Digital Possibilities of Internal Audit
Digitální možnosti interního auditu

VÁCLAV KUPEC

Abstract

Company management is a highly sophisticated activity which must employ the latest information technologies as ongoing digitisation allows company processes to be managed in a dynamic way, primarily with respect to the fast-changing economic environment. This also applies to internal audit, which helps to ensure flexible transfer of data concerning process deficiencies to the company leadership. The aim of the study is to verify the efficiency of the digital potential of the internal audit in the field of marketing, which forms an important part of company management. The method of the paper includes an analysis of the current theoretical background as well as an analysis of marketing risks and the use of adequate auditing techniques. The proposed system of internal audit, or the use of digital methods, can subsequently be used to predict process deficiencies, and thus contribute to efficient risk management and responsible business conduct.

Keywords

analysis, audit, digital, management, marketing, risk

JEL Codes

G21, M42

Abstrakt

Problematika podnikového managementu je vysoce sofistikovanou činností, ve které je nutné využívat nejnovější informační technologie. Postupující digitalizace totiž umožňuje, aby byly podnikové procesy řízeny dynamicky, obzvláště ve vztahu k rychle se měnícímu ekonomickému prostředí. Tato skutečnost se týká také interního auditu, s jehož pomocí lze zajistit flexibilní přenos dat o procesních nedostatcích směrem k managementu. Cílem příspěvku je proto ověření účinnosti digitálních možností interního auditu v marketingové oblasti, která je významnou součástí firemního řízení. K práci je přitom metodicky přistupováno nejenom rozborem aktuálních teorií, ale také analýzou rizik marketingového odvětví a aplikací vhodných auditních technik. Navrženým systémem interního auditu, respektive využíváním digitálních přístupů, lze následně predikovat procesní nedostatky, a tím je možné přispět k efektivnímu řízení rizik i odpovědnému podnikání.

Klíčová slova

analýza, audit, digitální, management, marketing, riziko

Motto

"These are exciting times for internal auditors, especially those who see themselves as agents of change within their organisation."

David Coderre

Introduction

As management evolves, it also brings about changes in individual methods. Those which are becoming ever more important, primarily in the context of economic changes, include internal audit. Today, internal audit is understood as a modern consultancy service which helps the company leadership (Phillips 2009). Contemporary audit is no longer based on "hard" controlling methods, but focuses more on "soft" consulting activity (Moeller 2011). As with other disciplines, internal audit is now facing new developmental changes which above all reflect the digitisation of the business environment, which in turn offers innovative approaches for auditing and other functions.

According to many theories, the digital environment is creating a new space for both life and business (Herout 2016). Sedláček (2015) has claimed that we are living in a great migration period. He used the phrase "into the digital" to talk about this new situation and explained that work and economy have also moved to the digital sphere following entertainment and relationships. Digitised data stored in company systems and databases create an ever-growing digital environment. This indeed is a very interesting phenomenon, as the real environment will never be able to expand in the same way. Consequently, the above-mentioned points establish the digital world as a new company environment that can be effectively analysed using internal audit.

The theories mentioned in this paper refer to a change in company processes and an increase in auditing functions (Report to the Nations on Occupational Fraud and Abuse, 2014). In the past, it was necessary to check risk areas directly in the different departments. In the last decade, though, extensive centralisation of company processes has taken place and consequently auditing has focused only on some departments. Nowadays, audits can be performed in the form of remote auditing from audit centres independently of where the auditing really takes place. In the future, we can expect auditing of anything to be carried out from anywhere. All this is facilitated by the advancement of modern age digital technologies that are part of what Tóth (2012) has called the century of modern management systems.

The suggested visions were also confirmed by Koontz and Weihrich (2008), who added that successful companies in the 21st century must take advantage of all information technologies. Therefore, internal audit will also have to use digital tools on a massive scale, which will help to improve it in many ways and offer clients higher added value. "Change is occurring at a faster rate than ever, and this change is being driven by technological advances" (Coderre 2009, p. 3). Therefore, this paper focuses on an innovative approach to internal audit in the context of the modern digital environment, as efficient audit has many tools available which may be understood as protective or rescue elements. The aim of the study is to verify the efficiency of the digital potential of the internal audit in the field of marketing, which forms an important part of company management.

1   Bibliographic sources

"The organization's needs may be determined by identifying and examining the key activities whose effective performances can either make or break it" (Cascarino & Esch

2007, p. 6). Internal audit, which Sawyer (2000) defined as assistance to the company leadership, also helps the company management to identify and study the company's needs. Koontz and Weihrich developed this theory in the following way: "Management is the process of designing and maintaining an environment in which individuals, working together in groups, efficiently accomplish selected aims" (Koontz & Weihrich 2008, p. 5). It is therefore obvious that in the current situation, management has to use all available tools to achieve its goals, including internal audit techniques.

The basic concept of the studied notion which reflects the current demands of managers is defined as follows: "Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes" (Spencer Pickett 2010, p. 2). In the international context, this has also been confirmed by Sawyer, Dittenhofer and Scheiner (2003), Russel (2007), Phillips (2009) and Douglas, Smith and Wood (2009). In the Czech Republic, this issue has been studied primarily by Dvořáček (2003, 2005).

According to the definition above, internal audit focuses mainly on risk management, which is also confirmed by Moeller: "The internal audit activity should monitor and evaluate the effectiveness of the enterprise's risk management system" (Moeller 2011, p. 13). The thesis has been further developed by Spira and Page (2003), Collier and Agyei Ampomah (2008) and Spencer Pickett (2010), who have stressed that auditing must affect all processes across the organisation. In this respect it is also important to define business risk. According to theories by Garvey (2009), this involves a negative event which brings about an undesired change affecting primarily the plans, costs and performance of an organisation.

