kingdom (UK), SMEs are generally identified as organisations which have less than 250 employees with a turnover of less than 25 million British pounds (Jones et al., 2018).

Rizos et al., (2016) bases the circular business model on the circular economy concept Antikainen & Valkokari (2016) describe to boost global competitiveness, generate new jobs and foster sustainable economic growth. Rizos et al., (2016) researches the difficulties for a "green" SME shift which results in several barriers such as a lack of capital and lack of provision from their supply and demand system. Financial capacity, company culture in terms of staff and local network mindset relies on the successfulness of the transition of an SME to a circular business model. Yanes-Estévez et al. (2018) puts to test three key strategic problems which SMEs face such as entrepreneurial, technological and administrative barriers. The findings show that technological problems being the most prospector, secondly entrepreneurial issues are intermediate, and lastly that administrative problems are being more defender.

Abdulsaleh & Worthington (2013) study and compare various literature on financing SMEs and the main characteristics which represent them. The characteristics which are most prominently effect SME's growth and performance. Those features include age and size, legal form and ownership type, industry sector, asset structure and geographical location. Karadag, (2015) emphasizes the importance of a strategic standpoint for effective and efficient behavior of financial management in order to achieve successful organizational performance. The author also highlights a brand new conceptional model to assess the specific indicators of SME performance, while measuring the profitability and growth and its impact on the strategic financial management.

This study focuses on Oman and therefore it's important to shed some light on SMEs in Oman. According to Shachmurove (2009), Oman presents one of the most desirable nations to attract entrepreneurial ventures. The author presents various reasons such as its economical attraction as being of the freest in the region and having a stable governable with low taxes in comparison to its neighboring countries. The author mentions the most attractive industries which the country is most in demand for such as tourism, retail, real estate and entertainment and others. The paper places emphasis on how the Omani government plays a major role in attracting international entrepreneurs, in addition Oman's stable political environment is more favorable towards long-term investments. This paper presented vital statistics on various factors regarding Oman's economic position to attract SMEs. This includes fiscal freedom where Oman serves low tax rates, where the highest tax rate reaches 12%. Oman stimulates trade freedom of 83.6%, labor freedom of 77.2% and freedom from corruption rate of 54%.

Ibrahim et al. (2017) researches other reasons for the high emphasis on creating further entrepreneurial ventures in Oman, especially for graduates. They present background research on Oman's government which is promoting entrepreneurship as policy options due to the higher amount of university graduates present today and the lack of employment opportunities available.

Therefore, entrepreneurship is created as one of the policy options to address graduate employment and to sustain growth. The study showed positive attitudes of entrepreneurs even amongst graduate students where 18% of students in their research would be inclined to pursue entrepreneurial careers according to the major they studied in.

Christina et al. (2014) discovers the main challenges and barriers which SMEs face in Oman. Their findings showed the main issues which SMEs in Oman face in respective order are policy and administrative challenges, marketing, financial, educational and lastly technical challenges. The authors provided recommendations to reduce the number of challenges which included subsidized interest rates for SMEs, more encouragement from academic institutions to support and encourage more projects in the SME sector.

Regarding health and safety in Oman, it's imperative that we highlight that Health and Safety in Oman has been taken into consideration for quite a while now. Ministerial Decree 286/2008: Regulation of Occupational Safety and Health, was introduced to overlook the health and safety of industry operations (Umar et al., 2018). This regulation is the leading piece of legislation on

Occupational Health and Safety in the Sultanate of Oman. There were legislations before such as the Sultanate Decree 40/1977, Ministerial Decree 19/1982 and The Labor Law 2003. International Standards that were developed so that countries with no set legislation regarding health, safety and environment would have a point to refer to and making sure that everything is executed in a safe manner, not putting any of the workers at risk of getting injured or being ill (Wilson et al., 2006). Oman was one of those countries that followed the international standards in their operational activities with regards to the safety and well-being of the workers both in the field and offices until the introduction of Ministerial Decree 286/2008.

