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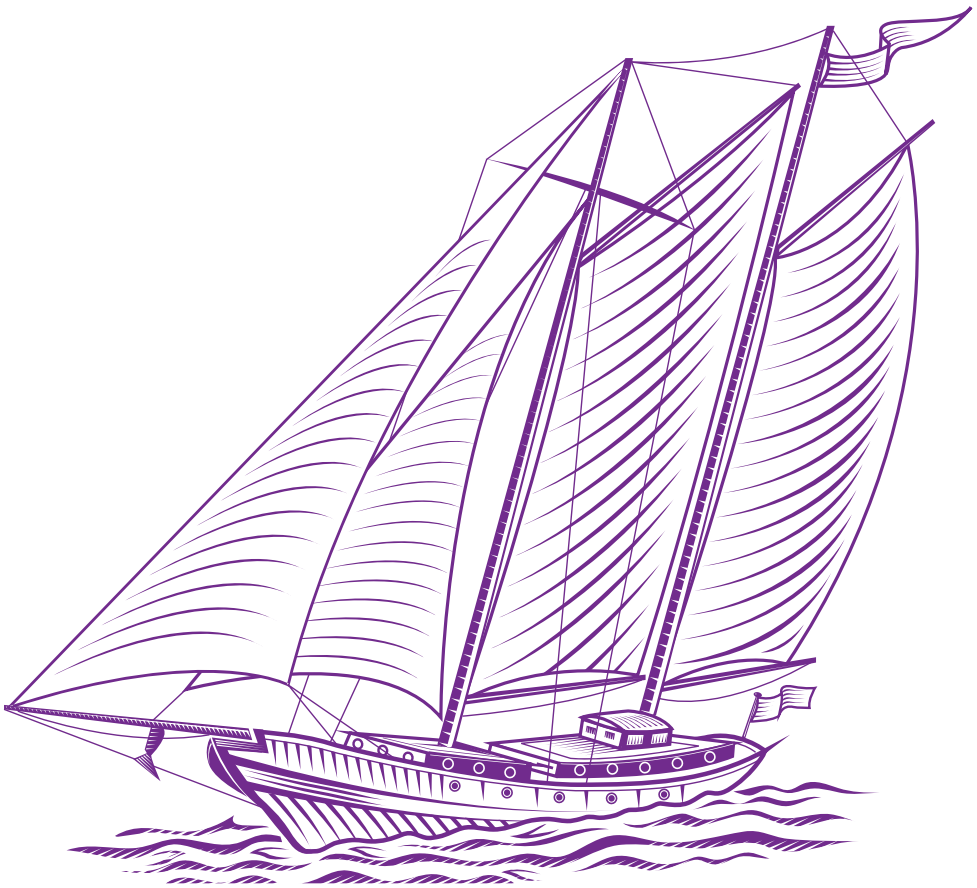

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# WHAT MAKES ROMANIANS TO BANK ON THEIR SMARTPHONES? DETERMINANTS OF MOBILE BANKING ADOPTION

**IMOLA-ZSUZSÁNNA MOLDOVÁN[1], ZSUZSA SĂPLĂCAN[2]**

**ABSTRACT.** Mobile banking is becoming a priority for the banks and an increasingly popular banking channel for the consumers as well. According to the literature, despite a growing number of the mobile banking adoption studies worldwide, little attention has been paid to testing adoption models in Central and Eastern European countries. The aim of the study is to investigate the factors affecting mobile banking adoption in a country with relatively low mobile banking penetration rate. Based on an extended Technology Acceptance Model the present study aims to reveal the antecedents of the mobile banking adoption in Romania, and provide insightful conclusion for financial service institutions in mobile banking applications development. Our paper proposes and tests an extended model of the adoption intention of mobile banking applications. Besides the original perceived usefulness and perceived ease of use variables we also incorporated the social norm and some barrier factors such as perceived risk and technology anxiety. The results show, that the banks should consider seriously the consumer technology interface development challenges, including drivers and barriers of mobile banking adoption, because there are many other emerging non-bank players on financial service market fighting to fulfil the consumers' financial needs.

**Keywords:** mobile banking, Technology Acceptance Model, consumer behaviour, Romania

**JEL classification:** G21, O33, M39

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## Introduction

The fundamental shift between the banking channels has started in the mid 1990's, the traditional channels have been gradually switched to self-service channels, such as ATMs or online banking, and later the mobile banking (Pikkarainen et al., 2004).

Riquelme and Rios (2010) define mobile banking as an electronic banking method, which offers electronic financial services to customers using mobile phone technology or other wireless devices. The Federal Reserve in their report entitled *Consumer and Mobile Financial Services 2015* refer to the mobile banking as a service which allows users to receive information about their bank account and make financial transactions through their mobile phone. This can be conducted by accessing the financial institute's website from the phone's browser, through text messages or using a smartphone application. In the present paper mobile banking denotes the smartphone applications developed by the banks, through which users can access their bank accounts and make different transactions (check the balance, transfer money, etc) (Federal Reserve Board, 2015).

The ascending trend of mobile technology development and the adoption of these technologies and devices by consumers make the mobile banking service topic crucial for banks. The traditional mobile phones, however, did not prove to be the most suitable device for mobile banking, due to their small screen and limited function. But in 2007 Apple launched the first iPhone and this brought a new era for mobile banking, which is developing more and more today. Along with the smartphone the AppStore was born, where the applications developed by banks were uploaded. The iPhone was followed by other smartphone brands on the market, such as Samsung or HTC. According to Statista (2016), the number of smartphone users in the present exceeds 2 billion worldwide, and foreseeably this number will grow to 2.6 billion by 2019.

When analysing the mobile banking penetration, KPMG in their *Mobile banking 2015* study predicted that, mobile banking penetration will increase to 1 billion users by 2017 and by 2019 it will reach 1.8 billion users worldwide. In the same report was stated, that for the majority of banks the mobile channel hosts the most transactions. The adoption rates are highest in developing countries, such as China and India, where 60-70% of bank customers use the mobile channel. In Europe at the end of the year 2014, the average mobile banking penetration rate through the bank customers was 38%, exactly matching the UK's adoption rate. Globally, 40% of the bank customers are mobile banking users (KPMG, 2015). According to Statista's estimation (2017) in Romania the number of smartphone users reach 8.61 million in 2016, which means that almost every second Romanian citizen owns a smartphone, while the mobile internet users reach 9.37 million in 2017 (Statista, 2017a). When it comes to the mobile banking usage rate in Romania, according to ING survey (2015), Romania is in the last place, with only 25% of mobile device owners using mobile banking. On the other hand, the rate of those, who are planning to use the mobile banking in the next 12 months (and own a mobile device), is 33%, which makes Romania rise to the top. Considering these two rates and the high smartphone penetration, it can be predicted that there is a great potential in mobile banking in Romania.

Mobile banking is becoming a priority for the banks. Many studies have confirmed that banks are increasingly focusing on the mobile first concept by optimizing their websites for the mobile browsers, developing applications and making certain content available on the mobile platform sooner than on the other vehicles (Bain & Company, 2015). The reason behind these actions is that the mobile channel brings a lot of benefits for the banks. A bank can increase its efficiency by implementing an integrated channel strategy, which includes mobile banking. Thanks to the low transaction costs of the mobile channel, the bank could spare a considerably large sum of money; moreover, it could close poorly performing branches. In addition to efficiency increase, there is a revenue increasing potential in mobile banking as well, due to many reasons: the mobile channel expands the demographic footstep of the bank, it offers insight into the consumer expenditure (opportunity for

cross- and up-selling, providing better customer service, improving decision capabilities, etc), banks can drive customers to this channel by providing discount at retailer partners, they can also segment and target their customers much better, which leads to more efficient marketing campaigns (Deloitte, 2010). In Bain & Company's (2015) survey loyalty figures as a benefit as well, because of the fact, that the mobile application offers an easy, reliable and efficient experience, which has a much better impact on the consumer, than the experience gained at the branch or through the phone.

Mobile banking is becoming increasingly popular for the consumers as well. Bain & Company (2015) showed in their survey, that most age groups are using mobile banking more frequently than online banking. The largest shifts from online to mobile since 2013 happened in Netherlands, South Korea and China. The higher usage of the mobile channel correlates with lower branch usage, but it's not a one-to-one relationship (Bain & Company, 2015). Despite the fact, that in the last two years, the number of routine operations conducted through the mobile channel grew dramatically, the routine branch operation decreased rather slowly. This can be explained by the fact, that consumers need time to adapt to the new channel. That's why banks need to focus on teaching their consumers to take advantage of the application's benefits whenever they have the possibility to do so (Bain & Company, 2015).

Beside the opportunities delivered by technological development, the traditional banks face an intensifying market competition pressure coming from behalf of the fintech companies and other start-ups. Due to the increasing interest toward the mobile banking usage, both academic researchers and practitioners try to identify the drivers and barriers of the mobile banking adoption in different countries. The introduction of the smartphone-based mobile banking services has launched a second wave of mobile banking adoption studies (Moser, 2015). Despite the increasing number of mobile banking related consumer behaviour studies, there is a need for further investigation, especially regarding the barriers of the adoption and the geographic area covered by studies (Baptista and Oliveira, 2016).

The aim of the study is to investigate the factors affecting mobile banking adoption in a country with low mobile banking penetration rate. Based on an extended Technology Acceptance Model (Davis, 1989) the present study aims to reveal the antecedents (drivers and barriers) of the mobile banking adoption in Romania, and provide insightful conclusion for financial service institutions in mobile banking application's development.

## 1. Literature Review

### 1.1. The mobile banking acceptance

The original Technology Acceptance Model (TAM) (Davis, 1989) has been used in many new technology-related researches, including studies of mobile banking acceptance (Aboelmaged and Gebba, 2013; Akturan and Tezcan, 2012; Lee et al., 2007; Mortimer et al., 2015).

The TAM was developed and introduced by Fred D. Davis in 1986, based on Fishbein and Ajzen's Theory of Reasoned Action (TRA). The aim of TAM is to provide a general explanation of the determinants influencing the acceptance of the computer and to be able to explain the users' behaviour towards a wide range of technological and computer systems, while the model is both empirically and theoretically justified (Davis et al., 1989). According to Davis et al. (1989), the main objective of TAM is to provide a theoretical basis for examining the effects of external factors on internal beliefs, attitudes and intentions. In order to meet this goal, they identified a few fundamental variables based on earlier researches studying the cognitive and affective determinants of computer acceptance, then used the TRA model to establish the relationships among them (Davis et al., 1989). The TAM has been used by many researchers from different research areas and in all of the cases the model has been proven accurate.

Two fundamental variables of TAM are the perceived usefulness and the perceived ease of use, which have a primary influence on the computer acceptance behaviour (Davis et al, 1989). The model presumes

that the actual use of a technology is determined by the behavioural intention to use that technology, and this intention is influenced by the attitude toward using the system and the perceived usefulness. If the consumer has a positive attitude towards using that technology, the intention to use will also be positive, so the consumer will most likely accept and use the technology (Davis et al, 1989). Venkatesh and Davis (2000) created the TAM2, which differs from TAM only in the independent variables added to the fundamental ones (for example subjective norm, experience, job relevance, result demonstrability etc). In TAM2 were examined the relationships between the new independent variables and the perceived usefulness.

Over the years, numerous researches have been conducted on mobile banking worldwide. It is a frequent research topic in the developed (South Korea, France) and developing countries (African countries, India) as well. In the developed countries there is a continuous shift from the traditional channels to the self-service channels and for this phenomenon the Netherlands is a great example, since there has been a huge online to mobile shift from 2013 (Bain & Company, 2015). In the developing countries the financial services are delivered mostly through the mobile platform; since the branch infrastructure is not so developed, banks are focusing more on the mobile channel (Gupta, 2013).

In their research undertaken in South Korea, Lee et al. (2007) examined the factors influencing the adoption of mobile banking in, using the TAM, to which they added two new variables: trust and perceived risk. The study showed, that trust and perceived usefulness influence adoption directly, while perceived risk has an indirect influence on adoption (via trust). The results also revealed that trust has a stronger influence on adoption than perceived usefulness; therefore, every bank should focus on building trust within their customers. Riquelme and Rios (2010) studied the factors influencing the adoption of mobile banking among current users of internet banking in Singapore, adding the gender as a moderating variable. The survey's results showed that perceived usefulness has the strongest influence on adoption, followed by subjective norm and social risk. Perceived usefulness has a larger effect in case of female users, while

male users are more influenced by the relative advantage. Social norms influence the adoption of mobile banking more in case of females than males. Püschel et al. (2010) also proposed an extended TPB with elements from TAM, such as perceived ease of use, and other predictors. They found, that all the independent variables of the intention of adoption are significant, while the predictors of the attitude toward mobile banking usage are the relative advantage, the image, the trialability, the visibility, the results demonstrability of the results, the compatibility and the perceived ease of use of the application.

Another TAM-model based study was conducted by Akturan and Tezcan (2012) in Turkey, where they surveyed students who were not using mobile banking but were considered as potential future users. As a result, they found, that perceived usefulness, perceived social risk, perceived performance risk and perceived benefits have a direct influence on attitude, which is the main determinant of the mobile banking adoption intention. There was no significant relationship found between perceived ease of use and attitude, financial risk, time, security risk and attitude, perceived usefulness and intention to adopt. Ouyang (2012) investigated the factors influencing the adoption of mobile banking in Taiwan. He also used the TAM as a theoretical model, to which he added security anxiety and Internet trust as external variables. It was found that security anxiety and trust influence the perceived usefulness and perceived ease of use, therefore they predict the attitude and through it the intention towards adoption as well. As a result, it was concluded, that security anxiety and Internet trust are two significant indirect factors influencing the adoption of mobile banking.

Aboelmaged and Gebba (2013) used the TAM and the Theory of Planned Behaviour (TPB) models to examine the factors influencing the adoption of mobile banking among undergraduate and postgraduate students in Dubai. As a conclusion they found that attitude and subjective norm have a significant and positive effect on the adoption of mobile banking, while perceived usefulness and behavioural control don't influence the adoption. Furthermore, it was showed, that attitude is significantly influenced by perceived usefulness, but not affected by perceived ease of use. Finally, there was a significant and positive relationship between usefulness and ease of use. AlSoufi and Ali (2014)

analysed the factors influencing the adoption of mobile banking in Bahrain, using an extended TAM. It was found that perceived usefulness and perceived ease of use have the strongest influence on the intention to adopt. On the other hand, perceived cost and perceived risk don't have a direct effect on the adoption of mobile banking.

Another study, delivered by Mortimer et al. (2015) revealed that the impact of the perceived ease of use and the social influence on intention can be culture-specific. While in Australia the perceived ease of use, perceived usefulness and perceived risk are the primary determinants of mobile banking adoption, in Thailand the most important antecedent of the intention were the perceived usefulness, the perceived risk and the social influence.

Shaikh et al. (2015) use a combined TAP and TPB model in Pakistan. They found that attitude, subjective norm, perceived behavioural control and perceived usefulness are significant antecedents for the intention, while perceived usefulness and perceived ease of use for the attitude. Unexpectedly they did not find a significant relationship between the perceived risk and the attitude.

In addition to the researches on mobile banking based on TAM or TPB, there have been several others, which used a specific research model and introduced different variables (for example social and cultural factors, gender, personality traits etc). For example, Khraim et al. (2011) examined the factors influencing the adoption of mobile banking in Jordan. Six independent variables (self-efficacy, trialability, compatibility, complexity, risk and relative advantage) were introduced in the model, the effects of which were measured on technology acceptance. They found, that all the variables have a significant influence on the adoption of mobile banking. Chaouali et al. (2017) applied the theory of trying, and have found that the attitude toward adoption is a predictor for intention of use mobile banking, while the attitude itself is influenced by three attitude dimensions: attitude toward success, attitude toward failure, attitude toward learning. The attitude dimensions are predicted by consumers' general self-confidence and the cynicism.

**Table no. 1. Literature review**

| Authors | Dependent variable | Predictor |
|---|---|---|
| Lee et al. (2007) | Adoption | Perceived usefulness*; Trust* (n) |
| | Trust (n) | Perceived risk* |
| | Perceived usefulness | Trust* (n) |
| Riquelme and Rios (2010) | Adoption | Usefulness*; Risk* (n); Social norms* |
| | Usefulness | Relative advantage* (n); Ease of use* |
| Püschel et al. (2010) | Intention | Subjective norm*; Attitude*; Perceived behavioural control* |
| | Attitude | Relative advantage* (n); Image* (n); Trialability* (n); Visibility* (n); Results demonstrability* (n); Compatibility* (n); Perceived ease of use* |
| | Perceived behavioural control | Technology facilitation condition* (n); Resource facilitation condition* (n); Self-efficacy* (n) |
| Khraim et al (2011) | Intention | Self-efficacy* (n); Trialability* (n); Compatibility* (n); Complexity* (n); Risk* (n); Relative advantage* (n) |
| Kesharwani and Bisht (2012) | Intention | Perceived usefulness*; Perceived ease of use; Perceived risk* (n); Social influences* |
| | Perceived risk | Trust* (n); Website design* (n); Social influences* |
| | Perceived ease of use | Website design* (n); Behavioural control* |
| | Perceived usefulness | Perceived ease of use*; Social influences* |
| Akturan and Tezcan (2012) | Intention | Attitude*; Perceived usefulness |
| | Attitude | Perceived usefulness*; Perceived ease of use; Perceived benefits* (n); Perceived social risk* (n); Perceiver performance risk* (n); Perceived financial risk (n); Perceived time risk (n); Perceived privacy risk (n) |

| Authors | Dependent variable | Predictor |
|---|---|---|
| Ouyang (2012) | Intention | Attitude* |
| | Attitude | Perceived usefulness*; Perceived ease of use* |
| | Perceived usefulness | Perceived ease of use*; Internet trust (n) |
| | Perceived ease of use | Internet trust* (n); Security anxiety (n) |
| Aboelmaged and Gebba (2013) | Adoption | Attitude*; Subjective norm*; Behavioural control; Perceived usefulness |
| | Attitude | Perceived usefulness*; Perceived ease of use |
| | Perceived ease of use | Perceived usefulness* |
| AlSoufi and Ali (2014) | Intention | Perceived usefulness*; Perceived ease of use* |
| | Perceived usefulness | Customer service* (n); Quality of service (n); Alternative (n); Efficient transaction* (n) |
| | Perceived ease of use | Efficient transaction* (n); Compatibility* (n); Self-efficacy* (n) |
| Hanafizadeh et al. (2014) | Intention | Ease of use*; Usefulness*; Cost* (n); Trust* (n); Credibility* (n); Compatibility* (n); Risk* (n); Interaction* (n) |
| Baptista and Oliveira (2015) | Intention | Performance expectancy* (n); Effort expectancy (n); Social influence; Facilitating conditions (n); Hedonic motivation* (n); Price value (n); Habit* (n) |
| Mortimer et al. (2015) | Intention | Perceived usefulness*; Perceived ease of use*/-; Need for interaction (n); Perceived risk* (n); Social influence -/* |
| Shaikh et al. (2015) | Intention | Attitude*; Subjective norm; Perceived behavioural control*; Perceived usefulness* |
| | Attitude | Perceived usefulness*; Perceived ease of use*; Perceived risk (n) |
| | Perceived behavioural control | Self-efficacy* (n); Regulatory support (n); Technology support* (n) |

| Authors | Dependent variable | Predictor |
|---|---|---|
| Baptista and Oliveira (2016) - metaanlysis | Intention | Performance expectancy* (n); Attitude*; Initial trust* (n); Perceived risk* (n) |
| | Performance expectancy (n) | Effort expectancy* (n) |
| | Attitude | Performance expectancy*(n) |
| | Initial trust (n) | Structural assurance* (n) |
| Laukkanen (2016) | Adoption | Value barrier* (n); Image barrier* (n); Gender * (n); Age* (n) |
| Chaouali et al. (2017) | Intention | Attitude toward adoption* |
| | Attitude toward adoption | Attitude toward success* (n); Attitude toward failure* (n); Attitude toward learning* (n) |
| | Attitude toward success / failure / learning (n) | General self-confidence* (n); Cynicism* (n) |

Notes: * - significant connection; (n) new variable to TAM, TAM2 or TPB
*Source: authors' own construction*

### 1.2. Research model and hypotheses

In the present research the TAM was adopted as a theoretical research model, based on the literature review (figure 1). The effect of perceived usefulness and perceived ease of use on attitude are investigated very often in mobile banking adoption, approximately one-third of all mobile banking adoption studies cite them (Shaikh and Karjaluoto, 2015). According to previous research, subjective norm, technology anxiety and perceived risk also influence the mobile banking adoption, therefore these variables were included in our research model. The perceived risk and the social influence or norms also have been researched widely, while anxiety is a less researched determinant in the literature.

