

FrancoAngeli

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INVESTING IN SAFETY IN THE ENVIRONMENTAL HYGIENE SECTOR



Scuola Superiore
Sant'Anna



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PRESENTATION

Despite the current economic crisis, the continuous improvement of worker health and safety remains an essential target to achieve. Safety at work is an important value for the workers' social lives and it is associated with economic and production opportunities.

The environmental hygiene industry, which is particularly sensitive to matters of health and safety at work, must guarantee the highest safety standards to its workers. This requires a constant commitment to ensure that workers' physical safety is safeguarded and improved in all stages of the waste management process, from clearing and collection through to disposal. During waste collection, there must be a careful and constant assessment of the chemical, bacteriological and muscular-skeletal risks. This means that technological and management solutions must be sought to guarantee worker health protection, minimising all the risk factors to ensure that the productivity objectives do not constitute a threat to the workers' health.

The reduction of the accidents in the industry is improving gradually, both with regards to the total number of accidents reported with respect to the number of workers exposed to the risks, and as concerns the severity of the events. This is a clear sign of the commitment made by the companies and category trade unions that, through the Foundation, collaborate towards the dissemination of the safety culture. Training activities, the dissemination of the sector safety management system (SGSL/R), research and cooperation with universities and international organisations are some example of the activities carried out.

Achieving and maintaining a high level of attention to these constitutionally-relevant matters required a great commitment and major efforts. In this regard, the focus must be on the promotion of economic and organisational investments of the companies and on collaboration between all the

agents in order to build a constructive dialogue and effective solutions for the promotion of health and safety at work.

Daniele Fortini
Chairman
Rubes Triva Foundation

Claudio Tarlazzi
Deputy Chairman
Rubes Triva Foundation

PREFACE

... non ti far mai servo; non far tregua coi vili;
il santo Vero mai non tradir; né proferir mai ver-
bo, che plauda il vizio, o che la virtù derida...

A. Manzoni

to Carlotta Maggi
child worker, wife and mother

In the Italian Constitution, the protection and physical-psychological safety of humans is a leading principle. Italian Constitution specifies that the economic initiative cannot take place in conflict with or in a way that damage human health, safety, freedom and dignity of the people.

In this regard, the implementation of the constitutional principles require that companies are engaged to complying with all general and special standards issued as regards accident prevention and, together with the workers and their trade union organisations, to defining strategies aimed at ensuring a widespread safety culture. These points can reveal that the workplace has an important human dimension, over than an economic one, and that the activities carried out to avoid and prevent potential accidents, cannot be considered as additional costs.

Accidents are often caused by technological and organisational choices made by the companies and human error or wrong behaviours. Accidents indicate an underestimation of risks and inadequate training and a lack of information exchange. Moreover, in a continuously and rapidly evolving production context, which goes hand-in-hand with a progressive ageing of the workforce, it is important to pay constant attention to studying the con-

ditions of the workplace, ensuring that they are compatible with the specific problems that progressively emerge.

In order to assess the economic impact of safety at work, the determination of social insurance costs does not suffice; rather, a calculation must be performed of the social-economic costs that, as also highlighted in this research, are often far higher than the insurance costs. According to recent research, in the European Union during the two years 2010/2011, the loss of GDP caused by work related diseases and accidents has been estimated at between 2.6% and 3%. This data highlights the need for supervisory entities and for the companies to adopt prevention strategies, with the key objective of developing interventions oriented on increasing accident prevention levels and the protection of health and safety at work.

Eliminating the causes of occupational accidents and work related diseases is not merely a civil and moral duty, but it is also a forward-looking approach for guaranteeing a healthy production development and entrepreneurial success. It is a well-known, that the identification of efficient structures and procedures that are able to encourage cooperation between entrepreneurs, managers and workers produce important benefits. All production processes entail some degree of exposure to risks. Eliminating the causes of occupational accidents is a specific commitment for a healthy development of a company. The prevention activities come at a cost, which can be significant, and it is therefore essential that the topic be broached with a basis of reliable data. Recent studies have revealed that two thirds of the costs connected with accidents are visible even if difficult to identify in the company' accounting system, whilst one third remains hidden to management, often making the implementation of health and safety at work programmes ineffective. Defining specific technique by which to measure health and safety at work, therefore, allows us to obtain a more objective and reliable quantification of the costs of accidents, to increase knowledge and managerial skills about investments plan, operative programmes and performance measurement and as such generate positive benefits.

The management of health and safety at work is essential to the social and economic development of our society. With the “*Investire in Sicurezza*” (Investing in Safety) project, the Rubes Triva Foundation collaborates with the Institute of Management of the Scuola Superiore Sant’Anna (Sant’Anna School of Advanced Studies) of Pisa, took a step to making a scientific and practical contribution to companies operating in the field of environmental hygiene and to spread health and safety culture by means of which to combine psychological-physical protection of the workers with economic value. The dissemination and growth of health and safety culture

will be able to respond to the changes deriving from membership of the European Union and also to the ethical and moral obligations that a company must accept, as part of its social responsibility towards the society.