Implementation of HSE In SMEs

Health and Safety in organizations is a significant tool used to protect the physical and mental well-being of the employees by identifying and eliminating safety hazards (Khrais et al., 2013), and creating safety culture and H&S management practices such as safety training, employee involvement and employee communication (Yorio & Wachter, 2014; Oakman & Bartram, 2017; Kaynak et al., 2016; Desa et al., 2013; Vredenburgh, 2002; Ali et al., 2009). Safety culture includes leadership style, employees' attitude, and hiring practices (Sembe and Ayuo, 2017; Yorio & Wachter, 2014; Oakman & Bartram, 2017; Laursen and Foss, 2013; Tan and Nasurdin, 2011; Mashia et al., 2016; Khair and Wameedh, 2013; and Demo et al., 2012; Micheli and Cagno, 2008). However, it has been claimed that SMEs lack effective implementation of HSE practices due to their characteristics, where Belayutham et al. (2019:4) stated that "SMEs could also be characterized by its nature (e.g. heterogeneous, geographical dispersion, lack of cohesive representation, etc.), organizational factor (e.g. non-formal ownership, being independent, simple lines of communication) and industry dynamism (e.g. a limited market share, high resource constraints, limited access to external sources for support)."

Organizational characteristics impact on HSE implementation and therefore its essential that we shed some light on SMEs characteristics where a clear understanding is provided. Fatoki & Asah (2011) list the different attributes between firm characteristics and an entrepreneur characteristic. The paper focuses on three firm characteristics which include the size and age of the firm, as well as the availability of business information and collateral. Whereas entrepreneurial characteristics depends on the gender, networking skills and managerial capabilities of the firm owner.

Islam et al. (2011) examines the success of SMEs in terms of the characteristics of the enterprise and the entrepreneur. The authors identified four main characteristics of an enterprise which includes the size of the enterprise, the organ of the enterprise, the length in time in operation and the capital sources. Those are the characteristics which have a vital role in the success of a business. However, it's important to highlight that there are characteristics associated with SMEs which differ from large organizations which impact on HSE implementation and challenges. Assarlind and Gremyr (2014) listed the SME characteristics based on the work of Ghobadian and Gallea, 1997 (Hudson et al., 2001). SME characteristics seem to focus on structure, contact, processes and people. Table 1 provides further description of each characteristic.

Table 1: SME characteristics

Structure	<ul style="list-style-type: none"> • Flat structure with few layers of management • Large degree of influence exercised by individual managers • Informal strategies • Single sited • Potential for quick responses to external changes • Unified culture • Limited financial resources 	People	<ul style="list-style-type: none"> • Modest human capital and know-how • Very few internal change catalysts • Individuals can see the results of their efforts • Low incidence of unionization
Contact	<ul style="list-style-type: none"> • Operating in limited markets with a small customer base • Limited external contacts 	Processes	<ul style="list-style-type: none"> • Flexible processes • Low degree of standardization • Reactive and firefighting mentality • Result oriented

(Source: Assarlind and Gremyr, 2014: 402)

In support of SME Characteristics, Garengo and Biazzo (2013:314) listed the following characteristics based on various studies:

- Lack of formalized strategy, as strategy is very often not made explicit
- Entrepreneurial behavior leading to many unpredictable changes in direction and priorities: SMEs consider a high structured management system as a constraint to change
- Limited managerial capacities mainly fuelled by implicit and context-specific knowledge
- Operational focus leading to limited involvement in strategic and managerial activities
- Limited capital and human resources: The staff often have no extra time for managerial and strategic activities, such as implementing a management system
- Poor understanding and therefore scarce adoption of management tools

With HSE recently implemented in different operating industries, it has mainly been given more consideration by larger organisations (Legg et al., 2015). Research has even shown that there is an increase in the number of publications on large organisations compared to small and medium enterprises. A growing number of people working in SMEs are being continuously exposed to hazards which may unfortunately result in work-related injuries or ill-health (Micheli & Cagno, 2010). The author further explains that the size of these enterprises should also be looked upon in characterizing the implementation of HSE, and not only the nature of the injuries and accidents occurring. Moreover, it has been documented that the occupational accident rate in SMEs is much higher than large organizations (Hasle & Limborg, 2006; Productivity Commission, 2010; Targoutzidis et al., 2014; Arocena and Nunez, 2010 and Sorensen et al., 2007).

