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*Sincerely,*

***Jose Noronha Rodrigues***  
***ELP Editor in Chief***

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# Consumer Protection Against Confusion in The Trademark Law

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## Abstract

Information has contemporarily become a good with a major market importance, which is why we observe many efforts of the European legislator and the national legislators aimed at protecting the information. What is also of utmost importance is the protection of the communication channels, because all the information asymmetries cause disruption in an economically efficient allocation of goods. The nature of communication between the traders and consumers generates the risk of confusion. Due to the large number of interferences in this area there is required a skilful interference in its course, which can be made with the use of the effective legal instruments. For this reason, the article presents the problem, not analysed previously in broader terms, of consumer protection against confusion in the trademark law. The issue of consumer protection from the perspective of accuracy and adequate transparency of market information has already been the subject of analyses and studies, yet they were mostly undertaken from the perspective of unfair competition law. It should be noted, however, that consumer protection against disinformation can be manifested also on the grounds of trademark law within the protective right in relation to the trademark against the risk of the confusion of the recipients. The aim of this article is to present the issues related to this specific form of the protection of the consumer as the recipient of the goods covered by a specific sign, in the context of the model of the average consumer in the European law.

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**Keywords:** Consumer, the model of the average consumer, trademark, the functions of the trademark, the risk of confusion among the recipients.

## 1. Introduction

The information society requires of its members a high level of functional literacy. Information has now become a good of major importance in the market, which is why we observe many efforts of the European

legislator and the national legislators aimed at protecting the information. From a market perspective, it becomes extremely important to protect communication channels, because all the information asymmetries cause disruption in an economically efficient allocation of goods. The nature of communication between the traders and the consumers generates a risk of confusion. Due to the large number of interferences in this area there is needed skilful interference in its course, which can be made with the use of effective legal instruments. Consumer policy in the EU law has undergone a long evolution, and is currently an autonomous as well as politically and legally independent field. It is significant that the current EU consumer policy, in addition to protecting the health, safety and economic interests, supports the consumers' right to information. Consumer protection against being misled constitutes, next to the unfair competition and antitrust issues, an important instrument governing the exchange of information in a competitive market. The issue of consumer protection from the perspective of accuracy and adequate transparency of market information has already been the subject of analysis and studies, yet they were mostly undertaken from the perspective of unfair competition law. It should be noted, however, that consumer protection against disinformation can be exercised also on the grounds of trademark law in the form of trademark protection rights against the risk of misleading the public. The aim of this article is to present the issues related to this specific form of protecting the consumer as the recipient of the goods bearing a given trademark, in the context of the model of the average consumer in the European law. The consumer interests related to information obligations are also protected in a specific way by the regulations concerning the requirements of the trademarks themselves. The requirement to have a distinctive character (abstract and concrete) eliminates from the protection those trademarks which are not suitable for distinguishing homogeneous goods in trade, which is certainly not without significance for the interests of the recipients of the goods. However, due to the framework of this study, these issues have not been covered by the present analysis.

## **1. Consumer model in the trademark law in the context of the European model of the average consumer**

### **1.1. Introductory comments**

The EU's vision of prosperity includes consumer protection and the relevant policies of producers and traders, forced thereby, which will increase the competitiveness of the EU products in the global economy. The need for consumer protection is a natural consequence of the pursued integration policy, which originally was focused on the realization of the four freedoms under the Treaty. A standard cost of the integration are the risks to the consumer (to his life, health, safety and economic interests). Ensuring the free

movement of goods, services, labour, capital and entrepreneurship needs to counter such integration activities which harm the interests of consumers (Tischner, 2012, p. 92).

The perceived need to protect undistorted market communication and the consumer's interests in respect of information duties, utterly important for its course, have succeeded in developing a specific model of the consumer - the recipient of market communications. The EU model of consumer protection evolved along with the progressive integration processes and development of the common market (Gnela, 2011, p. 56). This evolution in the perception of the importance of the consumer and the need to protect its interests can be clearly seen in the case law of the Court of Justice. What was of utmost importance for the protection of the consumers against misinformation was the adoption of the Directive 2005/29/EC on unfair commercial practices<sup>1</sup>. The inclusion in the Directive of the provision concerning the model of the average consumer was a kind of culmination of the efforts of the Court of Justice in order to establish a single European standard of the consumer (Tischner, 2006, p. 244). In turn, the implementation of the Directive into the Polish law has led to the introduction of a legal definition of the average consumer. The model of an average consumer has functioned for a long time already in the trademark law, hence its characteristics – even though a brief one – is essential for the subsequent analysis. It is also worth reflecting on the significance of this model for the trademark law in the context of the assessment of the risk of misleading the public from the perspective of protecting the interests of the consumers.

## **1.2. Average consumer model in the context of the selected judgments of the Court of Justice**

A. Tischner rightly points out that the jurisprudence of the Court of Justice clearly shows how much the understanding of the term “average consumer” is conditioned by the totality of the EU consumer policy, and above all, by the EU economic policy (Tischner, 2012: p. 92). The need to protect consumers clearly evolves with the process of the European integration. The frames of this study impose certain restrictions, hence the analysis below will cover only the problem of the average consumer as the recipient of goods or services on account of the imposed trademark<sup>2</sup>.

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1 Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair commercial practices in business-to-consumer internal market and amending the Council Directive 84/450/EEC, Directive 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and the Regulation (EC) 2006/2004, Official Journal of the European Union series L 149/22 of 11 June 2005.

2 It should be noted that the Industrial Property Act (the Act of 30 June 2000, Journal of Laws of 2013, item 1410, as amended, hereinafter Industrial Property Act) uses the term “recipient”

The literature indicates (Jasińska, 2010, p. 109) that a milestone in the jurisprudence of the Court was the ruling in *Gut Springenheide*<sup>3</sup>. The case concerned a marketing slogan placed on the packaging of eggs that read “Six-grain - 10 fresh eggs”, supplemented by the information that the eggs came from hens fed with six-grain feed. In fact, the feed given to the hens contained only 60% of grain components. In the cited case, the Court stated that the national court in determining whether a particular statement, used for promotion of the sale of eggs, misleads buyers, must take into account the expectations of an average consumer who is properly informed, reasonably observant and circumspect. However, it is not prohibited that the national court, having difficulties with the assessment of the occurrence of an error, referred, in accordance with the principles arising from the national law, to surveying the consumers or to an expert opinion as a tool to support the assessment of the case. In spite of the fact that this particular case concerned the advertising, the Court’s considerations were related to the concept of the average consumer not only from the point of view of fair competition and consumers’ rights, but also from the perspective of the trademarks law and other symbols (see paragraph 32 of the merits of reason of the cited judgment).

By accepting the above mentioned restrictions on the frames of the study, we can assume that there is a certain perpetuated approach in the trademark law, according to which the average consumer of a specific type of goods is seen as a well-informed, duly careful and cautious person, whereas the level of perception of the average consumer may vary depending on the type of goods or services. In addition, it is now accepted that the linguistic, cultural and social differences may cause that a trademark which does not mislead the consumers in one country, can have this very effect in another country<sup>4</sup>.

The above mentioned features of the average consumer have now become the part of the model provided for in the Directive 2005/29/EC,

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(see art. 296 paragraph 2 point 2 and art. 132<sup>1</sup> point 3 and 5). It is obvious that the recipients of goods or services that bear the trademark may also be professional actors, yet the Court of Justice in a number of its rulings on the issue of trademarks referred directly to the model of the average consumer. See K. Jasińska 2010, p. 100, footnote 7, and the judgments cited therein.

<sup>3</sup> Case C-201/96 *Gut Springenheide*, judgment of 16 July 1998, Collected Rulings 1998, p. I-4657.

<sup>4</sup> Case C-220/98 *Estee Lauder*, judgment of 13 January 2000; Case C-313-94 *Graffione*, judgment of 26 November 1996; see also: G. Dinwoodie, D.S. Gangee 2014 [access 24 September 2016]. The authors presented the thesis that the model of the consumer applied in this area of law is partly empirical and partly normative, indicating when the examined consumer behaviour is taken into consideration. In their opinion, the Court of Justice supports the use of the empirical evidence, which results in a more diversified protection, taking into account the characteristics of a given market and language differences.

adopted in the Polish law in art. 2 point 8 of the Act of combating unfair commercial practices<sup>5</sup>. It is worth noting that *the Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices*<sup>6</sup> allows the analogous application under the Directive of the case law of the Court of Justice and the General Court (formerly the Court of First Instance) generated by the assessment of a confusing trademark. It is of utmost importance for the considerations presented here that the average consumer normally perceives a trademark as a whole and does not analyse its various components. In addition, the average consumer only rarely has the opportunity to directly compare the opposing symbols, therefore in their perception, the consumer is based on the imperfect image left by the symbols in his memory.

### **1.3 The average consumer in the Directive 2005/29/EC. An outline of the issues**

The text of the Directive 2005/29/EC contains no definition of the term “average consumer”. The Directive uses this concept in the definition of unfair market practices (art. 5 paragraph 2 point b and art. 5 paragraph 3), in the definitions of misleading practices by action (art. 6 paragraph 1 and 2) and by omission (art. 7 paragraph 1 and 2) as well as in the definition of aggressive marketing practices. Extensive explanations on this concept are provided in points 18<sup>8</sup> and 19<sup>9</sup> of the preamble of the Directive. It is important that the Directive adopts the average consumer model developed in the case law of the Court of Justice. To use some simplifications, for the purposes of this study, we can conclude that the benchmark consumer, according to the regulation of the Directive, is a well-informed, reasonably attentive and cautious recipient, while the application of this concept in the scope of the undertaken evaluations cannot be detached from the social, cultural and linguistic factors. Where a

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5 The term “average consumer” has been introduced to the definitions section of the Act on combating unfair commercial practices (the Act of 23 August 2007, Journal of Laws of 2007, item 1348, hereinafter referred to as the Act on combating unfair commercial practices). According to art. 2 section 8, the concept of the average consumer shall be understood as the consumer who is reasonably well informed, observant and circumspect; the assessment is carried out taking into account social, cultural and linguistic factors, as well as the membership of a consumer to a particular group of consumers, which shall be understood as a clearly identifiable group of consumers, particularly vulnerable to the impact of market practice or to the product which the market practice concerns, because of the particular characteristics such as age, physical or mental disability. Unfortunately, the above legislative tool of the Polish legislator was not entirely successful from the perspective of the objectives of the Directive 2005/29/EC, see more broadly A. Michalak 2008, p. 56; A. Tischner 2012, p. 101, K. Jasińska 2010, p. 117.

