



METHODOLOGICAL FRAMEWORK FOR ANALYSIS AND EVALUATION OF SECURITY THREATS WITHIN INDUSTRIAL ENTERPRISES

Tsanko Valentinov IVANOV¹

¹ PhD Student, Department Industrial Business, University of Economics – Varna, Bulgaria. E-mail: tsanko_ivanov@ue-varna

JEL F52, L65

Abstract

The following article provides an adapted approach for analysis and evaluation of threats from the internal and external environment of industrial enterprises in the Republic of Bulgaria. A significant part of similar previous scientific studies and practically applicable tools have been analyzed in the paper. The author seeks answers to a great variety of questions and issues such as current global and regional threats, the rise of new types of aggressive competitive moves, the constantly changing regulatory framework, including the EU regulations as well as the inherited economic local issues. The developed methodological approach has been used by the author for empirical research on enterprises operating in section S 20 “Manufacturing of Chemical Products” in accordance with the Bulgarian Classifier of Economic Activities, the results of which provide a working methodological basis for the development of integrated active corporate security system.

Keywords:

threats, chemical industry, corporate security.

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Citation: IVANOV, T. (2017). Methodological Framework for Analysis and Evaluation of Security Threats Within Industrial Enterprises. *Izvestiya Journal of Varna University of Economics*. 61 (3). p. 303 – 320.

Introduction

Today’s difficult political and economic situation generates new types of challenges for the business world. As a democratic country driven by its market economy, Bulgaria cannot remain isolated from the extremely entangled geostrategic, political, macroeconomic and social relations and processes presenting diverse threats. Industrial enterprises, especially the ones operating in the chemical sector, are largely influenced by these factors, due to the specifics of their manufacturing processes, the hazardous materials at the input and output of production, the nature of their intellectual property and so on. Issues related to the active corporate security system together with elements that must neutralize internal and external threats are complicated and ge-

nerate difficulties for the system's administration. The concept requires from professionals operating in the business security sector to build two security levels – 1) proactive information gathering for risk management capabilities and 2) integrated corporate security system development (Petrov, 2007, pp. 10-17).

The author's main goal is to develop a methodological framework for analysis and evaluation of internal and external threats for industrial enterprises on the basis of previously completed similar scientific studies and practically applicable solutions.

Scientific studies and practically applicable tools in the area of corporate security

The author aims to cover as much recent studies in the area of corporate security as possible to be able to define more accurately a methodological framework for analysis and evaluation of security system's threats for the Bulgarian industrial enterprises. In addition, the listed studies provide a broad basis for exploration of different indicators within the process. Even though there are plenty of studies related to improving competitiveness, the relation between business excellence and active corporate security has yet been insufficiently studied. The analyzed studies and methodologies are sorted chronologically in Table 1, starting with the most recent ones. The herein examined key indicators and measures present the most significant part of the extensive studies conducted thereof and that is the reason why they bear such a great emphasis.

Table 1

Strengths and Weaknesses of Similar Studies

Research/Methodology Author(s)	Strengths	Weaknesses
Security Research Initiative (Gill & Randall, 2014) <i>Aspiring to Excellence: The Case of Security Suppliers and Corporate Security. A SRI Report.</i>	Despite the large number of studies related to business excellence, the one we have in mind belongs to the few focused entirely on the private security sector. Under close examination have been both security suppliers' and customers' opinions. The research points out a large number of crucial success factors in the field of active corporate security.	Survey conducted via Internet shows that different indicators are significant for the different focus-groups around the world without reporting the economic, political, social, cultural, and ecologic factors.
SIEMENS (2013-2014) (Miller, 2015)	The study was conducted among chief security officers of large	Respondent organizations operate in various sectors: finan-