The poorer safety performance of SMEs can be attributed to SMEs managers' focus on firm survival rather than the safety of employees and their well-being (Hasle et al., 2010); lack of financial resources, managerial skills, and lack of top management commitment (Michael et al., 2005; Fabiano et al., 2004; Hasle & Limborg, 2006; Sorensen, Hasle, & Bach, 2007; Walters, 2001; cited in Hasle et al., 2010), lack of qualified staff, dependence on outsourcing, reliance on informal and nonformalized approaches to health and safety practices (Hasle et al., 2010; Fleming & Scott, 2011; Arocena and Nunez, 2010; Rigby and Lawlor, 2001; Champoux and Brun, 2003; Lamm and Walters, 2003; Walters,

2004). Moreover, limited awareness and knowledge of OHS legal requirements ((Hasle, et al., 2012; Legg, et al., 2015; Manu et al., 2018; Cagno et al., 2013; Wilson et al. 2012, cited in Papworth, 2015; Makin, 2009), as OHS legal requirements are perceived as necessity to comply with regulation (Legg et al., 2009; Santos, Barros, Mendes, & Lopes, 2003) rather than implementation in pursuit of conduit to good business management.

Furthermore, Baek et al. (2008) identified inadequate health and safety procedures, pressure for production and rule breaking as challenges present in SMEs. While safety climate, safety training and management support were other challenges experienced in SMEs (Ma and Yuan, 2009). Hasle et al. (2012) emphasized that it is difficult to separate safety management practices and other aspects of running small businesses.

Bogna et al., (2018) presented six factors that reflect the barriers and limitations facing SMEs in implementing OHS and these factors include structural vulnerability, limited resources and expertise; general OHS tools which do not meet the needs of SMEs; limited awareness of compliance requirements and associated standards; inability to recognize and manage OHS hazards objectively; tools used to assist SMEs to manage hazards should incorporate relevance and context of the SMEs and these factors are consistent with other studies as presented in Table 2. Belayutham et al. (2019) supported this further in concluding that the major challenges facing SMEs in implementing H&S practices are costs, managerial commitment and safety culture.

Koehn et al. (1995), Griffin et al. (2005), Michael et al. (2005), Harms-Ringdahl et al. (2000) and Geldart et al. (2010) reported several challenges in the implementation of successful health and safety management practices including bureaucracy, inefficient institutional structures for implementing safety regulations and unawareness of workers about their rights to a safe workplace. Griffin et al. (2005) identified additional challenges, namely employee engagement and participation. Therefore, Agumba & Haupt (2018) developed a sophisticated theoretical model for H&E performance development for SMEs, with five main factors. Those factors are analysed as valid measures of H&S in SMEs, these factors include upper management involvement and commitment in H&S, resources and training, project H&S planning and communication, project supervision, performance outcome in H&S, employment involvement and empowerment and lastly is the H&S performance outcome. These practices were able to achieve an adequate fit model to qualify the structural model to be analysed.

Table 2: Overview of literature relating to barriers and limitations faced by SMEs

	Factor 1 Structural vulnerability limited resources and expertise	Factor 2 Some methods and tools targeted for SMEs too general and does not meet their needs	Factor 3 limited awareness of compliance requirements and associated standards	Factor 4 Inability to recognize and manage OHS hazards objectively	Factor 5 Tools used to assist SMEs to manage hazards should incorporate relevance and context of the SME
Loosemore and Andonakis (2007)	✓				
Clark et al.(2012)	✓				
Bahn and Kitching (2013)	✓				
Masi and Cagno (2015)	✓				
Diugwu (2011) (author only cites human resources)	✓				
Fleming and Scott (2011)	✓				
Arocena and Nunez (2010)	✓				
European Union (2013)	✓				
Papworth (2015)	✓				
Frick (2011)	✓			✓	
Hasle (2013)		✓			
Alavi and Oxley (2013)		✓			
Legg et al. (2015)					✓
Gallagher et al. (2003)		✓			
Halse et al. (2012)		✓			
MacEachen et al. (2008)					
Micheli and Cagno (2010)		✓			
Wilsen et al. (2012), Papwort (2015)			✓		
Legg et al. (2009)			✓		
Cagno et al. (2013)			✓		
Makin (2009)			✓	✓	
Makin and Winder (2009)					✓
Champoux and Brun (2003)					✓
Cagno et al. (2010)					✓

