STRATEGIC RESPONSE TO RISKS IN DIGITAL MARKETING

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Abstract: This paper presents the risk management process applied to digital marketing strategies within a research organization. Specific risks are identified, analysed, and catalogued. These risks are assessed using the risk index and risk matrix methods, measuring the probability of occurrence and the potential impact to calculate risk factors. Following the risk assessment, generic risk management strategies are proposed. This risk management framework is applicable to various organizations involved in digital marketing, providing a structured approach to mitigating risks and improving overall marketing effectiveness.

Key words: risk management, digital marketing, mitigation strategies, interconnected risks, operational risk.

1. Introduction

According to the ISO Standard 31000, risk is defined as the effect of uncertainty on the achievement of objectives, where uncertainty is the partial or total lack of information related to the understanding or knowledge of an event, its consequences, or plausibility (2009). Organizations of all types and sizes face factors that induce uncertainty, and all organization activities involve risks. Thus, the marketing department encounters risks specific to the activity undertaken, but also general risks that manifest themselves in a comprehensive organizational framework, usually under the responsibility of top management (Deselnicu, Barbu and Haddad, 2023).

Risk management involves identifying, analysing, and assessing risks and generating generic and specific strategies for dealing with risk. As a proactive process (Figure 1), it involves monitoring, improving, and adapting to the current context on an ongoing basis (Institute of Risk Management, 2022). The Plan-Do-Check-Act (PDCA) model is an effective method for managing risks within an organization, providing a structured framework for continuous process improvement. This model, also known as the Deming cycle, was

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developed in the 1950s by W. Edwards Deming, an American expert who promoted the idea that continuous process improvement contributes to steering an organization towards success, as it helps organizations become more efficient and competitive (The W. Edwards Deming Institute, 2024). PDCA unfolds in four main stages.

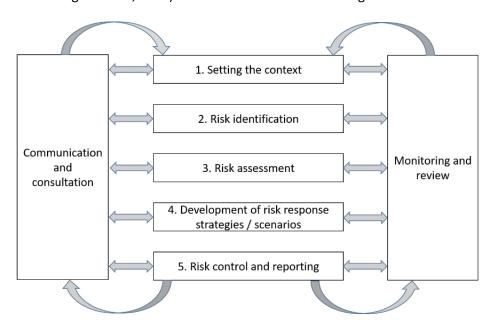


Fig. 1. Risk management process

In the first phase, the "Planning," clear objectives, strategies, and the necessary resources to achieve them are established, along with the methods for evaluating success. The second phase, "Implementation," involves putting the planned activities into practice, following the defined processes and procedures. The next phase, "Checking," compares the results obtained with the expected ones, identifying any differences or deficiencies. In case of discrepancies, corrective actions are taken to get back on track. The final phase, "Action," uses the evaluation results to improve processes and adjust activities, thus facilitating a continuous cycle of improvement. In risk management, applying the PDCA model allows for a rapid response to emerging risks and contributes to more effective risk control. Furthermore, by using this model, the organization can achieve its business objectives with reduced risk. However, the success of PDCA implementation depends on the commitment of the entire organization and the constant review of results, which can sometimes pose a challenge (Kramarz and Korpysa, 2023).

Each specific sector has its own needs, audiences, perceptions and criteria. Therefore, a very important step in the risk management process is context setting, as an activity at the beginning of this generic process. Communication and consultation are also essential processes that keep counter strategies relevant and increase the likelihood of achieving objectives (Fekete, 2012). The internal context may include the socio-technical structures, policies, capabilities, relationships with internal stakeholders, organizational culture, the form and aplociation of contractual relationships, standards, guidelines and models adopted by the organization (International Organization for Standardization, 2009).

By contrast, the external context of the entity under study refers to external elements that may influence its activities and decisions. These parameters can be framed in the cultural-social, political-legislative, technological, economic, natural and competitive environment, at international, national, regional or local levels (International Organization for Standardization, 2009). In the dynamic context of today's markets, where the marketing department represents the bridge between the organization and the customer, it is exposed to a multitude of factors with intrinsic potential to produce risks (Deselnicu, 2014).