<i>Corporate Security: Findings from a Global Study.</i>	corporations and public organizations from Europe, USA and Asia. The included indicators focus simultaneously upon current requirements that experts face and future security challenges.	cial institutions, high-tech companies, public organizations, health institutions, trade, chemical, manufacturing enterprises, etc. Corporate security problems logically vary according to the sector involved.
Securitas Security Services (2014) (Walker & Co., 2015) <i>Top Security Threats and Management Issues Facing Corporate America: 2014 Survey of Fortune 1000 Companies.</i>	The study was conducted among chief security officers and similar security experts in 248 American companies. A large number of evaluated threats are included. Although the companies operate in different sectors, deficiencies are neutralized by separate studies for each sector.	***
Forrester Research Inc. (2009) (Kark & Dines, 2010) <i>Security Organization 2.0: Building a Robust Security Organization.</i>	The study was conducted among 2199 IT directors and other information security officers within small and middle-sized companies in the United States, Canada, Great Britain, France and Germany.	The survey was conducted entirely online for a very short period of time (from August 2009 to September 2009) via one of the biggest social business media.
ASIS (2009) <i>Compendium of the ASIS Academic/Practitioner Symposium</i>	The researchers list 18 active corporate security elements.	The research is entirely in the field of science.
The Conference Board (2002-2004) (Cavanagh, 2005) <i>Corporate Security Measures and Practices</i>	The studies were conducted among 199 security directors, 80 IT security directors, 52 risk managers and 96 chief executive officers of middle-sized companies. A number of active corporate security elements and threats are grounded by interviewees.	***
University of Genève (2004)	The study successfully embraces information security, its costs and the strategy of the companies. It was conducted among 23 executives from the banking, telecommunication and IT sectors in Switzerland, Great Britain and Germany.	The study is entirely scientific and that is the reason for its timely limits. The data gathered presents the situation within the information security system at a particular moment. It lacks statistical data.
National Association of Industrial Security Companies (2009) <i>Private Security Activities During the Crisis</i>	One of the few private security studies conducted in Bulgaria during the financial crisis focused on two respondents: corporate security suppliers and customers.	Not enough analysis and arguments for the chosen indicators. The study focuses on the idea of reactive rather than active corporate security.

The research of Securitas Security Services named *Top Security Threats and Management Issues Facing Corporate America* conducted in 2014 has become an industry standard in the area of US corporate security. Securitas is an international company specializing in corporate security that works with more than 80% of Fortune 1000 companies and it generates an annual profit of over 3 billion dollars. Its survey drew 248 responses from corporate security directors and other executives who have an overall responsibility for their companies' security programs. The rated threats through the years are listed in table 2.

Cyber/Communication Security has topped the list being in the tenth place in 1997. Workplace Violence has held its importance for the respondents being second in 2010/2012 and third in 2014. Business Continuity Planning ranked second in 2014 (remaining third in 2010 and 2012) while Employee Selection/Screening has remained in the fourth place (where it has been since 2008). A new indicator, Privacy Concerns, holds the fifth place position. In addition, Property Crime slipped to sixth place in 2014 from 5th place in 2012 while General Employee Theft went down one position from its sixth place. The outlined trends in the survey represent the evolution of corporate security theories over the recent years.

Another significant factor for the study is the respondent companies' structure. All of them are included in Fortune 1000. Table 3 shows that most of the respondents, 90 companies in 2012 and 65 companies in 2014, represent the industrial sector, as in the following article. Industrial enterprises account for more than 30% of all respondents and that is the reason why top concerns for security directors at Fortune 1000 manufacturing companies are included in table 3 of the article. The top three threats in 2014 remain unchanged compared to 2012, a fact emphasizing their importance once more. In the following three places the trends are similar, verifying what is stated in the article's introduction – physical/reactive countermeasures are becoming less and less preferred compared to the new business security paradigms.

Table 2

Top Security Threats 1997-2014

Security Threats	1997	1998	1999	2000	2001	2002	2003	2008	2010	2012	2014
Cyber/Communications Security (e.g. Internet/intranet security)	10	8	7	2	2	4	3	3	1	1	1

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Business Continuity Planning	5	7	2	2	5	2	2	2	3	3	2
Workplace Violence	1	2	1	1	1	1	1	1	2	2	3
Employee Selection/Screening	4	4	4	5	3	5	5	4	4	4	4
Environmental/Social: Privacy Concerns	-	-	-	-	-	-	-	-	-	-	5
Property Crime (e.g., external theft, vandalism)	12	10	10	12	10	9	12	5	7	5	6
General Employee Theft	2	1	6	6	6	8	7	5	8	6	7
Crisis Management and Response: Domestic Terrorism	12	15	17	14	16	17	3	4	7	12	8
Identity Theft	-	-	-	-	16	14	10	12	11	10	9
Unethical Business Conduct	3	6	9	7	9	7	8	9	5	8	10
Environmental and Social: Pandemics	18	-	-	-	-	-	-	-	17	18	11
Crisis Management and Response: Political Unrest/Regional Instability/National Disasters	-	-	19	17	20	14	11	10	6	7	12
Litigation: Inadequate Security	13	13	13	13	13	11	18	19	16	9	13
Fraud/White-Collar Crime	7	3	3	4	4	6	6	8	10	12	14
Substance Abuse (drugs/alcohol in the workplace)	9	11	8	9	8	10	9	19	17	13	15