(Source: Bogna et al., 2018: 173)

The government plays a very huge part in the implementation of Occupational Health and Safety (OHS) in organisations whether they are large or small, this is done through the development of legislation. With the government having laws and regulations governing the implementation of OHS tends to become a smooth sailing process for these organisations. Research has found that the legislation available is mainly targeting large organisations and not considering the SMEs (Micheli & Cagno, 2010; Targoutzidis et al., 2014). Targoutzidis et al., (2014) states that due to the insurance premiums changing according to the number of accidents that the business has reported/experienced, the SMEs get affected by it the most due to their size and the number of individuals they employ. This results to the SMEs underreporting accidents to gain the advantage of good insurance premium.

The European Agency for Safety and Health at Work (2014) published business case studies of SMEs to help with understanding the relationship between productivity and OSH. Statistics showed that SMEs accounted for 67% of Europe's economy employment, during which time these SMEs also account for 82% of occupational injuries. There are number of constraints in the implementation processes with OSH policies in SMEs. These implications include difficulties in financing OSH policy, SMEs carrying fewer formal trainings in OSH, the lack of knowledge business owners have on OSH, and entrepreneur's belief that there is less risk for their businesses to carry in relations to work-related ill health and accidents.

Mclellan, et al. (2015) focused on the implementation of OSH activities in SMEs in the United States. Their results showed that over 75% of the companies investigated reported implementing a minimum of eight OSH policies; such as training efforts and programs. Furthermore, a low level of SME owners reported that they regularly update their OSH policies and only two-thirds set safety goals. Masi, Cagno, & Micheli (2014) investigated the implementation of OSH policies in SMEs while conducting five interviews with SMEs. The paper showed relative activities of implementation of OSH policies where the major activities exhibited a positive attitude and the presence of consultants were predominantly relevant. On the other hand, ineffective legal requirements, negative workers' attitude and lack of time were the main barriers in their research.

Although, there are laws put in place regarding the implementation of different Occupational Health and Safety policies, some SMEs owners seem not to be familiar with such laws and regulations. According to research done by Vickers, James, Smallbone, & Baldock (2005), their findings revealed that knowledge of the legislative requirements are really low. The authors go on to explain that there is a trend of the owner-managers subscribing to the statement that they are unaware of what they should be complying with and that sometimes the regulations put in place can be a burden to their business operations, both financially and otherwise.

Implementation of an Occupational Health and Safety Management system is different in SMEs and in large organisations (Kheni et al., 2010). The author explains that the larger the business size, the more aware of OH&S they are and as a result they have a lower accident rate. The opposite applies to SMEs and this is because they have fewer resources in applying the right tools in having effective OH&S management in place. According to Targoutzidis et al. (2014), one of the major characteristics of SMEs is having fewer employees and this makes

them more vulnerable compared to a large organisation. They have a higher rate of underreporting of accidents because they can't afford having an employee absent due to being sick or injured as it affects their productivity and revenue stream. Not having enough resources forces them to view OHS as unnecessary and burdensome. In order to help SMEs implement HSE effectively, the authors have adapted and compiled a list of successful HSE Management practices (see Table 3) based on various studies on SMEs, and the barriers and challenges they face in this area.