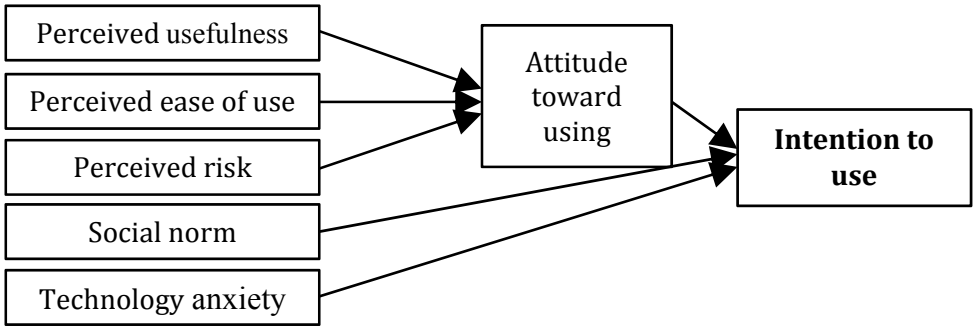


**Figure 1.** Proposed research model and the hypotheses
*Source: Authors' own construction*

**Attitude toward use**

Allport (1935) defines attitude as "a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and the situations with which they are related". According to TAM, the attitude toward usage has a strong significant influence on behavioural intention (Davis et al., 1989), which means that a positive attitude toward mobile banking usage results in a higher willingness to adopt mobile banking apps. Most of the new technology adoption studies investigate the attitude as a predictor of technology adoption (Chaouali et al., 2017; Ouyang, 2012; Shaikh et al., 2015).

*H1. The attitude toward mobile banking usage has a positive significant influence on intention to use mobile banking apps.*

**Subjective norm or social norm**

Based on the TRA model (which is the theoretical basis of TAM), Venkatesh and Davis (2000) introduced the social impact in the TAM2, which was represented by the subjective norm variable. According to definition, the subjective norm is a „person's perception that most people who are important to him think he should or should not perform the behaviour in question" (Fishbein and Ajzen, 1975). The social norm

therefore is the effect of people with significant influence on consumer (for example family, friends, other important reference groups), based on which the consumer decides whether to use or not the service (Riquelme and Rios, 2010), in this case the mobile banking. Pedersen and Ling (2002, in Riquelme and Rios, 2010) suggested that external and social influence should be included in every model studying the intention of use, because these have a clear contribution to the adoption behaviour.

*H2. The social norm has a positive and significant effect on intention to use mobile banking apps.*

**Technology anxiety**

As the new technologies are applied in many fields, it is important to investigate the consumers' ability and willingness to use these modern devices. „Anxiety is the unpleasant emotional reaction experienced by individuals in threatening situations." (Schwarzer et al, 1982, in Cohen and Waugh, 1989). Computers present many opportunities for the perception of similar threats. Heinssen et al (1987, in Barbeite and Weiss, 2004) drew attention, that computer anxiety shouldn't be confused with the negative attitude towards computers, because the anxiety is one's emotional reaction to the usage of computers.

Technology anxiety is an extended version of computer anxiety and according to Scott and Rockwell (1997, in Shen et al., 2010) it is the psychological state of fear or anxiety experienced by consumers while using a new technology. Technology anxiety is seen as a general emotional distress, or the tendency of an individual to feel uneasy, apprehensive or phobic when using new technologies (Igbaria and Iivari, 1995, in Shen et al., 2010). Meuter et al. (2003) found that technology anxiety influences the satisfaction, intention of use self-service technologies and the likelihood to spread positive word of mouth. In the case of mobile banking applications technology anxiety refers to the fear of smartphones or smartphone applications, which make the consumer feel insecure and incapable of using them properly, therefore can lead to a negative self-perception.

*H3. Technology anxiety is a significant barrier of mobile banking adoption. A higher level of anxiety causes a lower likelihood of mobile banking usage intention.*

**Perceived usefulness**

In the definition of Davis et al (1989), perceived usefulness is the future user's subjective probability that the usage of the given technology system will increase his or her work performance in an organization. In the context of mobile banking, perceived usefulness refers to all operations, which save time, increase the efficiency of the service and the performance, but it can also refer to extremely useful attached services, such as paying the bills (Kesharwani and Bisht, 2012). Mobile banking operations, that support usefulness, can be: money transfer, balance check, online bank account statement, etc.

*H4. Perceived usefulness has a positive significant influence on attitude toward mobile banking usage.*

**Perceived ease of use**

The perceived ease of use is a prospective user's expectation towards the usage of a technology system to require the least effort possible (Davis et al, 1989). As far as the perceived ease of use of mobile banking is concerned, it is essential that the application is easy to handle and learning the various bank operations is not difficult, neither takes much time. By integrating internal control (computer self-efficacy) and external control (facilitating conditions) into TAM, Venkatesh (2000) found several other factors, that explain the perceived ease of use.

*H5. Perceived ease of use has a positive significant influence on attitude toward mobile banking usage.*

**Perceived risk**

Risk perception is usually arisen by the uncertainty related to the degree of discrepancies between consumer's expectations and actual behavioural outcome. If a technology fails to deliver its expected outcome, it causes loss to the user (Laukkanen and Kiviniemi, 2003). Perceptions of

risk are a strong explanatory factor in consumer behaviour, due to the fact that individuals pay more attention on avoiding the mistakes rather than maximizing the benefits from purchase (Mitchell, 1999, in Safeena et al., 2012).

In the case of mobile devices, the risk factor is crucial, as consumers' mobility increases the security risk arising from the infrastructure needed for wireless applications. At the same time, the risk associated with mobile applications is also high (Riquelme and Rios, 2010). If we talk about the risks related to the use of mobile banking applications, the extent of those is even greater, as there are possibilities of financial risk: the phone can be stolen and the application used by strangers or as a worst-case scenario, the bank account can be hacked due to an unsafe Internet connection, which leads to loss of money.

*H6. Perceived risk regarding the mobile banking usage has a negative impact on attitude toward use.*

## 2. Material and method

Our study was conducted in Romania, where most of the banks provide mobile banking services for their clients. According to ING International Survey (Ipsos and ING, 2015) the penetration of mobile banking among mobile device users in Romania were only 25% in 2015, while in Europe this rate reached 53%. Thus, Romania can be considered interesting in terms of mobile banking adoption antecedents' research.

Data was collected by online questionnaire. The questionnaire includes three main sections: general banking behavioural questions, the latent constructs' scale questions from the model and demographic question. The latent variable scales were derived from previous studies, and were measure with five-point Likert scale (Table 2). In some cases, the statements were formulated both in indicative and conditional mood in order to address both the actual and potential users.

## Table 2. Measurement scales

| Variables | Measuring items | Adapted from |
|---|---|---|
| Perceived usefulness (PU) | Using mobile banking makes (would make) it easier and more convenient for me to carry out my tasks. (PU1) | Aboelmaged and Gebba (2013); Akturan and Tezcan (2012); Mortimer et al. (2015) |
| | Using mobile banking I can (would) save time. (PU2) | |
| | I think mobile banking is (would be) useful. (PU3) | |
| Perceived easiness of use (PEU) | I think that it is (would be) easy to use mobile banking to accomplish my banking tasks (PEU1) | Aboelmaged and Gebba (2013); Akturan and Tezcan (2012) |
| | It is (would be) easy to use mobile banking applications. (PEU2) | |
| | Learning to use mobile banking is (would be) easy and does not (would not) require a lot of effort. (PEU3) | |
| Social norm (SN) | People who are important to me think that I should use mobile banking apps. (SN1) | Riquelme and Rios (2010); Venkatesh and Davis (2000) |
| | People who influence my behaviour think that I should use mobile banking apps. (SN2) | |
| | I am (would be) trendy if I adopt (adopted) mobile app for banking transactions. (SN3) | |
| Perceived risk (PR) | When using (If I would use) mobile banking, I may lose money because my account information is hacked. (PR1) | Akturan and Tezcan (2012); Riquelme and Rios (2010) |
| | Conducting banking transactions on mobile phones is (would be) risky because one can easily lose or misplace the mobile phone. (PR2) | |
| | I think that using mobile banking is financially risky. (PR3) | |
| Technology anxiety (ANX) | Working with a mobile banking app makes (would make) me very nervous. (ANX1) | Barbeite and Weiss (2004) |
| | I get a sinking feeling when I think of using a mobile banking app (ANX2) | |
| | Using mobile banking apps makes (would make) me feel uncomfortable. (ANX3) | |

| Variables | Measuring items | Adapted from |
|---|---|---|
| Attitude toward using (ATT) | I think that using mobile banking is a good idea. (ATT1) | Akturan and Tezcan (2012) |
| | I think that using mobile banking for financial transactions is a wise idea. (ATT2) | |
| | I have positive opinion on mobile banking usage. (ATT3) | |
| Intention to use (INT) | I intend to use mobile banking in the next 3-6 months. (INT1) | Venkatesh and Davis (2000); Aboelmaged and Gebba (2013) |
| | I will use mobile banking as soon as possible. (INT2) | |

*Source: Authors' own construction*

Data was collected by convenience sampling method. The questionnaire was spread online by email and facebook channels. Special concern was taken to reach the 35-44 age group, because the KPMG (2015) research stated that in Europe, the mean age of those who use mobile banking is about 39 years. Also, the high presence of the younger respondents in sample could be beneficial; Laukkanen (2016) found, that youngest people are more likely to adopt mobile banking technology than the older ones. A total 175 valid questionnaires were collected. The Table 3 summarizes the sample's socio-demographic characteristics.

**Table 3. The socio-demographic characteristics of the sample**

| Demographics | | N | Frequency |
|---|---|---|---|
| **Gender** | Male | 72 | 41,14% |
| | Female | 103 | 58,86% |
| **Age group** | 17-24 | 80 | 45,71% |
| | 25-34 | 46 | 26,29% |
| | 35-44 | 36 | 20,57% |
| | 45+ | 13 | 7,43% |
| **Education** | High school | 43 | 24,57% |
| | University degree | 104 | 59,43% |
| | Postgraduate | 28 | 16,00% |

| Demographics | | N | Frequency |
|---|---|---|---|
| **Home place** | Urban, more than 100 000 inhabitants | 100 | 57,14% |
| | Urban, less than 100 000 inhabitants | 56 | 32,00% |
| | Rural | 19 | 10,86% |
| **Monthly gross income** | Less than 999 RON | 60 | 34,29% |
| | 1000-1999 RON | 54 | 30,86% |
| | More than 2000 RON | 61 | 34,86% |

*Source: Authors' own construction*

## 3. Results and discussion

Partial least square (PLS) modelling is a variance-based structural equation technique, and it is considered suitable in many research questions. It is useful to handle quite complex models based on a smaller dataset in comparison to covariance-based methods. The PLS is less restrictive than other models, especially regarding the sample size, data distribution and the complexity of the model.

A requirement towards the sample size is that the number of observations should be at least 10 higher than the maximum number of paths directed to a construct (Lowry and Gaskin, 2014). In our case, we have a maximum 3 of observed variables for a construct, thus a sample of 175 individuals is adequate (Gefen and Straub, 2005).

It is very convenient to use PLS because it develops both the measurement (outer) and the structural model (inner) paths simultaneously (Henseler et al., 2016). In the present study we used the SmartPLS3 program to analyse the model.

First, we analysed the measurement model of the latent variables. Our measurement model was a factor model, where the analysed psychological constructs were measured by Likert scale variables. The model satisfied all benchmarks for convergent validity (Table 4). All the loadings are above the 0.7 value, the average variance extracted (AVE) for all constructs were above 0.5 (Henseler et al., 2016) and all composite reliabilities were above 0.7 (Hair et al., 2010). Also, the Cronbach's Alpha has very high values, only one is situated below the 0.9 value (in case of SN). All the latent variables are measured properly by the proposed scales.

## Table 4. Construct Reliability of the measurement model

| Constructs | Variable | Factor Loadings | AVE | Composite reliability | Cronbach's Alpha |
|---|---|---|---|---|---|
| **Peceived ease of use - PEU** | PEU1 | 0.920 | 0.860 | 0.948 | 0.918 |
| | PEU2 | 0.950 | | | |
| | PEU3 | 0.911 | | | |
| **Perceived risk - PR** | PR1 | 0.924 | 0.824 | 0.934 | 0.893 |
| | PR2 | 0.915 | | | |
| | PR3 | 0.884 | | | |
| **Perceived usefulness - PU** | PU1 | 0.936 | 0.895 | 0.962 | 0.941 |
| | PU2 | 0.939 | | | |
| | PU3 | 0.963 | | | |
| **Social norm - SN** | SN1 | 0.933 | 0.780 | 0.913 | 0.857 |
| | SN2 | 0.953 | | | |
| | SN3 | 0.749 | | | |
| **Technology anxiety - ANX** | ANX1 | 0.912 | 0.845 | 0.942 | 0.908 |
| | ANX2 | 0.906 | | | |
| | ANX3 | 0.940 | | | |

| Constructs | Variable | Factor Loadings | AVE | Composite reliability | Cronbach's Alpha |
|---|---|---|---|---|---|
| **Attitude toward mobile banking use - ATT** | ATT1 | 0.961 | 0.915 | 0.970 | 0.954 |
| | ATT2 | 0.966 | | | |
| | ATT3 | 0.942 | | | |
| **Intention of mobile banking use - INT** | INT1 | 0.973 | 0.949 | 0.974 | 0.947 |
| | INT2 | 0.975 | | | |

*Source: Authors' own construction*

The constructs also satisfied discriminant validity requirements based on Fornell and Larcker's (1981) criterion, that all square roots of AVE should be less than the correlation between the construct and the other constructs (see Table 5). In addition, all heterotrait-monotrait (HTMT) values were below the recommended threshold of 0.85 (situated between 0.030-0.792), supporting discriminant validity (Henseler, 2017).

**Table 5. Discriminant validity of the constructs – Fornell-Larcker Criterion**

| | ANX | ATT | INT | PEU | PR | PU | SN |
|---|---|---|---|---|---|---|---|
| **ANX** | **0.919** | | | | | | |
| **ATT** | -0.368 | **0.957** | | | | | |
| **INT** | -0.452 | 0.679 | **0.974** | | | | |
| **PEU** | -0.315 | 0.743 | 0.535 | **0.927** | | | |
| **PR** | 0.432 | -0.173 | -0.228 | -0.087 | **0.908** | | |
| **PU** | -0.193 | 0.749 | 0.537 | 0.715 | 0.015 | **0.946** | |
| **SN** | -0.135 | 0.383 | 0.400 | 0.299 | -0.025 | 0.358 | **0.883** |

Note: Square root of AVE (on diagonal) and factor correlation coefficients
*Source: Authors' own construction*

The outer model results show that the model has good construct reliability, convergence and discriminant validity, which means that the constructs are statistically well defined and can be used in path modelling.

In order to test our hypothesis, we performed a PLS analysis, with 5000 subsample bootstrapping. The goodness of fit for the model was satisfactory with a square root mean residual (SRMR) of 0.052, which is less than the recommended 0.08 maximum (Hu and Bentler, 1999). Taken together the indices presented above, the model fits the data well.

**Table 6. Structural model**

| | Path coefficient | Standard deviation | T Statistics | P values |
|---|---|---|---|---|
| **Dependent variable: Intention of use $R^2$=0.531** | | | | |
| **ATT → INT** | 0.528 | 0.066 | 8.040 | 0.000 |
| **SN → INT** | 0.167 | 0.054 | 3.097 | 0.002 |
| **ANX → INT** | -0.235 | 0.071 | 3.325 | 0.001 |
| **Dependent variable: Attitude $R^2$=0.670** | | | | |
| **PU → ATT** | 0.469 | 0.094 | 4.992 | 0.000 |
| **PEU → ATT** | 0.394 | 0.098 | 4.037 | 0.000 |
| **PR → ATT** | -0.145 | 0.053 | 2.736 | 0.006 |

*Source: Authors' own construction*

According to Hypothesis 1 and 2 the attitude towards usage respectively the subjective norm has a significant and positive effect on intention to adopt mobile banking applications, while in the Hypothesis 3 we expected that the technology anxiety has negative effect on mobile banking usage intention. All three hypotheses were confirmed, the attitude has the strongest explanation power on intention ($\beta$ =0.528; $p<0.001$), followed by the negative effect of the technology anxiety ($\beta$ =-0.235; p=0.001) and the subjective norm ($\beta$ =0.167; p=0.002). The independent variables together explain 53.1% of the variation in mobile banking usage intention.

Then, we hypothesised that perceived usefulness and the perceived ease of use have a positive impact on the attitude towards use of mobile banking services (H4 and H5), and the perceived risk of the usage has a negative effect on attitude towards the use (H3). The analysis confirms our hypotheses. The perceived usefulness ($p<0.001$), the perceived ease of use ($p<0.001$) and the perceived risk ($p=0.006$) explain statistically significantly the attitude towards mobile banking usage. According to the beta coefficients, a higher perception of usefulness ($\beta=0.469$) and ease of use ($\beta=0.394$) results in a stronger attitude, while stronger risk perception ($\beta=-0.145$) reduce the intensity of the attitude towards mobile banking adoption. The results also show that PU is the most important construct in explaining ATT and the three determinants together explain 67% of the variation in attitude towards mobile banking usage (Figure 2).