Giuseppe Mulazzi
Director of the Rubes Triva
Foundation

INTRODUCTION

Given the multiple effects at individual and corporate, as well as social level, occupational health and safety are key aspects for the well-being of an individual and his connected social well-being. The idea that it is essential to create adequate workplaces promoting the health and well-being of the individual has thus become a widespread awareness in public debate and management studies. At European level, interest in the matter stems from the framework directive adopted in 1989, which was followed by other legislative acts aimed at ensuring continuous attention and at stimulating a more proactive management. In Italy, also following the attention and debate promoted with the Italian Legislative Decree no. 626/1994, the topic has gradually penetrated into companies' agenda and many initiatives have been promoted by the public institutions to support the creation of a health and safety culture. From this perspective, the numerous campaigns and economic incentives disbursed for promoting health and safety management in the workplace promoted by INAIL (Italian National Insurance Institute for Employment Injuries), should be recalled.

Today, businesses are increasingly taking the view that proactive management of occupational health and safety is a strategic lever in assuring the legal and moral responsibilities of a business with regards to the society, and with regards to the economic benefits. The results presented in this book take two perspectives. On the one hand, they confirm the attention paid to the matter, showing increase awareness by waste management companies. On the other, they point out that a complete maturity is still partly to be achieved before to set up a consolidated scenario. To this end, to generate positive effects (improvement of the company climate, productivity and reputation, etc.), companies must adopt new methods and tools, which are able to build and promote new skills and competences. Occupational health

and safety cannot be interpreted as a mere act aimed essentially at guaranteeing compliance with current legislation. Rather, it must be a distinctive element that generates monetary and intangible value both within and outside the company boundaries. The effective inclusion of health and safety in company management takes place through technical, organisational and cultural factors. For companies, health and safety provides impressive challenge and debate, highlighting their capacity to adapt their conduct in response to changes caused by internal and external factors.

The reasoning behind this text lies in highlighting some of the key aspects and variables that companies operating in the environmental hygiene industry must deal with in order to successfully and effectively manage health and safety issue. In this respect, there are no universal solutions. Rather there is a need to adopt solutions chosen on the basis of different needs and organisational, cultural and legislative factors in play. As shown by our first chapter, there are multiple management tools available, as well as positive effects associated to health and safety management. The chapter discusses health and safety from a management perspective paying attention to effectiveness, competitive and economic results associated with it. The second part of the chapter focuses on accidents costs and, analysing the main methods and tools present in the literature.

The second chapter analyses the environmental hygiene industry. Environmental hygiene is intrinsically linked to the subject of health and safety due to the countless effects and delicate implications that an incorrect management of the waste cycle has in terms of public health and on natural environmental protection. In this chapter, the environmental hygiene industry will be analysed from two perspectives. The first part aims to describe the industry by identifying, amongst other aspects, the activities carried out by businesses, their geographic location and the main dimensional characteristics. The second part takes a more in-depth look at health and safety through the description of results achieved by businesses at industry level and by giving an overview of the risks present in the industry.

The third chapter analyses the management of health and safety in the industry and the potential effects it generates. An exploratory investigation is carried out involving a sample of companies and setting itself a three-way investigation objective: to analyse the degree of maturity of the safety management system; to identify some possible contingent factors associated; and to verify the possible effects in terms of safety performance and competitive performance. Chapter four considers the matter of measuring costs connected with accidents by a multiple field study in four companies, of a cost model for the monetary measurement of the accidents at work.

The chapter analyses three aspects: the economic amount of the costs of “non safety”; the opportunities and risks associated with this practice of measurement and the definition of a model for analysing the costs of “non safety”. The main aim is to present a management tool that is able to provide reliable and relevant information by which support preventive action plan with a view to reducing the number of accidents and employees health and safety.

We would like to take the opportunity to thank the members of the Board of Directors of the Rubes Triva Foundation, for having given us the chance to carry out the research that led to the preparation of this book, the Director Giuseppe Mulazzi, Luca Casai and Monica Bigliardi, who afforded us their active collaboration, and all the staff of the four companies that worked with us during the files studies. Finally, special thanks also go to Elisa Meloni and Natalia Gusmerotti for their support in collecting some of the data given in chapter two. As always, the authors take full responsibility for any omissions and/or errors.

