

BUSINESS CONTINUITY AND DISASTER RECOVERY AS A PART OF MARKETING CONCEPT

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Abstract

This paper explores certain aspects of possible conceptual relationship between concept of business continuity planning (BCP) with disaster recovery (DR) and uncontrollable factors of marketing macro environments. It provides an overview of fundamental marketing concept principles as well as BC/DR principles, and gives an outline of basic procedures necessary for their successful application within marketing concept in order to ensure uninterrupted functioning of an organization in case of environmental or human-related adverse influences. Given that the extent of assets allocated to BC/DP segment will largely be determined by business operation considerations, this paper elaborates marketing macro environment factors relevant to establishment of a functional BC/DR plan.

Keywords: *marketing concept, macro environment, business continuity, disaster recovery, security procedures*

1. INTRODUCTION

Considering modern business conditions, it is obvious that all kinds of businesses and companies operating in the inconsistent market are exposed to numerous threats. The market has become global, so the risk in business has become global also.

The conceptual approach has become more necessary than ever for all businesses and it is possible to claim that those who operate without elaborate business plan cannot survive in the long term.

However, the threats that lurk on the market are not from today. That is why the management of all enterprise units takes care of the product, price, promotion of companies or products and services, the distribution, market analysis, as well as other significant management factors for business companies. Likewise, it is necessary to take into consideration not only microenvironment of a company, but also marketing macro environment of companies. There are numerous examples of different raw materials shortages, two-digit inflations, crises and recessions, political and military conflicts that have significantly affected company operations regardless of their dominant activity.

Thus, many well-known companies (e.g. Chrysler, MG Rover, Moto Guzzi, Panama, Tohatsu, Hugo Boss, etc.) [1] experienced a business crash, because they were not ready to overcome difficulties arising from the marketing macro environment. Even so, there are examples when the company that went to bankruptcy several times and already depreciated (e.g., Hugo Boss and Tohatsu) [2] becomes a reality and starts operating again.

Precisely for these reasons, modern companies should approach the systematic planning of operations by hiring experts who could plan the operations with the least possible risk. Sudden changes in current economic trends have been characterized by Drucker P. and Toffler A. as "age of discontinuity" and "future shock" [3], and such a change in business requires a systematic approach. It is possible to recognize such a systemic approach to business in business continuity planning (BCP), disaster recovery (DR) and in the marketing concept (MC).

2. OBJECTIVE AND PURPOSE OF THIS PAPER

The main objective of this paper is to find possible conceptual relationship between the concept of business continuity planning (BCP) with disaster recovery (DR) and uncontrollable factors of marketing environments.

The main purpose of this paper is to interpolate business continuity (BC) and disaster recovery (DR) within marketing concept (MC) and to show that those two concepts are not confronted, which can suggest (imply) their possible complementarity.

According to the objective and purpose of this paper the hypothesis was set.

Hypothesis: Concept of BC/DR is not incompatible with concept of marketing

3. METHODOLOGY

In this paper some of the general methods of scientific research are used as follows: a systematic observation [4], descriptive method [5], causal method [6], inductive and deductive method [7] and methods of analysis and synthesis [8] in order to research, analyze, describe and conclude.

4. MARKETING CONCEPT VS. BUSINESS CONTINUITY PLANNING

4.1. Marketing concept – definitions and objectives [9]

Term marketing has Anglo-Saxon root and consists of two parts - the word "market" and the suffix "ing". One of possible translations and explanations of the concept of marketing is related to the verb "to market" and "ing" which creates a ing-form. [10] The verb "to market" can be understood as willingness to purchase, or buying or selling in the market. However, understanding of marketing says that marketing is a set of activities to be carried out as transfer of ownership of goods from the seller to the buyer in a specific way. So, with respect to other opportunities, the term marketing needs to be understood as market operations, i.e. as a specific mode of action in the market. [11] Nevertheless, an explanation of the term alone does not give the full meaning of the

term.