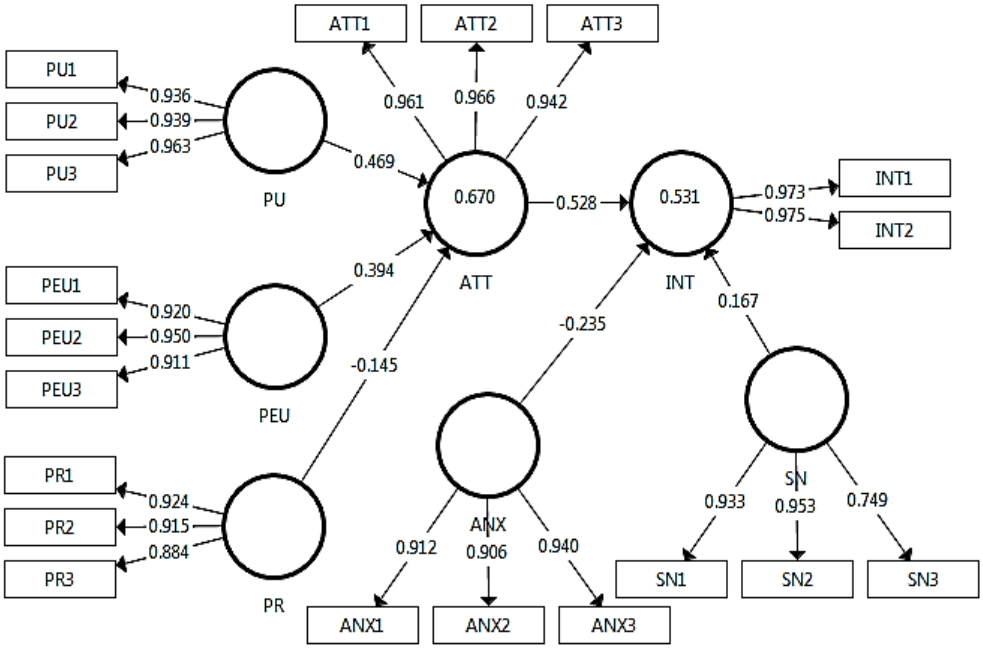


**Figure 2. Structural model results. Note: all the path coefficients are significant at least at p<0.01 level**

*Source: Authors' own construction*

The effect of the PEU and PU factors on attitude are investigated very often, approximately one-third of all mobile banking adoption studies investigate them (Shaikh and Karjaluoto, 2015), similarly the perceived risk is also a main issue in mobile banking adoption. Social influence or norms also have been researched widely, while anxiety is less researched. In line with literature (Baptista and Oliveira, 2016; Mortimer et al., 2015) we found significant relationship between ATT and INT, while PEU, PU and PR are significant predictors for the attitude. The influence of social interaction or social norm construct is not so obvious in the literature. Davis et al. (1989), in the original TAM study found that the social norm has no significant effect on intention, but recently the social influence issue is reintegrated in many studies regarding the mobile banking adoption (Shaikh and Karjaluoto, 2015) as the antecedent of the INT. In our case the SN is significant predictor for INT, but its effect is the lowest among predictors we investigated. The inclusion of the ANX variable is the major contribution of the proposed model. Similarly to other researches made on effect of the technology anxiety on self-service technology adoption (Meuter et al., 2003), we found a significant and negative relation between these two concepts.

From the managerial point of view our research provides some insightful results. First, the intention of adoption of mobile banking technologies depends on the consumers' attitudes towards these technologies, on social norms and on the degree of the anxiety they feel toward using technological devices in banking tasks. The technology anxiety is found to be significant for non-adoption and reduces the likelihood to use mobile banking. On the one hand a proper user interface could enhance the consumers' ability and willingness to use mobile banking apps, but on the other hand anxiety is a deeper personality dimension, which can be released by online video tutorials, or in face-to-face interactions in branches. The social norm also has a significant positive impact on adoption. This can be culturally determined, in certain cross-cultural comparisons the social interaction's effect differs among the countries. The significance of the social norm effect provides an opportunity for banks to stimulate the positive word of mouth by using different incentives. Also, in the case of services the word of mouth and the informal information sources reduce the perceived risk caused by intangibility and other service characteristics.

Second, the attitude has also a series of predictors. The perceived usefulness is the most important predictor for the attitude. If the banks can emphasize the main advantages of the mobile banking technology, they can increase the usefulness perception and therefore the attitude. The usefulness means time-saving and convenience; thus, the mobile banking design should be seamless and always functional. Perceived ease of use is the second most important predictor for the attitude, and refers to the user experience the customer faces. User experience of the mobile banking apps differs from banks to banks, and there is a huge potential to acquire and retain customers by offering easy ways of banking. These two benefits (usefulness and easiness) should be integrated in communication strategy. The perceived risk is also a significant predictor for attitude, but in a negative way. However, the coefficient of the perceived risk is not so high than the coefficients of the perceived benefits; but news about vulnerability of the digital systems in front of hacker attacks can increase the importance of this issue. Furthermore, the risk does not refer only to the hacker attacks, it can occur even when the internet connection fails. Thus, the mobile banking companies also should handle perceived problems caused by third party providers. The emphasis is on the term „perceived" regarding the risk which means that a well-designed communication strategy and a high-quality service can reduce the risk perception of the actual and potential mobile banking clients.

## 4. Conclusions

The banks should consider seriously the consumer technology interface development challenges, including those regarding the mobile banking services, because there are many other emerging non-bank players on financial service market (telecom companies, social media platforms or fintech companies) which show high flexibility and adaptability with regard to meeting consumers' (financial) needs and have produced a more dynamic expansion than the banking industry in the last few years (PwC, 2014).

Mobile banking is an emerging purchase and access channel for a range of banking services, and also a commodity service offered by the banks. Present paper aims to capture the antecedents of the mobile banking adoption among Romanian consumers. According to the literature, despite an increasing number of the mobile banking adoption studies worldwide, little attention has been paid to testing adoption models in Europe in general, excepting the Scandinavian countries, and in Central and Eastern European countries, in particular (Baptista and Oliveira, 2016). Most of the studies have been undertaken in Asia, Middle East and Africa.

In our paper, based on TAM model, we proposed and tested an extended model of the adoption intention of mobile banking applications. Besides the original PU and PEU variables we also incorporated the social factor SN and we also captured the effect of some barrier factors such as perceived risk or technology anxiety.

The study has some limitations and further research agendas. The research was conducted in Romania which reduces the generalising potential, but it could be considered in countries with similar business context and banking market development. Also, additional determinants can be included in the study as well as moderating variables. For examples in our study we have not made differentiation between actual and potential mobile banking users. In any case, there is a huge potential in mobile banking adoption researches, whereas the market is dynamically increasing, the competition is dramatically intensifying and the companies are interested in understanding the determinants of mobile banking adoption and experience.

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# ONLINE TRENDS FOR SMES IN THE TOURISM INDUSTRY

**NICOLAE MARINESCU**[1]

**ABSTRACT.** The aim of this paper is to emphasize the role of the internet and especially of modern online instruments for small and medium-sized enterprises (SMEs) operating in tourism. First, the literature review reveals the most important trends concerning the implications generated by the rise of the internet as a business tool for tourism SMEs. SMEs in the tourism market confront themselves with fierce competition from large companies. However, the advent of online marketing generates important opportunities to be seized by SMEs and often a level-playing field. The material is developed around the adoption and usage of the internet and ICT by tourism SMEs. The up-to-date online instruments available to tourism SMEs are explored and investigated in detail, revealing thus interesting findings about the benefits SMEs can reap when they approach the online environment. The paper ends with some conclusions concerning the possibilities opened up by online instruments for tourism SMEs. Finally, a specific set of measures is suggested for improving the online presence of SMEs.

**Key words:** SMEs, tourism, internet, ICT, online

**JEL Classification**: L83

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## 1. Introduction and literature review

The tourism industry of the European Union (EU) comprises approximately 2 million enterprises. The sector is clearly dominated by SMEs, which represent more than 99% of the total number of enterprises and provide work for 5.2% of the total EU workforce (Juul, 2015). As Wanhill (2002) suggests, the position of SMEs is of critical importance to the progress of tourism. They reflect the operational aspects of the industry and can act as promoters or barriers to the sustainable development of tourism.

Europe's tourism market as a whole is valued according to the World Tourism Organization at about 420bn euro, making it the largest in the world, with roughly 50% of worldwide tourist arrivals (UNWTO, 2015). The online share represents more than 35% of it and is growing steadily, whilst approximately 25% of bookings from European consumers take place online and more than half of tourists use the internet for research purposes (Eurostat, 2016).

The phenomenal impact of the internet on tourism didn't go unnoticed by researchers. The literature abounds of contributions emphasizing the role of the internet in profoundly changing the entire tourism industry.

- As a seminal paper in the area suggests, the internet is changing the tourism industry structure by altering barriers to entry, minimising switching costs, revolutionising distribution channels, and facilitating price transparency, while enhancing efficiency (Buhalis and Law, 2008);
- The internet has reshaped the tourism industry in a comprehensive manner; there is hardly a business that can escape its influence (Marinescu and Toma, 2012);
- A comprehensive study of the European Commission on the need for tourism SMEs to go digital, shows that the internet has had a significant impact on the tourism industry and this has led to an increase in business due to consumer e-commerce. Even travellers who do not otherwise purchase online utilise the internet as a source of information (European Commission, 2017);

- The internet brought a lot of innovative techniques used in tourism, such as comparison sites, online booking and payment systems, mobile applications etc. The mentioned technologies have been providing (and still provide) quite significant potential to improve the quality of current business models in the tourism and hospitality sector (Buhalis, 2005);
- Finally, the tourism industry and information technology cannot be separated and businesses in the tourism sector need to make continuous and effective use of the available technology (Imhanwa, Greenhill and Owrak, 2015).

Given these premises, more and more authors studied the link between tourism and information technology, to reveal the most important trends. Some of these trends are analysed in detail below.

As younger generations of consumers embrace the use of mobile media to seek information, destinations intend to incorporate technology with information provision to enhance the visitor's experience. The current wave of tourists prefers to feel independent and enjoy the trip without having to interact with others. Therefore the local supply side must make the most of their access to customer data and high technology (web portals, social networks, etc...) to serve travellers in a digital way (Pranicevic and Zovko, 2016).

According to Visa Global Travel Intentions Study (2015) mobile devices are the most important gadget for travellers. The same study indicates that 64% of travellers use their mobile devices to access destination information before their travel and 75% of them use the mobile phone after travel to share experiences recorded as text, pictures, and videos.

While making decisions regarding vacation planning, potential tourists search for information of tourism products and services in order to reduce uncertainty and perceived risks. Except reading information from the internet during their choice process, prospective tourists also post information on the internet. Bronner and de Hoog (2011) describe this posted information as electronic word-of-mouth (e-WOM).

Generally speaking, e-WOM communication refers to any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the internet (Jalilvand, Esfahani and Samiei, 2011).

For an SME active in tourism, e-WOM means an objective presentation of products and services at minimum cost, often with a larger effect on sales and competitiveness in comparison to other forms of advertising. A study by Loncaric, Ribaric and Farkas (2016) shows that the effects of e-WOM are actually the only real indicator of the value of products or services offered, taking into account their independence and objectivity, and the fact that they are not paid or purchased, fabricated or falsified.

The internet in fact is an instrument proper for the tourism industry as the latter offers services based on information. All tourism oriented companies, such as tour operators, travel agencies, rental agencies, cruisers and hotels experience the growing impact of what is commonly known as information and communication technology (ICT). The tourism sector represents an information-intensive industry characterized by a significantly long value chain influenced, to a great extent, by information (Januszewska, Jaremen and Nawrocka, 2015).

This is one important reason why more and more SMEs in tourism embrace online marketing. Online marketing represents a set of processes developed over the internet, by means of which customers are encouraged to take a buying decision. Even if its roots are in traditional marketing, online marketing stands out as being more interactive (Radbata, 2012).

Even if online sales still take the minor share in overall sales in tourism, they are increasing at a fast pace. Empirical evidence shows that the share of online sales is however higher than the average for other sectors.

The internet is indeed one of the means that have profoundly challenged and also facilitated the restructuring SMEs' operations in tourism. Rapid advances in technology as well as the increasing demands of customers, who look forward to flexible, specialized, accessible and interactive products and services, influenced the adoption of new information technology by tourism SMEs, leading to an improvement in operating efficiency and customer service levels desired by the customers (Mwai, 2016).

The advent of the internet has diminished many of the asymmetries between larger and smaller actors in tourism through the simultaneous explosion of global customer reach as well as access to and sharing of

rich information (Paraskevas, 2005). In general, the expansion of ICT in the tourism industry has created a more competitive environment, and it has become an indispensable element of business development (Berne et al., 2015).

ICT provides unique opportunities for innovative SMEs to redesign tourism products to address individual needs and to satisfy consumer wants (Bethapudi, 2013). However, the introduction of ICTs in SMEs is normally considered the start of a transition that is full of risks and of uncertain final results (Caruso and Marchiori, 2003). After the initial steps, taken with caution, the strategic significance of ICT begins to be more appreciated, and the use of ICT to upgrade quality, improve customer service, and also enhance integration with suppliers becomes the order of the day (Laudon and Laudon, 2009).

Through the internet, SMEs can build closer relationships with suppliers or business partners and customers. They are able to receive immediate customer feedback which allows a fast reaction to changing client demands and recognizing new market niches (Miraz and Habib, 2016).

Studying the factors that influence ICT adoption and usage by SMEs, Alam and Noor (2009), found a positive relationship in the case of perceived benefits, ICT knowledge and governmental support, while perceived costs and external pressure were not deemed significant.

There are also important barriers to the adoption of ICT by tourism SMEs. These often lack the resources and expertise to become ICT innovators, specifically, their management often lacks the expertise to effectively make use of the thousands of local ICT innovators. Furthermore, there seems to be a lack of mutual understanding because of cultural differences in management styles and knowledge. While some (especially technical) companies take a creative, innovative approach, others (especially traditional tourism businesses) remain conservative and compete mostly on price (European Parliament, 2015).

Various authors point out that by strategically positioning their ICT, SMEs can tap into the enormous potential advantages offered by ICT to gain a competitive advantage. SMEs can make use of their flexibility and relatively small size to their advantage, because these are perfect conditions for the diffusion and application of ICT (Ndiege, Herselman and Flowerday, 2012).

Managers should aim for digitization to enable the swift and accurate retrieval of information from financial and management information systems, a system that would, in turn, allow for greater operational control (Baltescu, 2009).

Nevertheless, evidence shows that the uptake of e-commerce in its complete and advanced form (e.g. online transactions) by EU SMEs is still low, standing at 19% in the year 2015. However there is a much higher percentage of enterprises in the accommodation sector that make use of e-commerce (63%) and whose 27% of income in the same year was generated from e-commerce (European Commission, 2017).

Most SMEs in tourism have access to internet thanks to the rapid development of communication infrastructure and they usually own a webpage.

Besides the webpage, empirical findings show that the most used advertisement instruments to date are email marketing campaigns and search engines (see figure 1). Social media is also gaining pace rapidly as more and more users register and expect SMEs to join the trend. Traditional, offline types of communication such as banners and printed advertisements lag behind, while radio and TV are less used by SMEs due to cost reasons.

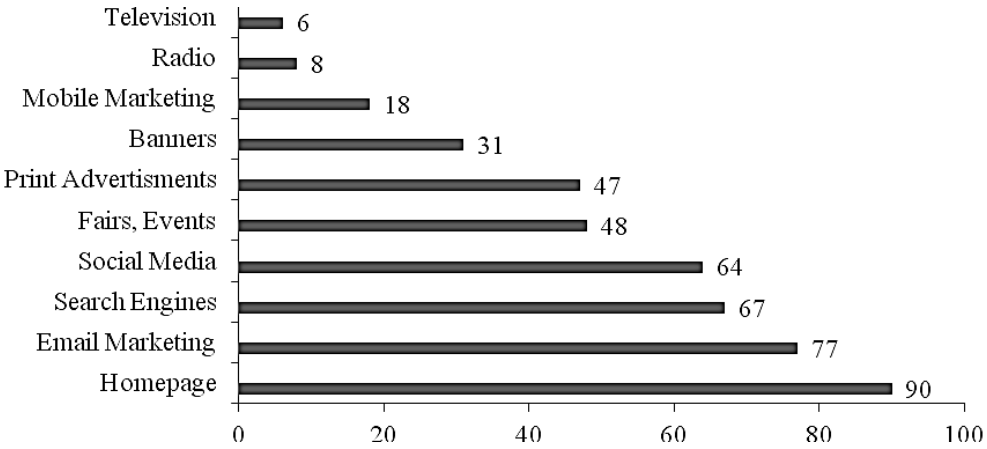


**Fig. 1. Types of communication channels used**

*Source: Schwarz, 2013*

When studying the impact of ICT on the tourism sector the most noticeable effect has been on distribution as it involves crossover exchanges between suppliers, intermediaries and customers which can be dematerialized. The internet is used during different phases of the sale and thus radically changes customer relationship management (CRM). For suppliers and intermediaries, the internet offers three main advantages; it gives them easier access to customers, it allows them to create customized offers and to reduce distribution costs. For customers, the internet is a means of reducing the cost of purchase (cost of looking for information and the price of sale) by making comparisons between and having access to a greater number of offers. These two combined effects explain the importance of the price variable on this channel (Sahut, 2009).

Despite the fact that ICT provides innovative and advanced potential to significantly increase the competitiveness of tourism goods and services, it is still insufficiently recognized and accordingly not enough used. On the other side, the ICT potential, if ignored, may bring negative results with serious consequences for the quality of tourism processes on the supply side and demand side as well (Pranicevic and Zovko, 2016).

Therefore, this paper tries to highlight the major online instruments available to SMEs in order to turn ICT potential into a competitive weapon destined to enhance their financial performance and expand the business.

## 2. Material and method

The paper is structured as follows. The first section comprised an introduction of the overall context of tourism SMEs, followed by a description of the fundamental concepts based on previously carried out research. Some of the most important contributions in the literature were surveyed on the impact of the internet and ICT on the tourism industry, revealing the current trends. In the second section, the methodology employed for the present research as well as the purpose of this study and its contribution to the literature are detailed. The third

section comprises the main results of the research on the up-to-date online instruments that SMEs can employ. A comprehensive analysis shows why these modern instruments matter, so that an SME may achieve a higher number of customers and, ultimately, reach a better financial performance. In the fourth section some conclusions are drawn considering the extent to which the widespread use of the internet has put its mark on the operation of SMEs in tourism and how SMEs can act in a proactive way to improve their online presence.