With the evolution of technology, communication channels have diversified and digital marketing has become a strategic tool, bringing with it both opportunities and challenges (Simion and Popescu, 2023). Identifying potential risks that exist within the organization that may change over time is an ongoing process, as risk factors evolve and the organization must be prepared to manage these changes. The aim of this stage is to identify the sources of risk and to answer questions such as the nature of the risk, its severity or the scope of action (Dumitrescu and Deselnicu, 2018). In addition, given the interactive nature of the digital environment, risk management needs to integrate continuous feedback from consumers, to ensure that marketing strategies quickly adapt to their requirements and preferences. However, risks can have both negative and positive consequences, they may or may not be quantifiable, and can be categorized into pure risks, also called hazard risks; control risks, usually associated with project management; and speculative risks, also called opportunity risks (Deselnicu, 2014).

The latter can also have positive effects and are deliberately assumed. These classifications are taken into account in the risk prioritization process. Thus, risk identification is the first important step in recognizing and cataloguing all potential threats that may affect marketing activities.

2. Methodology

2.1. Risk identification

In the digital environment, operational risk encompasses a wide range of risks, including human errors, IT system failures, supply chain disruptions, fraud, compliance issues, natural disasters, cyber-attacks, and internal control failures. According to Peter Bernstein, operational risk refers to the risk associated with the actions or inactions of internal business processes, involving employees, information systems, or external events. These factors can lead to significant financial losses, reputational damage, or other adverse consequences for the organization. Bernstein emphasizes that operational risk is one of the most important risks for companies, and its sources include human errors, technical failures, IT system issues, and fraud. He highlights the importance of managing operational risk to maintain an organization's financial stability and reputation. He states that risk management strategies should include identifying, assessing, controlling, and monitoring risks, as well as using appropriate tools and procedures for risk management (Kramarz and Korpysa, 2023).

Zawiła-Niedźwiecki offers a similar definition, explaining that operational risk arises from factors such as process problems, system failures, human errors, and external

factors. These risks may occur due to inadequate measures taken to prevent or mitigate the effects of risks, as well as from actions taken by clients or business partners. Additionally, he emphasizes the importance of employee training, ensuring that they have the knowledge and skills necessary to manage risks effectively (Kramarz and Korpysa, 2023). Furthermore, business processes must be aligned with operational risk management requirements to minimize potential negative impacts on the organization.

Risks specific to digital marketing describe both external threats, such as rapid changes in technology and fluctuations in consumer preferences, and internal factors, such as lack of coordination in marketing strategies or poor data management. Ten domain-specific risks will be considered (Table 1). This analysis includes hazard risks, control risks and speculative risks, to create a clearer picture of the methodology to combat them, each of which has distinct characteristics and implications. It will also demonstrate how they are interrelated, emphasizing the interconnected nature of the risks.

Identifying the specific risks of digital marketing

Table 1

Symbol	Risk	Manifestation	Type of risk
R1	Non-competitive products	Risk of fluctuations in consumer preferences	Hazard
R2	Missing data	Risk of poor data management	Hazard
R3	Falling behind competition	Risk of inability to innovate	Hazard
R4	Loss of digital visibility	Risk of decreased organic visibility	Hazard
R5	Cybersecurity compromised	Risk of cyber attacks	Hazard
R6	Fall in sales	Risk of inappropriate market fragmentation	Control
R7	Customer migration	Risk of loss of customer loyalty	Control
R8	Brand image damage, loss of customer trust	Reputational risk	Hazard
R9	Brand image enhancement	Reputational risk	Speculative
R10	Investing to generate sales	Promotion campaigns	Speculative

Fluctuations in consumer preferences (R1) are a constant challenge in digital marketing. These fluctuations can be determined by a variety of factors belonging to any external framework: socio-cultural, political-legislative, economic or technological (International Organization for Standardization, 2009). A trend can rapidly change the way consumers perceive a particular product or service; even Benchmarking can create this effect. These fluctuations are also a consequence of the growing influence of social networks and influencer marketing. Opinions and reviews shared on these platforms can rapidly change public perception (R8) of a brand or product. For example, a viral negative review can cause a sudden drop in interest in a product, even among consumers who were previously loyal to the brand (R7). Also, economic crises or political events can influence the purchasing power and thus consumer preferences, leading to significant changes in buying (Deselnicu, Negoita and Purcarea, 2018). In addition to these factors, there are also temporal influences, such as seasonality or special events, which can cause variations

in consumer behaviour. For example, preferences may fluctuate significantly during the holiday season, when consumers are more likely to buy specific products. This malleability in consumer preferences can affect the marketing strategy (Ejrami, Salehi and Ahmadian, 2016), resulting in unsatisfactory campaign performance (R10).