In fact, marketing includes marketing management, conceptual and strategic planning, analytic marketing system, market research, product planning, markets analysis, merchandising, sales and distribution, after-sales service to consumers, price planning, various promotional activities and many more. [12] Still, those who are engaged in marketing theory and practice have different opinions about the meaning of marketing and explain differently the importance of these elements. From this fact a number of different, though essentially similar, interpretations of the meaning of marketing arise. So, those are the reasons why at this point several definitions are carried out that indicate the best of marketing as a conceptual approach to business:

- "Contemporary marketing indicates business activities that link production with consumption according to principle "as much as possible" but profitable and meets the needs of society that appear as market demand." [13]

- "Marketing as a company policy, which is oriented in a way to answers market demands. This involves a much wider definition of commercial operations ... It encompasses everything from production, through procurement, personnel, funding, research to sales - including overall planning and structure of the firm. This is a new way of thinking; it is a business philosophy..." [14]

- Marketing, in addition to being a business orientation, is a concept and business philosophy, group of activities and business process management. Marketing activities are expressed through elements of the marketing mix, the so called 4-P (product, price, place-distribution and promotion). The process of marketing means a connected series that integrate company objectives and resources in accordance with the conditions and opportunities in the environment." [15]

Through the presented definition it is possible to identify some basic features and views of marketing as a business concept, business functions and economic processes. Quite understandably, the above mentioned features are common to most of those who deal with it. The reasons are more than clear. Marketing is a business concept, because it rests on the concept of demand, the concept of its satisfaction, product concept, concept of exchange, concept of markets and concept of a marketer (participants). Also, marketing is a business concept that is universal, because you can "apply it in all enterprises regardless of size, industry or country of origin" [16]

Marketing has a systematic approach to the function of the set goal, which is based on business function: identification, anticipation (prediction) and anticipative expectations, defining and meeting the demand.

Marketing application does not only refer to the present but also to the future. Future decisions depend on the marketing approach. In doing so, a systematic, ongoing approach is important, because marketing is not imitating its authenticity, nor does it ultimately produce the result. Therefore it can be concluded that marketing cannot be imitated, which further emphasizes its importance.

Of course marketing has its application in profit and nonprofit organizations and micro and macro level. Marketing macro environment consists of broader social forces that affect all actors in the microenvironment of the company (single employer, customers, suppliers, intermediaries, competitors and narrow the public), and it can be [17]:

- *Social conditions* (educational structure, religion, geographically defined living conditions, social classes (structures), lifestyle and personality)
- *Demographic circumstances and factors* (population, rates of mortality and fertility, changes in population structure - relations between age groups, the

- impact of family growth (decline), sudden global population growth, migration, ethnic and racial changes, population density)
- *Economic conditions and status of economy* (economic and competitive forces, size of the country, standard and growth-decline of real income, growth-decline of industrial index, growth-decline of state budget, continuous inflation pressure, high external and internal debts, savings, dynamic and continuous changes in model of consumer behavior)
- *Cultural heritage and cultural strength* (cultural values of society, subcultures, relationships to nature and society)
- *Physical environment* (threatening shortages of certain raw materials and energy, rise of energy costs, management of natural resources, shortage of water, natural disasters – floods, fires, earthquakes, volcanoes, landslides etc.)
- *Technical and technological development* (rapid technological development, unlimited possibilities of innovation, level of the budget for R & D, supporting regulations)
- *Political situation* (sociopolitical system, political parties, public interest groups)
- *State of Law* (functioning of tripartite authority – executive power, legislative and judicial body, consistent application of legislations and regulations)
- *Legislation* (legislative regulations, alignment with the EU Acquis Communautaire, improving of all areas of legislation with present time)
- *Public community* (public relationship, freedom of speech, independent journalism).

As it was said before and will be further elaborated on in paragraph 5, modality of establishment of a logical connection between the key concepts of BC/DR and marketing concept (MC) with the help of macro environmental factors, it is necessary to mention that MC creates plans that affect the future of the company, but also puts significant emphasis on the possible devastating effects on business caused by some of the factors of macro environment. Therefore, the current terms and conditions set in accordance with the MC may serve as a starting point from which further concepts of BC/DR planning can greatly help in future business activities.

4.2. Business continuity and disaster recovery – definitions and objectives

The concept of business continuity is increasing in importance in modern operational environment. In a time when business are becoming more flexible and adaptable in their approach to market positioning, and simultaneously more rigidly structured from within in order to maintain the ability to produce goods and services in the most efficient manner, it has virtually become a standard for a business to operate around the clock.

In an environment with such demands, any interruption in continuity of operations carries the risk of potentially disastrous consequences. Therefore, it is imperative for business to implement proper procedures as a preventative measure against disruptive influences of any origin.