The paper finishes with the limitations of this analysis and recommendations for future research.

The purpose of this paper is to investigate, by means of a qualitative study, the changes brought by the internet and ICT in tourism and to explore the positive impact that modern online instruments can have on the operation of tourism SMEs. It also proposes a micro-plan for SMEs as a starting kit to help them develop a more consistent online profile.

The material provided for this paper comes from a vast number of theoretical and empirical studies in three different areas: tourism, internet / ICT and SMEs. Desk research and qualitative methods of analysis were employed in the study. More than 90 sources and bibliographic references have been consulted on various linkages between tourism SMEs and the influence of internet and ICT, from academic papers, official publications of public institutions and think-tanks as well as from private companies.

The research undertaken in this paper is an exploratory study and, as such, contributes to the literature on the impact of the internet on tourism SMEs, with all its opportunities and shortcomings. The paper enriches the insights of other recent studies that deal with the involvement of tourism SMEs in online marketing. It offers valuable insights into the most up-to-date online instruments that tourism SMEs can adopt to gain a better position in the market.

Contributions are considered from three standpoints: firstly from the theoretical view the contribution is related to the role of the internet and ICT in tourism SMEs. Secondly, from the research view the modern online instruments are investigated in detail, to provide an insight on how tourism SMEs can increase their competitiveness.

Finally, the proposal of a micro-plan to SMEs so as to improve their online presence, presents a practical contribution of this exploratory study, useful for SMEs to promote themselves better on the tourism market.

## 3. Results and discussions

At present, SMEs active in the tourism sector still don't fully comprehend the essential parts of an elaborated online presence and its benefits for the business. The internet facilitates the interaction between enterprises, suppliers and customers, the collection of data from users, the building of a reputation, and promotion on an unprecedented scale.

For SMEs, social media is an excellent method to create visibility and enhance the notoriety of the brand, distribute information to a wider public, get essential knowledge about customers, promote innovation, create a system of relationship with customers and one for operational efficiency, as well as to build marketing strategies with the aim of generating higher revenues (UNWTO, 2014).

The most interesting and appealing aspect of the internet is that it offers hospitality SMEs the possibility to replicate the promotion power of large tourism chains. A small hotel may become an online star, leaving big hotels behind, if the latter have only a meagre online presence.

An essential step for a consistent online development for hospitality SMEs is the creation of an online booking system, incorporated into their own website. This is important for the following reasons (WebReserv.eu, 2017).

- Open to 24/7 bookings. A lot of customers search online for hours to find a good holiday location, and they prefer to complete the booking at once instead of waiting to call on the phone the next day.
- Eliminating commissions. The SME may pay to special booking portals or for online advertisements so as to get a better positioning. Either case, when using its own system, there is no commission, as the intermediary is skipped.

- Usability. The process of registering a guest at the reception can be considerably shortened if all his/her data are automatically transferred by the system.
- Creation of a database. Data can be saved and reused in the future to gain new customers by means of recommendations. The particular SME may also send coupons, discount vouchers, or special offers to previous customers to maintain a solid degree of loyalty.

The objectives of an SME when setting up an online campaign may be measured by the increase in the number of visitors on the webpage, the achievement of a good position on the first page for Google searches, and ultimately by the increase of online bookings concluded in the first year.

Each objective calls for different actions. First, an online campaign may be developed to include link building with social media, pay-per-click marketing and online advertisements. Next, a search engine optimization (SEO) optimization for the content of the website should be carried out, alongside a GoogleAdwords campaign. The third implies positioning of call-to-action buttons on certain elements of the website, and online marketing oriented towards promoting various offers of the SME.

For SMEs, it is highly important to maintain their online presence on most channels, so as to reach and keep their customers close. This also means that they should build a well-designed communication over the internet.

This strategy requires good skills though, and high qualification on part of the employees involved. Unfortunately, employees in tourism are rarely or never trained systematically to use the latest online developments, while most SMEs do not have integrated IT-systems or don't use the internet for business purposes.

The trending online instruments which an SME may use to grow its business are illustrated in figure 2 and will be detailed further.

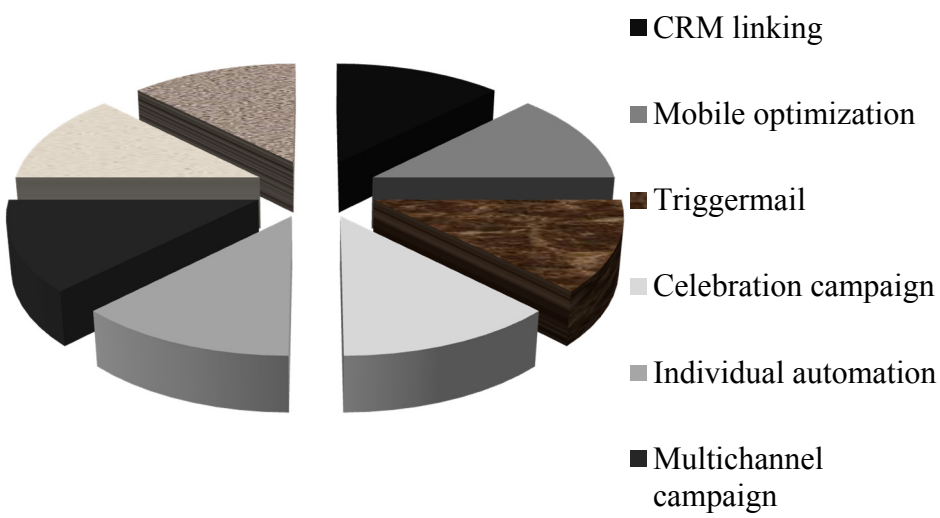


**Fig. 2. Online instruments currently in trend**

*Source: processed by the author from digital commerce data*

A lot of people still think of email-marketing as spam. Few know that it is the dialogue-marketing of the future. CRM effectively becomes e-CRM. So as to approach the appropriate target group of customers, SMEs need data. Formerly these were difficult to gather, or needed large expenses. Nowadays, tools for web analysis and the social media supply data for enterprises. This is commonly known as CRM linking. Data from customers who register or de-register for the newsletter can be synchronized automatically with the online offer of the enterprise. Thus, their data will be always up-to-date. The linkage functions in the other direction, too. Several touristic offers from the webpage can be integrated automatically in the newsletter, which saves a lot of time and effort.

More and more customers surf the internet on their mobile phones, especially when they are on holiday. Websites and emails are read different on a mobile phone compared to a PC. The user has little time available. He/she may be in traffic, so the subject of the email is

very important as well as the length of the message. The email should better comprise links, as few scrolling is done on the smartphone. Through a software solution called 'responsive design', websites and emails can be customized for the specific reading device. Thus, tourism SMEs can reach their customers wherever they are. If they read their emails on a PC, there will be more content, smaller script, if they read it on a smartphone, less content and a larger script. When partnerships between SMEs are available, a small hotel or B&B can send to its current guests (on their approval) customized links for restaurants, car hire and other facilities in the respective tourist destination.

The bond between the SME and the customer can become more profoundly if emails are sent comprising useful information or reminders in the preparation phase of the journey. The newsletter sent to former or potential customers is joined by individual trigger mails. If the SME gains access to IT-skills, this process is no longer done manually, but in an automated way. Thus, tourism SMEs can gain insights about their customers according to their country of origin, type of travel preferred, key words most used for search, reading device, or time of the day used for surfing the internet. These customers can be approached afterwards with tourist services recommendations. The efficiency of trigger mails can be monitored by means of the number of visits on the webpage, the clicking rate, and ultimately, the value of the shopping cart. They also need to be tested against filters for spam via a spam-checker.

Only customers that agreed to it will get emails and newsletters. Sending an email to 50,000 people randomly makes no sense anymore. Customization and efficiency seem to work in opposite ways. Nowadays, they can be bound together though by means of some IT-skills. The result means personal, highly relevant emails, sent automatically. A newsletter generates turnover in the online shop in a quite efficient manner. Empirical evidence shows that, while print mailing generates around 7 euro for 1 euro invested, in the case of emailing the result is 40 euro (Schwarz, 2011).

To increase the interaction with customers, an SME can build a celebration email campaign. For automatic customized emails, when the birthday of specific customers is unknown, one solution is to use the name day for a celebration email. The celebration email can comprise,

for more appeal, a gift voucher on a certain purchase. It is demonstrated that these customized celebration emails have a higher opening rates compared to typical newsletters.

A new trend for determining the customer to read emails and newsletters is to incorporate a video which plays automatically upon opening. Evidence shows that people tend to watch the video rather than read the email. For the tourism business, where 'a picture speaks a thousand words', this is a very efficient way to present an attractive offer to internet users.

When the customer visits a website, his clicking behavior can be tracked with the aid of a small software application. Another way is to use eye tracking-software and to generate heat maps which show the most viewed parts of a webpage. These can help a travel SME learn about the features that generate the largest interest for a visitor, which links were followed and entered or which destinations / types of travel were preferred. The time spent for making a booking on the website can be monitored. When visitors of a travel agency website leave the page or abandon the shopping cart without having effectively purchased any service, they are registered and can be addressed again by means of a customized email. This is called retargeting and brings additional revenues. It comprises the sending of emails at a certain pace, including the offer of a gift voucher for tourists who book faster and thus may be determined to make the purchase. Once a booking is completed, the enterprise can approach the customer with cross-selling, i.e. with various associated offers (car hire, entertainment facilities etc.).

Social media can supply an SME with information in two ways. This can happen directly, through an interface shortcut, when the user agrees to allow his data to be processed, or indirectly, through social media monitoring, when the agreement or disagreement of customers on the provided tourist services is read and centralized. Thus, the enterprise can design customer profiles by gaining access to their online behavior and preferences. Emails will follow in a customized manner, with a high probability to be opened and read. Even templates can be configured in terms of colours, pictures, arrangement etc., depending if the newsletters or emails are sent to men or women. They enhance customer loyalty and bring additional revenues.

The most successful social media network to date in terms of registered users is Facebook. A Facebook page is almost a 'must' for a customer-oriented business like an SME in tourism. More important than the own communications are the comments and answers to the visitors' queries. Also, whole emails or messages may be forwarded to one's friends or relatives, especially by tourists who want to share their experience or photos when travelling. Social media may be bound to email-marketing when a SWYN-button (Share with your network) is incorporated into the email, generating thus a viral effect.

The search for potential partners and suppliers is done increasingly via online. Lead generation through the internet is very efficient, as search engines are now the first option for any business with an interest in the tourism sector. SMEs who want to download a certain offer may be encouraged to fill in a simple online form with their own data. Thus they are added to a list of potential or current customers.

## 4. Conclusions

The intensity of the competition and the progress of information technology have brought profound changes in the tourism industry. Tourism companies try to diversify their activity in order to eliminate intermediaries for various tourist services. Suppliers, such as hotels, restaurants or transport companies get in touch directly with customers via the internet and their own websites. In an attempt to save their market, tour operators make the same move, advertising aggressively on the internet.

Modern online instruments appear on a regular basis. One of the newest capabilities in e-travel is a "dynamic packaging engine", that lets travellers choose between airlines, accommodation units, restaurants, car-hire and other activities on an individual basis, so as to form a vacation according to their desire, with the price of the package smaller than the sum of its parts.

In comparison to other sectors, the tourism industry presents a rather developed online market. Online reservations grow at a fast pace, especially for airline tickets and accommodation. Therefore,

tourism SMEs try to combine a reduction in the cost for various types of reservations with a differentiation focus for the information and organization of the whole trip, or for locally provided services.

Websites and internet usage are more common with tourism SMEs compared to the SME average. They are still far though from using several of the vast possibilities of new online instruments analyzed in detail in the present study.

In order to develop a consistent online presence, a tourism SME needs to employ a micro-plan comprising the following skills:

- Content Writing;
- Search Engine Optimization (SEO);
- Social Media Marketing.

Content writing is necessary for writing travel blogs, impressions, as well as webpages and comments on social networks. Moreover, it should fulfil optimization processes of content through the text.

SEO is meant to ascertain key words and usage of tags inside a website, and also accomplish a good positioning among search engines. SEO is highly relevant for the elements a website should contain, the manner in which these elements should be arranged inside the page, and how an SME presents its image to internet users.

The enterprise needs to be quick to adopt social media. This comprises knowledge about managing the webpage, its promotion tools, how content should be adjusted for a more professional outlook and understanding the correct relationship between the firm's objectives and the posts.

The SME should hire or train an employee to manage the website and the online marketing campaigns. This employee has to possess the three above-mentioned skills. An average wage in Romania for this type of resource, plus the additional fees for the wage amounts to about 11,000 euro yearly. The employee training for online skills is also recommended, but this is an investment cost of about 150 euro for starters and it is paid only once.

The website also needs consistent bandwidth so as to be able to upload pictures, text and videos, and still be quick upon opening. The basic package for a starting kit amounts to about 300 euro per year (in the case of a Romanian SME).

Online promotion campaigns, represented by Facebook and Google Adwords need to be part of the continuous marketing strategy. A minimum of 50 euro should be dedicated to each one of them monthly. This amounts to 1,200 euro for a yearly campaign.

The final amount adds up to 12,500 euro per year. This is a relatively high cost for a Romanian SME in tourism. Nevertheless, this investment generates constant traffic on the webpage and customers for the enterprise. With such a budget, a superior rate of return can be obtained, which will cover the investment. Offline costs would be much higher anyway to achieve the same revenues.

Employing such a micro-plan, any ambitious SME in tourism will learn to understand the relevance of the online strategy. As a result, a well-informed, internet- and technology-savvy SME may generate strong competition for any large enterprise in tourism. This shows the enriching power of the internet. SMEs that familiarize themselves with modern online instruments, will tap into the rich potential of ICT together with its benefits.

The lack of primary data analyzed by using quantitative methods is a certain limitation of the present study and, in accordance, the author, in a next research, intends to extend this qualitative study. Nevertheless, given the phenomenal development of online instruments and their multiple uses in the tourism industry, it is certain that the link between the internet and tourism SMEs will generate several new contributions in this field of research on an international scale.

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# TIME SERIES ANALYSIS FOR SMALL-MEDIUM ENTERPRISES STRATEGIC PRICING: A CASE STUDY FROM ROMANIAN SMALL CONVENIENCE STORES

**EMANUEL-EMIL SAVAN**[1]

**ABSTRACT.** This paper illustrates how time series analysis can support regular price decision making for small convenience grocery stores. The existing literature indicates an increasing importance of strategic pricing. However, small-medium enterprises (SMEs) lack both the know-how and the financial capabilities required for advanced price analysis. The carried research illustrates a relatively simple approach for forecasting the impact of different pricing strategies. A case study based on a Romanian SME: SM, operating in the retail sector, was selected. The collected sales data and financial performance indicators provide an interesting insight into both practices and problems faced by SMEs. Following a detailed investigation, a particular category of products: bread and pastry products, was identified as having a major impact on both sales and gross profit. Based on a series of analyses which include: forecasts, best and worst case scenarios, impacts on revenues and gross profit, SM was recommended to increase their mark-ups with 10% for all bread and pastry products. The change is predicted to produce a 9.86% increase in total gross profit and 1.31% increase in all revenue, with minimum risks and minimal loss of sales.

**Key words:** pricing strategies, forecasting, time series analysis, cost-plus pricing

**JEL Classification:** L11

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## Introduction

The Romanian grocery market is characterized by high competition and thin margins. Moreover, the industry continues to expand, especially on the proximity, supermarket and discounter formats (Retail&FMCG, 2018). Small and medium companies (SMEs) operating in the grocery market face a fierce competition. They are clearly not capable of competing with the hypermarkets (e.g. Auchan, Carrefour, Cora, Real), discount hypermarkets (Penny, Lidl), or Cash&Carry formats (Metro, Selgros) on price. Their main competitive advantage relies on proximity and convenience. However, certain supermarkets e.g. Profi, Carrefour, Mega Image, Auchan, invest heavily in expanding their proximity format stores. The most aggressive expansion is exhibited by Profi. They are by far the leading retailers in terms of number of units and coverage, at the end of March, having over 741 stores nationwide (OverviewProfi, 2018). They also hold the record for the number of units opened in a single month: 32 stores (ProfiPress, 2017).

Given the fierce competition, SMEs must offer great consideration to pricing. Existing studies emphasise the importance of adequate pricing policies, which is argued to be the most important lever in profit improvements (Dolan and Simon, 1997). Literature presents a variety of pricing strategies, the most popular is also the simplest one: everyday low price (EDLP), which, as its name suggests, implies offering low stable prices across all the products (Hoch et al., 1994). The alternative strategies will be presented in the literature review section. EDLP seems the obvious choice for SMEs, which are not capable of investing large sums in marketing campaigns.

A case study was conducted based on a proximity store belonging to a SMEs from a medium-sized city in Romania. Data presented in this paper was collected over a period of over two and a half years. Collected data monitors: daily sales, sales on groups of articles, daily number of customers, and average value of shopping basket. Moreover, these results were associated with the company's financial performance (e.g. cost of goods, other direct & indirect costs, profit margins).

For predicting the impact of price increases, this paper employs time series analysis. First of all, the data is decomposed into its corresponding basic components: trend, seasonal variation, and irregular variation using a moving average smoothing method. Secondly, the quality of the developed model is tested using data from the last three months. Finally, confidence intervals are employed to approximate the impact of price changes on the future sales.

The remainder of this paper is structured as follows. Section 2 is dedicated to reviewing the existing literature on Romanian grocery market and the most popular pricing strategies. Section 3 briefly presents the collected data and the selected methodology. The findings are presented in Section 4 along with a recommendation for the store. Finally, this paper concludes in Section 5, which mentions the limitations and suggestions for further research.

## Literature review

Most models of grocery retail decision making are developed based on case studies or data pertaining to either US or UK. In this section we will review the existing literature on pricing strategies, but we will also examine the particularities of the Romanian grocery retail market. This section will start with an analysis on traditional retail pricing, followed by more recent approaches, and it will conclude with the links to the local grocery retail market.

Phillips (2005) suggests that there are three major 'traditional' approaches to pricing: cost-plus, market based, and value based (see table 1). As its name suggests, cost-plus pricing is based on adding a certain percentage to the cost you incur with the product. As indicated by Phillips (2005), and illustrated in table 1, this approach completely ignores the needs of the customers and the prices of the competition, being a completely inward-focused and disregarding towards the market. On the other hand, market based pricing presents an approach which relies entirely on the prices of the competitors. Phillips (2005) indicates that this approach is particularly popular in commodity markets or markets dominated by a clear market leader. Under these circumstances he indicates that the market dictates the price, and companies must take it as a given. Finally, value-based pricing implies

that price should be entirely based on the customer perception of the product. In other words, through this approach the value that customers attribute to products is extracted (e.g. surveys, focus groups) and is reflected into the price (Phillips 2015). Most frequent examples of value-based pricing are found in the case of new, innovative products, with minimal competitive pressure.