Different tools can be used for risk management and internal auditing. Various approaches are further discussed in the section on methodology. The aim of this section is to determine auditing techniques which are based on traditional practices by Basu (2006). According to Dvořáček (2003), such tools must be used which will lead to appropriate findings with a strict assessment of costs. The author also pointed out that efficient auditing techniques must be used: "Efficiency can also be improved through the application of advanced technology" (Burrow, Kleindl & Everard 2008, p. 10). Burrow, Kleindl and Everard (2008) added that advanced technologies help in acquiring a competitive advantage, and so this is a good opportunity to implement digital tools in internal auditing.

2   Subject matter and methodology

2.1   Subject matter

Based on a bibliographic search of selected theories (Collier & Agyei Ampomah 2008; Spencer Pickett 2010; Moeller 2011), we can state that internal auditing can be used to verify different company processes. For the purpose of this text, the verified process, or the studied material, is company marketing, which, according to the *Report to the Nations on*

Occupational Fraud and Abuse (2014) represents an environment with a considerable level of risk. Marketing is defined in accordance with Kotler-Armstrong as follows: "The process by which companies create value for customers and build strong customer relationships in order to capture value from customers in return" (Kotler & Armstrong 2010, p. 29). This general concept can be narrowed to company management and marketing strategies as specified by Kašík and Havlíček (2012).

Marketing has been going through developmental changes (Wilson 2002). Therefore, the current tasks internal audit faces include the evaluation of the marketing environment, strategies, organisation, system, efficiency, profitability, mix (Kotler & Armstrong 2010) and other elements of marketing according to the operational demands of the management. "The primary purpose of a marketing audit[1] is to identify problems in ongoing marketing activities and plan the necessary steps to correct these problems" (Ferrell & Hartline 2014, p. 273). Ferrell and Hartline (2014) then applied this theory to marketing strategies.

In this context, Kotler and Keller (2007) advised every company to regularly evaluate concrete processes while at the same time assessing marketing efficiency. "Those companies and divisions that discover marketing weakness through applying the marketing-effectiveness rating review should undertake a more thorough study known as marketing audit" (Kumar & Sharma 2005, p. 41). Thus, we can use marketing auditing to adequately evaluate selected factors (in both the internal and external environment) which affect marketing performance (Proctor 2000) and which can be then directed at market, product and other areas of company risks (Sadgrove 2005).

It is clear that company marketing, which has a significant impact on a company strategy (Kašík and Havlíček 2012), is affected by a number of risks. These include primarily operating risks (Spencer Picket 2010), which Tattam further specified in the following way: "The risk of loss from failed or inadequate processes, people, systems or external events" (Tattam 2011, p. 9). Secondary risks, which have significant links to marketing, are reputational risks. A company's reputation has a strategic value and provides the company with a competitive advantage (Corenlissen 2005). Consequently, reputational risk is understood as an instance when a company's reputation can be damaged (Honey 2009).

2.2   Methodology

The previous section focused on defining the subject matter. The following section looks at the possible methodological approaches to the subject matter in question. The bibliographic search determined the basic approaches to internal audit and defined company marketing. We can further develop these conclusions with a note by Cascarino and Esch (2007), who claimed that business today contains a certain level of risk. Garvey further elaborated on this theory and warned of two possible risks: "The first is

---

1   *In this paper, the terms "internal audit" and "marketing audit" often merge, as understandings of them are very similar in this context. Internal audit, which focuses on verification of marketing processes, can be either generally called "internal audit" or more specifically "marketing audit".*

its occurrence probability. The second is its impact (or consequence) to an engineering system project" (Garvey 2009, p. 4). See Formula 1 (Garvey 2009, p. 9).

$$Risk = F\ (Probability,\ Impact) \tag{1}$$

As we have already said, marketing faces several threats. Companies should therefore concentrate on analysing and identifying areas at risk. We can distinguish two types of risk analysis – qualitative and quantitative (Smejkal & Rais 2013). For the purpose of this study, the method is a combination of the two techniques, which allows us to assess the identified risks and determine the frequency with which they occur as well as other risky outcomes. The Delphi method can be used as a concrete analytical approach, as specified by Tarantino: "The Delphi technique is a procedure to obtain a reliable consensus of opinion from a group of experts" (Tarantino 2011, p. 58). The author added that this technique can be used in different management processes.

The Delphi technique (Tarantino 2011) is used for the identification and assessment of potential risks in the marketing environment. The evaluation of probability of occurrence (P) and size of impact (I) (Garvey 2009) is carried out through an estimate by a group of experts for the given period in company management. The given evaluation of the basic set of potential risks can be done in the form of a guided discussion on the basis of which a group of significant threats is determined. This method is applied according to the specific demands of the company's marketing, because, as Tichý (2006) said, specific conditions require specific approaches.

The methodology applied here draws on observations, analyses and embedding of the selected methods, the so-called *best practice* of auditing processes. The study and collection of data was conducted in marketing campaigns with a focus on timely delivery of a communication to the selected sample group, measurement of completeness of the communication, checking of its efficient feedback and compliance with legal requirements. The sample group consisted of a customer segment of a selected company of 232 customers out of a total of 5,378 customers (i.e. 4.31%) that were selected for a marketing campaign. The following generalised visualisations of the results were carried out by a transfer of data through descriptive texts, tables and graphs.