Table 3: Successful health and safety management practices

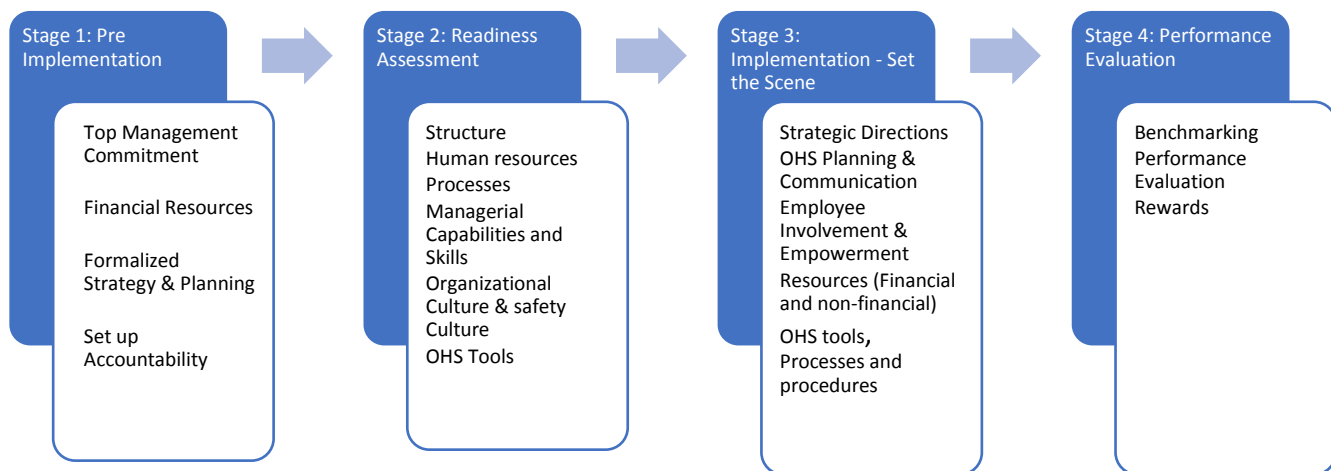
Year and author(s)	Health and safety management practices	Year and author(s)	Health and safety management practices
Simond and Shafai-sahrai (1977)	<ul style="list-style-type: none"> • Top management involvement; • Higher average age of workers; • Longer average length of employment; • Adequate working space and neat environment; and, • Higher percentage of married workers. 	Tam and Fung (1998)	<ul style="list-style-type: none"> • Post-accident investigation; • Safety awards; • Safety training; and, • Use of more directly employed labor
Liska et al., (1993)	<ul style="list-style-type: none"> • Safety training and orientations; • Provision of safety incentives; • Safety pre-task planning included in safety goals; • Safety person or personnel; • Safety policies and procedures; • Fire protection procedure; • Accountability/responsibility and safety budget; • Alcohol- and substance-abuse program in place; • Accident. and near-miss investigation; and, • Record keeping and follow-ups 	Wright (1998)	<ul style="list-style-type: none"> • Fear of prosecution by maintaining image of responsibility thereby avoiding adverse regulatory, customer or public reaction; • Belief that it is necessary and morally right to comply with health and safety regulations; • Compliance with customer or regulator certification schemes; • Minimization of cost of ill-health and injury; • Conformity with principles of total quality management, empowerment etc.; and, • Desire to improve staff morale and productivity.
Jaselkis et al., (1996)	<ul style="list-style-type: none"> • More detailed safety programs; • Expended large percentage of revenue on safety programs; • Greater safety training programs; • More formal safety inspections per month; and, • More safety meetings. 	Gad (2002)	<ul style="list-style-type: none"> • Safety culture affects the attitudes and belief of workers in terms of health and safety performance; • Management is the key influence of organization's safety culture; and, • Financial incentives to improve productivity or to compensate for working in hazardous condition can lead to safety being compromised.
Gallagher (1997)	<ul style="list-style-type: none"> • High level of top management commitment; • Health and safety responsibilities known; • Supervisor involvement encouraged; • Active involvement of health and safety representatives who have a broad role; • Effective health and safety committees; • Planned identification of risk and hazard elimination/control emphasis; and, • Comprehensive approach in inspections and investigations. 	Hinze (2003)	<ul style="list-style-type: none"> • Minimizing worker turnover; • Implementing employee drug testing; • Training with assistance of contractor association; and, • Growth in company size.
Baldock et al (2005)	<ul style="list-style-type: none"> • Regulatory enforcement activity; • Use of external assistance with respect to health and safety issues; • Management training and experience; and, • Membership of trade/business association. 	Aksom and Hadikusumo (2008)	<ul style="list-style-type: none"> • Accident investigations; • Jobsite inspections; • Job hazard analysis; • Safety inductions; • Safety record keeping; • Safety committees; • Safety incentives; and, • Control of subcontractors.