Litigation: Negligent Hiring/Supervision	16	16	15	13	14	18	20	25	23	17	15
Business Espionage/Theft of Trade Secrets	-	9	12	11	12	19	16	15	15	16	17
Environmental/Social: Robberies	-	-	-	-	-	-	-	27	19	14	18
Intellectual Property/Brand Property/Product Counterfeiting	-	-	-	-	-	-	-	21	14	11	19
Global Supply-Chain Security	-	-	17	19	18	22	21	27	22	20	20
Executive Protection (including travel security)	-	-	-	-	-	-	-	22	13	18	21
Insurance/Workers' Compensation Fraud	17	19	16	15	15	17	17	26	25	21	22
Crisis Management and Response: International Terrorism	-	-	-	-	-	-	-	-	-	-	23
Bombing/Bomb Threats	-	-	-	-	-	-	-	14	24	19	24
Labor Unrest	-	-	-	-	-	-	-	29	26	23	25
Crisis Management and Response: Kidnapping/Extortion	-	-	18	18	19	20	19	33	27	24	26

Table 3

Industry Classification

Main/Sub-industry	Respondents 2012	Respondents 2014
Utilities	15	19
Construction	2	3
Wholesale Trade	4	3
Retail Trade	8	8
Healthcare and Social Assistance	23	30
Arts, Entertainment and Recreation	21	6
Finance and Insurance	35	20
Real Estate, Rental and Leasing	23	31
Professional, Scientific and Technical Services	16	10
Educational Services	10	19
Accommodation and Food Services	2	1
Transportation and Warehousing	24	14
Law Enforcement	6	5
Manufacturing:	90	65
Food Manufacturing	18	11
Wood Product Manufacturing	4	5
Computer and Electronic Product Manufacturing	9	7
Electrical Equipment, Appliance and Component Manufacturing	10	7
Transportation Equipment Manufacturing	15	10
Miscellaneous Manufacturing	34	25
Information:	14	14
Telecommunications	8	6
Other Information Services	6	8
Other	4	4
TOTAL	297	248

Table 4

Top Threats by Industry – Manufacturing

Rank 2014	Security Threats	Rank Within Industry 2014	Rank Within Industry 2012
1	Cyber/Communications Security (e.g. Internet/intranet security)	1	1
3	Workplace Violence	2	2
2	Business Continuity Planning	3	3
4	Employee Selection/Screening	4	6 (tie)
17	Business Espionage/Theft of Trade Secrets	5	6 (tie)
20	Global Supply Chain Security	6	5
19	Intellectual Property/Brand Property/Product Counterfeiting	7	4
5	Environmental/Social: Privacy Concerns	8	-
7	General Employee Theft	9	8
10	Unethical Business Conduct	10	12

A list of 16 security management topics rated by various interviewed experts is also significant for the article’s main purpose. The list was presented to security managers with instructions to rate between 5 (most important) and 1 (least important) with regard to their anticipated impact on their company’s security program during the following 12 months. The results are shown in table 5 (Walker, 2015, p. 14).

Table 5

Future Impact of Security Management Issues

Rank 2014	Management Issues	Average Importance Score
1	Security Staffing Effectiveness: Training Effectiveness/Methods	3,94
2	Promoting Employee Awareness	3,82
3	Budget/Maximizing Return On Investment	3,78
4	Regulatory/Compliance Issues	3,73
5	Keeping Up With Technological Advances	3,71