6 Commission Staff Working Document – Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices, document SEC (2009) 1666 of 3 December 2009.

certain commercial practice is designated for a particular group of consumers, particularly vulnerable to unfair market practices, its impact should be assessed from the perspective of the average member of this group. In certain specific cases, it is possible, and even advisable, to make assessments from the point of view of an entity other than the average consumer. It is in fact approved to assess commercial practices also from the point of view of the people who, according to the trader's intention, were not intended to be the sole recipients of a certain practice, but in fact found themselves in the scope of its influence. One may not have too high expectations in respect of the benchmark consumer protected by the Directive 2005/29/EC as to its independence in obtaining the information necessary to make a rational decision on the market. This concept should be interpreted in compliance with art. 114 of TFEU, which provides for a high level of consumer protection.

It seems that the so-called average consumer test, proposed in the Directive, coincides with the approach settled for the assessments undertaken under the trademark law. Consistency of the assessments in this regard certainly promotes confidence and the practice of law<sup>7</sup>.

## **2. The functions of the trademark and the interests of the consumer**

### **2.1 The consumer's right to information. Introductory comments**

The tool for the communication between the traders and the consumers on the market is a widely understood "commercial communication", and wherever a flow of information takes place, there is a risk of confusion. The competition law is dominated by the principle of truth, and from the latter there directly follows the fundamental right of the consumers to information. This right is made concrete in the form of specific obligations on the part of the traders to provide information and the traders' responsibilities to prevent consumers being confused (Tischner, 2006, p. 203).

Free consumer decisions are an extremely important element of the undistorted market interactions and all measures introducing consumer confusion are a violation of the right to information. Reliable information is one of the basic mechanisms that regulate the exchange in the market, and any disruption in this area results in inefficient allocation of scarce resources, and as undesirable market phenomena, should be eliminated.

Intensive development of visual arts in the use of human perceptual abilities, also for persuasion, provides the traders with completely new tools of influencing the recipients. The trademark becomes extremely important market message with specific opportunities to influence the decision-making process of the consumer. At this point the question arises whether the dynamic

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<sup>7</sup> In this context, there must be presented a negative assessment of the implementation of the Directive into the Polish law, see more broadly A. Tischner 2012, p. 126.

development of visual communication does not pose new threats for the consumer and whether these could not somehow be eliminated within the framework of the trademark law. For this purpose it is necessary to look, at least briefly, at the currently protected features of the trademark in the context of protecting the interests of the consumers.

## 2.2. The functions of the trademark

The development of the legal institution of the trademark is directed toward the relationship between the mark and the goods (services), which are used to distinguish homogeneous goods (services) in trade (Wojcieszko-Gluszko, 2017, p. 473). In economics, the trademark operates as a brand (Kotler, 1994, p. 410). The trademark in the ontological aspect is a unitary relation of the mark and the goods, reflected in human consciousness, including general ideas about a given commodity, differentiated on the basis of its origin (Skubisz, 1988).

Trademarks belong to intangible goods, which are not intellectual in nature, yet they represent a carrier of information about the commercial origin of the goods or services. The essence and the significance of the trademark appears only in connection with the goods, the business and broadly understood economic activity<sup>8</sup>.

A trademark is most frequently described in regard to the function which it plays in the economic reality. The functions of the trademark shall mean the overall impact of the trademark on the market [R. Skubisz 2001, p. 163].

The doctrine and the case law traditionally distinguish the following functions of the trademark: marking the origin, quality function and advertising function. The latest views of the doctrine, formed on the basis of the case law of the Court of Justice, also mention other functions, in particular, investment and communicative one<sup>9</sup>. It is also indicated that the other functions are derived in their nature from the three above-mentioned ones (Skubisz, 2012, p. 94).

Traditionally, the primary importance is given to the function of origin labelling. It involves providing the information to a potential buyer that all the

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8 In light of the Industrial Property Act, the trademark can be any sign (symbol) capable of being represented graphically, if such a sign is capable of distinguishing the goods of one undertaking from those of other undertakings. Trademark may in particular be an expression, a drawing, ornament, colour composition, spatial form, including the form of goods or their packaging, as well as melodies or other acoustic signals (art. 120 of the Industrial Property Act).

9 See the most frequently cited: the judgment of 18 June 2009, Case C-487/07, *L'Oreal*, Collected Rulings 2009, p. I-5185, paragraph 60; the judgment of 23 March 2010 in Joined Cases C-236/08 to C-238/08 *Google France and Google*, Collected Rulings 2010, pp. I-2417.

goods bearing a certain trademark come from the same source (the identity of the origin of the goods). It is emphasized that a potential buyer, usually the consumer, can expect that all the goods which a given trademark is intended to mark are derived from the trademark proprietor or from the entities under his control.

The Court of Justice defines the basic function of the trademark as a guarantee to the consumer (or other end-user of the product) of the identity of the origin of the goods bearing a certain trademark, by enabling him, without any danger of confusion, to distinguish those goods or services from the goods or services of another origin. In this role, the mark is a guarantee that all the marked goods or services have been manufactured or supplied under the control of a single undertaking which is responsible for their quality (Żelechowski, 2015, p. 4 and the CJEU rulings cited there).

Moreover, the attention in the doctrine is drawn to the fact that currently the criterion of the commercial origin of the goods should be understood more widely, i.e. in the context of the very ability of the trademark to distinguish the goods from other goods. The changes in the practice of selecting and using the trademarks caused a shift of emphasis from the position of origin labelling to the direction of the guarantee of the commercial identity of the origin of goods (Skubisz, 2001, p. 167).

The quality function comes down to induce in the recipients the belief that all goods have the same, consistent quality, because they have the same origin. It is pointed out that the trademark can fulfil this function only when as a result of the prior use of the trademark the recipients developed the idea that the goods bearing a certain trademark are characterized by a specific, consistent quality. In order for the trademark to fulfil this function it will be therefore essential to create positive experience in the purchasers of goods or services bearing this trademark, resulting in the specific expectations as to the consistent quality of the products under that trademark. This feature is sometimes referred to as a guarantee function or the function of the protection of the trust of the purchasers of goods (Skubisz, 2001, p. 170).

The trademark also serves as advertising. This function is described as the ability of the trademark to attract the attention of a potential buyer of the goods and to trigger in him the need to purchase a particular product because of the trademark associated with it. This advertising function is characteristic of only those trademarks where the goods which they represent enjoy a good reputation among customers (so called good will). It is interesting to note here the special role of reputable trademarks, which, when detached from the goods, are themselves the carriers of good will and all sorts of associations and perceptions of the consumer. This function is an expression of the attractive force of the trademark that attracts the customer to the product. Similarly to the quality function, the advertising function does not arise from

the very essence of the trademark and its role fulfilled by a specific trademark is a result of the adoption by the trademark proprietor of specific actions and efforts.

The case law of the Court of Justice clearly indicated the further functions of the trademark - investment and communication functions, whereas the catalogue of the functions in the light of the Court's position remains open (Żelechowski, 2015, p. 6).

The investment function, indicated by the Court of Justice, frequently overlaps with the function of advertising. The so-called "investment" function is associated with the use of the trademark in order to gain or retain a reputation likely to attract or bind to it the consumers, and unlike in case of the advertising function, gaining or retaining the reputation takes place not only as a result of advertising, but when using other commercial techniques<sup>10</sup>.

In the case of the communication function, the Court of Justice did not so far explain precisely how to understand this function and how there should be formed its scope of protection. In the statements made so far, the Court of Justice indicates, among other things, that “[...] trademark can provide consumers with various kinds of information on the product on which it was placed. It can involve information resulting directly from the sign forming a part of the trademark (for example, information on the material qualities of the goods resulting from the possible descriptive elements contained in a complex trademark) or, more frequently, the information “collected” around the trademark as a result of the promotional or advertising activity carried out by the proprietor – for example, the information relating to non-material features which create the overall image of the product or the business (e.g. quality, reliability, etc.) or its detailed image (e.g. a certain style, luxury, power)”<sup>11</sup>. This information property of the trademark deserves protection according to the Court of Justice.

### **2.3. Specific importance of the protection of the communicative function of the trademark**

The doctrine describes the communicative function of the trademark as the overall capacity of the trademark to invoke specific ideas of the goods among the customers. It combines in itself the abovementioned functions (i.e. about the source of origin of the goods, the quality of the goods, the attractiveness of the trademark) (Żelechowski, 2015, p. 6). The communicative function is considered to be superior over other functions

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10 See the judgement of the Court of Justice of 22 September 2011 in the case C-323/09, *Interflora and Interflora British Unit*, EU:C:2011:604, Collection of Rulings 2011, p. I-8625, points 60–64.

11 See the judgment of 18 June 2009 in the case C - 487/07 *L'Oréal et. al.*, Collection of Rulings, p. I-5185, point 67.

(Bailey, 2013). In addition, it is indicated in the literature that today there can be seen the attempts to replace the traditional approach to the functions with a new approach, referred to sometimes as the science of protecting the communicative function of the trademark, which grew on the basis of interdisciplinary research. It is pointed out that the combination of research in economics, marketing and psychology led to the perception of the communicative function as a certain market phenomenon. The trademark is regarded as information channel between the vendor and the purchaser of the goods or as the tool of market communication (Tischner, 2008, p. 31).