Business continuity planning (BCP) may be defined as the identification and protection of critical business processes and resources, critical meaning those the functioning of which is indispensable to maintaining an acceptable level of business operations. It also encompasses the preparation of procedures to ensure the survival of the organization in times of business disruption [18].

Alternatively, BCP can also be defined as the creation of a logistical plan dealing with procedures for recovery and partial or complete restoration of interrupted critical functions of an organization. These result in a document called a business continuity plan (BCP), whose purpose is to minimize the duration of the recovery and restoration phase, as well as their cost, by providing a pre-planned set of tested guidelines.

The objective of BC/DR planning extends beyond simple restoration of operational capability. A good business continuity plan also deals with preserving the organization's reputation and image, its customer base and market share, as well as its profitability.

In an ideal situation, the implementation of a business continuity plan in the event of a disruptive influence would ensure the complete preservation and seamlessness of business operations viewed from the outside of the organization, with no loss whatsoever. In reality, however, that is not always a realistic expectation. That is why it is important to accurately determine critical functions and critical dependencies.

Critical functions are those whose interruption for a period of time longer than the period determined by a BCP is considered unacceptable. Also, a function is regarded as critical if it represents a legal requirement for a business operation. Critical functions determine critical dependencies, those being areas which, if adversely affected, would cause the greatest harm to an organization's operational capabilities [19].

The development of a formal business continuity plan generally consists of five main stages: 1. Impact analysis, 2. Solution design, 3. Plan implementation, 4. Plan testing, 5. Maintenance and adaptation.

Impact analysis focuses on determining critical functions and critical dependencies of an operation [20]. For each critical function, a business continuity plan determines two values: recovery point objective (RPO) and recovery time objective (RTO). Recovery point objective is a value determining the acceptable level of loss of operational assets, while recovery time objective sets the limit on maximum acceptable amount of time in which functionality is to be restored. Following a detailed analysis of potential risks and vulnerabilities, a set of solutions is designed to counter their negative effects. With high-impact disruptions, a BCP considers business operations as a whole, and strives to rebuild the critical dependencies as quickly as possible. This will often require circumventing regular procedures and focusing on the end result. Some aspects of the business will inevitably suffer during that phase, but at that point the priority is uninterrupted production or services. For low-impact disruptions, BCP provides readily available temporary workaround solutions, either through modifications of the interrupted process in such a way that it produces the same result via a different method, or by shifting the workload to an unaffected work unit until the affected section can recover and restore sufficient functionality.

The implementation of a BCP includes setting up the required infrastructure that is to come into play in case of a business disruption. It assumes that all the relevant personnel are adequately trained and informed, that procedures are made known and are readily available, and that everyone involved is fully aware of their tasks and responsibilities in case of a crisis [21][22].

Plan testing is a crucial component for identifying planning flaws. It is reasonable to assume that a plan which fails to be successfully implemented in a test setting will fail much more catastrophically when an attempt is made to execute it under conditions of severe stress. That is why it is important that a BCP is precise and specific.

Testing intervals of a BCP are a matter of organizational planning, but it is recommended to perform tests on a regular basis. Any flaws in the plan identified during

the testing phase are addressed by the BC/DR planning team, corrections are entered into the BCP, and the upgraded version is tested during the next test cycle.

5. CRITICAL FUNCTIONS, CRITICAL DEPENDENCIES AND RESPONSE TRIGGER POINTS VS. MARKETING MACRO ENVIRONMENT FACTORS

It is possible to establish a logical connection between key concepts of BC/DR and marketing macro environment (MME) factors in the following manner:

First, it should be noted that BC/DR planning is not concerned with the current conditions a business is operating in, but rather focuses on changes in those conditions. Therefore, the current state of MME serves primarily as a base on which starting point in BC/DR planning is determined.

Second, it is obvious that changes in MME affect the functioning of a business in either a positive or a negative way. This is why the team working on BC/DR planning uses observations of the MME to determine the manner in which they will reflect on business operation. It is important to keep track of MME as a whole because, even though the changes in MME may be considered positive (such as an unexpected breakthrough in technology or a positive change in legislation), those changes may still have a negative impact on the business itself.