6	Threat Assessment	3,69
7	Strategic Planning	3,67
8	Implementing Best Practices/Standard/Key Performance Indicators	3,63
9	Security Staffing Effectiveness: Adequate Staffing Levels	3,60
10	Security Staffing Effectiveness: Selection and Hiring Methods	3,57
11	Security Staffing Effectiveness: Security Officer Turnover	3,37
12	Managing Remote Security Operations	3,25
13	Additional Security Responsibilities	3,16
14	Career Development	3,13
15	Security Staffing Effectiveness: Absenteeism	2,98
16	Global Supply-Chain Decisions	2,57

To sum up, specialized studies in the field of active corporate security prove to be limited even from a global perspective. Despite that fact, analyzed data show that corporate security services consumption has grown due to the recognized need of today companies to run successful operations which as a whole largely depends on the prevention of corporate security threats. If managers decide to deal intuitively with security issues at hand, in case such arise, they will have to face even graver concerns. However, the analyzed studies in the article include a large number of threats, risks, critical and emergency situations, etc. as well as methods and tools for their proactive neutralization. As a result, the cited studies represent a significant basis for developing a new methodological framework on the one hand, and future similar research, on the other. Each of them, with its particular strengths, weaknesses and limitations provides a large number of indicators that can be used for evaluation of current issues in the area of active corporate security.

Based on these assumptions, the indicators used in the studies of Securitas and The Conference Board seem appropriate for the next stages of the current research. They have been evaluated by a total of 675 corporate security executives to start with, and they submit enough indicators for analysis and evaluation of threats (including such faced by industrial enterprises) to consider.

Summarized results from discussions with business representatives and security experts

The author has arranged a number of meetings, discussions and interviews with managers operating in the chosen industry sector and security professionals, searching answers about the problem areas they have experienced. Herein below are the summarized main points of view from the discussions held:

I. Managers and other representatives from the chemical industry:

- 1) Changes in the general/operating/internal environment of the companies in recent years and their impact on economic performance.
- 2) A discussion focusing on different threats for the chemical industry:
 - neutralizing/deteriorating of existing threats; emerging of new threats from both the external and internal environment of the enterprises;
 - impact of direct and indirect threats; which ones bring more dangers.
- 3) Problems for domestic businesses:
 - corruption, lack of anticorruption laws, bureaucracy, access to external financing, etc.;
 - monopoly/unfair competition;
 - lack of qualified human capital;
 - high levels of crime;
 - decreasing material resources and outdated technology.

II. Security professionals:

- 4) Changes in the security environment during the transition of Bulgarian economy and their effect on the industries, particularly the chemical industry as part of the country's critical infrastructure.
- 5) A discussion about economic security threats' nature:
 - macro threats, especially political instability in Bulgaria between 2012 and 2017;
 - financial sector crashes;
 - hybrid threats linked to the changing geopolitical and regional positions; the scale of their impact upon national security;
- 6) Problems for domestic business:
 - delayed reforms in both judicial and macroeconomic systems;
 - *hidden economy* – gray, black and informal economy;
 - higher levels of terror danger, especially for the critical infrastructure, respectfully – the chemical industry;
 - undeveloped infrastructure.

Having summarized the available information from theory, research and discussions in the area of active corporate security, the main aspects of the new methodological framework's concept to be outlined are as follows:

- Analysis of the genesis of threats and their subsequent impact on the chemical industry;

- In-depth analysis of potential channels of newly emerging threats in order to identify more effective tools for their proactive neutralization;
- Evaluating the effect from implementing an active corporate security model against potential and current threats.

Methodological framework for analysis and evaluation of potential and current threats for industrial enterprises' security systems

Scientific studies in the area of security and defense in Bulgaria are not institutionalized as a separate research area. Therefore, according to Pavlov (2009), such studies are often interdisciplinary and involve a variety of scientific directions which is very challenging for knowledge management within that specific science area. Radev (2006) adds that a scientist's mission is to predict the development and impact of future events and processes by analysis of information and other specific data processing tools. According to the same author, special attention must be drawn to security studies in the context of security environment transformation. To a large extent, those assumptions are legit in business and economy, as well, having in mind the close relation between security and economic prosperity (Walt, 1991, p. 227).

A suitable algorithm for security threats evaluation is developed by Hristov (2007), according to whom it includes:

- 1) Compiling a list of key security threats, focusing on their relativity;
- 2) Choosing a proper number scale for quantitative measurement of each threat's impact;
- 3) Composing of evaluation card for needed data collection;
- 4) Conducting a survey with a group of qualified respondents;
- 5) Processing of data gathered from the survey;
- 6) Defining the seriousness of each threat;
- 7) Calculation of level of consensus regarding the importance of evaluated threats;
- 8) Generalization of the results from the conducted empirical research.