In accordance with the profession-specific theories determined through the bibliographic search, the selected material and the techniques proposed in the methodology, we can proceed to the next part of the text. The aim of the article, as mentioned above, is to verify the efficiency of digital potential of the internal audit in the field of marketing, which forms an important part of company management. The outcomes of this article should extend the literature in the analysed field of study, while practical efficiency is expected to be delivered mainly through the use of the achieved results in the field of internal marketing and risk management with respect to company, or marketing, strategies.

3   Results

Marketing processes are extensive and cover a wide range of specialisations (Proctor 2000; Wilson 2002; Kotler & Armstrong 2010). In order for the article to have universal validity

and for the expected results to be generally applicable, the performed analysis did not focus on specific processes but on factors which have a significant impact on them. The results draw on an analysis of marketing risks and refer to four potential threats. According to their probability of occurrence (P) and size of impact (I) (Garvey 2009) based on the researcher's own conclusions, they are ordered in the following way: information risk, strategic risk, risk of efficiency and legislation risk (see Figure 1).

Figure 1: Map of significant marketing risks
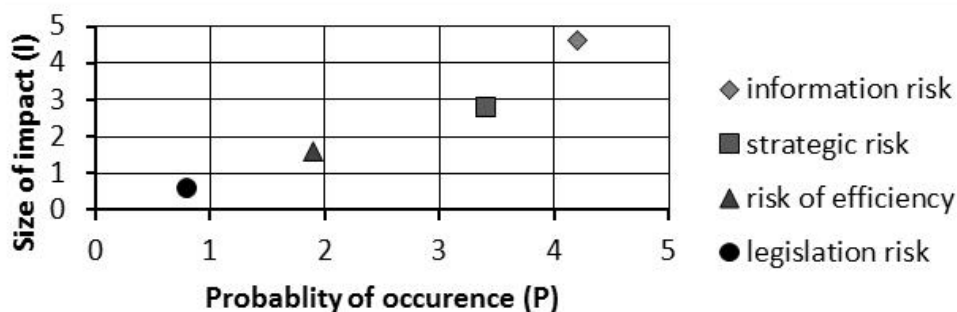
Figure 1 shows the results for risks according to the Delphi analysis. Their significance is measured by the probability of occurrence (P) and size of impact (I) on a scale 0 to 5, where 0 points is minimum significance and 5 points is maximum significance.

3.1 Risk analysis

The analysis of the probability of occurrence and size of impact (see Figure 1) shows that the largest risk in marketing processes lies in information, which is defined as actual facts supporting decision-making (Strydom 2004). This suggestion also supports the placement of the threat in the most risky area of the presented map (see Figure 1, sector 5:5). Information serves as the primary input for the further management of company processes, in this case the management of marketing processes (Kupec 2014). Therefore it is necessary to study the attributes of information, which include timeliness, precision and value (Kupec & Kretter 2013). Attention must be paid to the information risk, primarily in the context of the current digital advancement.

The second most significant risk (see Figure 1) is the strategic risk (the position connection of the individual risks is depicted in Figure 2), which is linked to marketing strategies (Kašík & Havlíček 2012; Petrů 2015 a). More specifically, these threats are determined by the choice of markets, stimulation of markets, competitive position or competitive alliances (Jakubíková 2013). Incorrectly set, performed and evaluated strategies have a significant impact on company performance. In the context of auditing, it can be said that this is an ideal area for the application of digital techniques which will allow the company management to carry out the continuous monitoring of principal data.

The set of identified threats further includes the risk of efficiency. "An efficient organisation of modern marketing is distinguished by strong cooperation and customer orientation of all company departments" (Kotler & Keller 2007, p. 764). However, this statement from Kotler and Keller (2007) deals solely with the internal environment of an organisation. With respect to the abovementioned risks, it is therefore necessary to point to the possibility of an efficiency failure in the external environment of an organisation. The risks are linked to the analysed area of strategic risks and can therefore often result in the incorrect choice of target groups, incorrectly selected communication channels or an incorrectly formulated marketing message, for example according to Petrů (2015b). This area then presents another opportunity for digital auditing.

The chain of selected risks is completed with the least significant potential risk – the legislation risk. "Different ethical norms and regulations exist in different countries which affect the supply and primarily the way how to present the supply" (Přikrylová & Jahodová 2010, p. 194). Legislation must be observed not just with the impact on the company's reputation in mind, but primarily with respect to the possible recourse from supervisory and regulatory bodies. In the given case, compliance should be adopted to eliminate the risk, which is defined as an ability to abide by regulations, guidelines and laws (Dvořáček 2003). The level of this risk in general (not according to Figure 1) is rather low in terms of probability of occurrence but not in terms of size of impact.

Figure 2: Position connection of individual risks
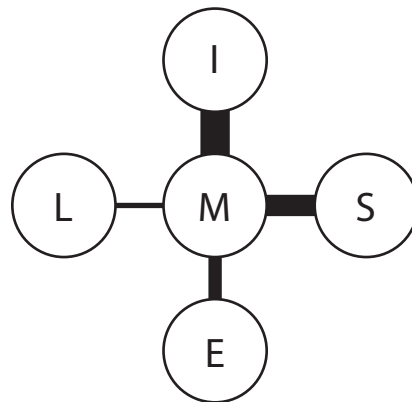
where: *M* – company marketing,
        I – information risk,
        S – strategic risk,
        E – risk of efficiency,
        L – legislation risk.