**Table 1.** Traditional pricing approaches

| Approach | Based on | Ignores |
|---|---|---|
| Cost-plus | Costs | Competition, customers |
| Market based | Competition | Cost, customers |
| Value based | Customers | Cost, competition |

*Source: Phillips, 2005*

Clearly the above presented traditional pricing approaches are quite simplistic and they represent extremes. In practice, retailers use a combination of these approaches. Moreover, recent practices incorporate new aspects into pricing e.g. price variation, deals and promotions. Bolton and Shankar (2003) identify five major pricing strategies employed by branded retailers in the US: EDLP, HiLo, Exclusive, Moderately promotional, and Aggressive. The pricing strategies are described in table 2 (Bolton and Shakar, 2003, and Bolton et al., 2010). The two price-related dimensions distinguish between the pure price and the promotion price, captured through relative price and variation of price. The deal-related dimensions indicate the deal depth, frequency and duration (deal intensity) and the feature and/or display (deal support).

**Table 2.** Pricing strategies

| Pricing strategy | Relative price | Price variation | Deal intensity | Deal support |
|---|---|---|---|---|
| **EDLP** | Average | Low | Medium | Medium |
| **HiLo** | Average | High | High | High |
| **Exclusive** | High | Medium | Low | Low |
| **Moderately promotional** | Average | Medium | Medium | Medium |
| **Aggressive** | Average | High | Low | Medium |

*Source: Bolton et al. (2010)*

In the case of EDLP pricing, the companies focus on providing consistent low prices, without running sales or promotions (Hoch et al., 1994). Almost opposite to EDLP we can place the HiLo pricing which consists of retailers charging high prices for products, followed by big discounts in sales clearance, once their popularity has passed. Exclusive pricing was found to be the least adopted strategy, as it is targeted for high-end stores which address a wealthy customer segment (Bolton and Shankar, 2003). As Zielke (2010) argues, the pricing impacts the way the customers perceive a particular retailer. Another customized pricing strategy: the moderately promotional pricing, which relies as its name suggests on average implication in deals and promotions, has a relatively low popularity. Finally, the most popular hybrid strategy, which actually was found to surpass the HiLo pricing, is the aggressive pricing (Bolton and Shankar, 2003). Retailers adopting this strategy use the price as a weapon, offering a low price and medium deal support coupled with high price variation and a low deal intensity.

The above mentioned popularity of pricing strategies is restricted, as previously emphasised, to the US. Similar scientific enquiries have been carried for the UK in conjunction with the US (Watson et al., 2015). However, the existing literature does not provide any comprehensive study that addresses the retail pricing strategies for the Romanian market. This enquiry is also beyond the purpose of this research; nevertheless, this paper will present a detailed overview of the current retail market in Romania e.g. main competitors, market share, and type of stores.

According to a study carried by Euler Hermes and cited by ESM (2017), based on revenues towards the end of 2017, Romanian retail market is dominated by four major players: Kaufland, Carrefour, Metro, and Auchan, with a cumulated market share of over 60%. However, the picture changes drastically if the players are judged based on their respective number of stores, on this criterion, as expected, the supermarkets outperform the hypermarkets. At the end of January 2018 Profi is reported to have the highest number of stores: 705, followed by Mega Image: 599 units, and Carrefour: 311 (Retail&FMCG, 2018). In this paper, the focus is placed on supermarkets, since they compete directly with SMEs on convenience/ proximity. Clearly, hypermarkets outperform both supermarkets and SMEs on price, promotions, and variety.

Even though Profi is now clearly the leader, having the highest number of stores and the highest rate of store openings, the market looked very different 4 years ago. At the end of 2014 Mega Image operated with 410 stores, whilst Profi only had 275 (ZF, 2015). The gap between the two was narrower one year before, the figures are presented in table 3. It is clear that both companies followed a very aggressive expansion strategy, even though Mega Image managed a slightly slower growing pace after 2014.

**Table 3.** Profi vs Mega Image

| Supermarket | Stores Dec. 2013 | Stores Dec. 2014 | Stores Jan. 2018 | Increase (%) |
|---|---|---|---|---|
| **Profi** | 204 | 275 | 705 | 345.58% |
| **Mega Image** | 293 | 410 | 599 | 204.43% |

*Source: Retail&FMCG (2018) and ZF (2015)*

Another retailer which tries to capture the proximity/ convenience market is Metro, through their LDP stores. They are reporting to have over 500 store nationwide (LDP, 2018). The reason for their exclusion from the above presented statistics is that they operate a very different business model. As opposed to their competitors, they franchise their stores. In other words, they do not deal with the daily operations. In fact, their role is quite limited: they offer consultancy, marketing, design features, and training, but the actual decision making is taken by the SME that bought the franchise (LDP, 2018). The SME franchise holder will take all the operating and strategic decisions such as: pricing, acquisition, opening hours, number of staff. The franchisor imposes a minimal number of operating rules, which are rarely enforced e.g. an agreed upon amount of goods must come from Metro (can be under 10% of sales), the store must have good availability for products that are part of their bi-monthly marketing campaign, the products on their bi-monthly campaign have maximal prices.

Moreover, it is important to emphasise that Metro LDP stores have a very low minimum threshold on store floor space, the accepted minimum is 40 square meters (LDP, 2018). The supermarkets are

generally inclined to opt for larger floor space. For example, Profi accepts a minimum of 180 square meters for their smallest store format: Profi City (BM, 2013), and their regular-format stores can have up to 700 square meters of total floor space.

Following a local analysis for the specific case study addressed in this paper, it was revealed that the city in question holds 2 hypermarkets: Unicarm and Carrefour, and three Profi supermarkets. In addition, there are two local stores which hold LDP franchises, one being the SME addressed in the case study. It could be argued that the existing local retail market is underdeveloped. Interviews with experts reveal plans for three extra hypermarkets: Lidl, Kaufland, and Penny to be opened by 2020, and at least one extra Profi supermarket, which will be launched in June 2018. Consequently, in terms of proximity stores, Profi and the LDP franchises are the only competitors to local SMEs.

As previously mentioned, this paper is supported by data gathered from a Romanian-based small medium enterprise (SME) referred in this paper by the acronym SM. The company was recently funded: first store was opened in the third quarter of 2015. The main challenge for SM is to react to the impact of multi-national and local competitors. In close proximity: under 50 m and respectively under 200 m, there are two other local SMEs with slightly smaller store floor spaces. A Profi supermarket is scheduled to be launched in June 2018, at a distance of 300m from SM. The distance to the two existing local hypermarkets: Unicarm and Carrefour, is under one kilometre.

The limited number of hypermarkets and supermarkets can be explained by the size of the city. As previously emphasised, SM activates in a small-medium city (D). According to the 2011 census (Census, 2011), D has a population of only 33,497. Given its spread of 109km$^2$, it can be deducted that D has a very small density: approximately 307 people/km$^2$. By contrast, the largest city in the county: Cluj-Napoca had a population of over 324,576, with a density of 1808 people/km$^2$ (Census, 2011).

Nevertheless, SM faces extreme pressure from both local and multi-national competition. One on hand, the multi-national companies like Profi, exert high pressure on pricing due to their economies of scale (higher volumes), larger store sizes (larger variety of goods), relatively

good proximities. On the other hand, the local SMEs which are in close proximity are family-run businesses which also possess certain competitive advantages e.g. lower costs (e.g. wages), lower indirect costs (e.g. accounting, fuel), and sometimes lower acquisition costs (e.g. one-off promotions). SM has exclusivity to a segment of goods: pastry and confectionary specialties, which is supplied by a company from its own group. The other goods are supplied by independent suppliers.

As previously emphasised, there are no comprehensive academic studies that address the pricing strategies adopted in the Romanian retail market. For the addressed case study, of most relevance are the pricing practices of Profi, LDP franchises and local SMEs. From the available information (LDP, 2018) it can be concluded that LDP franchises face similar challenges as SMEs in terms of pricing, except for the few products that have imposed maximal prices. A research into pricing practices of local SMEs would be most beneficial. As far as Profi is concerned, their pricing strategies are undisclosed. They seem to adopt a hybrid approach, which varies among products but also from one store format to another. An informal interview carried with one of their suppliers provided some generalities which he was at liberty to disclose. For their particular product, Profi had no mark-up per see, rather they are charging the supplier a set of fees: shelf space fixed fee, shelf stocking fee (variable), and admin fees (variable). However, this pricing technique, must be very different from other products from their portfolio e.g. own brand products.

## Material and Methods

The data employed in this paper was collected from three major sources, and it covers a period of two and a half years. First of all, sales and other statistic data was collected form SM's IT software system. All this data is strictly quantitative. Secondly, financial data was collected from company's official balance sheets and income statements; this data is also quantitative. Finally, other information required to process or interpret the data was collected, as qualitative data, through a series of informal interviews carried with key SM staff members.

As previously emphasised, time series analysis and forecasting constitute the main methodology of this paper. Given the nature of the data: quantitative historical data, time series was identified as the most appropriate method (Anderson et al., 2007). The main assumption behind the time series approach is that up to four components can be extracted from the data: trend, seasonal, irregular, and cyclical (Anderson et al., 2007). As it will be showed in the following chapter, the cyclical component is disregarded in this paper, as the collected data does not cover a sufficiently large period of time so as to be able to identify any cyclical patterns. However, both interviews and an in-depth analysis of the historical data indicates a strong seasonal pattern; also, both trend and irregular components are present.

In order to extract the seasonal component the moving average approach is employed. Given the fact that historical data and interviews indicated a strong seasonal (weekly) pattern, moving averages (MA) is preferred to smoothing methods. According to Anderson et al. (2007) simple smoothing methods e.g. exponential smoothing should only be employed on stable time series, which exhibit little trend or seasonality, for shot-range forecasts. On the other hand, MA offers a simple way of firstly deseasonalizing, secondly capturing, and finally extracting any seasonal pattern. The MA can be defined as follows: MA=[∑(most recent data values)]/n, where n is the selected window, for example, in the case of data that follows a weekly seasonal pattern, n=7.

For modelling the trend component, simple linear regression is employed. The underlying equation is given by: $T_t = b_0 + b_1 * t$, where $T_t$ is the trend value of the series at period t, $b_0$ is the intercept of the trend line, $b_1$ is the slope of the trend line, and t is the time. The quality of the trend line fit is judged based on the coefficient of determination ($R^2$). For a perfect fit $R^2$ has a value of 1, while lower values mean a worse fit (Anderson et al., 2007).

As far as the specific time series model is concerned, a multiplicative model was selected for this paper. Even though both multiplicative and additive models can offer good representations of the interaction between the components, according to Dewhurst (2006), the multiplicative models have generally registered better performances. The model is described by the following equation: $TS_t = T_t * S_t * I_t * C_t$,

where $TS_t$ is the value of the time series, $T_t$ is the value of the trend component, $S_t$ is the value of the seasonal component, $I_t$ is the value of the irregular component, and $C_t$ is the cyclical component, at time period t.

The forecasts are generated using the fitted trend line and the captured seasonal component. The underlying equation is given by: $F_t=T_t*S_t$, where $F_t$ is the forecasted value for the time series, $T_t$ is the forecasted value of the trend component, and $S_t$ is the value of the seasonal component (seasonal index), at time period t. The quality of the forecasts is judged based on visual inspection and a paired t-test. The paired t-test is employed to check if there is a significant difference between the two sets of observations: the forecasts and actual data (Anderson et al., 2007). The hypothesis are expressed as follows: $H_0:\mu_1=\mu_2$ or $H_0:\mu_1-\mu_2=0$ (the population means are equal) and $H_1:\mu_1\neq\mu_2$ or $H_1:\mu_1-\mu_2\neq0$ (the population means are not equal). If $H_0$ cannot be rejected at the selected confidence interval percentage, it can be concluded that data does not provide enough evidence that the two data sets (forecasts and actual data) are significantly different (Anderson et al., 2007).

## Results and Discussions

The purpose of this section is to analyse the impact that difference pricing levels would have on the future sales and suggest the most appropriate strategy for SM. It will commence with an in-depth analysis of the collected data. This will be followed by the decomposition of sales data into relevant time-series components: trend, seasonal, and irregular. Additionally, forecasts for a period of 3 months will be provided. Finally, the results are going to be discussed and recommendations for SM are going to be suggested.

Since its opening, SM exhibited significant increases in Total Sales and steady increase in Profits, as illustrated in fig. 1. The discrepancy between 2015 and 2016 is given by the fact SM opened its first shop in the third quarter of 2015, consequently the figures correspond to approximately 5 months of commercial activity. As far as year 2018 is concerned, the presented figures represent the total sales and profit at the end of the first quarter. Clearly, the financial results for 2018 give raise to many concerns. Even though the Q1 target for sales: 600000lei

was achieved, the profit fell well below the target and SM made a loss. The unsatisfactory Q1 results are attributed to a rise in costs e.g. rise in costs with employees (tax changes), repairs, and other indirect costs, which correlated with a very low profit margin lead to a loss of almost 6000lei.

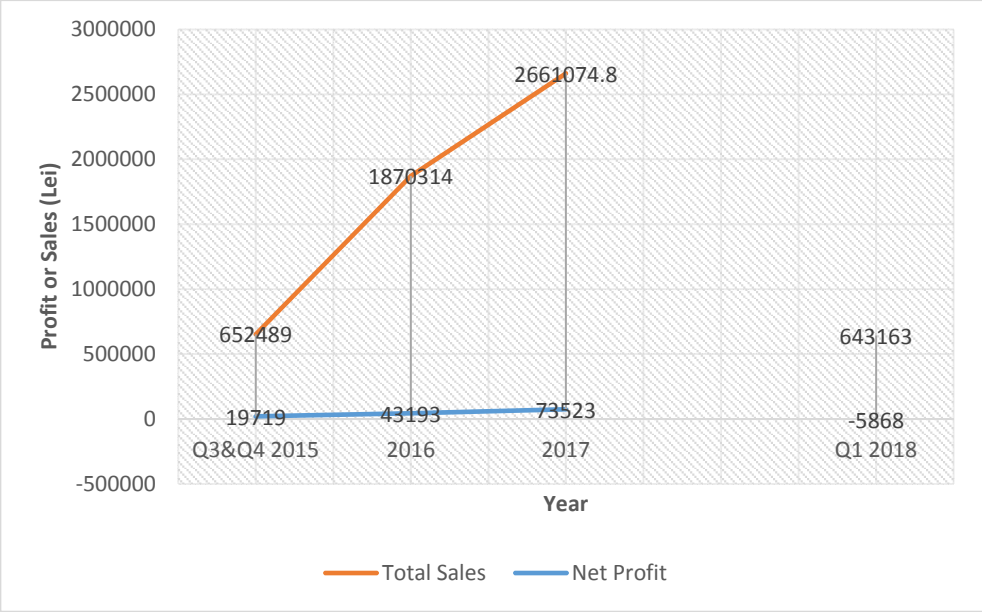


**Fig. 1.** SM Total Sales and Net Profit for 2015-2018

The retail industry is generally characterized by very low net profit margins (NPM), as a result of large sales coupled with low mark-ups, and, consequently high cost of goods. The industry standard for NPM is thought to be in the interval 3-5%. Available statistics indicate that, in 2010, top 250 retailers in Europe averaged a net profit margin of 3.3% (Statista, 2018), for UK the margin was slightly higher 3.6% and the US registered an average net profit margin of 4.3%. As indicated by fig. 2, SM fell short of the industry standard, registering lower NPM in all years since its opening. SM performed particularly poor in 2016, when it registered a NPM of only 2.31%.

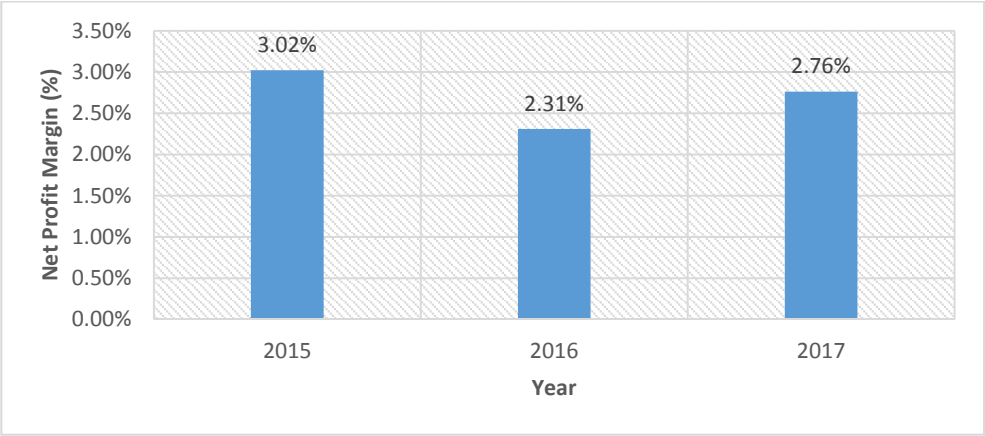


**Fig. 2.** SM Net Profit Margins 2015-2017

In order to improve the performance on the NPM indicator, SM can either reduce their costs or increase their revenues. The highest proportion of costs, generally around 85%, is given by the costs of goods. This variable can generally be reduced by negotiating with suppliers or changing suppliers. The remaining 15% of the total costs consist in a very high proportion of salaries and tax, the rest being indirect costs such as repairs, bank charges, and telecom. As far as the revenue improvement is concerned, the strategies can be twofold, either increasing the quantity of goods sold or increase their price. The quantity of sold goods can be raised either by increasing the number of consumers e.g. through marketing and promotions (can also negatively impact NPM), or determining the customers to buy more (increase the shopping basket value). However, all these approaches are inter-related e.g. if we invest in marketing: revenue might increase due to increased customers, however the overall costs will also increase due to the new marketing costs.

This paper will focus on improving the NPM indicator through optimizing the pricing strategy. An increase in price will clearly have a very high impact on profit and NPM, Dolan and Simon (1996) illustrate how a 10% increase in price can result in a 33% improvement in profit. However, the price elasticities of the products must be considered, sometimes a too high increase in price can lead to a significant loss of customers which can lead even to a decrease in NPM.

First of all, the daily sales data is collected from the store under investigation, referred in this paper as S1. Fig. 3 illustrates the daily sales data for the period: 01.07.2015 to 30.03.2018 for S1. As it can be observed straight away there are quite a few outliers and quite a lot of noise in the data. On a close analysis, we can observe that outliers are associated with major yearly celebrations: Christmas, New Year, and Easter. There are few days around this days which act as outliers, these are expected as sales are rising exponentially the days before the event and then they decrease or even go to 0 if the store is closed during and/ or after the national holiday. The added trend line exhibits an upper slopping trend, however, as indicated by the coefficient of determination ($R^2$), does not present a good fit because of the present irregularities and potential seasonal variation. Consequently, a detailed analysis of the data is required.