It should be taken into account that, for the MME factor to be considered a significant threat to business continuity in the context of BC/DR planning, it has to be either completely unexpected or unexpectedly fast in its development and impact. If a change in the marketing macro environment is sufficiently slow or if there was ample time to prepare for it, dealing with its effects falls outside of the domain of BC/DR planning. Therefore, the degree in which an MME category directly influences the creation of BC/DR plan is in proportion with the speed and unpredictability of the changes in that category. From this it naturally follows that, even though all MME factors must be duly considered, greater attention will be given to those more prone to sudden changes.

Also, an important part of creating a functional BC/DR plan is the setup of proper response trigger points, i.e. a predetermined set of conditions which, when met, prompt the BC/DR management structure to initiate appropriate action in order to minimize disruption to operations. Those conditions must be described in BCP in detail.

It is apparent that response trigger points directly correspond to certain points on the change continuum of MME factors. Therefore, through analysis of potential changes in the MME, it is possible to determine where to set the response trigger points for initiation of various procedures in the BC/DR plan. In order to illustrate the compatibility of crucial BC/DR planning aspects and MME factors, it is sufficient to briefly examine the main categories of MME factors as they relate and influence the BC/DR concept. While specific BC/DR techniques are beyond the scope of this paper, it is evident that the principles of BC/DR correspond to conditions imposed by MME factors which are mentioned in chapter number 4.1.

1. Social conditions

From the viewpoint of BC/DR, social conditions are for the most part slow to change, and are therefore not highly likely to cause unexpected business disruptions. Regardless of that, they still have the potential to cause significant disruptions in the business process if they are not accounted for properly.

2. Demographic circumstances and factors

Similarly to the social conditions, most demographic circumstances are relatively slow to change and can be predicted with sufficient degree of accuracy, making it possible to make corrections in business operations before the situation deteriorates enough to make it a BC/DR problem. However, certain aspects of demographic circumstances can be prone to unexpectedly sudden changes. This is especially true for migrations that can be caused by natural disasters in neighboring areas, wars and social unrests, sudden changes in political regimes of neighboring states, and a number of other factors. These migrations have the potential to cause sudden demographic changes which can have significant impact on business operations. Therefore it is important for BC/DR planning team to take into account those circumstances, not only in the immediate area of operations, but also in surrounding areas.

3. Economic conditions and status of economy

This set of factors is inherently prone to more sudden changes, and as such has to be accounted for in creation of a BC/DR plan. Every non-governmental organization operating with intention to make profit is affected by those conditions. Positive changes in economic conditions are unlikely to adversely affect business operations; however, negative changes in economic conditions will most certainly have an impact. Since negative changes in economy are usually more pervasive and affect all levels of business operations, they are extremely difficult to circumvent, even through extensive planning. That makes it all the more important to account for them in creation of a BC/DR plan. This is why the team charged with the formulation of the BC/DR plan has to keep close track of the state of economy in the region in which a business operates. In the event of a severe and sudden economic degradation, the BC/DR plan should have in place methods for achieving sufficient results while reducing costs, such as outsourcing the production of goods to another region, reducing employee number to critical personnel, reducing physical infrastructure to essential minimum, transferring majority of operations to the Internet instead of using physical resources, and other procedures. These operational changes must be designed to be robust and durable, since the timeframe of economic recovery can be significant.

Significant sudden changes in consumer behavior is also one of the marketing macro environment factors likely to cause disruptions in business continuity, especially if significant company resources are committed to production of goods and services which suddenly become non-marketable. BC/DR plan should account for recovery procedures in cases where company ends up with either a large number of non-marketable products, or with a deficit of products the market requires. Such procedures might include secondary markets for surplus products or adjustments in product presentation, as well as secondary sources or product importing.

4. Cultural heritage and cultural strength

General cultural values of a society are usually slow to change in stable environments. However, those changes can be a secondary effect of political changes, and as such cause disruptions in business continuity by rapidly changing cultural values – changing what is perceived as “desirable”. This can cause a product or a service to quickly become undesirable, or even problematic in nature. Also, companies that supply predominantly to meet the needs and desires of certain specific subcultures are particularly vulnerable, since smaller demographic groups are inherently more prone to rapid changes in taste and preferences. A BC/DR plan should therefore account for the possibility of such changes, and prepare procedural solutions which will effectively adjust the company’s focus to rendering “appropriate” goods and/or services.