Source: own processing according to the method of Tichý (2006).

Figure 2 shows the connection of the basic risks with the audited area, which is positioned in the centre *(M)*. Individual connecting lines between risks and the marketing centre

have different width depending on the significance of the selected risks (see *I* as the most significant risk v. *E* as the least significant risk).

3.2 Digital audit

The risks mentioned in the analysis can be verified using different techniques of internal audit. With reference to the title of the article, though, the main idea lies in the use of information technologies to eliminate risks. In the company environment, these technologies make it possible to detect errors in company processes, focusing either on the security of systems or the protection of systems. Consequently, auditing techniques are not limited to the physical verification of the selected risks but by using an innovative application, the processes can be verified digitally. In this way the processes listed below enhance the verification abilities of the internal audit.

Verification of information risk through audit is directly connected to the attributes of information (timeliness, precision and value). In the observed subjects, the time of dispatching commercial information about a marketing campaign was monitored. This criterion plays a significant role in the appropriate development of the whole campaign, its timing and further links. As part of auditing verification, a limit was set for dispatching the information (x+10 days) and consequently the whole course of the campaign process was verified. The results of the experiment proved that 92.3% of communications were dispatched within the given limit. However, 7.7% of communications were outside the limit (before the limit (x+10)). Consequently, correction was recommended as early as during the campaign.

Based on the retrieved results, a general conclusion can be drawn with respect to auditing the information risk, to the effect that the described techniques allow internal auditing to monitor selected information online in Managerial Information Systems (MIS) or in Business Intelligence (BI) systems. Specific criteria can be entered in MIS/BI which reduce the whole set of monitored information to the required limit, which includes the normal values of the selected data. Data which fall within the specified limit do not need to be subjected to auditing. However, data which do not meet these requirements will have to be included in the audited sample to be analysed and appropriate recommendations for remedy will have to be suggested (see Figure 3).

Figure 3: Digital verification of information risk
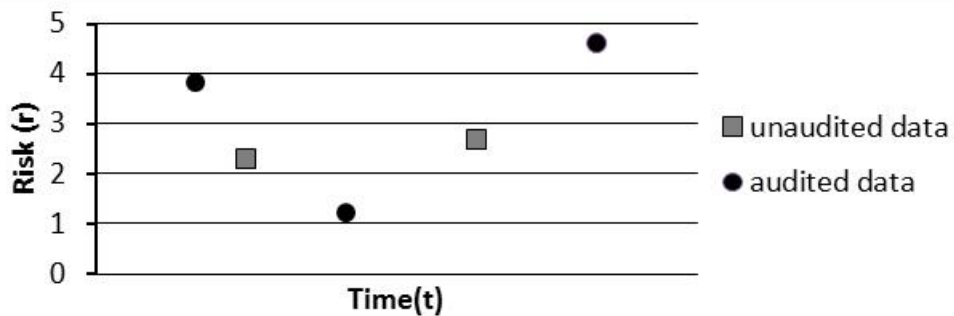
where: t – time,
         r – data risk,
         2 – bottom limit of risk data (r_{min}),
         3 – upper limit of risk data (r_{max}).
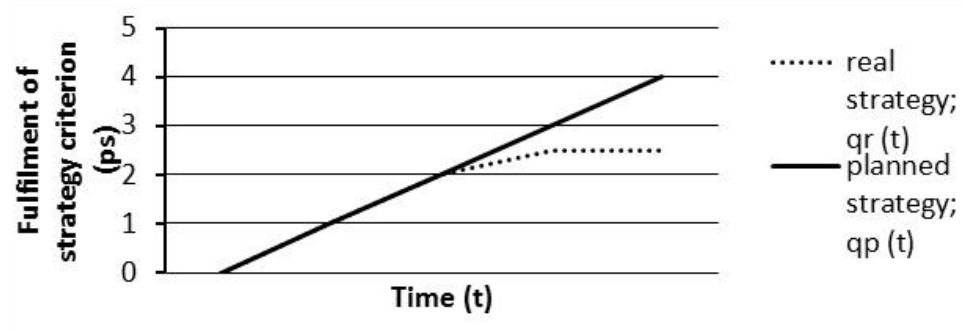
Source: own processing.

Figure 3 is a scatter diagram of marketing data with different levels of risk. Data which do not have to be audited because they meet all positive criteria are delimitated by risk level 2 (r_{min}) and risk level 3 (r_{max}). Other data are digitally included in the audited sample (AS) according to Formula 2.

$$AS \in \langle 0, r_{min} \rangle \cup (r_{max}, \infty)$$ (2)

Information risk further merges with strategic risk and is determined through monitoring the observed quantities. Marketing strategies include meeting company goals in the defined period, which can be quantified in MIS/BI. Verification of possibilities to audit the risk was carried out during the monitoring of the completeness of contacting the selected sample. As part of the verification, a limit was set for communications delivered to the selected sample at 98% and consequently the fulfilment of the strategy was audited. The researcher's own experiment revealed that at the final part of the campaign, no communication had been sent to over 25% of customers, which implied a deviation from the set strategy that relied on a delivery of communication to costumers which was balanced in time.

On the basis of these findings, prompt recommendations can be given to remedy the strategy fulfilment in the course of the campaign. This implies that digital auditing using the MIS/BI systems can monitor the continuous fulfilment of selected values and simulate the prediction of the development based on the estimate created by an analysis of trends. As soon as a real deviation from the planned trajectory is detected, the changes must be subjected to audit investigation in order to detect the cause and set relevant auditing recommendations. Verification carried out in this way will prevent negative impacts of marketing strategies and other strategic processes (see Figure 4).