(Source: Kheni, 2008: 71-73)

SMEs seem to have various challenges and barriers in implementing HSE, and therefore to sustain the contribution of SMEs to the economy, we must ensure their sustainability through

the provision of a framework to assist in the effective implementation of HSE. The authors are proposing four stages of framework as seen in Chart 1.

Chart 1: Framework for HSE Implementation



Source: Compiled and proposed by the authors

Chart 1 illustrates the effective implementation of HSE in SMEs must go through the following stages:

- Pre Implementation stage: this stage will take place once the organization has made the decision to implement HSE as a strategy, and been communicated by the organization senior executives. This stage will focus on seeking top management commitment on the implementation of HSE through the provision of the required financial resources, the availability of a formalized HSE strategy, the availability of resources in coming up with HSE plans, and the appointment of a project leader.
- Readiness assessment stage: once top management commitment is provided to enable the team to move forward with HSE implementation, readiness assessment stage starts where the HSE project leaders will investigate the readiness of the organization in implementing HSE, and the readiness assessment will focus on the following elements:
 - Structure: to see whether the organizational structure available supports the chain of communication, effective decision making based on data, transparency, and accountability.
 - Human resources: to identify whether the available human resources can support the HSE implementation and have the required expertise and skills
 - Processes: to identify whether the organization has the appropriate processes in place to implement HSE
 - Managerial capabilities and skills: to check on whether the organization has the management team in the various departments with the required capabilities, skills and understanding of HSE and its implementation
 - Organizational and safety culture: to see whether the HSE culture is embedded within the organizational work processes, practices, and core values
 - OHS tools: to see whether the organizations have OHS tools to manage hazards and in compliance with HSE standards
- Implementation and set the scene: once the readiness assessment stage is completed and the organization is ready to

move forward, this stage of implementation and set the scene will take place. This stage will focus on the following:

- Setting the strategic direction of HSE implementation in term of priorities, KPI, and timeline.
- Setting the proper planning and communication on the way forward and the expected role of each individual, accountability, KPI, timeline, reporting line....
- Involving and empowering employees at all the stages of HSE implementation where valuable input is provided, and this stage will encourage the commitment of employees to the success of HSE implementation
- Identifying the specific financial and none financial resources requirements based on the HSE project plan.
- Identify the required OHS tools for the effective implementation and make sure that they are available
- Set the correct and required processes and procedures for HSE implementation
- Set the implementation wheel in motion
- Performance evaluation stage: once the process of the implementation is in motion, and the a cycle of implementation is completed, there must be some activities to take place to measure the success of the implementation in order to continuously improve the implementation, these activities include benchmarking, performance evaluation and reward employees for their contribution

Conclusion

In conclusion, SMEs tend to have poorer and less effective Health and Safety implementation. This can lead to not only increased injuries but a dark figure of H&S violations, making it difficult to fully analyse the extent of the harm. A way of combating this, as suggested by the authors, is the implementation of a four stage framework to assist in the effective implementation of HSE within SMEs – which make up a significant amount – takes into account the characteristics of SMEs and why those characteristics result in difficulties and subsequent failings when it comes to knowledge of an implementation of H&S policies. The important of not only using this framework but continuously evaluating H&S in SMEs is

to ensure that they remain a sustainable form of entrepreneurship to sustain their contributions to the economy.

Data Availability

Since the article is based on review and recommendation, refer to the bibliography to get more information about the studies used to aid in the completion of this article.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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