It should be noted that in today's economy, consumers' behaviour differs significantly from the approach to them as settled in the science of law and economics. Consumer behaviour is influenced by the multiplying channels of communication and specialized marketing techniques related to them that significantly shape the attitudes of consumers also in relation to the trademark (Rea, 2012).

It is worth repeating that on the basis of the theory of the functions of the trademark, in the light of a new approach to the protection of the trademark formed on the background of the case law of the EU Court of Justice, the trademark is increasingly more often perceived as the image of the product. Thus, the distribution of the weight of protection in the light of the need to protect the interests of the consumers should aim to protect the bond that is formed on the basis of the relations with the trademark. These bonds are based on trust, and the benefits of them rely primarily on reducing the risk of the transaction by minimizing the risk of purchase, simplifying the selection process, saving time. Trademark equips the consumer with the information and considerably simplifies the decision-making process related to the purchase of goods / services, while expanding the possibilities to reduce the excess information. From this perspective there arises as crucial the need to protect the consumer's right to act in transparent market conditions. Therefore, in determining the scope of the protection of the trademark there cannot be left aside, and there can be even postulated the value associated with a communicative function of the trademark (Beier, 1970, p. 61-62). The trademark should be the guarantor of the proper information, so that it is not confusing. Full control over the course of marketing communication lies not only in the interest of the proprietor of the trademark, but also in the interest of the consumer.

#### **4. Protection of the consumer against being confused under the trademark law**

##### **4.1 Introductory remarks**

As noted by A. Tischner, a confusing market communication violates the consumer's right to economic self-determination, invoking in him the

wrong idea about the characteristics and the quality of the purchased goods. Therefore, an adequate instrument to protect the consumer in such cases is the prohibition of confusion. The universality of market practices based on confusion causes that combating these practices should take individualized forms, independent of individual protection against actual disinformation of the individual. The issue of confusion is the keystone of several disciplines of law: the law on unfair competition, industrial property law and consumer protection law. The term “confusion” is a vague concept which needs to be made more specific in judicial decisions. This construction opens up the legal system for the evaluation undertaken outside the system (Tischner, 2006, p. 203-206, Węgrzyn, 2013, p. 89 -91).

In cases of violation of the protection right of a trademark, the court is obliged to take into account all relevant factors, which are important for assessing the risk of confusion<sup>12</sup>. Therefore, the subject of further consideration will be the methodology of assessing the likelihood of confusion, a brief one – due to the form of the study – carried out under the terms of the analysis of the abovementioned factors from the perspective of the protection of the consumer rights to information (self-determination).

#### **4.2. The criteria for assessing the likelihood of confusion**

A likelihood of confusion is the fundamental institution of the trademark law. It consists, in general terms, in the possibility of erroneously assigning, contrary to reality, the origin of the goods by the recipient, due to the trademark, to the person authorized for the registration of the trademark (Szczepanowska-Kozłowska, 2007, p. 4). There can be differentiated the direct and indirect risks of confusion. The direct risk of confusion includes the possibility of mistakes on the part of the consumers that the goods (services) of a third party bearing the same or a similar trademark originate under the undertaking of the proprietor of the trademark. In turn, the indirect risk of confusion includes confusion as to economic, legal or organizational bonds between the undertaking of the third party and the proprietor of the trademark. This risk, therefore, includes the possibility of confusion as to the relations between the undertaking of the third party and the proprietor of the trademark. Both in the EU law and in the Polish law every form of risk of confusion is an obstacle to register the trademark with later priority, and if registered – it constitutes the basis for the cancellation of the protective right granted. Each form of such a danger is the constitutive condition of violating the protective right of the trademark.

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12 See Case C - 251/95 *SABEL*, the ECJ judgment of 11 November 1997, Collection of Rulings 1997, p. I-6191, cited by R. Skubisz 2012, p. 1113, comments to footnote 248.

The assessment of confusion due to an earlier trademark requires prior determinations in respect of:

- a) the identity or similarity of the goods (services) and the degree of such similarity,
- b) the identity or similarity of the trademarks in conflict and the degree of such similarity,
- c) the degree of the recognisability of the earlier trademark (the degree of a certain distinctive character of this trademark) and, optionally,
- d) other criteria that are important for assessing the risk of confusion (e.g. the earlier trademark being the part of the series of trademarks).

Only after the verification of all these factors (criteria) of the risk of confusion, there must be undertaken a comprehensive risk assessment. This assessment is to determine whether from the point of view of the average recipient of a particular type of goods (services) there is a risk of confusion as to the origin of goods (services), due to the earlier trademark (the earlier trademarks) (Skubisz, 2012).

Reference point for assessing the risk of confusion as to the origin of goods and services is a person of the average customer (consumer). As was presented in the considerations above, the latter is a person who is well informed, duly attentive and careful.

In conclusion, it can be stated that, in accordance with the approach settled in the jurisprudence, mainly due to the judgments of the Court of Justice, the likelihood of confusion arises when the average consumer may mistakenly think that the goods or services bearing the trademark originate from the undertaking of the proprietor of the trademark or from the undertakings of the entities remaining with it in economic or organization relations. At the same time, this assessment, unlike on the basis of unfair competition law, should apply only to those circumstances that are related to the application of the trademark.

#### **4.2 The overall assessment of the likelihood of confusion and the interests of the consumers**

The likelihood of confusion implies the simultaneous existence of the identity or similarity between the trademark applying for the registration and an earlier trademark as well as the identity or similarity between the goods and services for which the registration is made, and those for which the earlier trademark has been already registered. These conditions must be met cumulatively<sup>13</sup>. In other words, in all cases in which there arises the problem of the similarity of the opposing trademarks, it is the result of two closely

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<sup>13</sup> In this way, among others, the ECJ judgment of 12 October 2004 in the Case C-106/03, P, *Vedial vs. OHIM*, Rec. p. I-9573, point 51.

related elements: firstly – the similarity of the signs, and secondly – the similarity (homogeneity) of the goods / services for which the trademarks are applied, registered or used. Both of these factors determine the scope of the trademark protection.

As mentioned above, the assessment of the risk of confusion must be holistic, taking into account all relevant elements of the state of facts. The question whether or not there arises the risk of confusion in a particular case, depends on the overall evaluation of several interdependent criteria, such as the similarity of the goods and services; similarity of the signs; the relevant circle of recipients; the presence of the distinctive and dominant elements in the conflicting signs; the degree of recognition of the earlier trademark; other factors. In the course of the assessment of the likelihood of confusion there must be in the first place determined the abovementioned factors and then it is necessary to determine their significance in the individual case.

The relevant circle of recipients consists of the actual or the potential purchasers of the goods bearing the trademarks, namely of the consumers who buy goods or services or may purchase them in the future. Determination of the relevant circle of recipients consists, therefore, in identifying the recipients of goods or services bearing the trademark and should be made with regard to their nature.

The next step after determining the relevant group of recipients should be the identification of who are the standard purchasers of the specific goods or services, namely the average recipients. As already indicated, the benchmark of the average recipient, adopted by the European courts, has a unitary character throughout the European Union. It is generally accepted that the average consumer of certain product category is a person who is properly informed, reasonably observant and reasonable. The adoption of such a definition means that the average consumer is a person with specific knowledge about the world, having the ability to absorb information, but it acquires it with a certain amount of criticism because of the awareness of the commercial role of the trademark. The assessment of the likelihood of confusion is made, therefore, always from the point of view of the average consumer, i.e. a well-informed person, sufficiently careful and rational, who belongs to the relevant group of recipients of certain goods or services.

In a situation where the average consumer will not be able in any way to presume the origin of the goods from the same undertaking, the risk of confusion will not take place. The perception of the trademarks by the average consumer is therefore crucial in assessing the risk of confusion and depends on the nature of those goods and services.

The above outlined approach to the assessment of a likelihood of confusion of the recipients as a consequence of the application of the identical or similar signs for the identical or similar products aimed to draw attention to the

interests of the consumers, which can be protected within the framework of the trademark law. As can be clearly seen, the model of an average customer (consumer) is the central point of reference for the above evaluations. As mentioned above, the rapid development of human sciences results in using their outcome by the entrepreneurs in attracting the attention of customers and actively influencing their purchasing decisions. The use of the achievements of neuroscience in advertising and marketing, coupled with the rapid development of visual techniques, presents the law with completely new challenges.

For the modern consumer, burdened with too much information, the protection of the identity of the source of origin of the goods, referred to in this article, is undoubtedly of great value. It is especially the case because the said protection of consumer interests takes place in a way collaterally, somehow in the context of the rivalry between the entrepreneurs for the exclusive use of a particular sign, free from the risk of confusion. The approach to the determination of the likelihood of confusion, settled in the doctrine and jurisprudence, whose central point is the recipient of the goods, is not without significance for the interests of consumers. The trademark, especially a highly distinctive one, still remains an important tool for market communication, and although the above thesis is not accurate in every case (e.g. in the case of the so-called “impulse goods”), the sign that is contemporarily the image of the goods, still remains an important instrument for controlling the decisions of consumers. For this reason, it is important to provide the consumers with the maximum free choice, and the latter can take place only in the conditions of the most extensive, the fullest and most adequate information. The confusion as to the identity of the origin of the goods or services undoubtedly seriously disrupts the market exchange, therefore any legal instruments that aim at minimizing the risk of confusion, deserve appreciation and consideration, which was the purpose of this article.

## **5. Conclusions**

The EU’s vision of prosperity includes consumer protection as well as the relevant policies of producers and traders forced thereby, which will increase the competitiveness of EU products in the global economy. The need for consumer protection is a natural consequence of the policy of integration.