5. Physical environment

Elements that fall under the category of physical environment make up the majority of BC/DR planning concerns. This is due to the fact that the nature of those changes is quick and unpredictable, and the impact potentially devastating. These include, among others, shortages of raw materials; interruptions of energy supply; damage to critical infrastructure caused by human act or natural forces, such as earthquakes, floods, volcanic eruptions, draughts and fires; and many others. The procedures for dealing with such disruptions will vary according to the nature and size of the organization, its resources and area of operations. The primary role of a properly implemented BC/DR plan in those situations is to restore company functionality as quickly as possible using whatever means are available, while the environment regains enough stability to restore a more sustainable modus of functioning. Those measures may vary from simple outsourcing (in cases of smaller-scale disruptions, such as localized temporary power shortages) to relocating the majority of operations, management and infrastructure to a more stable area (in cases of severe incidents with long-lasting effects, such as large earthquakes followed by social instability).

6. Technical and technological development

The level of technical and technological competence today has a significant influence on the market positioning of a company. While strictly speaking it is not a BC/DR issue, a company may experience serious setbacks if it allows itself to fall behind the curve on the technological development continuum, so BC/DR plan has to account for that also. More direct application of this MME factor is the application of technical and technological development in creating and updating the BC/DR plan. A BC/DR plan has to keep track of latest technological developments and implement them into its procedures in order to achieve maximal efficiency. This will have a direct influence on the stability of the business in general.

7. Political situation

Political situation has a significant impact on business continuity planning. This is because changes in political regime of a region can have impacts that are difficult to predict, and can affect all aspects of business operation. Due diligence has to be given to possible implications of political changes when developing a BC/DR plan. In most extreme cases, changes in political regime may require relocation of the entire business operation to a different country.

8. State of law

This MME factor affects the functioning of the entire business operation by being a prerequisite for dependency and stability in the area of operations. BC/DR procedures in case of a collapse of the rule of law are by nature very demanding and complex, as it is extremely difficult for any business to function in such an environment. However, as can be seen in several theaters of operations today, a well-prepared company can function with profit even in a failed state. It should be noted that such manner of operation implies measures specific to the operating environment, and those measures have to be prepared well in advance, as it is highly unlikely that an “ad hoc” solution will be sufficient in such an extreme environment.

9. Legislation

A company intent on stable functioning has to take into consideration the changing nature of legislative regulations in the region in which it operates. While legislative changes usually take place slowly and with ample warning, some may be the direct consequence of swift changes in government and are more difficult to predict. As it is unacceptable for a company to function any duration of time outside of compliance with applicable legal regulations, this has the potential to cause business continuity

disruptions. Another element relevant to the BC/DR planning is that changes in legislation may make some of the measures prescribed in the BC/DR plan obsolete or even illegal. This is why a BC/DR plan has to be regularly revised and harmonized with current laws.

10. Public (community)

The negative impact on business caused by incurring a negative public image must not be underestimated. In an environment protecting freedom of speech and independent journalism, the company is always vulnerable to negative publicity. Another vulnerable point in this category is leakage of confidential information. Both of those situations require quick and decisive implementation of pre-developed BC/DR procedures to minimize the damage to the company; but any such procedure must also operate within what is considered publicly acceptable, or it might cause additional harm.

6. CONCLUSION

It follows from the above mentioned arguments that the concepts of BC/DR and marketing are mutually dependent. While BC/DR deals primarily with the effects of an adverse event by creating procedures to maintain and/or restore functionality and is more technique-oriented, the concept of marketing serves to provide a proper context for optimal design and implementation of those procedures. A BC/DR planning team must have significant insight into the rules of marketing in order to formulate a set of procedures that will not only work as a “patch” for an immediate problem, but also contribute to long-term recovery of the affected organization by placing those measures within a broader economic perspective [23].

Analyzing presented arguments, there is no doubt that is possible to establish a logical connection between key concepts of BC/DR and marketing macro environment factors. Also, it is clear that BC/DR planning is not concerned with the current conditions a business is operating in, but rather focuses on changes in those conditions. However, despite the fact that marketing concept (MC) creates plans that affect the future of the company and also puts significant emphasis on the possible devastating effects on business caused by some of the factors of macro environment, marketing concept needs BC/DR planning. So, marketing macro environment current status serves primarily as a base to determine starting point in BC/DR planning and changes in marketing macro environment affect the functioning of a business in either a positive or a negative way.

Finally, according to relevant arguments that match the main objective and purpose of this paper, and also match the set hypothesis, it is possible to conclude that set hypothesis is proved.

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