Improper data management (R2) is a specific risk in digital marketing, with direct implications for how organizations interact with their customers. In digital marketing, companies collect a variety of information about consumers, such as demographics or purchasing behaviours. If this data is incomplete, inaccurate or wrong, organizations risk developing campaigns that do not reflect reality (Ţucă, Deselnicu and Simion, 2024) or lead to low conversion rates (R4).

Efficient data organization is as important as data quality. Information scattered in different systems without a clear structure makes it difficult to get a coherent picture of consumer behaviour and data processing. This disorganization can create confusion among marketing teams, who lack a solid foundation of data to make informed decisions, thus affecting the direction and focus of efforts (Fekete, 2012). Data management also involves analytics on consumer behaviour. This data is meant to create predictability in consumer interactions with the organization. Without proper analysis, companies risk missing emerging trends or changes in preferences, affecting their competitiveness. This stagnation in adapting to new trends (R3) can diminish customer loyalty and engagement (R7).

Another constraint to the database management activity is legislative regulations, such as the General Data Protection Regulation (GDPR). Ignoring these rules can lead not only to financial penalties, but also to damage to the organization's reputation with consumers (R8) or loss of customer loyalty (R10).

Inability to innovate (R3) is a big disadvantage in today's dynamic environment. Failure to adapt to new technologies, trends (Simion and Popescu, 2023) and consumer expectations can lead to stagnation (Nechita, Ulerich and Radoi, 2024), which affects the ability to attract and retain customers (R7). This directly influences the results of the marketing team's efforts, with campaigns becoming less effective compared to competitors adopting new digital strategies and tools (Dumitrescu, Alexe and Alexe, 2009). Lack of innovation puts companies at risk of losing organic visibility (R4), as search engine algorithms and social platforms prioritize relevant content. At the same time, a stagnant approach may limit the ability to personalize the consumer experience, which is essential in the context of growing expectations (R1) for individualized digital interactions.

The risk of decreasing organic visibility (R4) is an increasingly important issue in digital marketing, as modern technology facilitates users' quick and constant access to information through mobile phones and other devices. In this context, new (R3) and relevant content is favoured by the algorithms of search engines and social platforms. Companies that do not maintain constant activity by generating up-to-date content risk not appearing in the top search results, but even when these conditions are met, visibility is not guaranteed. Algorithms consider several parameters, such as content quality, its relevance to the audience, user interaction and user interaction history with the brand.

Competition in the same niche further complicates the situation. If several brands simultaneously publish similar content, the exposure of each brand can be diminished, even for those that invest considerable resources in creating quality content. The search engine results are therefore a ranking of the return on relevance efforts.

The risk of cyber-attacks (R5) is a major concern in today's digital environment, given the rapid expansion of information and communication technologies, as well as the increasing volume of sensitive data managed by organizations. The consequences of these attacks are often severe (Deselnicu, 2014), especially as they represent the initiatives of malicious actors. They include: significant financial losses, damage to the organization's reputation (R8) and diminished consumer trust (R7). A cyber-attack can also cause significant disruption to operations, leading to remediation and restoration of the affected IT infrastructure. In addition, compliance with legal regulations such as GDPR imposes strict responsibilities on organizations regarding the security of personal data, and non-compliance can lead to financial penalties, damage to reputation (R8) or loss of customer loyalty (R7).

Inappropriate market fragmentation (R6) occurs when audience segmentation is not properly performed, resulting in ineffective marketing campaigns (Ejrami, Salehi and Ahmadian, 2016). This leads to generic communications that do not respond to the diverse or real needs of consumers, thus diminishing the impact and relevance of the messages delivered. The correct collection and analysis of personal data, through quantitative and qualitative methods, is essential for a proper understanding of consumer behaviour, but if data management and processing is not done properly (R2), the effect is the reverse. Analytical tools enable the development of market segments and the implementation of personalized marketing strategies in line with customer expectations (R1).

Customer loyalty (R7) can be difficult to maintain in today's competitive environment, characterized by a diversity of options available to consumers. Declining loyalty can be attributed to multiple factors, including service quality, failure to meet expectations and lack of commitment to social responsibility. These factors influence purchasing decisions and affect brand perception (R8), having a direct impact on consumer behaviour (R1) and organizational performance. The costs associated with attracting new customers increase significantly, as attracting new customers requires the allocation of additional resources to marketing campaigns. Moreover, once a business relationship has been damaged, it can be extremely difficult to re-engage the customer at a similar level of commitment.