The issue of confusion is of interest to several disciplines of law: the law on unfair competition, industrial property law and consumer protection law. The term “confusion” is a vague concept, which requires specification in judicial decisions. It should be emphasized that the risk of confusing the recipients is a basic institution of the trademark law. It consists, in general terms, in the possibility of erroneously assigning the origin of the goods by the recipient, in a manner contrary to the state of facts, due to the trademark, to the proprietor

of the trademark. The risk therefore includes the possibility of confusion as to the ties between the undertaking of the third party with the proprietor of the trademark. Both in the EU law and in the Polish law every form of risk of confusion is an obstacle to register the trademark with a later priority, and in case of its registration – it constitutes the basis for the cancellation of the right of protection. Each form of this risk is also a constitutive condition for infringement of a protective right granted in respect of the trademark.

Under the trademark law the protection of the interests of consumers is made in a way collaterally, in the context of rivalry between the traders of the exclusive use of a particular sign, free from the risk of confusion. The approach to the determination of the likelihood of confusion, as settled in the doctrine and jurisprudence, whose central point is the recipient of the goods, is not without significance for the interests of consumers and should be also paid attention to in this context. It is especially the case in light of the new approach to the protection of the trademark formed in the context of the case law of the Court of Justice of the EU, according to which the trademark is increasingly often perceived as the image of the product. Thus, the weight of the burden of protection in the light of the need to protect the interests of consumers should aim to protect the bond that is formed on the basis of relations with the trademark. These ties are based on trust, and the benefits of them rely primarily on reducing the transactional risk by minimizing the risk of purchase, simplifying the selection process, by process of saving time. The trademark equips the consumer with information and considerably simplifies the decision-making process related to the purchase of goods / services, and should therefore be the guarantor of the proper and non-misleading information. Full control over the course of market communication lies not only in the interest of the proprietor of the trademark, but also in the interest of the consumer.

## References

- Ametrano, F.M [2014] “Hayek Money: The Cryptocurrency Price Stability Solution”, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2425270](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2425270);
- Bank of England (2014 Q3), Ali R., of the Bank' S Financial Market Directorate Infrastructure, Barrdear J., of the Bank' S Monetary Assessment and Strategy Division, and Clews R. and Southgate J., of the Bank' S Markets Directorate, “Innovations in payment technologies and the emergence of digital currencies”;
- Davidson, L., W.E. Block [2015], “Bitcoin, the Theorem Regression, and the Emergence of has New Medium of Exchange”, the Quarterly Newspaper of Austrian Economics, vol. 18, n° 3, pp. 311-338

Decker, C, Wattenhofer, R. Information propagation in the bitcoin network. In: Proceedings of the International IEEE Conference on Peer-to-Peer Computing (P2P). 2013;

Dominic Frisby, "The Incredible Technology behind Bitcoin Is about to Change the World" [files], Insider Business, January 21st, 2015;

Dupre, D., J. - F. Ponsot J. - M. Servet [2015], the bitcoin against the revolution of the commun runs, communication to the 5th congress of the French Association of political economy, Lyon, July; HEEKS R., "Understanding "Gold Farming" and Real-Money Trading at the Intersection of Real and Virtual Economies", Newspaper of Virtual Worlds Research, Vol.2 n°4, February 2010;

Herlin P. (2013), "the revolution in the currencies: to circumvent the banks and the States", in the Revolution of Bitcoin and the complementary currencies: A solution to escape from the banking system and the euro, Eyrolles Editions and Atlantis, 2013, pp. 32-40;

Kibum Kim, Consultant At KPMG, Seoul, Korea, Taewon Kang, Ph.D Candidate At Seoul University National, Seoul, Korea Does Technology Against Corruption Always Lead to Benefit? The Potential Risks and Challenges of the Blockchain Technology, 2017, pages 12 and 15;

Maftai, L. (2014), BitCoin – between legal and informal, THESE Working Papers, Vol.6, No.3, pp. 53-59;

THANKACHEN J., "Deep Web: Proverbial the Safe House for Cybercriminals", Wired, August 22nd;

The 'Great Bitcoin Exodus' has totally changed New York' S bitcoin ecosystem, New York Business Newspaper by Michael Del Castillo, the 8/12/2015.

## Performance Management in Counties: A Position Paper On Devolution in Kenya

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### Abstract

**Purpose** – The purpose of this paper is to review existing literature on performance management in counties, a new feature in Kenya that influences organizational performance and to construct a framework that could be valuable for leadership of the devolved units.

**Design** – This paper used a systematic review of articles on the landscapes that influence performance management. The purpose of this study is to collect and summarize all empirical evidence from literature that forms a perfect fit for this review.

**Findings** – The findings of the study have been woven together in a proposed framework on performance management leadership competencies that in turn influence organizational performance.

**Research limitations/implications** – This paper is a literature review on the performance management of counties in Kenya as a new phenomenon following the promulgation of a new constitution in 2010; therefore, structures are yet to take route and be subjected to empirical testing.

**Practical implications** – Leaders can leverage the results of this study to enhance their leadership competencies for improving the counties' performance on human capital and organizational levels.

**Value** – There are few studies on the performance management on counties as this is a new phenomenon in Kenya on organizational performance. The County Governments should therefore adopt performance management systems in line with vision 2030 and proper strategies that will make them more efficient and effective to meet the citizens' expectations on devolution and to enable them to achieve competitive advantage and superior economic development performance. This paper has identified key variables that play a significant role in helping counties perform effectively.

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**Keywords:** Performance management, counties, promulgation, organization performance, devolution.

## 1.0 Background information

Governments all over the world pride themselves on the ability to publicize their development track record and engagements at every opportunity. Performance management is a force for both vertical and horizontal integration. Hartle, (1995) postulates that performance management should be integrated into the way business is managed and linked with other key processes such as business strategy, employee development and total quality management. It is strategy that is concerned with the broader issues confronting businesses. Performance management describes a method of enabling people in an organization to perform at their best to accomplish goals and objectives that contribute to the success of that organization.

Performance management is referred to as a strategic and integrated approach to delivering sustained success to organizations by improving the performance of the people who work in them and by developing the capabilities of teams and individual contributions (Armstrong & Baron, 1998). It therefore embraces both behaviour and outcomes in a systematic process of: planning work and setting expectations; continually monitoring performance; developing the capacity to perform; and periodically rating performance in a summary fashion rewarding good performance. This traditional approach is captured in the definition of performance management systems espoused by Buchner (2007) as a process for establishing a shared understanding about what is to be achieved, and how it is to be achieved, and an approach to managing people that increases the probability of achieving high performance, growth and success.

The genesis of performance management in the Public Service in Kenya is traceable to the Economic Recovery Strategy (ERS) and Wealth and Employment Creation of 2003-2007. At the County Government level, performance management is legally prescribed through various sections of the County Government Act of 2012 (CGA), Public Finance Management Act, 2012 (PFM), and the Mwongozo Code of Governance for State Corporations. Hope (2001) points out that performance contracts specify the mutual performance obligations, intentions and the responsibilities that a government requires public officials or management of public agencies or ministries to meet over a stated period. Therkildsen (2001) speculates that performance contracts if well executed increase political accountability by making it easier for managers to match targets with political priorities. Politicians can, in turn, hold managers accountable for their performance as being witnessed in many developing countries.

The CGA Section 47(1), requires the County Executive Committee to design a performance management plan to evaluate performance of the county public service and the implementation of policies. The plan provides for among others: objective, measurable and time bound performance indicators,

linkage to mandates, annual performance reports, Citizen Participation in the evaluation of performance of county government and public sharing of performance progress reports. Further, the CGA Section 103 identifies the objectives of county planning that include: ensuring harmony between national, county and sub-county spatial planning requirements whereby each county is required to have planning unit in place which ensures linkage between county plans and the National planning framework as per Section 105 of the CGA.

The PFM Act of 2012 Section 126 (1) also requires every county to prepare a development plan which identifies: strategic priorities for the medium term that reflect the county government's priorities and plans; programs to be delivered with details for each program of; the strategic priorities to which the program will contribute, the service or goods to be provided, measurable indicators of performance where feasible, and the budget allocated to the program.

The underlying objective of a CPMF is to promote accountability in service delivery by ensuring that tasks are performed efficiently, effectively and economically. Also, a performance framework provides a mechanism for citizen to engage and evaluate the performance of their county government. The CPMF is composed of seven (7) components. These components include; Vision 2030, 10-Year County spatial/sector plans, 5-Year County Integrated Development Plan (CIDP), 5-Year departmental strategic plans, Annual Development Plans (ADP), Performance Contracting (PC), Performance Appraisal System (PAS) and Monitoring and Evaluation and Reporting.

Performance Management is often taken to be fundamental to delivery of improved services. Emphasis on performance management for delivery of results is undoubtedly influenced by the basic assumption which lies in its professed ability to unite the attention of institution members on a common objective and galvanize them towards the attainment of this objective (Balogun, 2003). However, in the Counties there are tools such as Performance Contracts (PC), Staff Performance Appraisal Systems (SPAS), Rapid Results Initiatives (RRI) and Public Service Charters Systems.

Performance evaluation/appraisal, a process by which a manager or supervisor evaluates an employee, is widely touted by human resource scholars, professionals, and practitioners. The goal of a performance appraisal is to do more than point out poor, good, or excellent performers. It is also important to understand that a performance appraisal is not used solely for the purposes of discipline or remediation but as part of a continuous improvement process. The many purposes of ongoing performance appraisal process may help an organization to succeed. The goal is to use resources, meaning people, to help drive the organization's mission.

The biggest challenges faced by counties is developing the capacity to deliver services and track implementation. Performance management is an indispensable requirement for effective county management. Although there are several reasons counties should consider measuring the performance of their programmes and services, the most compelling one is that citizens demand and deserve quality service. The evidence of effective performance management in a county is essentially indicated by improved service delivery. It is fundamentally about driving and monitoring results and the correct behaviours of people (Standard Digital Media, November 2014).

## **2.0 Identification of the Problem**

Studies have been done on PM in the defunct Local Authorities in Kenya but very few on the County Governments. Nzuve, (2013) also focused on factors affecting performance management among Local Authorities in Kenya. The study concluded that the perceived factors that influenced performance management were understanding of performance management, stakeholder involvement, continuous monitoring, feedback, dissemination and learning from results, organizational culture and leadership commitment. Gichimu (2010) in a study found out that significant factors influencing the successful implementation of an employee performance management system, to be the users' understanding of the system and creation of a conducive working relationship that fosters performance. Mwangi (2008) investigated the use of rewards as a performance management strategy by insurance companies in Kenya concluded that there is a significant relationship between reward management practices and employee retention.