Figure 4: Digital verification of strategic risk

where: t – time,
         ps – fulfilment of strategy,
         t_a – time during which q_p differs from q_r,
         q_p (t) – planned strategy,
 q_r (t) – real strategy.

Source: own processing.

The continuous line in Figure 4 shows the function of the planned marketing strategy $(q_p$ $(t))$ and the dotted line shows the function of the real strategy $(q_r$ $(t))$. As soon as a difference is detected between the real fulfilment and the planned fulfilment (point t_a), the situation can be verified by audit according to Formula 3.

$$\exists t_a \, \forall t \geq t_a : q_r(t) \neq q_p(t)$$ (3)

The following risk, the risk of efficiency, is connected primarily to the monitoring of performance in fulfilling the company's marketing strategies. Verification of auditing possibilities for this issue was piloted on the given sample through monitoring of a business response of a group of customers that received communications during the marketing campaign. Through their response, these customers were supposed to fulfil the company's business plans by concluding contracts to use the selected product. The level of efficiency of fulfilment was set at 80% of the business plan over the course of two months. The audited results showed that throughout the whole experiment the plan was sufficiently fulfilled and therefore no auditing recommendation had to be given.

The results clearly show that the data concerning the realisation, or efficient fulfilment of individual tasks, should also be gathered in the online MIS/BI regime. Setting the optimal level of efficiency, which can differ for each level of performance, will enable the digital monitoring of the fulfilment of individual criteria in real time. The fulfilment of selected criteria indicates the level of risk and the possible time to start audit verification (see Figure 5). However, this does not exclude the possibility of performing audit investigation on a level when the efficiency was met before the limit, as this kind of positive fulfilment can indicate an incorrect setting at the beginning of the process.

Figure 5: Digital verification of risk of efficiency
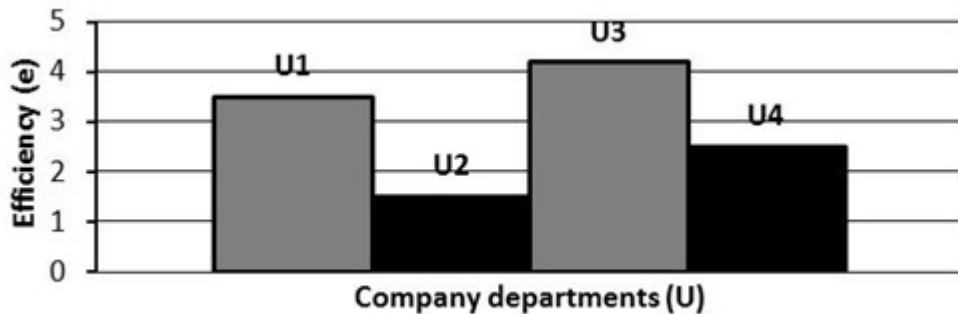
where: U – company departments (U_1, U_2, U_3, U_4),
         e – efficiency,
         3 – minimal level of efficient fulfilment (e_{min}).
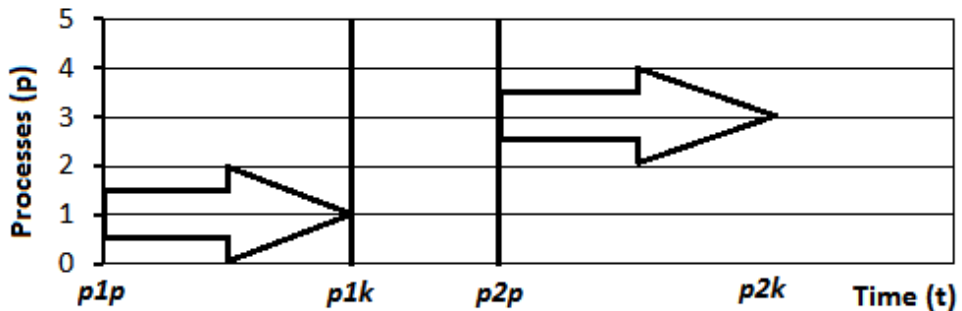
Source: own processing.

Figure 5 shows different company departments (U_1, U_2, U_3, U_4) which contribute to the fulfilment of the strategy. The limit for the efficient fulfilment of a marketing strategy is delimitated by the efficiency level 3 (e_{min}). Departments (U_2, U_4) which do not meet the limit are included in the audited sample (*AS*) according to Formula 4.

$$\{U_x \in AS \mid e_{Ux} < e_{\min}\} \tag{4}$$

Legislation risk is linked to all the previous areas. Experimental testing of auditing possibilities using digital approaches to this issue was linked to the selected sample group and to legislative requirements concerning providing information to customers about product changes in set time periods. The set date of a change in legislation or obligatory communication to customers in time (x), without fail, was monitored in the course of the whole communication process. Information concerning legislation was provided to 100% of customers in the sample group in time. At the same time, the start of the new legislative process with a firmly set expiration date was marked for each customer with respect to continuous monitoring.

Digital monitoring of the legislation risk is obviously one of the most difficult areas, primarily with respect to the fact that it concerns mainly qualitative information which is difficult to evaluate automatically. Monitoring of the legislation risk can be done from external sources by connecting the information systems (IS) of the audited companies to the IS of supervisory and regulatory bodies, which send out notifications about changes in regulations, guidelines and laws. Internally legislative regulations can be monitored in MIS/BI by marking legal force, change etc. so that possible differences in dates in internal and external information systems can be easily checked (see Figure 6).