Reputational risk (R8), as a pure risk, refers to the potential for damage to an organization's image and credibility as a result of negative perceptions from the public, customers, employees or other stakeholders. This type of risk can be generated by a variety of factors, such as ethical behaviour and legislative compliance, and the consequences can have long-term effects on the sustainability of the organization. A negative reputation can lead to significant losses in attracting and retaining customers, difficulties in recruiting and retaining employees, or restrictions in obtaining strategic partnerships or collaborations. In the context of digitization and instant communication, reputational risk has taken on an additional dimension. Information spreads rapidly through social networks and online platforms, which means that the impact of risk

materialization can escalate exponentially. Negative feedback, unfavourable comments and reviews can also affect public perception, even before the organization has the opportunity to respond.

When an organization decides to take the risks associated with its reputation, it invests in its image and credibility, hoping to reap long-term benefits (Deselnicu, 2014). This risk-taking can lead to a variety of outcomes: on the one hand, the organization may gain a solid reputation and a trusting relationship with customers. In this case, the risk (R9) is speculative.

The risk associated with promotional campaigns (R10) is essentially a speculative risk, as it involves investing resources in the hope of obtaining favourable results. Promotional campaigns can vary significantly in effectiveness, and their success depends on a variety of factors, including the creativity of the message, the selection of communication channels or the tailoring to consumer preferences. A well-designed campaign can have a considerable impact on brand visibility and attract new customers. On the other hand, a poorly executed campaign can lead to financial losses and negatively affect consumers' perception of the brand. However, taking these risks is vital to the organization's progress. Investing in marketing campaigns can open up opportunities for growth, increasing brand visibility and facilitating communication with target audiences.

Finally, risk context analysis highlights how risks are interconnected and have the potential to influence each other. Thus, through efficient and informed risk management, it can be seen that risks can be dealt with synergistically.

2.2. Risk assessment

Finally, the purpose of risk assessment is to determine the severity and likelihood of materialization of each identified risk. This involves a two-dimensional analysis of each risk, as risks can be quantified using a risk factor-based assessment model, which combines the probability of an event occurring with the impact of the risk materializing. Thus, the risk factor F_r is the product of probability P and impact I:

$$F_r = P \cdot I$$

In this case, the experience and expertise of specialists in the field will be used to note the probability and impact generated (Table 2) for a company active in research, where these are integers with values in the range [1;10].

Proper risk assessment is important for developing strategies appropriate to the real context. It can be observed that the identified risks are not very serious, given the associated low impact, but they present high probabilities of materialization.

Among the identified risks, reputational risk (R8), with a score of 35, represents the most important concern, highlighting the potential seriousness that negative perceptions may cause to the brand. This is followed by inadequate market fragmentation (R6) and loss of customer loyalty (R7), with scores of 28 and 24 respectively. These risks indicate significant potential challenges in maintaining a consistent market presence and fostering long-term customer relationships.

Risk assessment specific to digital marketing

Table 2

Risk symbol	Probability	Impact	Risk factor
R1	3	6	18
R2	4	4	16
R3	2	9	18
R4	2	5	10
R5	2	3	6
R6	4	7	28
R7	3	8	24
R8	5	7	35
R9	4	6	24
R10	2	5	10

At the other end of the spectrum, cyber-attacks (R5) and poor data management (R2) have lower scores (6 and 16 respectively), suggesting that these, while important, may require less immediate attention compared to reputational concerns. Likewise, risks associated with failure to innovate (R3) and fluctuations in consumer preferences (R1) also warrant attention, as their scores of 18 indicate mediocre implications for marketing effectiveness.

To prioritize risk management efforts, it is essential to first focus on the highest-scoring risks, especially reputational risk (R8) and related factors, to mitigate potential long-term effects on brand perception and customer loyalty. Thereafter, addressing the challenges associated with market fragmentation and customer loyalty can increase the effectiveness of the strategy. The values obtained from the risk index for each risk will be illustrated on the Risk matrix (Figure 2).

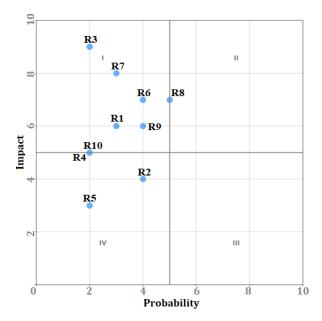


Fig. 2. Risk matrix

The risk matrix is a specific tool for risk management, providing a visual and efficient approach to classify identified risks based on their probability and potential impact. Utilizing the matrix enables organizations to achieve focused resource allocation and strategic planning in managing risks within digital marketing.