The importance of performance management system is on continuously improving organizational performance, and this is achieved by improved individual employee performance. Therefore, improving employee performance by using performance management system is away to improve organizational performance.

There are limited studies on Performance Management Systems on the devolved units of government, this study focuses on the existing literature gaps and recommend the intended benefits on PMS thereof. The failure of the top management to support the counties such as, (failure to involve all stakeholders in the development of the PMS, continuous monitoring, feedback, dissemination and learning from results, staffing gaps at the middle level management) to operationalize performance management at the county must be reinforced by the recommendations of the study. We propose a framework to address gaps that has immensely contributed to poor service delivery and the low implementation of developmental projects at the counties.

## 2.1 Justification

Performance measurement is often taken to be fundamental to delivery of improved services. Emphasis on performance management for delivery of results is undoubtedly influenced by the basic assumption which lies in its professed ability to merge the attention of institution members on a common objective and galvanize them towards the attainment of this objective (Balogun, 2003). Operationalizing a PM in County Governments is therefore important in making sure that Counties demonstrate their development results. Subsequently, it means that PM in County Governments will mark a paradigm shift and a new dimension that Counties will no longer just demonstrate what they have done but rather how their activities and interventions have benefited the people of Kenya.

Out of 47 Counties in Kenya, only 27 Counties have put in place a Performance Management System as shown in table below:

SNo.	Tool	Remarks
1	Performance Contracting Guidelines.	27 Counties have put in place a Performance System: Baringo, Bungoma, Busia, Embu, Homabay, Kakamega, Kericho, Kilifi, Kisii, Kisumu, Kitui, Laikipia, Lamu, Machakos, Makueni, Migori, Mombasa, Nairobi, Narok, Nyandarua, Nyeri, Siaya, Taita Taveta, Tharaka Nithi, Tranzoia, Vihiga and West Pokot
2	Guidelines for the development of County Integrated Monitoring and Evaluation System (CIMES).	Turkana has put in place an M&E system and cascaded down to Monitoring and valuation Committees and Kwale County has M&E policy
3	County Delivery System	Not yet adopted

Source: Council of Governors, (COG 2017)

## 3.0 Situation Analysis

The main purpose of the performance management system is to ensure that:

- I. The work performed by employees accomplishes the work of the organization;
- II. Employees have a clear understanding of the quality and quantity of work expected;
- III. Employees receive ongoing information about how effectively they are performing relative to expectations;
- IV. Awards and salary increases based on employee performance are distributed accordingly;
- V. Opportunities for employee development are identified; and Employee performance that does not meet expectations is addressed

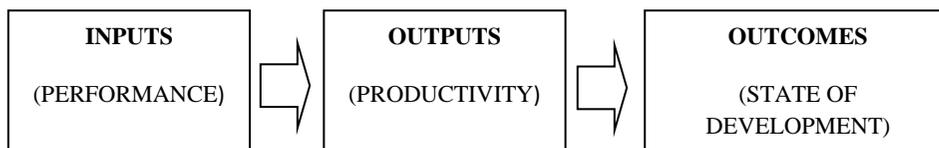
Macky and Johnson (2000) suggested that a typical performance management system features include: the organization communicates its mission/strategies to its employees; the setting of individual performance targets to meet the employees' individual team and ultimately the organization's mission/strategies; the regular appraisal of these individuals against the agreed set targets; use of the results for identification of development and/or for administrative decisions; and the continual review of the performance management system to ensure it continues to contribute to the organizational performance, ideally through consultation with employees.

Successful organizations are aware that to win in today's competitive marketplace, they must attract, develop and retain talented and productive employees (Varma, Budhwar & DeNisi, 2008). High performing organizations get their competitive edge from a performance management system that helps them hire talented people, place them in the right position, align their individual performance with organization's vision and strategic objectives, develop their abilities and reward performance commensurate with contributions to the organizations' success.

Counties are facing service delivery issues due to limited capacity and limited resources. The Council of Governors developed a County Performance Management System intended to provide tools to aid the Governors drive forward their manifesto and development agenda (CPMS Handbook, 2016). However, counties have not fully embraced this County Performance Management Framework (CPMS) and the 27 counties that have adopted either one or more tools of the CPMS have cited various challenges. The challenges include: inadequate funds to train the entire workforce on performance contracting and performance appraisals, non-commitment by the top management, staff attitude towards embracing PMS and setting of highly ambitious County Integrated Development Plan (CIDP) not aligned to the Kenya Vision 2030.

The content of CIDP and Annual Development Plan, and quality of performance indicators and targets strategy, are by far the most important elements of an effective performance management system. Performance management is achieved when there are indicators and targets measuring the

inputs, outputs and outcomes of development projects, as well as financial and non-financial activities.



Source : <http://www.blgs.gov.ph/lgpms>

The implementation of a PMS is precipitated by: the level of involvement of employees in the designing of the system; the extent to which the system is understood and supported by the managers; extent to which corporate goals are aligned with individual and team goals, how specific, measurable, achievable, realistic and time specific the goals are, extent to which the system enables the supervisors to provide ongoing feedback to split and whether

The quality of services is affected not only by the economy, politics and social conditions, but also by performance management practices. An effective system aims at achieving agility for sustainable success and entrenching a performance-driven culture. To be effective, counties should move beyond legislated requirements and adopt a system that directs available resources to what is important, achieves the improvement of service delivery and citizen satisfaction.

Counties that have embraced PMS have adopted mainly the Performance Contracting, Performance Appraisal System, Service Delivery System, Work Plans, and Rapid Results Initiative System.

### 3.2 Situational Challenges

Devolved units (counties) have experienced unprecedented change, and are at the same time faced with many service delivery and development challenges. Development prioritization is critical, and decisions are made based on evidence. Thus, counties are expected to measure absorption of funds and achievement of development results.

Secondly there is no alignment due to various organizational processes being created in isolation. Strategy development, budgeting, operational planning and implementation of the CIDPs and ADPs, departmental strategic plans and the Spatial/Sector Plans are developed by different groups of people with different frameworks adopted hence resulting to non-alignment between individual performance, departmental performance and organizational goals.

Thirdly, some counties have embraced PMS contracts and set ambitious targets that are not achievable. In other cases, no data can be

collected or is kept as evidence to track performance and inform proper future decision making (GDS, 2016).

Fourthly, counties that have embraced PMS fail to give the due attention and commitment in its development and this affects the successful implementation of the PMS. The commitment and understanding of leadership and management of the requirements for achieving a workable performance system is critical to any performance success (Armstrong, 2001).

Fifthly, a few counties that have embraced PMS, have either failed to cascade performance contracting or failed to conduct and review staff performance appraisals. Management needs to appreciate that performance management is not an event but something that is managed daily but recorded and reported at certain times through reviews and appraisals (Lawler, 2005).

Lastly, political influence poses a great challenge to operationalization of PMS in the counties. Governors have not harmonized the already developed PMS framework to be adopted and embraced across the board.

Unfortunately, measuring the efficacy of a performance management system can be a problematic. The goal of performance management is to maximize organizational performance, but many other factors are likely to influence the success of a company. Just because an organization has a great quarter or year does not mean that its management practices deserve all the credit.

### **3.3 Proposed mitigation and intervention strategies**

The success of PMS in the counties must be demand driven as a best practice phenomenon in the development agenda. Governors, CEC Members and Chief Officers must actively spearhead county PMS implementation, including monitoring and evaluating the results thereof. The ADP should include a list of projects and their budgets, preferably as a programme-based budget in alignment to the CIDP, departmental strategic plans and the Spatial/Sectoral Plans.

Capacity building of human capital on PM at all levels of management through identification and prioritization needs and implementation of the county vision. Improvement on service delivery, achievement of results, and demonstration of progress to citizens, the county must have the ability to monitor, evaluate and act on the results achieved – based on timely evidence. Consequently, it is important for a county to produce timely and accurate information across all systems leading to faster and better decisions.

The county PMS needs leadership and commitment from the Governors and the executive team. This executive team will ensure each officer using the PMS system is accountable and responsible for providing information and data. The county CEO (Governor) is essential to the success of the Performance Management System. The commitment and follow up,

driving accountability and service delivery, using the county PMS can significantly accelerate the speed of development and the quality of service delivery in the county (GDS, 2016)

To improve performance management in counties, individual accountability is critical, where performance is assigned and measured within a defined period. Counties should therefore focus on performance improvement both at the strategic and operational levels to unlock the full potential of the available resources and infrastructure through cascading the PC from the top management to the middle management and conducting Staff Performance Appraisals for all other staff. Proper evaluation and assessment mechanisms should also be put in place.

The Council of Governors in conjunction with the Ministry of Devolution and Planning should put in place a policy framework on performance management aligning both the NPMF and the CPMF. This will therefore discourage unnecessary political interference.

Finally, to achieve sustainable success, counties should take advantage of change (whether planned or unexpected) with the aim of owning the process and giving it due attention. It will require the ability to move quickly, adapt to change and address it smartly, while simultaneously keeping the county on course.

In summary, counties should align individual and company goals, reward performance, identify poor performers, leverage technology and avoid legal battles.

#### **4.0 Implications of the performance management on Counties**

Performance management is a continuous process that creates a working culture that encourages employees to improve their work performance and reach their full potential during their stay of employment. Secondly, Performance Management also provides strategic direction, develop competency in employees and instill organization value.

According to Gagne (2002), if individual employees know what their priorities are, they will follow those priorities. Performance management gives managers and employees more say in setting their goals and more accountability for accomplishing them. Consequently, this implies that performance management does not necessarily fix problems but eliminates challenges that causes the problems.