Figure 6: Digital verification of legislation risk

where: t – time,
p – legislative processes,
p_{1p} – start of process no. 1,
p_{1k} – end of process no. 1,
p_{2p} – start of process no. 2,
p_{2k} – end of process no. 2.

Source: own processing.

Figure 6 shows Legislative Process 1 and its start (p_{1p}) and end (p_{1k}) as well as Legislative Process 2 and its start *(p_{2p})* and end (p_{2k}). If the two processes do not follow one another, see the difference between p_{1k} and p_{2p}, auditing investigation can be initiated.

The above-mentioned suggestions for auditing processes do not exhaust all of the possibilities regarding how to eliminate marketing process risks. The presented outcomes, however, take into account the current advancement of digital technologies. At the same time, these suggestions reflect a considerable level of development of all company and marketing information. The number of cases like these where internal audit is able to effectively analyse the so-called audit trail (Kupec & Petrů 2014) is growing. Another positive aspect of the presented propositions is that they eliminate the human factor risk. Provided all data is entered correctly, the monitoring and notifications to the internal audit are fully automated.

3.3 Proposed recommendations

Following the findings revealed by the auditing, it is also necessary to formulate recommendations which will eliminate company marketing weaknesses. The following section will therefore focus on how to eliminate deficiencies in company marketing linked to information, strategy, efficiency and legislation in the digital context of the article. Sawyer (2000) pointed out that in this phase of internal audit, it is necessary to discuss proposed recommendations with audited departments, primarily in order to clarify any possible technical discrepancies (Kupec 2012). The following section therefore concentrates on a list of individual auditing recommendations concerning the verified areas.

The findings concerning information risks must be approached carefully, taking into account the fact that this sphere provides data for subsequent company processes. If digital monitoring shows that the set limits have been exceeded (see Formula 2), the reasons why it happened must be discovered in order to eliminate possible impacts on other areas. Therefore, the auditing recommendation concerns the regular monitoring of selected information and their crosschecking using more sources with respect to the timeliness, precision and value of information. These measures can also be taken online in MIS/BI by electronic projection of information from several sources over one another. This will highlight possible deviations and make it easier for companies to manage risks.

Discrepancies between marketing strategies and real fulfilment are yet another finding which calls for rectification and monitoring. As soon as digital techniques announce any changes in the fulfilment of marketing values, or diversion from expected trends (see Formula 3), the situation must be amended in an appropriate manner. Here, auditing recommendations will concern the continuous and online assessment of the fulfilment of the strategy so that the defined strategies can be upheld with minimal deviations. This is where the high added value of digital techniques lies, thanks to which it is possible to follow the fulfilment of the plan in real time. Evaluation of marketing documents should be done on a regular basis, which, however, is often not the case.

The suggestions to eliminate risks of efficiency aim at overcoming problems with the fulfilment of individual marketing tasks. So while strategic risks are addressed as one area, under this concept, risks of efficiency concern individual issues. Auditing recommendations therefore focus on the elimination of the impact of any differences between the planned and actual fulfilment of marketing targets (see Formula 4). If targets are not met or the planned values are exceeded, this state must be analysed, criteria adjusted in real time and their changes also be incorporated in the overall marketing strategy. This approach will consequently help companies to efficiently fulfil their business plans.

Recommendations concerning legislation cannot be viewed as an independent aspect. Risks in this area can be dealt with through the cooperation of all company units. With respect to the suggested recommendations and the fact that legislation is present in the whole company structure, auditing recommendations should aim at establishing a unified digital hub for monitoring changes in legislation. Consequently, under such arrangements, all involved departments can enter information and cooperate in a responsible manner so that they are able to process all regulations, guidelines and laws coming from both external and internal information systems. The proposed method will consequently allow companies to apply crucial legislation policies.

The presented auditing recommendations are purposely only of a general nature, so that they can be further adjusted in accordance with each company's individual needs. The intention of the article was to present an overview of the possible ways to eliminate marketing risks with regard to digital technologies. Until now, auditing approaches have been confined primarily to physical verification of issues at-risk, which is demanding mainly with respect to the required capacity, time and financial costs. The automated monitoring of selected processes and subsequent activities undertaken by internal audit

can partly replace these methods, while at the same time achieving more efficient results in reducing certain risks.

4   Discussion

The presented results need to be confronted with other theories which will allow a balanced picture to be presented. In general, it can be said that digital methods of internal audit are important for managers, primarily with regard to marketing issues. This claim can be supported by theories by Kumar and Sharma (2005), who presented the following view on the subject matter: "The objective of the marketing audit is to identify marketing problem areas and to recommend a corrective plan with a view to improve the organization's overall marketing effectiveness" (Kumar & Sharma 2005, p. 36). Marketing effectiveness can be achieved by the application of digital techniques in internal audit.

The suggested methods for eliminating information risks are linked to the precise targeting of auditing techniques and the selection of a particular sample group for auditing verification. As Coderre (2009) claimed, it is on the basis of a study of a sample group that internal auditors arrive at their conclusions with regard to the whole process. A digital selection in accordance with the presented method will enable auditors to focus exclusively on preselected areas which either meet or do not meet the given criteria. Unlike in case of traditional selection by physical methods, the suggested digital method is clearly faster, more precise and efficient, according to Dvořáček (2003) and in this way it is in line with the changing trends in management.

