TAM – PROPOSED APPLICABILITY TO SOCIAL MEDIA

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Abstract: *The Internet no longer represents a new medium. It is considered to be a very powerful and important medium in means of communication around the world. Today, Internet and social media have enormous potential and offer many opportunities for the improvement of various business activities. Their impact on the business of modern companies is continuously growing. In a wider context, the subject of the paper is an overview of the previous social media research, as well as an overview of the technology acceptance model application. The aim of the paper is to determine whether the technology acceptance model can be adapted and important for social media usage. Given that modern users are actively using the Internet and social media, it is important to determine the factors that influence the acceptance and use of social media in order to create more personalized online communication.*

Key Words: *Personalization, Technology Acceptance Model, Social Media.*

1. INTRODUCTION

The Internet represents a useful tool for collecting information about potential clients and customers, competition and markets, as well as information about current clients, news about the company, products or services that the company offers [1]. One of the important advantages of the Internet is cost reduction, including fixed and variable costs (through e-commerce applications, using Internet technology in combination with Enterprise Resource Planning software, Electronic Data Interchange or Business to Costumer applications).

Numerous authors share the view that the Internet is one of the most important tools in modern business [2], [3]. Namely, the Internet offers companies the ability to improve the efficiency of international market transactions [4]. This includes strengthening international business relations and facilitating information exchange in relation to international markets [5]. Also, the Internet played a very important role for small and medium-sized enterprises, primarily because it enabled them to conduct international business through faster and easier access to international market [2].

Given that contemporary consumers are actively using the Internet and social media, the subject of the paper are factors that influence the acceptance and use of social media, as well as the development of the extended technology acceptance model (TAM) in the function of social media.

2. LITERATURE REVIEW

Nowadays, the concept of social media is a very popular topic. Nevertheless, despite great interest, there is still a very limited understanding of what the term "social media" means.

2.1. Social media definition

Kaplan and Haenlein [6] defined social media as "A group of Internet applications based on the ideological and technological themes of Web 2.0 that enable the creation and exchange of user-generated content." Using these applications, people can create and share information in a virtual community. The dramatic development of social media has helped shape the interrelations of people through different social platforms [7]. Today, the benefits of using social media include not only simple social communication, but also the building of reputation and opportunity for creation direct monetary income for companies [8]. Social media is launching a new set of models for different types of companies that challenge traditional business processes and operations. In the modern Internet era, online customer reviews have become an important measure by which marketers formulate their marketing strategies. Social media can serve as a tool for facilitating various activities, such as: product development [9], knowledge sharing communities [10], brand management strategies [11], collaborative learning and creativity [12]. Considering that each of these activities include user personal experience, either as a cause or consequence, social media has an important role in creating personalized online communication and customized user experience.

2.2. Areas of social media application

Most studies explore the use of social media in the three main industrial sectors: the public sector, which includes government and non-governmental organizations, the education sector and the commercial sector. Numerous studies explore the importance and use of social media in the fields of engineering, marketing,

customer relationship management (CRM), collaborative activities, knowledge sharing, organizational communication and education.

2.3. Theories and models used in the research of social media

A number of theories and models are used in social media research. The most commonly used models are models of accepting technology, personal behavior theories, social behavior theories, and mass communication theories (Table 1).

Table 1. *Theories and models used in the research of social media*

Theories and models	Reference
Technology acceptance models	
Technology acceptance model – TAM	[13], [14], [15], [16], [17], [18]
Unified theory of acceptance and use of technology – UTAUT	[19], [20], [21]
Theory innovation diffusion – IDT	[22], [23]
Personal behavior theories	
Attribution theory	[24]
Elaboration likelihood model	[25]
Expectation and disconfirmation paradigm	[26], [27]
Goal-directed behavior model	[5]
Hofstede's theory of cultural difference	[28]
Personality traits	[25], [29]
Psychological choice model	[30]
Risk perception theory	[31]
Social cognitive theory	[26], [32]
Task-technology fit model	[33]
Switching behavior	[34]
Theory of planned behavior – TPB	[13]
Theory of reasoned action – TRA	[19]
Social behavior theories	
Cognitive map	[36]
Involvement theory	[37]
Justice theory	[26]
Social capital theory	[38], [39]
Social Exchange theory	[40]
Social identity theory	[17], [35], [40], [41]
Social influence theory	[41], [42]
Social interaction theory	[43]
Social loafing	[31]
Social network analysis	[15]
Social power	[44]
Social ties	[31]
Mass communication theories	
Media richness theory	[31]
Para-social interaction	[7]
Uses and gratifications theory	[45], [46], [47]

There are numerous theories in the literature, especially in the field of information technologies, which try to predict the use of new technologies based on personal factors. Venkatesh et al. [48] presented a comprehensive overview and history of numerous theories used to predict the use of new technologies over the past several decades. These, primarily quantitative theories, are mostly used in the organizational context to envisage the acceptance of innovations. However, most individual theories are criticized as fragmented, without appropriate cohesive model, because many factors influence the use of technology [48].