The PMS will increase visibility and make County Governments accountable and transparent. In Taita Taveta County, the PMS is a tool that will make them hold themselves accountable to the people of county, and will transform all the institutions within the county through this system (CPM, Handbook, 2016). The Laikipia County Governor asserted that “As a county, how can we hold ourselves accountable to the people? What have we been

doing? We do a lot as a county, but we have not communicated enough to our people. This is the best time for us as a county to make proper use of the system and ensure we have visibility, transparency and accountability.” The system will also ensure quality delivery of services, enhance Human Resource Management and coordination of public service performance. This was confirmed by a team of County Chief of staffs (September 2014) in a workshop on County Performance Management System (CPM, Handbook, 2016).

With the PMS in place in the counties, there will be needing to measure and show value for money expended in development and to get updates on the progress being made on a timely basis. This is because targets are set with a timeframe in mind and tasks must be completed within the timeframe.

The purpose of implementing the County PMS is to ensure that performance happens by design and not by chance. Thus, the PMS ensures the linkage between planning, budgeting, accountability and results, in the counties. Thus, by ensuring accountable delivery of priority and flagship projects in areas such as in infrastructure, agriculture, health, climate change and resilience, the county PMS provides a mechanism through which the political and administrative leadership of the county can improve the lives of Kenyans.

PMS in counties will ensure that the most important services and projects get initiated, and delivered. Without priority and focus, resources may be misallocated, and key projects will not get the focus as planned. For this reason, it is important that each County Executive Committee Member and County Chief Officer agrees the priority projects and services for each ministry (department).

Finally, the PMS will provide the county leadership and officers with a finger on the pulse of development results, including who is accountable for each project and service, together with the evidence recorded and the results produced.

## **5.0 Conclusion**

County Governments have a constitutional responsibility to engage with, listen to and account to their citizens about use of public funds. Comparison of the use of these funds for the analysis of public service performance is the only way of justifying the use, other than bureaucracy. Kervasdoue (2007) asserts that, there is no disagreement that performance evaluation is necessary in public affairs. Governments and their bureaucrats must be accountable to their citizens about the use of taxes and public funds.

Upon the adoption of PMS framework, counties shall promote accountability in service delivery at the County level by ensuring that tasks are performed efficiently, effectively and economically. It also provides a

mechanism for Citizens to engage and evaluate the performance of their county governments.

Finally, adopting a reliable performance management system is not negotiable for county governments if they are to deliver on their core mandate, achieve their objectives and improve service delivery.

PMS is one of the managerial techniques that improve the performance, attain and sustain competitive advantage of an organization. Subsequently, the implementation rate of PMS is high in the contemporary organizational environment as a best practice. Hence, the organization should put their greatest effort for successful implementation of PMS either through financial resource or human resources.

### **5.1 Recommendations**

The government of Kenya in a milestone contained in the 2010 Constitution, has addressed the question of leadership, governance and management of public resources. This is documented in Mwongozo Code of Governance for State Corporations (MCoGSC, 2015). Mwongozo allocates responsibilities for supervision, implementation and enforcement while recognizing the role of complimentary agencies. This framework is envisaged to lead a positive impact of the national budget while improving the public's perception for quality and delivery of public service. The following raft of recommendations if implemented will address PMS issues:

- a) Execute a performance management system that is linked to the mandate of the organization and which is aligned to the national development plans and sector performance standards to reflect the corporate culture and values.
- b) Set realistic performance targets that will form the basis of performance evaluation and focus on the right company performance measures.
- c) Ensure that the performance targets are measurable and link compensation to PMS – merit increases, short/long-term and discretionary incentives.
- d) Agree on the performance parameters and targets with the National Government or oversight body and ensure that the obligations of the parties are documented. Require managers to actively search out, offer and acquire performance feedback on a regular basis.
- e) Ensure that the performance targets are cascaded to the management and staff of the organization through a performance management system and communicate the total reward system.
- f) Continually monitor organizational performance and identify areas that require improvement. Capacity build managers in performance management.

- g) PMS is premised on a foundation that include; the first building block is a focus on outcomes-performance of the public services which should be assessed based on results. The second one involves devolving responsibility for the delivery of services to employees, subject to appropriate minimum standards and regular performance monitoring. The final building block is about improving the governance of public services, by reforming institutions to reflect the importance of clear objectives, appropriate incentives and good performance information in the achievement of higher productivity.

## References

- Armstrong, M. (2000). *Performance Management. Key Strategies and Practical Guidelines*. London: Kogan Page Limited.
- Armstrong, M., & Baron, A. (1998). *Performance Management: the new realities*. London: Institute of Personnel and Development.
- Balogun, J., Huff, A. S., & Johnson, G. (2003). Three responses to the methodological challenges of studying strategizing. *Journal of Management Studies*, 40(1), 197-224.
- Buchner, T. W. (2007). Performance Management Theory: A look from the performer's perspective with implications for HRD. *Human Resource Development International*, 10(1), 59-73.
- Council of Governors of Kenya. (2016). *County Performance Management System and Stakeholder Engagement Handbook*. Nairobi: Government Press.
- Council of Governors of Kenya. (2017). *Performance Management Framework for County Governments*. Nairobi: Government Press
- Gagne, K. (2002, January 30). Using performance management to support an organization's strategic business plan Volume 28, Issue 4. Wiley Periodicals Inc, pp. 53-59.
- Gichimu H. A. (2010) Factors influencing successful implementation of employee performance management systems at KPMG
- Government of Kenya. (2007). *Economic Recovery Strategy for Wealth and Employment creation (2003-20087)*. Nairobi: Government Press.
- Government of Kenya. (2012). *The Public Finance Management Act*. Nairobi, Kenya: Government Press.
- Hartle, F. (1995). *How to Re-engineer your Performance Management Process*. London: Kogan Page.
- Hope, K. R. (2001). The New Public Management: Context and Practice in Africa, *International Public Management Journal*, Vol. 4 No. 2
- Kervasdoue, J. (2007) Rating and Evaluating Health Systems: Reinforcing the Partisan Spirit or Investigating the Public Good? Paper prepared for the IPMN

- Workshop, 'Ranking and Rating Public Services', Worcester College, Oxford, 7-9 August 2007
- Lawler III, E. E. (2005). Creating high performance organizations. *Asia Pacific Journal of Human Resources* Volume 43. Issue 1, 1-15.
- Macky, K., & Johnson, G. (2000). *The strategic Management of Human Resources in New Zealand*. Auckland, New Zealand: Irwin/McGraw-Hill
- Mwangi (2008) *The use of rewards as a performance management strategy by insurance companies in Kenya*
- National Council for Law. (2016). COUNTY GOVERNMENTS ACT. NO. 17 OF 2012.
- Nzuve, S. M., & Njeru, L. K. (2013). Perceived factors affecting Performance Management among Local Authorities in Kenya: A Case of the City Council of Nairobi. *Africa Management Review* August, Vol 3 No.2, 59-69.
- Public Service Commission (2015). *Mwongozo Code of Governance for State Corporations*. Nairobi: Government Press.
- The Standard Digital Media (3rd November 2014). Performance management key to making devolution a success. Accessed on 5/10/2017
- Therkildsen, O. (2001). Efficiency, Accountability and Implementation: Public Sector Reform in East and Southern Africa. UNRISD Program Paper No. 3, (pp. 16-131). Geneva.
- Tse, J. (2007). The Changing Phase of Performance Management Systems. *People Management* Vol. 13 No. 2, 35-36.
- Varma, A., Budhwar, P. S., & Denisi, A. S. (2008). *Performance Management Systems: A Global Perspective*. Abingdon: Oxon.

# Understanding Risk and Uncertainty in Project Management

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## Abstract

This paper seeks to discuss different aspects of risk and uncertainty. This paper will then look at the historical presentation and understanding of the two concepts and how different experts contributed, in the course of time, in understanding the two concepts. Other sections of the paper will look at the different ways that are applicable in reducing the harmful effects of risks and uncertainty. As will be presented, resources must be set aside to deal with risk and uncertainty. The paper will demonstrate that historically, the understanding of both risk and uncertainty has been a number of changes through while previous knowledge and information has been improved with a view to enlightening society on the best ways to manage their adverse effects. However, during the entire discourse, it is clear that risks can be tabulated and quantified with a view to reducing their harmful effects while uncertainty is unforeseen and cannot be predetermined.

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**Keywords:** Risk, uncertainty, probability, project, project management.

## Introduction

Cognisant of the various challenges that could portend in life about risk and uncertainty, many scholars and general societies have been faced with risk and uncertainties in all aspects of life. This has called for various strategies aimed at understanding the concept of risks and uncertainties and the issue has been debated since time in immemorial. This paper will affirm that both risks and uncertainty have faced humanity for a long time. Risk refers to both negative and positive outcomes that can be calculated through probabilities and historical occurrences while uncertainties are unforeseen negative or positive eventualities that cannot be determined at present.

## Historical Overview

The concepts of risk and uncertainties have been the subject of discussion in various fields and academic discourse for a very long time.

Moreover, each and every aspect of human life and engagement faces risks and uncertainties, and this means that judgement decisions must be made at all times. This section gives a historical presentation of the concept of risk and uncertainties and, evidently, states that different people across disciplines contribute immensely to the understanding of the contemporary concepts of risks and uncertainties. In retrospect, it is important to acknowledge that the understanding and comprehension of the subject matter have undergone different inputs and interpretation, thus making improvements in the course of time.

According to Goodhart (2009) in Greece, the first recorded attempts in risk analysis and regulations took place in Phoenicia. In this respect, there were different institutions that were put in place to counter risks and prize trade within the maritime frontier. Wealthy business people gave letters indicating awards on credits and how profits would be shared. Similarly, indication on different indemnities that would be awarded to people was also introduced.

In 100BC, greater innovations took place to safeguard against imminent risks, and this was evident in the manner in which ships and other equipment were made. Navigation at sea was also improved, just as was the development of financial securities. Development of mathematics as a discipline also took place during the same period. Future predictions through celestial mappings were also enhanced.