From the author's point of view, with the required changes, those steps represent a solid basis for developing a new approach for analysis and evaluation of corporate security threats for industrial enterprises. In any case, the process of developing a methodological framework starts with determining the type and functions of the organization as different enterprises face different threats due to their various activities. The term *threat* refers to any kind of danger for the corporate security system which could disrupt business organizations' interests and strategies. The term is widely used, it intensifies society's sensitivity and it lays the foundations of a great number of pol-

icies directly or indirectly related to security (Yontchev, 2014, p. 41). The above concept draws the attention of the Copenhagen School of security studies – a group of researchers in the area of security with post-Cold war perception who have affirmed the term *securisation* in response to the arising hybrid threats despite the object of attack (Waeber, 1998). In practice, there are a number of issues related to threat evaluation. That is the reason why Buzan (1998) introduces two approaches – objective (for clear and present dangers) and subjective (for potential threats). Despite the critics, Buzan proves the link between each threat and different factors' impact and draws the attention to the possibility a threat to be proactively assumed even when its impact is not visible.

In response to the large number of threats, Pudín (2007) proposes the following function:

$$S = f(A, P, T/R). S_i$$

in which:

A – protected assets;

P – forces, measures, defense factors and organizational facilities;

T/R – threats and risks faced by the organization;

S_i – different circumstances related to enterprise's security.

The article focuses on current and potential threats. However, at a later stage, by using expert assessments, the suitable forces, measures, etc. for assets protection could be developed.

According to Radulov (2013), threat analysis means asking the correct question in the correct order. Following the same logic, a suitable methodological framework is developed in the following article. Industrial enterprises (especially the ones operating in the chemical sector) face virtually every possible internal (violence, labor unrest, etc.) and external (theft, vandalism, natural disasters, etc.) threats (Reid, 2005, p. 5). After reviewing a large number of threats found in the cited recent studies, the author assumes the classification of *Securitas* (table 2) as a reliable source of indicators which represent potential and present business threats for the Bulgarian chemical industry. Nowadays, security challenges are numerous, complicated, interrelated and hard to predict: possible regional crisis that can easily bring violence; new technologies bringing unknown threats and vulnerabilities; political and military conflicts fused by environment changes and lack of natural resources (Dimov, 2014, p. 32).

At the same time, a number of threats and risks could easily blur the line between internal and external security. The big number of threats is divided into two groups – internal and external. This makes the empirical research easier because the

indicators' ranking by respondents clarifies whether the threat originates from the internal or external environment of the enterprises. In addition, such groupings grant a solid basis for developing an active corporate security model which consists of units for neutralization of both internal and external business threats. Figure 1 illustrates these classifications:

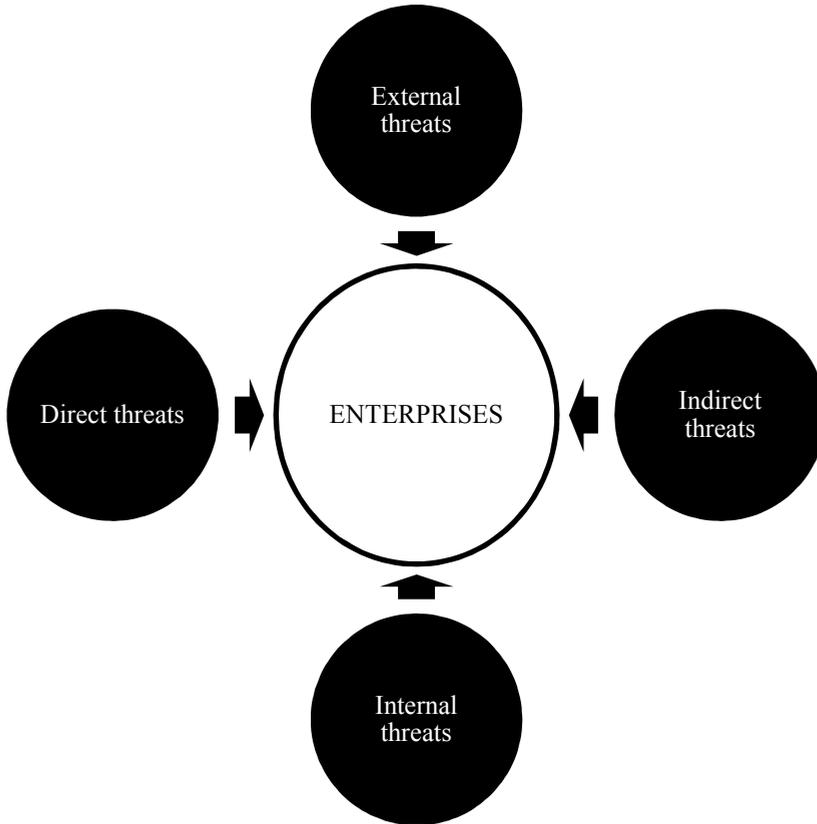


Fig. 1. Types of Threats for Industrial Enterprises

Further classification of threats as direct and indirect is possible after the survey data is collected. In response to insecurity's source, it is possible to distinguish between aspects of internal and external security but such a distinction is very formal as external threats often provoke internal insecurity and vice versa (Ivanov, 2006, p. 11). Despite those limitations, internal threats can be related to:

- **Staff** – during recruitment, selection, training, motivation, managing, control, etc.;
- **Organizational Structure** – inappropriate management styles, lack of corporate culture, etc.;
- **Finances** – potential internal financial crimes perpetuated by employees or managers;
- **Technology** – cyber/communication attacks, privacy concerns, leaks of personal data or intellectual property, etc.

As stated earlier, a particular external action, whether intentional or not, as well as unmanageable situations (environment events) can also cause damage to the organizational activities, mission and assets (human, financial, technological, and intellectual). Those factors should not be excluded and underestimated in security studies such as the following article. The large variety of external sources of threats can be grouped as follows:

- **Political Threats** – unstable political governance (lack of parliamentary majority, lots of resignations, etc.) and law enforcement issues (criticism by the European Commission, bureaucracy and corruption); arising threat of terror, extremism, radicalism, racial, ethnic or religious hatred, etc.;
- **Economic Threats** – delayed economic reforms, monopoly, unfair competition, hidden economy, poverty, unemployment, etc.
- **Social Threats** – demographic crisis (low birth rate, high death rate, lots of economic migrants – mainly young and educated people); high crime rates including organized crime (theft of physical and intellectual property);
- **Technological Threats** – degree of technological development including the competitors'; business espionage; technological disasters, etc.);
- **Ecological Threats** – natural calamities and catastrophes, breakdowns and contaminations, pandemics; food, water and resource shortages, etc.

As discussed earlier in the cited studies with all the indicators, evaluation of security threats (in general) and within a particular sector of industry is a very complicated issue which cannot be addressed generally. Researchers and professionals express different opinion on the issue mainly because the lack of working unified methodology for accurate business threats evaluation. The main difficulties, according to the author, are related to:

- **Enhanced information security and 'no sharing' policy in today's business world** – an issue that can be traced to international relations due to the policy of 'no sharing' of intelligence even between state members of partner intergovernmental

military alliances which has led to some of the most serious terrorist attacks in the XXI century. Restricted access to actual and relevant data related to the problem statements by today’s companies (for keeping their competitive advantages) makes it harder for researchers to develop reliable methodology.

- **A large number of specific ‘industry related’ current threats and various channels for potential ones** – distinguishing ‘universal’ threats is extremely difficult. Each sector/business/enterprise faces various issues.

- **Time lapse in threats’ impact** – overall impact of some threats on a particular object (especially the indirect ones) can cover large intervals of time.