3. Results and discussions

In Quadrant I, where the risks are positioned—risk of fluctuations in consumer preferences (R1), risk of inability to innovate (R3), risk of inappropriate market fragmentation (R6), and reputational risk (R9)—the strategy is to transfer these risks to a third party due to their high impact. Quadrant II describes risks with high impact but lower probability, suggesting that termination strategies should be considered. Quadrant III corresponds to risks that require treatment strategies to minimize their effects; however, no risks have been identified that correspond to Quadrants II and III. Finally, Quadrant IV includes risks such as compromised cybersecurity (R5) and risk of poor data management (R2), which can be tolerated given their low impact. Additionally, the risk of loss of digital visibility (R4) and investing to generate sales (R10) are positioned on the border between Quadrants I and IV, while the reputational risk (R8) is located between Quadrants I and II. Thus, the generic strategies for mitigating risks have been determined (Table 3) according to their classification within the quadrants.

Risk assessment specific to digital marketing

Tabl	e 3
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Risk symbol	Risk general strategy
R1	Transfer
R2	Tolerate
R3	Transfer
R4	Tolerate/ Transfer
R5	Tolerate
R6	Transfer
R7	Transfer
R8	Transfer/Terminate
R9	Transfer
R10	Tolerate/ Transfer

These risk management strategies are often referred to as the "Four Ts" in risk management, referring to Transfer, Tolerance, Termination, and Treatment. The generic transfer strategy involves transferring the responsibility for risk management to third parties, such as insurers or business partners. This approach reduces the impact of risks on the organization, allowing it to focus on core activities without being affected by unforeseen events. Through transfer, risks are outsourced, which often entails costs. The tolerance strategy suggests accepting minimal risks in situations where the costs of managing them outweigh potential losses. This strategy corresponds to risks with low impact and low probability, where the organization believes that the resources needed to

manage them are not justified. Thus, it can focus on more significant risks without being disturbed by marginal ones. The termination strategy refers to the complete elimination of risks that have a high impact but a low probability of materializing. This may involve changes in business processes or abandoning certain activities that pose an unacceptable risk. Through this strategy, organizations can better protect their reputation. Treatment aims to reduce the effects of risks through proactive measures, such as implementing internal controls, policies, and security procedures.

4. Conclusions

The research highlights the importance of effective risk management in digital marketing, emphasizing the specific risks faced by organizations in this field. Identifying and assessing risks, such as fluctuations in consumer preferences and reputational risks, provides a deep understanding of the challenges that marketers encounter. By applying the risk matrix, it became possible to classify these risks based on their probability and impact, facilitating efficient resource allocation for risk management. High-impact risks, such as reputational risks (R8) and inadequate market fragmentation (R6), require increased attention and transfer strategies. In contrast, low-impact risks, such as those related to data management (R2) or cyber-attacks (R5), can be tolerated but should not be ignored.

Moreover, the research underscores the interconnectivity of risks, demonstrating how a decision in the management of one risk can influence others. For instance, poor data management can lead to ineffective marketing strategies, which can subsequently affect a brand's reputation. This dynamic suggests the need for an integrated approach in digital marketing strategy, where risk management is an essential part of strategic planning. By recognizing the interconnected nature of risks, organizations can develop more robust strategies that not only mitigate risks, but also capitalize on opportunities arising from a deeper understanding of market dynamics.

Furthermore, organizations that continuously adapt their marketing strategies based on identified risks not only protect their reputation but also enhance long-term performance. The ability to pivot quickly in response to identified risks allows companies to maintain relevance in a fast-paced digital environment. Proactive risk management in digital marketing is essential for sustainable success, ensuring that businesses are well-equipped to navigate the complexities of consumer behaviour, technological advancements, and competitive pressures.

In conclusion, the findings of this research underscore that sustainable success in digital marketing hinges on a proactive and integrated approach to risk management. Organizations that embed risk considerations into their strategic frameworks are better positioned to respond to emerging challenges and opportunities, ultimately fostering resilience and growth in an ever-evolving landscape. By prioritizing effective risk management, businesses can enhance their competitive advantage while safeguarding their brand's reputation in the digital marketplace.

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