The monitoring of strategies can be internally audited under the presented concept, primarily with regard to analysing trends and marketing information. Each strategy has to be planned beforehand, and if such a project is transferred to electronic systems with a link to MIS/BI systems, its realisation can be followed online and in this way, possible strategic differences can be monitored. Blatná (2004) confirmed that marketing analyses designed in this way can be statistically evaluated through trend analyses. The suggested method, which monitors only collected data on strategy fulfilment, is also in line with theories presented by Anderson et al. (2009), who pointed to the efficient use of selected information by management.

In regard to the risk of efficiency, the auditing possibilities depend on a strategic process. The main stages of the project are the importance of defining criteria, their continuous monitoring, real-time application and adequate auditing intervention. From the point of view of profession-specific auditing operations, the feasibility of application of this intention follows from theories concerning the Six Sigma auditing technique by Dvořáček (2005). Dvořáček (2005) claimed that as soon as we are able to measure potential deficiencies in a process, we are also able to offer methodical recommendations on how to eliminate these deficiencies. On the other hand, he also points out that evaluation of information can be quite demanding. And finally, the importance of analysing the presented information was suggested by Boone and Kurtz (2011), who saw the aforementioned techniques as a comparative advantage.

The suggested management of the legislation risk using digital methods and its subsequent monitoring using auditing techniques is one of the possible ways to approach these issues from the point of view of marketing. The importance of analysing the legislation sphere has been confirmed by Boone and Kurtz (2011), who included it among five basic attributes of the macroeconomic environment. The suggested auditing of qualitative information is a highly sophisticated activity which serves primarily as prevention (Dvořáček, 2003). A similar link between information databases is definitely not an exhaustive way to deal with this area; however, it is an accessible method which contributes to the successful management of risks in the legislation sphere.

Finally, we can say that internal audit can achieve better added value for the company management if digital methods are used, with respect to three basic attributes, the time of their implementation, accuracy of their results and cost efficiency, as important standards used for the evaluation of individual projects in firms (Hejduková & Kureková 2016). It is obvious that digital techniques can be used primarily in the preparatory phase of auditing, which consequently reduces the time needed for the verification itself. Sharma (2010) confirmed that meticulous preparation is essential and claimed that an audit without proper preparation rarely succeeds in providing the necessary recommendations. Consequently, the preparatory phase in the application of digital methods enables better orientation during the actual auditing.

Conclusions

This article has analysed the internal audit of company marketing in the digital environment. The aim of the study is to verify the efficiency of the digital potential of internal audit in the field of marketing, which forms an important part of company management. The presented results draw on the Delphi analysis of significant risks, which are ordered according to the probability of occurrence and size of impact as follows: information risk, strategic risk, risk of efficiency and legislation risk (see Figure 1). This analysis was followed by possible approaches to digital audit which can effectively detect the aforementioned threats (see Formulas 2, 3, 4). Finally, expert recommendations on how to eliminate the detected risks were presented. On the basis of the summarised results, we can conclude that the presented methods of digital audit in the marketing environment will allow the efficient management of company strategies. Modern audit can benefit from using digital techniques which can detect flaws in company processes.

References

ACFE (Association of Certified Fraud Examiners) (2014). *Report to the Nations on Occupational Fraud and Abuse.* Austin: Association of Certified Fraud Examiners
ANDERSON, D. R. et al. (2009) *Statistics for business and economics.* 10th Edition. Mason: Thomson Higher Education.
AYYUB, B. M. (2014) *Risk Analysis in Engineering and Economics.* 2nd Edition. Boca Raton: Taylor & Francis Group.

BASU, S. K. (2006) *Auditing: Principles and Techniques.* 1st Edition. New Delhi: Pearson Education.

BOONE, L. E. and D. L. KURTZ (2011) *Contemporary Marketing.* 15th Edition. Stamford: Cengage Learning.

BURROW, J., B. KLEINDL and K. E. EVERARD (2008) *Business Principles and Management.* 12th Edition. Mason: Thompson Higher Education.

BLATNÁ, D. (2004) *Metody statistické analýzy.* 1st Edition. Praha: BIVŠ.

CASCARINO, R. and S. van ESCH (2007) *Internal Auditing: An Integrated Approach.* 2nd Edition. Lansdowne: Juta.

CODERRE, D. (2009) *Internal Audit: Efficiency through Automation.* 1st Edition. Hoboken: John Wiley & Sons.

COLLIER, P., M. and S. AGYEI-AMPOMAH (2008) *Management Accounting Risk and Control Strategy.* 1st Edition. Oxford: Elsevier.

CORNELISSEN, J. (2005) *Corporate Communication: Theory and Practice.* 2nd Edition. London: Sage.

DOUGLAS, F., P., J. L. SMITH and D. A. WOOD (2009) Internal Audit Quality and Earnings Management. *The Accounting Review,* Vol. 84, No. 4, pp. 1255-1280.

DVOŘÁČEK, J. (2003) *Interní audit a kontrola.* 2nd Edition. Praha: C. H. Beck.

DVOŘÁČEK, J. (2005) *Audit podniku a jeho operací.* 1st Edition. Praha: C. H. Beck.

FERRELL, O. C. and M. D. HARTLINE (2014) *Marketing Strategy.* 6th Edition. Mason: Centage Learning.

GARVEY, P. R. (2009) *Analytical Methods for Risk Management.* 1st Edition. Boca Raton: Chapman & Hall.