According to Ivanov (2003), the renaissance that took place in the 1500s supported the development of science. Risks became vital in price formulations and potential profits that would be earned. Capitalism gained popularity and with it came things like bookkeeping and forecasts; current accounting was born as a result. Understanding the calculation of margins, profits and percentages took place.

Capitalism called for a more advanced approach in forecasting and predictions and this enabled scientist to devise a means of predicting future events. The Chinese came up with algebra that proved useful to that end. Italy witnessed the first set of banks that established up in Genoa and Venice.

Between 1445 and 1490, Paccioli introduced the concept of gambling: gaming and chance. In the analysis, it became clear that there was a likelihood of exploring the chance of a future event taking place. In those times, a metaphysical analysis was taken by event since the advent of qualitative analysis to give explanations on natural occurrences. Gambling took shape; the outcome of events meant that the probability of events relied upon favourable and unfavourable occurrences. Cardona and other like-minded people took advantage of that understanding and developed concepts of using dice and other gaming tools (Pushkarskaya et al., 2015; Walker et al., 2017).

Gigerenzer (2005) argues that in the mid-17<sup>th</sup> century, Blaise Pascal invented what became the first calculator. On the same note, the present day decision making theory formed root. That was essential in helping make numerous decisions in case of uncertainties. The scientists also introduced statistical inference that was essential in hypothesis development in the case of the sampling. Fermat borrowed a leaf from previous works and formulated foundations of the present day probability theory. Economics and mathematics were the first disciplines to appreciate those findings and used them in their analysis.

Jacob Bernoulli, who lived between 1655 and 1705, introduced large number laws and introduced the error term, confidence level and means of improving accuracy in data and analysis. The broad name given to those discoveries were utility hypothesis and have enormous applications in various disciplines today.

The fundamental difference between risks and uncertainties were first drawn by Bayes (Skinns, 2011). It became clear that uncertainties were linked to environmental factors. They were unknown and unpredictable. Bayes ideologies were enhanced by Francis Galton, who advanced the concept of regression and correlation. The concepts were an important milestone in calculation and prediction of risks and uncertainties.

Uncertainty and risk are considered to be multidisciplinary and multifunctional concepts, which are useful in different areas such as accounting, marketing operations, finance, organisational design and human resource management. In fact, risk and uncertainty are crucial to make sure that every project succeeds. In addition to that, these concepts borrow ideas from engineering, human behaviour, mathematics, psychology and sociology (Smithson, 2015; Song et al., 2017).

Above discussed, contributions have undergone numerous revisions. To date, numerous scholars and academicians are still in pursuit of further improvements of concepts that can ease the understanding of risks and uncertainties. Over the course of development of the concepts, it is clear that risks can be calculated and determined while uncertainties are beyond prediction and human control.

## **Risk**

In order to understand risk, let's define a project as an attempt in which physical, human and financial resources are utilized in order to accomplish a goal of specific tasks, within a certain limitation of time and cost. The major aim of accomplishing a project is to bring about a constructive change by delivering quantitative and qualitative objectives (Elfaki et al., 2014; Koleczko, 2012; Serrador & Turner, 2015; Papke-Shields & Boyer-Wright, 2017). Nowadays, risk management practices are required in order to get

positive outcomes from a project. These risk amendment practices help in the achievement of economically effective objectives and long-lasting future benefits. In addition to making a project successful, conduction of an effective risks analysis assists in the identification of certain risks which have the ability to alter the outcome as compared to expected and projected results (Nasirzadeh et al., 2016). In this way, previous practices can predict the occurrence of a risk. However, uncertainty cannot be projected in this manner.

According to Rutherford (2002, p. 182), “Risk is an outcome which can be calculated through measuring probabilities.” In project management, risk refers to the measurement of both the probability and consequence of failing to achieve a set goal of the project. Most professionals accept the fact that risk can be equated with uncertainty. However, when taking risk into consideration, it is necessary to ensure that the consequence that is related to the event must be accounted for. Assessing risk is complex and dynamic over time as both the probability and consequence of the occurrence are not measurable parameters; thus there is a need to use estimation based on judgement or statistics and in some cases the application of other procedures. In general, once consequence or probability shows an increase, a possible increase in risk is also expected (Chandra, 2015). It is very important to take into consideration probability and consequence in risk management.

In order to comprehend the significance of risk, there is a need for a deeper investigation into the true meaning of project management. Project management has to overcome numerous obstacles while accomplishing anticipated outcomes through a process of preparing, organising, acquiring, and handling certain resources. Most importantly, the challenge that project management has to overcome includes achievement of all set goals and objectives whilst considering the set constraints including range, time, requirement, quality and budget problems, being measured and organized by a project manager (Babatunde & Perera, 2017). In order to achieve this, two steps are required. Firstly, the project management team should adopt a practical risk management methodology which is efficient enough to detect risks at early stages, and thus can predict how far those risks can arise or certain opportunities can emerge. Secondly, it should adopt a portfolio method which manages risks in integrated and cost effective ways, throughout the entire event and portfolio of project. If both of these methodologies are adopted, then effective and sound decision making can be made which will eventually make the management strong and fast enough to take active steps during periods of change and uncertainty. In other words, the significance of risks for project management can be well understood in making effective cost budget, accomplishing the goal of earning profits, gaining success or not being an enterprise, and getting an authoritative and trustworthy image in eyes of their key stakeholders (Babatunde & Perera, 2017).

Regarding project management, all profitable and professional activities are actually risks in the future. So, in order to recognize the probability of risk, both science and judgement needs to be considered. Probability theory refers to a branch in mathematics that is focused on analysing random phenomena (Bernstein, 1998). The result of a random event may not be known before it happens, but possible outcomes can be known. The probability is of two types, either when the object itself is really uncertain, and is determined by chance; or when, although to be sure of an object already (Keynes, 1921). Humans may use probabilities on all aspects of their lives. Taking into account the risk of any event, the assessment of all possible outcomes is usually weighted through its probability of occurrence. Indeed, judgement and science can be utilised in measuring risk where probability of occurrence and impact are weighted, and decisions largely depend on placement of mechanisms for controlling and managing risk. Making sure that risk does not become uncontrollable by risk management, expected utility theory was created to better understand and analyse attitudes toward risk, such as risk seeking and risk aversion, particularly when it is applied to decision making. It is important to note that theoretical constructs applicable to risk have been examined for more than a century to come up with a better understanding of its impact and usefulness in practical application (Bernstein, 1998).

### **Probability**

Probability theory is known to be very useful in forecasting, yet the quality of information that is the foundation of probability estimates might dictate the accuracy and quality of expected outcomes. Probability depends on historical event observations to come up with future events (Bloom, 2014). Indeed, it is a complicated task to come up with decisions for future occurrences in conditions of uncertainty. Probability is a technique which is mainly used to evaluate quantitative risk. Regarding project management, the outcomes of any quantitative risk analysis is employed for numerous purposes (De Oliveira et al., 2017; Dziadosz & Rejment, 2015). For example, the results are used to rank risks according to their gravity and rate of occurrence. At the end of each project stage, deduced probabilistic cost and schedule approximation for set milestones assist the project managers in allocating resources effectively. Moreover, the results help in evaluating probability of meeting set cost margin, technical performance, set goals, achieving, and authenticating established technical performance measures. Considering these effects of outcomes of quantitative risk analysis, it is highly important to get precise outcomes. This can be done in two ways, firstly, by development of an authentic model structure, and secondly, by integrating exact probability data.

As for project risk management, Koleczko (2012) pointed out that there is a lack of attention afforded to these factors, which might result in inaccurate outcomes. Therefore, it is necessary that the model be designed carefully and validated before its application in the decision making process. Take note that once the outcome is not represented by one or more point values, probability distributions should be a suitable choice. The quantitative stochastic analytical approach refers to a methodology that combines a model structure and probability distributions. This can be used in risk management wherein it is expected to create a series of probability distributions for potential risks.

Keynes (1921), evaluated probability in his theory in which he basically analysed the effect of periodic information on the effectiveness of investment-based decision making. He also investigated that investors cannot be the rational actors of classical theory. This owes to the impossibility of getting cold calculation from projected outcomes. He also detected certain events in which it is impossible to make scientific calculations for computing probability. The study also revealed that there exist high instability of the facts and data which are used to evaluate future revenues and outcomes for investors. In short, there exists insignificant and slight information of the factors governing future investment yield (Koleczko, 2012; Papke-Shields & Boyer-Wright, 2017). However, Bayesian's methodology used probability retrieved from older data which was revised using new factual information. In other words, newer probabilities are statistically compared with previous ones (Bernstein, 1998). According to Jacob Bernoulli (1738), a risk can be better managed if three requirements are assumed which includes complete information, independent trials and significance of quantitative assessment. These suppositions are highly important in finding out how effectively these measurements and data can be used to compose and forecast future decisions (Bernstein, 1998).

### **Uncertainty**

According to Rutherford (2002, p.182), "Uncertainty concerns the unknown future". Uncertainty is part of project management wherein assumptions and expectations are involved in analysing the project's outcome. According to Knight (1921), there are two different types of uncertainty. The first is called measurable probability which the author labelled as "risk." The second is termed unquantifiable ambiguity or uncertainty. When applied to project management, risk can be given a probability value while uncertainty will be immeasurable. This distinction is deemed necessary as risk is concerned with objective probabilities while uncertainty might require taking into account subjective probabilities (Rutherford, 1995). Because uncertainty is considered to be a condition of insufficient knowledge, it can be affected by

uncertainty. Attitudes toward risk might be useful in understanding the decision making process under uncertainty, although this method may fail to consider human response to uncertainty. Moreover, risk can be measured, and results can be estimated, and a contingent style of management can be used to manage the inaccuracy of forecasting.

There are typically three traditional views of human responses to uncertainty. These are used to underpin most psychological approaches (Koleczko, 2012; Smithson, 2015).