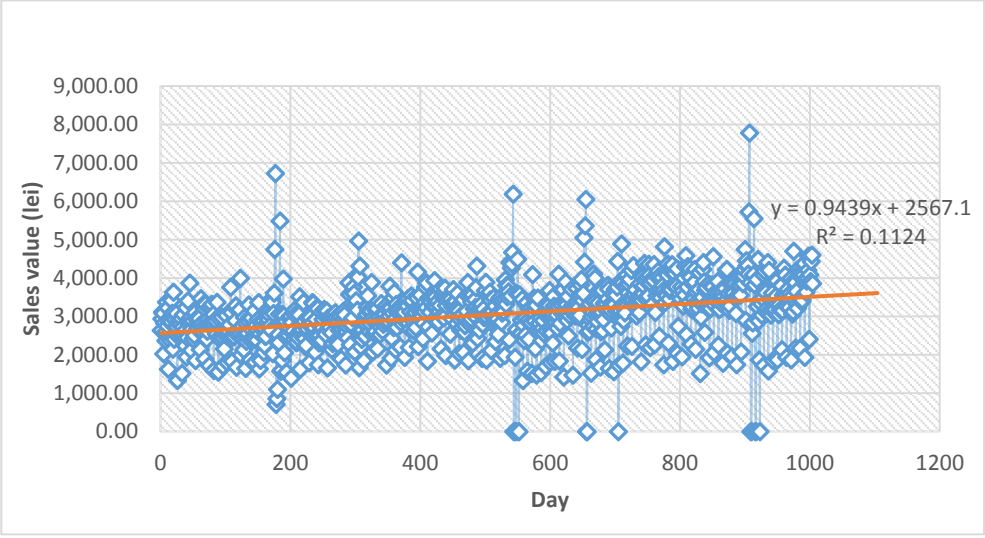


**Fig. 3**. S1 Daily Sales

Looking at the sales of Q1 2018, which are depicted in fig. 4, we can identify the same outliers as mentioned above. The 1st and 2nd of January indicate no sales as a result of S1 being closed for the two days

following the New Year. Moreover, the date of 8th of January also represents an outlier with 0 sales. Following an informal interview with SM's financial team, the date 08.01.2018 was identified as the date in which they conducted the yearly law required inventory, hence, S1 was closed for the whole day. The trend line exhibits a similarly poor fit as for the previous (complete) dataset. However, from the more restricted data-set, the presence of a certain seasonality is apparent. On a close analysis, it can be observed that all data-points which represent daily sales values below or around 2000lei are registered on Sundays. This recursive trend suggests the existence of a weekly seasonal pattern.

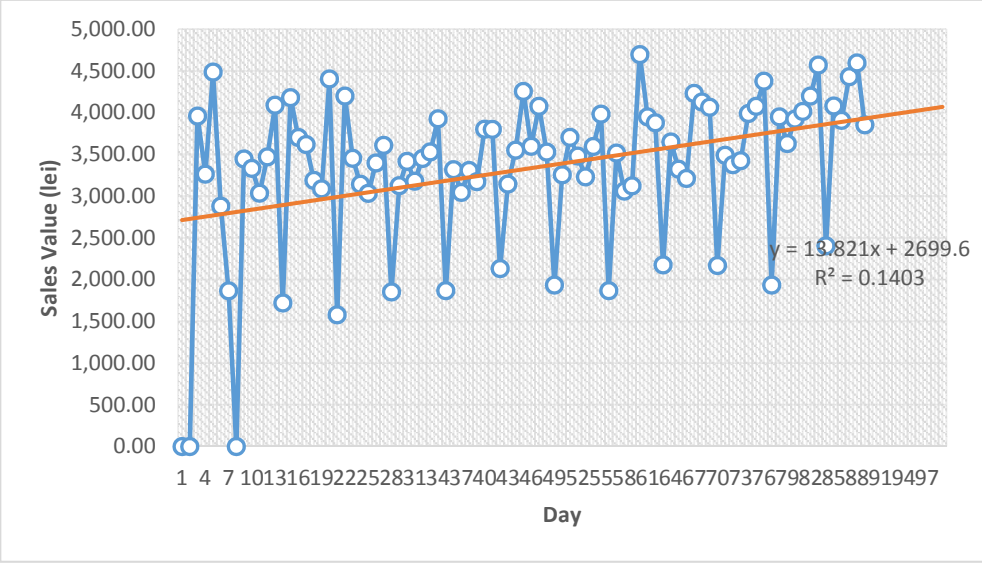


**Fig. 4.** S1 2018 Q1 Daily Sales

The existence of a weekly seasonal pattern is further illustrated in fig. 5. Except for the three outliers: two in week 1 (blue) and one in week 2 (red), the remaining data seems to follow quite a similar weekly pattern. There seems to be slightly larger sales on Fridays and Saturdays, followed by very low sales on Sundays. This information is extremely valuable in extracting the seasonal component from the time series.

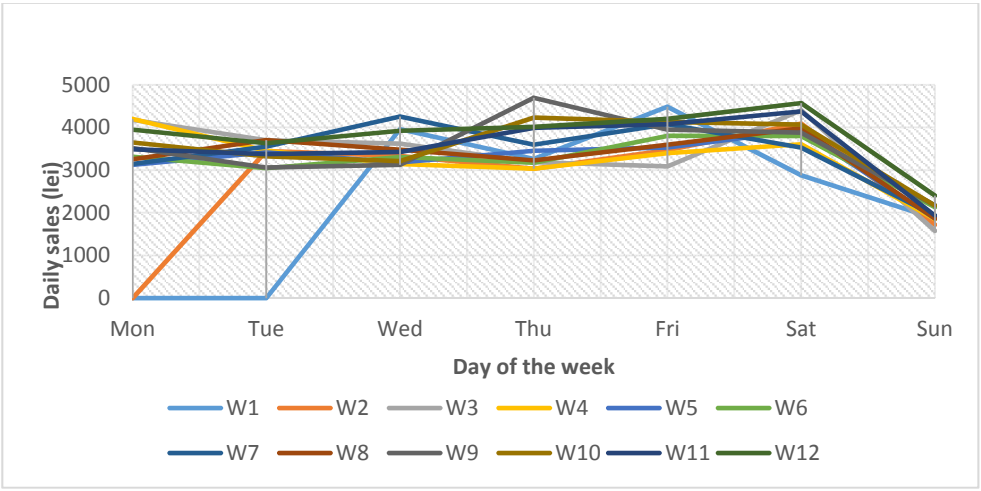


**Fig. 5.** Weekly pattern S1 2018 Q1

As previously emphasised, the work carried in this paper employs a time series analysis methodology for forecasting. In a classical view a time series is composed of four basic components: trend, seasonal variation, cyclical variation, and irregularities (Anderson et al., 2007). Considering the above presented data-set, the cyclical will be disregarded, as the interval for data collection is not long enough: slightly under 3 years. As previously emphasised, a multiplicative model will be employed, as they are considered to generally outperform the additive models (Dewhurst, 2006).

Since it has already been established that the data follows a seasonal pattern, smoothing methods, e.g. simple exponential smoothing, cannot be employed (Anderson et al., 2007). Consequently, in order to identify and remove the seasonal component a moving average (MA) approach is proposed. As the pattern is correlated to the weekdays (see fig. 5) a 7-period MA is selected. An illustration of original data vs MA(7) is provided in fig. 6. As it can be observed, MA(7) does well to remove the irregular components; however, it can be observed that it is still impacted by the outliers. It must be mentioned that data pertaining to Q1 2018 (3 months in total) was not included, as it was kept for testing. This testing set will be excluded from all analysis, until the forecasts are produced.

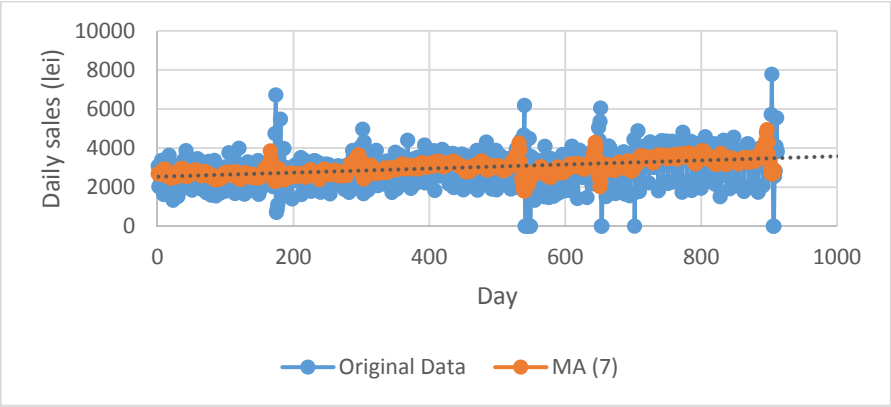


**Fig. 6.** Original data vs MA (7)

The resulting seasonal indices are presented in fig. 7. The seasonal indices clearly follow the pattern indicated in fig. 5, displaying average sales for the first four days of the week, followed by a slight increase in sales during Fridays and Saturdays and a very sharp decrease on Sundays. This is consistent with the information gathered during informal interviews with the staff.

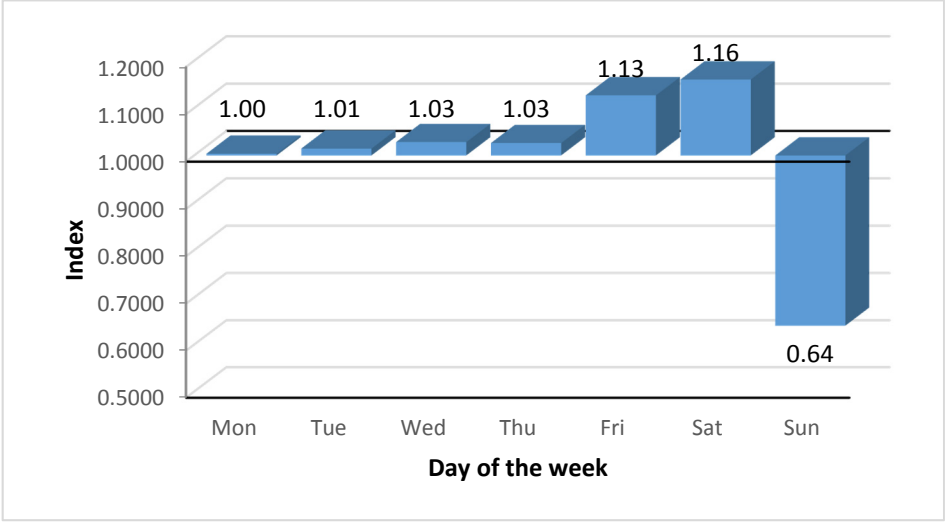


**Fig. 7.** Seasonal indices

Following the identification of seasonal indices, the data is deseasonalized, so as to extract the trend component. In order to reduce their impact on the trend line, the known outliers e.g. days around Christmas, New Year, and Easter, have been removed. Clearly, as it can be observed from fig. 8, there is still significant noise in the data, given by the irregular component. As previously emphasised, in order to test the accuracy of the developed model, a testing dataset consisting of Q1 2018 (three months in total) has not been included in the trend fitting either. The coefficient of determination indicates a significant improvement in trend line fit, when compared with initial seasonal data (see fig. 3). Nevertheless, it is clear that its accuracy could be improved: for a more accurate fit the $R^2$ value should be closer to 1. Unfortunately, the irregular variation and various outliers, coupled with the large size of the dataset, did not facilitate a better fit. However, the fit could be potentially improved if a larger window-size was to be tested for the MA. This was not desired in the current research as the MA window-size would lose its significance; following a number of informal interviews and a detailed analysis of the data, it is clear that the exhibited seasonality is weekly and, hence, a 7 window MA should be used.

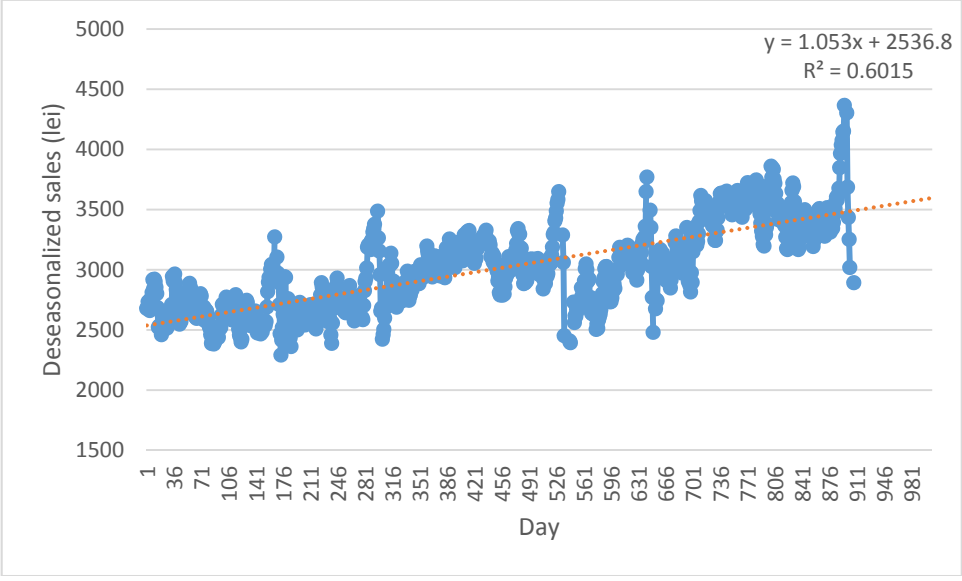


**Fig. 8.** Deseasonalized data

The accuracy of the developed model has been assessed on the testing set using visual inspection and a paired t-test (Anderson et al., 2007), to ensure there is no significant difference between the mean of the actual data and the mean of the forecasts. The first eight days were excluded from the testing set, as they contained a high number of outliers: the days following the New Year when the store was closed, and the day in which the law-required inventory was carried (08.01.2018). A visual inspection of the two datasets plotted in fig. 9 (actual vs forecasts) indicate small differences between the two. Main differences occur mainly because of lower than estimated sales on Sundays, but also due to certain variations during weekdays; nevertheless the predicted pattern seems to fit quite well with the actual data. This is also supported by the conducted paired t-test which indicated that there is not enough evidence to reject the null hypothesis $H_0$ at a 0.05 significance level. In other words, there is not enough statistical evidence to say that the mean of the actual data is significantly different than the mean of the forecasts.

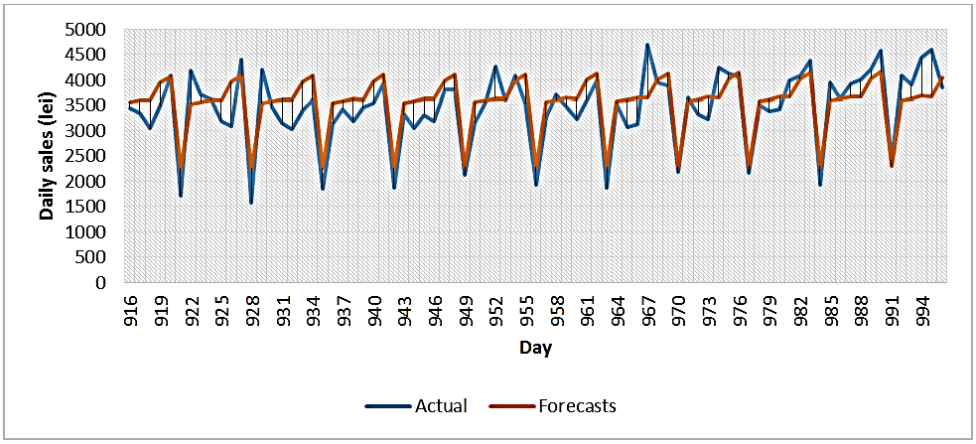


**Fig. 9**. Actual vs Forecasts on testing set (Q1 2018)

As the forecasting model is constructed and tested, the impact of certain price changes can be analysed. First of all, a detailed analysis of the main groups of products, which contribute to the daily sales, must be carried. An illustration of total sales for the period 01.07.2015-

30.03.2018, based on the main groups of products is provided in fig. 10. As it can be observed tobacco products are by far the biggest source of revenues, followed by bread and pastry products, and coffee & sweets. Quite a significant amount of sales is also hold by beverages and non-food products. However, this figure does not provide a complete picture, as different product groups have different contributions towards the gross profit (GP). SM currently employs different mark-ups according to the group of products e.g. sweets, beverages, and alcoholic drinks are marked-up 30% while pastry, meats, milk, and dairy products are marked-up 20%.

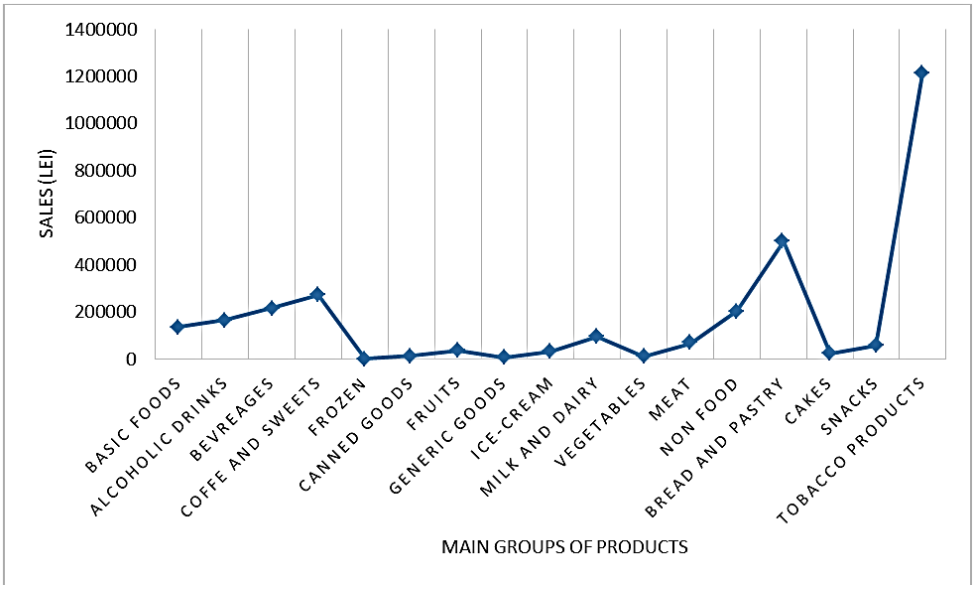


**Fig. 10**. S1 Sales (main groups of products)

From a gross profit point of view, the main top contributors change. As indicated by fig. 11, even though tobacco products account for an extremely large percentage (39.7%) of the total sales, they contribute with less than 11% towards the total GP. This is due to the fact that mark-up for tobacco products is restricted by law and generally reaches around 4%. The main contributor towards the GP is the bread and pastry

category, which generates almost 20% of the GP. That is almost twice the contribution to GP made by tobacco products with less than half of the sales (bread and pastry amount only to 16.4% out of total sales). Other main contributors towards the GP are: coffee and sweets with 16% of the GP (only 9% of total sales), non-food: 12% of GP (6.7% of total sales), and beverages: 9.9% of GP (7.1% of total sales).