The Technology Acceptance Model (TAM) was developed by Davis [49] and is often used in literature to study the ease of use and the impact of new technologies in relation to the attitude of people towards their adoption. The core of this model is to investigate and improve user personal experience with different technologies. TAM is an adaptation of the Theory of reasoned action (TRA) specially tailored for the acceptance of information systems. TAM considers perceived utility and ease of use as two main determinants of technology usage [13], [15], [18]. The model is shown in Figure 1.
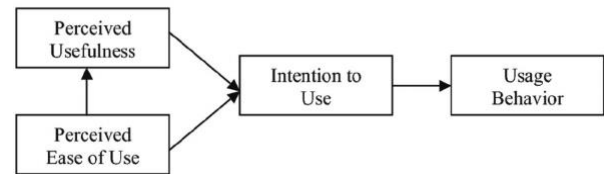

Fig. 1. *Technology Acceptance Model – TAM*
Source: *Davis [49]*

A unique theory of acceptance and use of technology (UTAUT) is a contemporary theory that can be increasingly found in modern literature. Venkatesh and others [50] introduced the term UTAUT. UTUAT is based on conceptual and empirical similarities in different models of technology acceptance. UTAUT suggests that four basic constructs – Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC) are direct determinants of the intention of behavior and end behavior, and that these constructs are moderated by sex, age, experience and voluntarism [49]. It has been found that by examining the presence of each of these constructs in the real world, researchers and practitioners will be able to evaluate the intention of an individual to use a particular system, allowing for the identification of key impacts on acceptance in any context. The theory was developed through the review and integration of eight dominant theories and models: Theory of Reasoned action, Technology Acceptance Model, Motivational Model, Theory of Planned Behavior, combined Theory of Planned Behavior and Technology Acceptance Technology, PC Utilization Model, Diffusion of Innovation theory and Social Cognitive Theory. These theories and contributing models have been widely and successfully used by a number of previous studies on the adoption and diffusion of technology or innovation in a range of disciplines, including information systems, marketing, social psychology and management [19].

3. TECHNOLOGY ACCEPTANCE MODEL APPLICABILITY TO SOCIAL MEDIA

The Internet appeared in Serbia in 1996 [51]. For more than two decades, companies' target groups have relocated to the Internet. Given that today all stakeholders in the business process (starting with users, suppliers, partners, to traditional media and competition) can be found on social media, the need for researching the model of accepting social media and determining the factors that influence their acceptance by the user appeared.

One of the approaches to investigating the behavior of social media users would be to revisit the TAM. The decades of extensive research have focused on the validation of TAM, one of the widely accepted theories proposed by Davis [49].

TAM was tested in various contexts: acceptance of information systems [52], software applications [53], e-commerce [54]. In order to improve existing research in the field, but also to help social media professionals develop best practice, it looks like it is necessary to expand the existing TAM model in order to better explain the use of social media. The TAM model was chosen for several reasons. In recent decades, it has become very popular. It meets the theoretical simplicity characteristics and it is applicable to predicting the acceptance and use of new technologies in different areas. A review of scientific research on the acceptance and use of information systems suggests that TAM has emerged as one of the most influential models [48].

However, since TAM is not developed specifically for social media, it is necessary to expand the existing model and to consider some of the significant characteristics of social media. The initial assumption is that TAM will be used in an organizational context to improve the efficiency of employees, thus excluding a fun that can be significant for social media users. Moreover, theory regarding TAM does not take into account the role of other users. Networking is one of the most important characteristics of social media. Numerous psychological studies have shown that individual behavior is influenced by the behavior of people from their environment. The psychological concept of social influence is based on the assumption that the behavior of an individual is greatly influenced by the behavior and presence of others.

There are some papers that examine TAM application on social media, but those studies are mainly focused on the most popular social networking site - Facebook. Considering the wide popularity of other social media, such as Instagram, YouTube and LinkedIn, it is important to explore the factors that influence their acceptance and use, in order to improve the application and understanding of these new technologies.

One of the approaches for a better understanding of the acceptance of social media is the revision of the existing technology acceptance model (TAM).

In order to revise the existing TAM, it is necessary to expand TAM (which belongs to personal behavioral theories) with constructs from the above mentioned groups of theories: social behavioral theories and mass communication theories. A factor that can influence the intention of using social media, which belongs to social behavioral theories, is model of network externalities. This factor not only increase social media economic benefits, but also has significant effect on expanding social network potential. The model considers three types of sources: direct (number of members), peer (number of peers), and indirect (perceived complementarity) network externalities [55]. Another construct that can be added to TAM is Perceived Playfulness (PP). PP belongs to the factors of the group of mass communication theories, and it is defined: "The extent to which the social media-related activities are perceived to be fun and enjoyable apart from any performance consequences that may be anticipated". One more construct should be considered for implementation to TAM – Trustworthiness (TW), as a significant factor that can influence the acceptance of social media.

4. CONCLUSION

The results of the research can be applied as a basis for improving user experience and easier acceptance of social media. Also, the empirical study of the revised model can be of use to future researchers, practitioners and lecturers in the field of social media. Valuable insights about usage behavior that TAM enables will contribute to the creation of more customized user experience in communication on social media.

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