Table 6

Indicators for Analysis and Evaluation of External and Internal Security Threats

<i>EXTERNAL ENVIRONMENT</i>	<i>IMPACT</i>				
<u>1.1. POLITICAL/LEGAL INDICATORS:</u>					
<i>1.1.1. Political Instability</i>	1	2	3	4	5
<i>1.1.2. High Levels of Corruption</i>	1	2	3	4	5
<i>1.1.3. Tough Bureaucracy</i>	1	2	3	4	5
<i>1.1.4. Lack of State and Local Financing</i>	1	2	3	4	5
<u>1.2. ECONOMIC INDICATORS:</u>					
<i>1.2.1. Delayed Economic Reforming</i>	1	2	3	4	5
<i>1.2.2. Monopoly</i>	1	2	3	4	5
<i>1.2.3. Unfair Competition</i>	1	2	3	4	5
<i>1.2.4. Hidden Economy</i>	1	2	3	4	5
<u>1.3. SOCIAL/CULTURAL INDICATORS:</u>					
<i>1.3.1. Worsening Demographic Situation</i>	1	2	3	4	5
<i>1.3.2. Lack of Qualified Manpower</i>	1	2	3	4	5
<i>1.3.3. High Levels of Crime</i>	1	2	3	4	5
<i>1.3.4. Terrorism, Extremism, Radicalism, etc.</i>	1	2	3	4	5
<u>1.4. TECHNOLOGICAL INDICATORS:</u>					
<i>1.4.1. Degree of Technology Development in the Sector</i>	1	2	3	4	5
<i>1.4.2. Decreasing Material Resources</i>	1	2	3	4	5
<i>1.4.3. Undeveloped Infrastructure</i>	1	2	3	4	5
<i>1.4.4. Technological Catastrophes</i>	1	2	3	4	5
<u>1.5. ECOLOGICAL INDICATORS:</u>					
<i>1.5.1. Environmental Disasters and Catastrophes</i>	1	2	3	4	5
<i>1.5.2. Breakdown and Pollutions</i>	1	2	3	4	5
<i>1.5.3. Pandemics</i>	1	2	3	4	5
<i>1.5.4. Decreasing Natural Resources</i>	1	2	3	4	5

<i>INTERNAL ENVIRONMENT</i>	<i>IMPACT</i>				
<u>2.1. STAFF RELATED INDICATORS:</u>					
<i>2.1.1. Workplace Violence</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.1.2. Negligent Hiring</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.1.3. Negligent Supervision</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.1.4. Substance Abuse (Drugs/Alcohol)</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.1.5. Strikes</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.1.6. Theft by Employees</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<u>2.2. ORGANIZATIONAL INDICATORS:</u>					
<i>2.2.1. Fraud by Managers</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.2.2. Unethical Business Conduct</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.2.3. Risks for Higher Management</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.2.4. Kidnapping and Extortions</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<u>2.3. FINANCIAL INDICATORS:</u>					
<i>2.3.1. Business Espionage</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.3.2. Robberies</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.3.3. Intellectual Property Theft</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.3.4. Insurance/Workers' Compensations Fraud</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<u>2.4. IT INDICATORS:</u>					
<i>2.4.1. Cyber/Communications Threats</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.4.2. Privacy Concerns</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.4.3. Identity Theft</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>2.4.4. Software Threats for Supply-Chain Security</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>

The above difficulties need to be taken into consideration during the structuring of the study. The author believes that one of the most important steps towards neutralizing the described difficulties and many other is the correct and grounded selection of indicators for threat analysis and evaluation.

The initial classification is based on the logically summarized sources of threats for today business enterprises. The first group includes threats originating from the external macro environment which is divided into five subgroups: 1) political/legal threats; 2) economic threats; 3) social/cultural threats; 4) technological threats; 5) ecological threats. The second group summarizes internal threats for the industrial enterprises. A major part of the featured indicators are adopted by Securitas classification (table 2) and they can be broken down into four groups: 1) staff related threats; 2) organizational threats; 3) financial threats; 4) IT threats. The two groups form a total of 38 indicators which are included in a survey. The results from it must show which groups and subgroups have greater impact on researched enterprises' operations (5 – very serious impact; 1 – very low impact).

Conclusion

To sum up, the developed methodological framework fully or partly neutralizes some of the analyzed studies' weaknesses in table 1 as follows:

- it is designed only for industrial enterprises, operating in the chemical sector;
- it considers the specific regional and state political, economic, social, cultural, technological and ecological factors;
- the framework could be used not only by scientists, but also by managers from the chemical industry and by corporate security professionals;
- it summarizes the strengths found in corporate security and threat evaluation theory, researched industry features, conducted studies and security professionals point of view;
- by evaluating the featured indicators, the author searches for grounded assumptions related to active corporate security value and possible applications of researched theory into the Bulgarian industrial enterprises' operations.

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