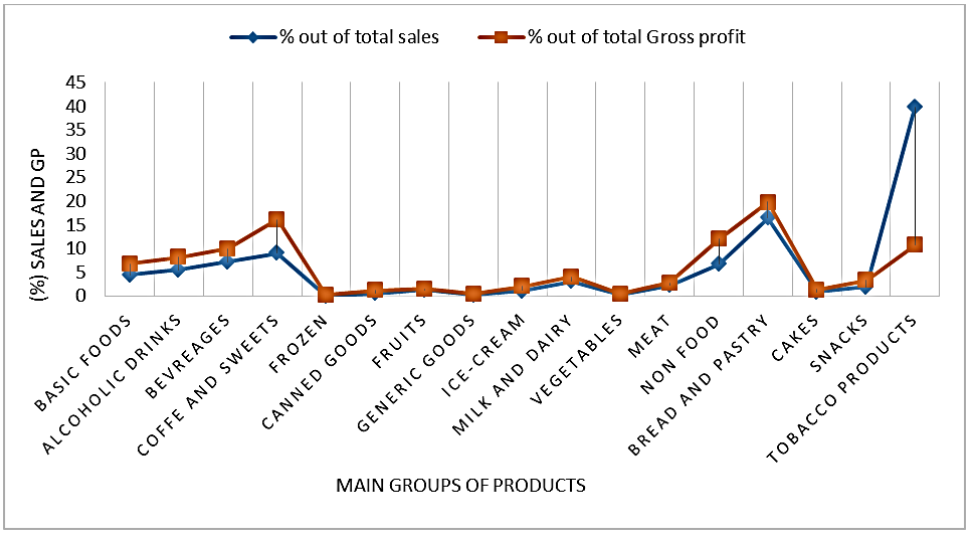


**Fig. 11**. S1 Percentage Sales and Gross Profit

Clearly, the categories which hold the highest percentage of total sales can generate the greatest impact of gross and net profits. However, the category that holds the highest percentage of sales: tobacco products (39.7%) has a law imposed selling price and, consequently, no adjustments can be made in this regard. As previously discussed the following categories are: bread and pastry with 16.4% out of total sales and coffee and sweets with 9% of total sales. In this paper the impact of a price change for bread and pastry will be analysed. First of all, this category was selected for its potential: since it holds the second highest percentage of total sales, it has the potential of generating the highest impact on total gross profit. Secondly, its mark-up is only 20%, as

opposed to coffee and sweets which have a mark-up of 30%; consequently, the perceived impact on price (from consumers' point of view) can be smaller. Finally, since the supplier for bread and pastry is a company from SM's group, it can provide support in case the price change has an undesired effect/ deviates from the forecasts e.g. help with promotions, price reductions and other discounts. Clearly, the pricing strategy can be analysed across multiple product categories; however, that will be the grounds of future analysis. The work carried in this paper will be limited to one category of products. From the case study/ company perspective, this is important for testing the forecasts and minimizing the impact of any deviations.

By employing the developed forecasting model, the sales for the next 3 months, more precisely the next 93 days, are predicted, as illustrated in fig. 12. Following a set of informal interviews with key members of staff, the impact of various price increases on customer spending was estimated using best and worst case scenarios. The results are presented in table 1.

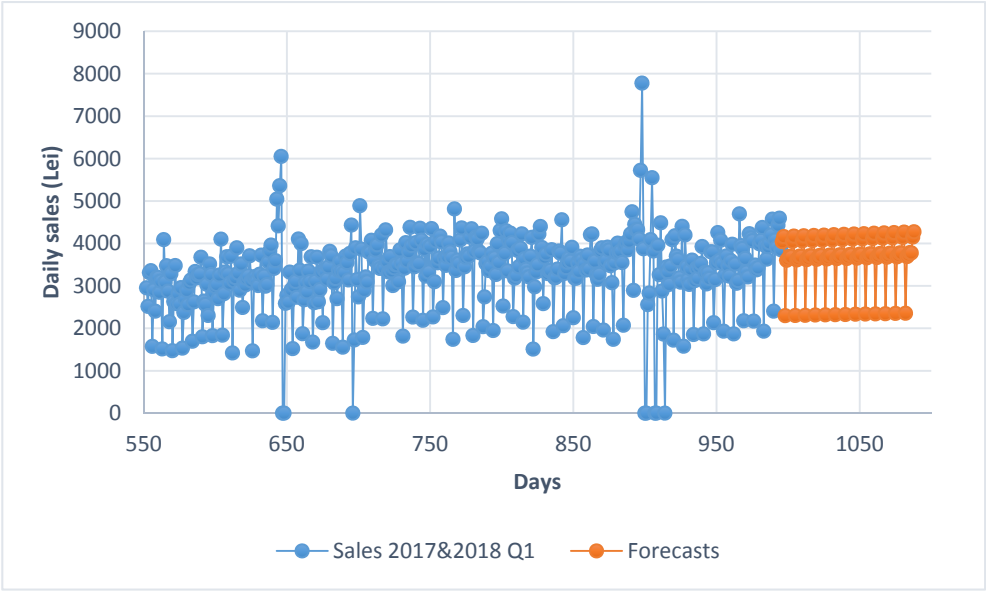


**Fig. 12**. S1 Percentage Sales and Gross Profit

The potentially negative customer impact is analysed from two different perspectives. On one hand we consider the potential loss in bread and pastry sales, but on the other, we also consider potential impact on overall sales. For supporting this required assessment, the data pertaining to customer baskets for February 2018 were analysed. The sum of all shopping baskets that contained 700gr white bread for Feb 2018 was 10187lei while all the 700gr white bread sold in Feb 2018 was 3462lei. In other words, for every 1leu spent on bread there were additional products worth 2.94lei in the basket. However, this data does not prove causality, it cannot be inferred that bread was the main driver for shopping, it could have been a side-product. For the purpose of this paper we estimate that for every 1leu (or 1%) lost in sales of bread due to price raise, we have a total of 1.5lei (or 1.5%) loss from total revenue.

**Table 4**. Pricing level analysis

| **Price raise (Mark-up)** | **Example of impact (700gr White bread)** | | **Calculated positive impact (greater revenues)** | **Estimated overall negative impact on sales Best Case (BC)** | **Estimated overall negative impact on sales Worst Case (WC)** | **Overall impact on GP** |
|---|---|---|---|---|---|---|
| | **Before (lei)** | **After (lei)** | | | | |
| 5% | 3 (2.5) | 3.125 | 0.69% | 0.15% | 0.30% | 4.93% |
| 10% | 3 (2.5) | 3.25 | 1.31% | 0.15% | 0.60% | 9.86% |
| 15% | 3 (2.5) | 3.375 | 2.05% | 0.75% | 1.50% | 14.79% |
| 20% | 3 (2.5) | 3.50 | 2.74% | 2.25% | 4.75% | 19.73% |
| 30% | 3 (2.5) | 3.75 | 4.10% | 4.50% | 10.50% | 29.59% |

An example is employed in table 4 to illustrate the impact of potential price changes. By adding an additional 5% to the original mark-up, the 700gr white bread increases its total gross margin to 25% (from 20%) leading to a price raise of 0.125lei: from 3lei to 3.125lei. The impact of the price raise on total revenues is presented in column 4. The impact on the bread and pastry revenues are calculated using the

following formula: increase= [(1.20+markup)/1.20-1]. For example, for the 5% increase in mark-up there will be a 4.2% increase for bread and pastry revenues. In order to obtain the impact on total revenue the previous percentage is multiplied by percentage contribution that bread and pastry holds from total revenue (16.4%). Hence for the 5% increase in mark-up there will be a 4.2%*16.4%=0.69% increase in total revenues. In columns 5 and 6 the best and worst case scenarios are estimated for negative impact on sales due to loss of consumers. The previously mentioned rule was considered during the informal interviews: a 1% loss in revenues of bread and pastry translates in 1.5% loss in total revenues. Finally, in the last column (7), the impact on overall GP is calculated. For calculating the impact on bread and pastry GP the following formula can be used: GP increase= [(0.20+markup)/0.20-1]. For example, for the 5% increase in mark-up, there is a 25% increase in bread and pastry GP. In order to calculate the impact on the overall GP the previously calculated increase is multiplied with the percentage contribution that bread and pastry holds from total GP (19.73%). Hence, a 5% increase in mark-up will generate a 25%*19.73%=4.93% increase in total GP.

It can be observed that, when compared to impact on GP, the price change impact on overall revenue is relatively small. An increase with 5% of the mark-up will raise the total revenue with only 0.69% while the overall GP will be raised by a significant 4.93%. It must be noted that the proposed increase in price mark-up is only for a category (bread and pastry) and even though this category is one of the main contributors to both revenue (16.4%) and GP (19.73%), it clearly implies a diminishing impact on overall results. If we analyse the contribution to the category's own revenue: 4.2% and GP: 25%, we are clearly presented with a significantly different impact.

As far as the price change impact on GP is concerned, it can be argued that the major increase is expected. Since the cost of the goods remains constant, all the increase given by the rise in the mark-up will become directly gross profit. Consequently, even though the percentage increase in overall revenue is not very small, the percentage increase in GP will raise exponentially. These results are consistent with the literature, as previously emphasised, Dolan and Simon (1997) found that a 10% rise in price can generate a 33% increase in profits.

In order to select the appropriate pricing level, the potential impact on loss of sales is illustrated in fig. 13. Based on the figures extracted in table 4, the predictions for 10%, 20%, and 30% change in mark-up were graphed. Understandably, as the increase in price becomes larger, the loss of sales along with the predicted uncertainty raise exponentially. From a predicted loss, for the whole 3 month period, of only 508lei (BC) -2034lei (WC) in the case of a 10% raise in mark-up to an expected loss between 15256lei (BC) - 35597lei (WC) for a 30% raise. Judging strictly based on the figures from table 4, we might be inclined to think that even under the dire conditions of significant loss of customers, given the high impact on the GP, greater benefits are obtained when very high price changes are applied. This judgement is correct for the short term, but such a strategy is not recommended as we risk losing a significant number of customers in the long run, or even more drastic impacts (than predicted) in the short term.

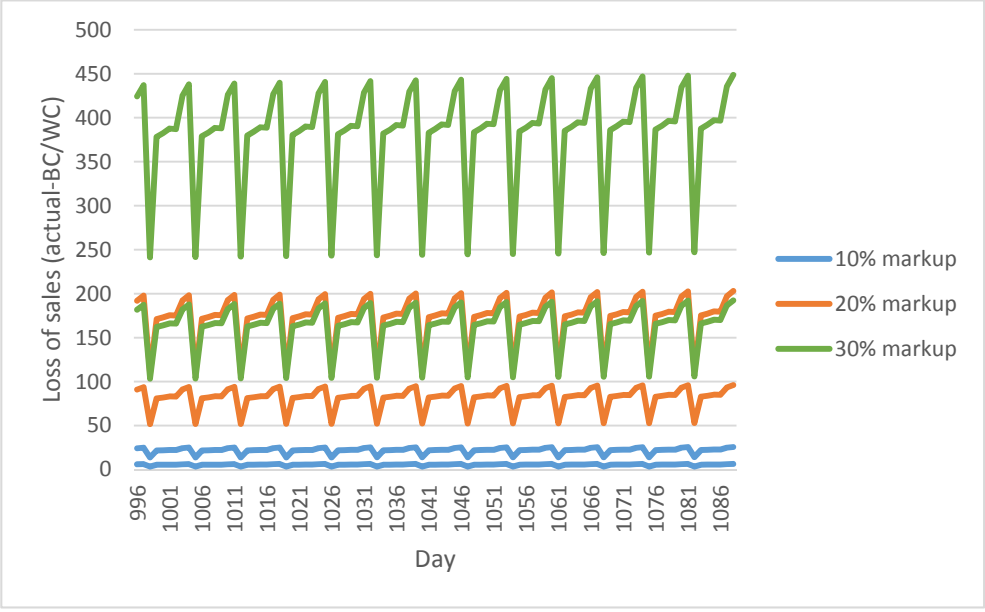


**Fig. 13.** Forecasted daily potential loss of sales

Subsequent to the presentation of the results, another set of informal interviews were carried, including with the CEO of SM's supplier for bread and pastry products. Following these discussions, the 10% increase in pricing mark-up was recommended and selected to be implemented. It represents the optimum alternative for SM as it predicts significant increase in overall GP (9.86%), a small increase in total revenue (1.31%), but, at the same time, minimal forecasted risks: just 0.15%- 0.60% decrease in sales. The second favourite option: the 15% increase in pricing mark-up was also considered as potentially viable, but was dismissed for its corresponding slightly higher associated risks. The experts subjectively appreciated that, for the higher mark-ups, the risk of sale loss could be even larger than forecasted. The predictions will be checked over 3 month intervals; after 6 months a re-evaluation will be conducted.

## Conclusions

This paper analysed the feasibility of employing time series analysis to support pricing decision making for SMEs which activate in the convenience sector of the retail market. The literature review revealed that increasing importance is paid to strategic pricing. Moreover, many consecrated approaches, as well as, hybrids have been developed. However, very few of these techniques are actually implemented, especially in the case of SMEs, which lack the knowledge and financial resources of analysing large datasets. It is also the case of a Romanian based SME: SM, which was selected as a case study for this research. SM's current practices rely on cost-plus pricing and historic data is rarely analysed.

As far as the Romanian retail market is concerned, there are limited publications that discuss pricing strategies, there are no overviews to indicate which methods are preferred. After a detailed literature review, an overview of the market structure became apparent. The four major players: Kaufland, Carrefour, Metro, and Auchan, which dominate the market, were identified. However, these top retailers are focused on the hypermarket sector, the proximity sector was found to be dominated by Profi and Mega Image, with Metro franchises "La doi pasi" offering an interesting, yet, currently, inefficient alternative.

As far as SM is concerned, they were found to face competition from hypermarkets: Unicarm and Carrefour, supermarkets: Profi, and other local SMEs, which operate as family businesses. Even though they generally experienced an upward sloping trend in terms of sales, SM was found to face problems with their net profit margins, which are below the industry standards. This is thought to be mainly attributed to their efforts of being competitive and keeping the prices low, but it is judged to be also the effect of a somewhat lax pricing policy.

Following an analysis of historic sales and a detailed investigation into groups of products, it was found that SM also exhibits quite a low gross margin (13.7%). This is mainly due to the fact that the main driver of sales: tobacco products (almost 40% of revenues) have a very low gross margin (around 4%). The biggest contributors to GP were found to be the bread and pastry products, which, even though, have a gross margin of only 20% and contribute to only 16.4% of the total sales, they amount to almost 20% of all GP. This category was selected for further analysis and price optimization.

Based on forecasts, estimations of worst and best case scenarios, impacts on GP and total sales, different pricing levels were analysed. Subsequent to a set of discussions and informal interviews with key personnel from SM and their bread and pastry supplier, a consensus has been reached and a 10% increase in mark-up was identified as optimal strategy and selected for implementation. The main deciding factor was constituted by the low predicted risks. Given the relatively low price of the products, a 10% increase in mark-ups was estimated to have a very minor impact on the buying patterns of consumers e.g. for the 700gr white bread a 10% increase in mark-up means raising the price from 3lei to 3.25lei.

Nevertheless, it must be mentioned that the carried work relies on a number of assumptions, and its robustness could be further improved. Consequently, a number of important directions are suggested for further research. First of all, in order to have a more comprehensive understanding of Romanian retail market, a research into existing empirical pricing strategies should be carried. This could prove quite challenging because of the reluctance, of major retail companies, to disclose their practices. Secondly, in order to improve the accuracy of

forecasts for SM, the impact of price changes across different categories should be analysed. In order to evaluate such elasticities data needs to be collected from various price changes and correlations to potential losses (in sales) should be sought. Thirdly, more case studies (e.g. more shops) should be analysed in order to be able to formulate a framework which can later be generalized and applied to any SME. Finally, a procedure should be devised for reacting to the results that the pricing strategy holds. Pricing is not a linear procedure, rather a cyclical one, the market is always changing and adapting, the feedback received from a certain price change must be analysed and frequent re-evaluations need to be conducted.

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# DYNAMICS OF INTERNATIONAL TOURISM AT GLOBAL LEVEL

**OANA RUXANDRA BODE**[1]

**ABSTRACT.** The core idea of the present paper is to analyse the evolution of international tourism during 2000-2015, simultaneously highlighting the factors that contribute to this dynamic. Thus, the aim of this paper is two-fold. The first is to analyse the evolution of international tourism at global level and at regional level. The second is to screen the dynamics of international tourism in the top tourism destinations countries. The main reason of focusing the research in this area is given by the important part played by tourism, a diverse and complex industry, in the global economy.

**Keywords:** international tourism, international tourist arrivals, international tourist departures, tourism development, global level

**JEL Classification:** L83, Z32

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## Introduction and literature review

According to the *United Nations World Tourism Organization - UNWTO, 2008*, "Tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes.

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These people are called visitors (which may be either tourists or excursionists; residents or non-residents) and tourism has to do with their activities, some of which imply tourism expenditure. International tourism comprises inbound tourism plus outbound tourism, that is to say, the activities of resident visitors outside the country of reference, either as part of domestic or outbound tourism trips and the activities of non-resident visitors within the country of reference on inbound tourism trips".

All debates related to the importance of tourism reveals the fact that tourism represents an engine of economic growth. Tourism provides around 292 millions of jobs at global level and contributes approximatively 10% to global Gross Domestic Product. Also tourism accounts for 7% of the world's exports of services (US$ 1.4 trillion a year) and 30% of the total export of services at global level (World Tourism Organization, 2017).

The travel and tourism industry has faced many changes throughout the last years. One of the main determinants can be found in the increased globalization which leads to an easier access and dissemination of information as well as a borderless world offering completely new opportunities for travellers nowadays (Buhalis and Law, 2008). Another major reason, is the e-tourism which encourages a more interactive relationship between tourism organizations and travellers, leading to new ways of developing and marketing tourism products (Buhalis and Licata, 2002). As a result of the easier access to information and the opening up of the travel and tourism industry, customers have greater expectations and therefore one can notice a shift from the old conventional to the new tourism (Stamboulis and Skayannis, 2003).

Moreover, in the past 10 years, the segment of young tourists market value has begun to increase significantly. Thus, the dynamics of the youth travel market, on a global level, taking into consideration the international youth arrivals, youth accommodation units and the behavioural habits of young tourists, is relevant (Demeter et al., 2015).