1. The knowledge seeker;
2. The certainty maximiser; and
3. The intuitive statistician-economist.

Let's take a look at how individuals manage in the existing unreliable world. Regarding this, generally three uncertainty paradigms exist which must be analysed here. These include probability, delay and lack of clarity. Here, there is a need to establish a link between uncertainty and emotion. This is evident from Keynes' literature that mainly assessed the variances in orientation to lack of knowledge and uncertainty. Moreover, another study highlighted the significance of choices made upon proper reasoning which allows people to produce, realize, and validate their decisions (Tversky & Kahneman, 1981).

The first view is that of *knowledge seeker* which rarely exists in project management. It basically supports those people who are looking forward toward gathering new facts and skills despite short-term uncertainty and ignorance; communicate openly; and does not justify previous philosophies solely. This is rather an idealistic approach in which individuals rely on existing data for forecasting outcomes. This is so because both process and results appear too great an investment. As mentioned previously, most project managers feel restricted toward using their best judgements in making decisions regarding uncertainty. Project managers have many factors to take into account before they make an informal decision.

The second view is the *certainty maximiser* which highlights the devastating penalties of uncertainty, unpredictability and uncontrollability which affect the sentimental, rational and functional abilities of a decision maker (Meng & Boyd, 2017). Other studies reveal that uncertainty is an equivalent of anxiety. Thus, individuals are inspired to minimize uncertainty (Karimiazari et al., 2011; Oliva, 2016). This idea is comparable to Keynes' view of animal spirits which assesses if decision makers feel an urge to take action against uncertainty in order to minimize the subsequent emotional state of anxiety. He stated that instead of mathematical probability, most of our positive doings are dependent on impulsive positivity. In short, the majority of our positive acts and long-term judgements are an outcome of these animal

spirits. These are not resultant of weighted average, which is a product of quantitative benefits and quantitative probabilities (Koleczko, 2012).

The third is the view of *intuitive statistician-economist*. It initiates from observation and cognitive psychology and psychophysics. This view basically incorporates several models of cognition which are used to process data and information. It mainly signifies similar reactions of project management in risk matters and situations. “The dominate normative viewpoints, which have a lot in common with neo-classical economics, are probability theory and a view that humans as hedonic rent seekers, or in the case of project management, focussed solely on seeking profit and avoiding loss” (Bammer & Smithson, 2008, p. 173). Now, sensible decision-makers select certain preferences, rank them according to expected outcomes, and enumerate them into utilities i.e. net benefits/costs. This process of *maximising subjective expected utility* then goes on by adding the probabilities and utilities. Next, the average of added results is calculated. The product final value for which utility is expected to yield highest value is then selected. Even though these elaborate models seem limiting, still most studies have concentrated on judgemental and decisional inaccuracies (Tversky & Kahneman, 1982; Tversky & Fox, 1995a, b).

According to Keynes (1921) and Knight (1921), risk can be quantified with the use of probability theory while uncertainty remains incalculable. This notion has been examined for many years, particularly the theoretical constructs of risk, as a way of better understanding its impact on practical application. This is the reason why different strategies, research and theories have been proposed to apply to risk analysis. In particular, probability is the most widely used method in project management for quantitative risk analyses. Probability is also considered to be a useful instrument for forecasting as the quality of information needed for probability estimates will be the basis for accuracy and quality.

Lastly, let's throw light on dissimilarity between risk and uncertainty. On one hand, precise probabilities are assigned under risks. Whereas, on the other hand, the concept of uncertainty states that one cannot assign precise probabilities. This results into allowing the decision makers to make judgements using existing knowledge, perception, information and characteristics of the project, and their relative approaches and opinions. This idea is supported by Tversky and Kahneman, and is quite evident from their studies. Their studies reveal that individuals do not appear as if they were value-maximisers. Instead, claim that they actually are! This is held true based on various rational philosophies. Thus, people play the role of problem-solvers. They make choices based on their perceptions, and consequently solve critical issues by carefully balancing and compromising between set goals and desired values. In other words, they are not inspired, but themselves create

preferences by processing and choosing based on their own will and judgements (Koleczko, 2012).

## Conclusion

In conclusion, risk and uncertainty differ because with risk, specific probabilities are assigned while with uncertainty, one cannot use specific probabilities. This may lead to the decision makers' need to make sound judgement based on available information, instinct, their knowledge of a particular project and their own attitudes and beliefs. Thus, decision-making under conditions of risk where assignments of estimated probabilities are applicable will allow the development of management strategies that will respond to it, such as monitoring and managing risk mitigation as a way of controlling the risk to the desired level. On the other hand, uncertainty is considered immeasurable. In order to manage risks, the first step starts with the management of uncertainty. Risk management relies on assessing and making choices so that the right ones may be prioritized. Once that has taken place, the management should make use of all the available resources to reduce the likelihood of the occurrences. Control implies looking at the probability of the negative occurrences and reducing them. Examples of risks arising from various things like financial markets, projects and programs. It is also evident that the higher the risk, the higher the return. Risk and uncertainties are eventualities that must be catered for during planning

## References

- Babatunde, S. O., & Perera, S. (2017). Analysis of traffic revenue risk factors in BOT road projects in developing countries. *Transport Policy*, 56(7), 41-49.
- Bammer, G., & Smithson, M. (2008). *Uncertainty and Risk Multidisciplinary Perspectives*. London: Earthscan.
- Bernoulli, D. (1738). Specimen Theoriae Novae de Mensura Sortis. *Commentarii academiae scientiarum imperialis Petropolitanae*, 5, 175-192.
- Bernstein, p. L. (1998). *Against the Gods*. Good approach to understanding the development and science of probability theory, risk and risk management. New York: John Wiley & Sons.
- Bloom, N. (2014). Fluctuations in uncertainty. *The Journal of Economic Perspectives*, 28(2), 153-175.
- Chandra, H. P. (2015). Structural equation model for investigating risk factors affecting project success in Surabaya. *Procedia Engineering*, 125(3), 53-59.
- De Oliveira, U. R., Marins, F. A. S., Rocha, H. M., & Salomon, V. A. P. (2017). The ISO 31000 standard in supply chain risk management. *Journal of Cleaner Production*, 151, 616-633.

- Dziadosz, A., & Rejment, M. (2015). Risk analysis in construction project - Chosen Methods. *Procedia Engineering*, 122, 258-265.
- Elfaki, A. O., Alatawi, S., & Abushandi, E. (2014). Using intelligent techniques in construction project cost estimation: 10-Year Survey. *Advances in Civil Engineering*, 2014, 11. doi: <http://dx.doi.org/10.1155/2014/107926>
- Gigerenzer, G. (2005). *Calculated risks: how to know when numbers deceive you*. New York: Simon & Schuster.
- Goodhart, C. A. (2009). *Money, information, and uncertainty* (2nd ed.). Cambridge, Mass: MIT Press.
- Ivanov, L. D. (2003). *Reliability based renewal criteria for risk based inspection: Phase A: "level of confidence": definition, calculation and use for new designs and aging vessels*. Houston, TX: American Bureau of Shipping.
- Karimiazari, A., Mousavi, N., Mousavi, S. F., & Hosseini, S. (2011). Risk assessment model selection in construction industry. *Expert Systems with Applications*, 38(8), 9105-9111.
- Keynes, J.M. (1921). *A treatise on probability*. London: Macmillan and Company.
- Knight, F. H. (1921). *Risk, uncertainty and profit*. New York, USA: Dover Publication.
- Koleczko, K. (2012). Risk and uncertainty in project management and decision making. *Public Infrastructure Bulletin*, 8 (1), 76-82
- Meng, X., & Boyd, P. (2017). The role of the project manager in relationship management. *International Journal of Project Management*, 35(5), 717-728.
- Nasirzadeh, F., Mazandaranzadeh, H., & Rouhparvar, M. (2016). Quantitative risk allocation in construction projects using cooperative-bargaining game theory. *International Journal of Civil Engineering*, 14(3), 161-170.
- Oliva, F. L. (2016). A maturity model for enterprise risk management. *International Journal of Production Economics*, 173, 66-79.
- Papke-Shields, K. E., & Boyer-Wright, K. M. (2017). Strategic planning characteristics applied to project management. *International Journal of Project Management*, 35(2), 169-179.
- Pushkarskaya, H., Tolin, D., Ruderman, L., Kirshenbaum, A., Kelly, J. M., Pittenger, C., & Levy, I. (2015). Decision-making under uncertainty in obsessive-compulsive disorder. *Journal of Psychiatric Research*, 69, 166-173.
- Rutherford, D. (1995). *Economics- key concepts*. London: Routledge.
- Rutherford, D. (2002). *Routledge dictionary of economics* (2<sup>nd</sup> ed.). London: Routledge.
- Serrador, P., & Turner, R. (2015). The relationship between project success and project efficiency. *Project Management Journal*, 46(1), 30-39.
- Skinns, L. (2011). *Risk*. Cambridge, UK: Cambridge University Press.

- Smithson, M. (2015). Probability judgments under ambiguity and conflict. *Frontiers in Psychology*, 6, 674.
- Song, Y. I., Lee, D. H., Lee, Y.-G., & Chung, Y. C. (2017). Managing uncertainty and ambiguity in frontier R & D projects: A Korean case study. *Journal of Engineering and Technology Management*, 24(3), 231-250.
- Tversky, A & Fox, C.R. (1995a). Ambiguity aversion and comparative ignorance. *Quarterly Economic Journal*.
- Tversky, A., & Fox, C. R. (1995b). Weighing risk and uncertainty. *Psychological Review*, 102(2), 269.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453-458.
- Tversky, A., & Kahneman, D. (1992). Advances in prospect theory: Cumulative representation of uncertainty. *Journal of Risk and Uncertainty*, 5(4), 297-323.
- Walker, D. H. T., Davis, P. R., & Stevenson, A. (2017). Coping with uncertainty and ambiguity through team collaboration in infrastructure projects. *International Journal of Project Management*, 35(2), 180-190.