Pisa, Sant’Anna secondary school
September 2013

1. OHS MANAGEMENT: AN ANALYSIS OF LITERATURE

1.1. What is occupational health and safety

Occupational health and safety (“OHS”) is a multi-disciplinary area of study aimed at ensuring an analysis of the conditions of hygiene, safety and well-being of the people operating in the workplaces. This may entail the interaction of different areas of research, including occupational medicine, industrial hygiene, public health, engineering, chemistry, employment law, ergonomics, organisation, economics and business management. The general aim is to promote a healthy workplace by means of the identification of the risks connected with the work, the reduction of worker exposure to dangerous situations and the reduction of occupational accidents and work related diseases.

In the last 60 years, safety at work issues have been one of the key factors underlying trade union claims. Then, over time OHS is progressively become a social value, due to the numerous implications that OHS can have on the personal and social life of individuals. The importance of OHS is borne out by the numerous agreements, declarations and studies that have taken place over the years by the World Health Organisation (WHO), the International Labour Organisation (ILO) and the European Agency for Safety and Health at Work (EU-OHSA). In 1950, for the first time ever, the ILO and the WHO proposed a shared definition of OHS. Today it reads:

«Occupational health should aim at:

- the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations;
- the prevention amongst workers of departures from health caused by their working conditions;

- the protection of workers in their employment from risks resulting from factors adverse to health;
- the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities;
- to summarize the adaptation of work to man and of each man to his job».

In analysing the declaration of the ILO and WHO, three separate macro objectives can be identified: 1) the maintenance and development of worker health and their capacity to work; 2) the improvement of the working environment in order to encourage health and safety; 3) the development of a work culture able to promote a positive social climate, the correct function of the company and the improvement of its productivity.

In 2012, the Director of the EU-OHSA, Christa Sedlatschek declared: “We need to convince companies that occupational safety and health is an asset for business too. According to some ILO estimates, 4% of the world GDP is lost due to occupational diseases and accidents; EU-OSHA estimates establish this loss as between 2.6% and 3.8% of the European Union GDP. Equally, research into the human cost of accidents at work (which should, in itself, suffice to justify preventive policies and action), has shown just how important it is to reflect on the company costs of such accidents. In 2007, 83 million days’ work were lost due to accidents at work, and if we add this to absences caused by work-related diseases, the total comes to 367 million days’ work. Each accident or disease has a cost, and in a global, competitive employment market, these are costs that are quite simply unaffordable, both for the State and the companies themselves. The evidence is empirical and clear: healthy, safe workplace are also more productive, more motivated and enjoy more loyal employees. It is therefore quite simply untrue that expenses incurred for safety training and for equipment are a non-essential luxury”. According to EU-OSHADirector, correct safety management policies should be seen as an investment that can yield economic results. Despite its importance, health and safety does not yet get the attention it deserves and to achieve this, certain fundamental steps are needed. Health and safety must become an integral part of the day-to-day business management process and of the working culture. They must involve the managers and all employees in day-to-day matters regarding health and safety. In short, safety management should be interpreted no longer as a burden but rather as opportunities to develop safety and productivity.

During the interview, the Director also disclosed some of the results of a recent European opinion survey carried out for EU-OSHA by Ipsos MORI regarding the opinions of 35,000 people from 36 different European countries on work-related matters, such as, for example, the relationship between stress and work, the importance of occupational health and safety and the extension of the working life. The results obtained from Italy show, first and foremost, that work-related stress is set to grow over the coming years. Seven people out of ten (73%) expect to experience some form of work-related stress in the next five years, and two out of five (39%) expect this to grow considerably. By contrast, only 11% of those interviewed consider that the number of people suffering from stress will decline. In Europe, on the other hand, 49% of people believe that stress will grow and only 7% that it will decline.

The second result reveals that nine Italians out of every ten (90%) believe that OHS is important if people have to work for longer before retiring, and 61% believe it to be very important. In general, the Italians are the most likely, of all Europeans, to consider this aspect of the working life as relevant. Finally, a minority of Italians are uncertain of the fact that health and safety in the workplace will be considered adequately. Three out of every ten are uncertain that issues raised with their managers will effectively be discussed (30%, of which 9% are not at all certain). This average is higher than the European average (23% and 7%), even if on the other hand, the majority of workers (64%) are convinced that the problem will be dealt with.

To complete this brief introduction, and before moving onto start to analyse literature regarding the implications of OHS management on a company level, we show some of the pioneering studies that have brought the matter to become a subject for debate, both on an academic and business level. A useful contribution has been made in this sense by Swuste *et al.* (2010), who analysed literature on occupational safety starting from the first few decades of the last century and particularly in the USA and England. In the USA, the first signs of concrete interest date back to the start of the last century, thanks to “*The American Safety First Movement*” and the “*Pittsburgh Survey*”. At that time, numerous sectors (steel, the automotive industry, textile and meat production) came under heavy attack by public opinion due to the poor working conditions and the consequent great many accidents. At the time, legislation on safety at work was basically lacking and the first rules introduced, in a very limited compensation perspective, were focused on forcing companies to reimburse the cost relating to the funeral