HEJDUKOVÁ, P. and L. KUREKOVÁ (2016) National health systems´ performance: evaluation WHO indicators. *3rd International Conference on New Challenges in Management and Business: Organization and Leadership,* Dubai: UAE, pp. 240-248.

HEROUT, L. (2016) Use of the Information and Communication Technologies with the Internet Access by the Pupils of Elementary Schools. *EDULEARN16: 8th International Conference on Education and New Learning Technologies.* Barcelona: IATED, pp. 1057- 1063.

HONEY, G. (2009) *A Short Guide to Reputation Risk.* 1st Edition. Farnham: Gowe Publishing.

JAKUBÍKOVÁ, D. (2013) *Strategický marketing.* 2nd Edition. Praha: Grada Publishing.

KAŠÍK, M. and K. HAVLÍČEK (2012) *Marketing při utváření podnikové strategie.* 2nd Edition. Praha: VŠFS.

KOTLER, P. and G. ARMSTRONG (2010) *Principles of Marketing.* 13th Edition. London: Pearson Education.

KOTLER, P. and K. L. KELLER (2007) *Marketing Management.* 12th Edition. Praha: Grada Publishing.

KOONTZ, H. and H. WEIHRICH (2008) *Essentials of Management.* 8th Edition. New Delhi: Tata McGraw-Hill Publishing.

KUMAR, R. and V. SHARMA (2005) *Auditing: Principles and Practice.* 1st Edition. New Delhi: Prentice-Hall.

KUPEC, V. (2012) Analýza vybraných atributů profese interního auditora státní správy. *Societas et res publica*, Vol. I., No. 4, pp. 69-84.

KUPEC, V. (2014) *Marketingový výzkum ve vybraných procesech řízení banky.* 1st Edition. Trnava: UCM.

KUPEC, V. and A. KRETTER (2013) Měření atributů marketingových informací. *Communication Today*, Vol. 4, No. 1, pp. 106-116.

KUPEC, V. and N. PETRŮ (2014) The Options of the Analysis of the Traces of Marketing in the Banking Services. *MARKETING IDENTITY: Explosion of Innovations*, Trnava: UCM, pp. 310-322.

MOELLER, R. R. (2011) *COSO Enterprise Risk Management: Establishing Effective Governance, Risk, and Compliance.* 2th Edition. Chichester: John Wiley & Sons.

PETRŮ, N. (2015 a) Předávání znalostí jako cesta úspěšné nástupnické strategie v rodinných firmách. *Lidské zdroje a kapitál.* Praha: VŠFS. pp. 30-34.

PETRŮ, N. (2015 b) New Approaches in the Banking Sector to Communicate with Customer Segments. *MARKETING IDENTITY: Digital Life – part II*, Trnava: UCM, pp. 190-205.

PHILLIPS, A. W. (2009) *ISO 9001:2008 Internal Audits Made Easy.* 3rd Edition. Milwaukee: Quality Press.

PŘIKRYLOVÁ, J. and H. JAHODOVÁ (2010) *Moderní marketingová komunikace.* 1st Edition. Praha: Grada Publishing.

PROCTOR, T. (2000) *Strategic Marketing: An Introduction.* 1st Edition. London: Routledge.

RUSSELL, J. P. (2007) *The Internal Auditing Pocket Guide.* 2nd Edition. Milwaukee: Quality Press.

SADGROVE, K. (2005) *The Complete Guide to Business Risk Management*, 2nd Edition. Burlington: Gower.

SAWYER, L. B. (2000) *Interní audit.* 1st Edition. Praha: MFJ.

SAWYER, L., B., M. A. DITTENHOFER and J. H. SCHEINER (2003) *Sawyer's Internal Auditing: The Practice of Modern Internal Auditing.* 5th Edition. Altamonte Springs: IIA.

SEDLÁČEK, T. (2015) *Veliké stěhování národů aneb Into the digital.* [online]. [2015-10-25]. Available at: http://blog.aktualne.cz/blogy/tomas-sedlacek.php?itemid=24300.

SHARMA, A. (2010) *Auditing.* 1st Edition. New Delhi: VK Publications.

SMEJKAL, V. and K. RAIS (2013) *Řízení rizik ve firmách a jiných organizacích.* 4th Edition. Praha: Grada Publishing.

SPENCER PICKETT, K. H. (2010) *The Internal Auditing Handbook.* 3rd Edition. Chichester: John Wiley & Sons.

SPIRA, L. F. and M. PAGE (2003) Risk management: The reinvention of internal control and the changing role of internal audit. *Accounting, Auditing & Accountability Journal,* Vol. 16, No. 4, pp. 640-661.

STRYDOM, J. (2004) *Introduction to Marketing.* 3th Edition. Cape Town: Juta.

TARANTINO, A. (2011) *Essentials of Risk Management in Finance.* 1st Edition. New Jersey: John Wiley & Sons.

TATTAM, D. (2011) *A Short Guide to Operational Risk.* 1st Edition. Farnham: Gower Publishing.

TICHÝ, M. (2006) *Ovládání rizika. Analýza a management.* 1st Edition. Praha: C. H. Beck.

TÓTH, E. (2012) Proudy, metody a myšlení v současném managementu. *Communication Today,* Vol. 3, No. 2, pp. 41-63.

WILSON, A. (2002) *Marketing Audit Handbook.* 1st Edition. London: Kogan Page.

Contact address

PhDr. Ing. Václav Kupec, Ph.D.
Vysoká škola finanční a správní, Fakulta ekonomických studií / University of Finance and Administration, Faculty of Economic Studies
(vkupec@mail.vsfs.cz)