The trends in international tourism and economic implications were debated by many authors. The tourism industry will become one of the major players in international commerce and one of the main

income sources for many developing countries (Pantelescu, 2012). International tourism not only influences economics, it also affects social, environmental and land development policies. International tourism flows produce some of the most dynamic economic exchanges that occur between countries (Vellas and Bécherel, 1995).

Tourism competes in the global market, so it is important to understand its trends at the global level and at the regional level. Therefore, the present article offers insight into important trends of tourism during 2000-2015.

The evolution of tourism, respectively of international tourism, is characterized worldwide by a growth trend as a result of the favorable influence on the economic, social, demographic and political factors. People's desire to visit other countries/regions, their wish to experience other civilizations, as well as technical progress in the field of transport which allows faster and more comfortable journeys over longer distances, has led to a significant increase in international tourism worldwide.

This upward trend in international tourism, even in socially, economically and politically unfavorable times, has led tourism to be considered one of the most dynamic economic sectors. Furthermore, we emphasize the factors that determined the above mentioned, such as:

a) *Changing in consumer preferences for tourist destinations and expanding travel habits:* during the period 2000-2015, tourists started to move increasingly towards African countries such as Namibia, Tanzania, Nigeria, Gambia, Rwanda, Zimbabwe and Madagascar (this being mainly due to their initial low knowledge at international level). At the same time, China, together with Hong Kong and Macao, becomes unparalleled Asian tourism leader, followed by Malaysia. European countries such as Croatia, Slovakia, Bulgaria, Slovenia, Georgia, Armenia and the BRICS members - Brazil, Russia, India, China and South Africa, and also Middle East countries like Palestine, Lebanon, Jordan and the United Arab Emirates, experience a growing share as attractive tourist destinations. At the same time, destinations such as Vietnam, Singapore, Cambodia, Philippines, Thailand, Indonesia, Sri Lanka and Maldives have seen significant increases in consumer preferences. The strong results recorded in 2015 related to international tourist arrivals in all

these new tourist destinations emphasize a significant growth of this indicator compared to 2000: Namibia +111.58%, Tanzania +140.52%, Rwanda +849.03%, China +82.16%, Hong Kong +202.77%, Macao +175.31%, Malaysia +151.62%, Croatia +117.51%, Bulgaria +154.90%, Georgia +1.424,81%, Armenia +2.548,89%, Thailand +212.38%, Vietnam +271.22%, Cambodia +924.68%, Sri Lanka +349.5% and Maldives +164.24%[2]. From the point of view of consumers traveling habits, during the analyzed period, tourists preferred to travel more and more with the airplane (especially due to the increase of low-cost flights to many tourist destinations) at the expense of the train or the personal car;

b) *a significant increase in the number of countries and geographical areas included in the tourist circuit*, mainly driven by the demand from an increasing number of people who are always looking for authentic experiences or are motivated by the need to be in touch with the "new", the discovery of style locally, the need to escape the daily routine in places not yet visited by them, or the low cost of travel. For example, Solimar International is helping to create tourism destinations that are financially and socially sustainable, and good for the planet, such as Malawi, Cayman Islands, Campeche, Myanmar, Benin, Ethiopia, Bethlehem, Sri Lanka etc. In most of these countries we can find the most interesting and unique attractions (such as indigenous culture, wildlife, and nature reserves), always located in rural areas, where poverty is often the greatest;

c) *improving national legislation in many countries to stimulate tourism:* for example, visa policies create a barrier to travel and tourism. Easy visa facilitation is one of the basic ingredients for attracting foreign tourists. Visa costs (direct costs, such as monetary costs or indirect costs, such as waiting time and travel costs associated with obtaining the visa or the required documents) often discourage travel to the tourist destinations where a visa is required, and redirect the request to other destinations. According to the UNWTO Visa Openness Report[3], in 2015 39% of the world's population could travel without obtaining a visa before departure compared to only 23% in 2008. As average, 18% of the world's population managed to travel to a

[2] Source: Author's own elaboration based on World Development Indicators Database, World Bank

[3] UNWTO, Visa Openness Report 2015, available at: https://www.eunwto.org/doi/pdf/10.18111/9789284417384, accessed on June 18 2016

destination without visa in 2015, compared with 17% in 2008. Emerging economies continued to be more open than advanced economies. At regional level, Southeast Asia, East Africa, the Caribbean and Oceania were the most open areas, while Central Africa, North Africa and North America were the most restrictive sub-regions in 2015.

We emphasize some examples that highlight the improvement of visa policy in different countries and its impact on international tourist arrivals[4].

- In 2007, Canada cancelled the visa requirement for Czech citizens. Touristic arrivals from the Czech Republic to Canada recorded an increase of 36.5% in 2007-2008, of which 20% is estimated to be the result of the lifting of the visa requirement;
- In 2008, the US extended visa waiver program including the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Slovakia and Korea. As a result, the number of tourist arrivals from these countries increased in US reaching 46% by 2011;
- In 2008, China was added to Korea's visa waiver program for Jeju Island, the largest island in Korea and an important tourist destination. Until 2009, Chinese tourists' arrivals in Korea increased by 64.5% compared to 2005;
- In 2009, Great Britain began allowing tourists from Taiwan staying less than six months to enter the country without a visa. Thus, ITA sharply increased in 2009 (39.6%) and the average yearly increase of Taiwan arrivals was 6.6% for the period 2009-2011;
- In 2010, India changed visa restrictions on arrivals from 11 countries (New Zealand, Finland, Luxembourg, Japan, Indonesia, Philippines, Singapore, Cambodia, Laos, Myanmar and Vietnam). It was allowed a single entry in a 60 days period. The positive effect that occurred as a result of the program was an increase in combined arrivals from the 11 countries by 10.6% in 2010;
- In 2013, Japan adopted a visa relaxation policy and subsequently recorded a 169% increase in international tourist arrivals. This increase is largely due to tourist arrivals from Thailand, Malaysia and Indonesia, which have benefited from the visa waiver rule in Japan;

[4] The Impact of Visa Facilitation on Job Creation in the G20 Economies, Published by the World Tourism Organization (UNWTO) and the World Travel & Tourism Council (WTTC), June 2012

d) *increasing population income at global level:* for example, if we are considering strictly the average wage in the economy, it is important to note that in the last decade, average wages more than doubled in China, increased by about 60% in India and had an increase of 20 to 40% in Indonesia, Brazil, South Africa, Turkey and the Russian Federation. In China, wage growth has been faster than in other countries[5];

e) *strong growth in tourist demand and supply in areas such as Southeast Asia, Eastern Europe, New Zealand* (international tourist arrivals increased in 2015 by 71% compared with 2000, while international tourist departures increased by 88%) *and Australia* (international tourist arrivals increased in 2015 by 51% compared with 2000, while international tourist departures increased by 170%[6]);

f) *continuous professional training for tourism staff through the efforts of big hotel chains, cruise companies*, etc;

g) *education of the population such that to consume more and more tourist products*;

h) *increasing the average length of stay*[7];

i) *Open Skies* - the liberalization of airspace and the increase in low-cost flights supply.

The purpose of this paper is to investigate the evolution of the basic indicators of tourist activity for the period 2000-2015 by: 1) analysing the evolution of international tourist arrivals, international tourist departures, international tourism receipts and international tourism expenditures at global level and at regional level; and 2) emphasizing the evolution of international tourist arrivals and international tourism receipts in the World's Top Tourism Destinations. We highlight the evolution that the world tourism industry registered in the last 16 years. The remained of this paper is organized as follows: Section 2 describes the research methodology that has been applied, Section 3 presents and discusses the research results, and finally, the last section of the paper concludes this research.

[5] Global Wage Report 2016/17 - Wage Inequality in the Workplace, published by International Labor Office, Geneva, 2016

[6] Source: Author's own elaboration based on World Development Indicators Database, World Bank

[7] Average length of stay of visitors - Tourism indicators - UNCTAD Handbook of Statistics - Country Comparison available at http://www.nationsencyclopedia.com. Data avaiable for the period 1990-2007

## Material and method

Considering this research goal, we used the data provided by World Bank - World Development Indicators database. The data was collected for a period of 16 years (2000 – 2015) and computed accordingly to our main research objective. We also used the World Tourism Organization (UNWTO) document entitled *Tourism - Highlight 2017* which includes assessments on tourism development in 2016, as well as UNWTO documents entitled *Tourism 2020 Vision*[8] and *Tourism Towards 2030*[9], which include long-term assessments and forecasts on tourism development.

We consider the evolution of the basic indicators of tourist activity, relevant to the understanding of the global dimension of the tourism phenomenon. This has resulted in a dynamic map of tourism circulation internationally, which shows the main tourist flows worldwide and by destinations.

The development of international tourism can be analyzed on the basis of the following basic statistical indicators: international tourist arrivals (ITA), international tourist departures (ITD), international tourism receipts (ITR) and international tourism expenditure (ITE). These indicators allow the analysis and characterization of the sector's dynamics. We highlight the evolution that these indicators registered in the last 16 years at global level, at regional level and in the world's tourism destinations.

## Results and discussions

The evolution of the basic statistical indicators which emphasize the development of international tourism was run for each year, from 2000 to 2015. This evolution and the descriptive statistics of the studied variables are presented in Table 1. By highlighting the annual percentage growth rate durimg 2000-2015 of ITA (average growth 4.19%), ITD (average growth 3.84%), ITR (average growth 6.37%) and ITE (average growth 6.59%) at global level, we compared the evolution

[8] Available at http://mkt.unwto.org
[9] Available at https://www.e-unwto.org/doi/book/10.18111/9789284414024

of these indicators over time. We conclude that the minimum percentage growth rate for all indicators is registered in 2009, just after the economic crisis.

**Table 1.** ITA, ITD, ITR and ITE growth at global level (annual %)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | MAX | MIN | AVERAGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ITA | 7.80 | 0.03 | 2.98 | -1.34 | 10.47 | 6.23 | 5.95 | 7.36 | 1.73 | -4.20 | 6.64 | 4.26 | 5.08 | 4.84 | 4.90 | 4.31 | 10.47 | -4.20 | 4.19 |
| ITD | 9.43 | 1.25 | 0.67 | -0.14 | 8.51 | 6.54 | 2.50 | 6.98 | 2.61 | -3.69 | 7.65 | 4.23 | 4.58 | 5.01 | 0.81 | 4.47 | 9.43 | -3.69 | 3.84 |
| ITR | 3.39 | -1.55 | 4.70 | 9.81 | 19.06 | 5.69 | 8.09 | 15.68 | 9.76 | -9.92 | 8.93 | 11.93 | 3.76 | 7.95 | 8.91 | -4.20 | 19.06 | -9.92 | 6.37 |
| ITE | 4.95 | -1.79 | 4.80 | 10.11 | 16.87 | 8.60 | 6.35 | 15.75 | 8.19 | -11.15 | 9.12 | 11.40 | 5.80 | 7.01 | 12.32 | -2.85 | 16.87 | -11.15 | 6.59 |

*Source: Author's own elaboration based on World Development Indicators Database, World Bank*

Figures 1 and 2 highlights the expansion of international tourist arrivals and departures (measured in millions of people), as well as of the international tourism receipts and expenditure (measured in millions of USD) for the period 2000-2015.

International tourist arrivals is the main indicator used for the measurement of tourist traffic. There is a steady increase in both arrivals and departures of international tourists with low growth periods in 2003, respectively 2009. At global level, ITA has risen from 677 million in 2000 to around 955 million in 2010, reaching 1200 million in 2015 (a significant increase of about 77% compared to 2000). Similarly, ITD had an upward trend from 822 million in 2000 to around 1,129 million in 2010, reaching a threshold of 1.360 million in 2015 (an increase of about 65% compared to 2000). The ITD indicator shows a much higher increase compared to the ITA. The global gap between the arrivals and departures of international tourists is due to the different method of measuring these two indicators across the different countries.

Worldwide, between 2000 and 2015, the average ITA was 897.38 million, which corresponds to an average annual increase of 4.19%, while average ITD were 1,055.26 million, which corresponds to an average annual increase of 3.84%. The period 2010-2015 was marked by a continuous increase, the number of arrivals and departures of international tourists registering a much higher growth than the average one.

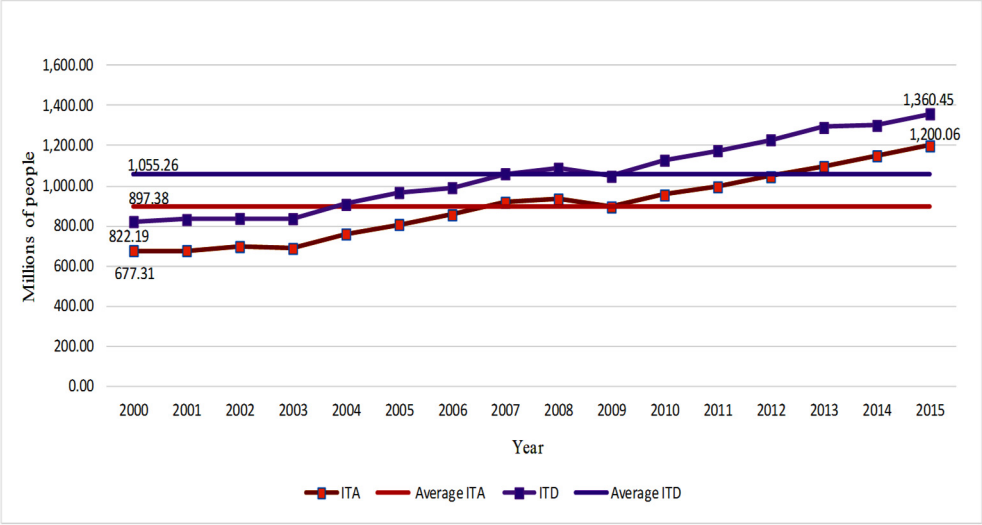


**Figure 1.** ITA and ITD at global level during 2000-2015 (millions of people)

*Source: Author's own elaboration based on World Development Indicators Database, World Bank*

The same conclusion can be highlighted in relation to the revenues from international tourism, respectively the expenditures for the international tourism: the continuous increase of these two statistical indicators, the most pronounced growth of which is the ITR, with a slowing of growth in the years 2001, 2009, respectively 2015. However, compared to the increases recorded for ITA and ITD, in the case of ITR and ITE the increases are amazing: ITR increased by about 151% in 2015 compared to 2000, while ITE increased by approximately 156%. ITR had an upward trend from $ 572,778 million in 2000 to about $ 1,436,984 million in 2015, while ITE had an upward trend from $ 536,493 million in 2000 to about $ 1,371,214 million in 2015. At global level, the difference between international tourism receipts and international tourism expenditure is due to the different way of measuring these two indicators across the different countries.

Average ITR were US $ 994,535.22 billion (average annual growth was 6.37%), and average ITE were $ 921,064.40 billion (average annual growth of 6.59%). This is due to the fact that over time many

countries have been focusing on attracting a significant number of tourists and turning tourism into a source of wealth.

Despite the many unfavorable factors, international tourism has grown steadily. 2015 was the most successful year in terms of ITA, respectively ITD, while 2014 was the most successful year concerning ITR, respectively ITE.

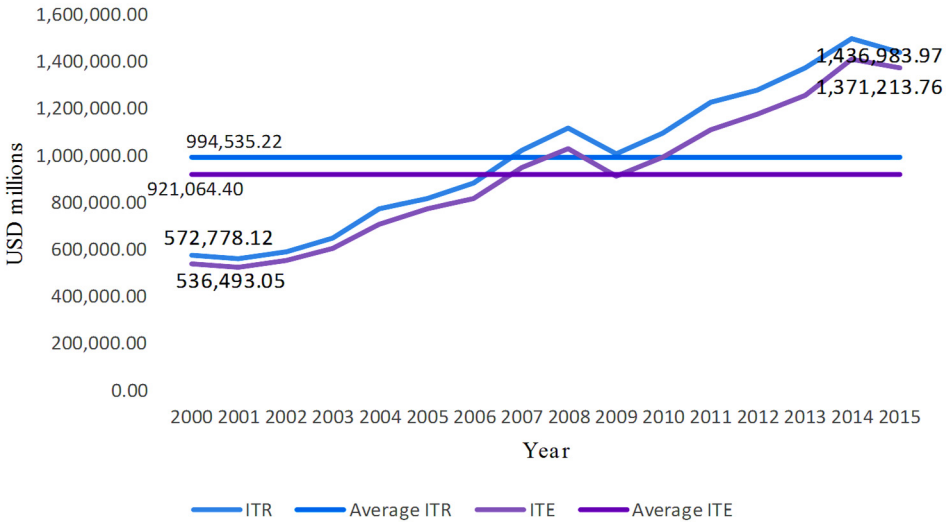


**Figure 2**. ITR and ITE at global level during 2000-2015 (million USD)

*Source: Author's own elaboration based on World Development Indicators Database, World Bank*

The vast majority of international travel takes place at the level of tourists' regions, with about four out of five arrivals from the same region. Source markets for international tourism were largely represented by the advanced economies of Europe, America, Asia and the Pacific. Europe is currently the world's largest source region, generating almost half of the ITA (48%), followed by Asia and the Pacific (26%), America (17%), Middle East (3%) and Africa (3%)[10].

[10] UNWTO Tourism Highlights, 2017 Edition

For a more complete characterization of the tourism phenomenon we studied also the evolution of the basic indicators of tourism activity at the regional level. In the evolution of these indicators, there are many determinants common to all regions, given that over time, many countries/ regions have focused on the development of international tourism through investments in this sector, promotional activities, developed infrastructure, facilities granted, in order to attract an increasing number of international tourists annually.

Data available in the World Development Indicators - WorldBank database reveals the existence of the following six major tourist regions: Africa; East Asia and the Pacific (EAS); Europe and Central Asia (ECS); Latin America and the Caribbean (LCN); The Middle East and North Africa; and South Asia (SAS). Furthermore, we emphasize the evolution of the ITA, ITD, ITR and ITE of the following four regions: EAS, ECS, LCN and SAS[11].

We conclude that:

- the explosion of the tourist phenomenon is felt both at the level of international tourists arrivals/departures, as well as of the international tourism receipts/expenditures;
- of all regions, ECS occupied a peak spot during the analyzed period of time, representing the most popular and mature tourist destination at global level;
- until the economic crisis from 2008, all four indicators have steadily increased, but unfavorable effects have been felt in 2009 (as a percentage of annual growth are registered negative values for each region, for each indicator);
- in the period following the economic crisis of 2008-2010, in terms of ITD, ITR and ITE the oscillation at the ECS level can be observed, while the rest of the regions enjoy a steady and sustained growth trend, although they attract a small number of visitors and are emitters of tourists more modest compared to ECS. In contrast, concerning ITA, all regions enjoy a steady increase, although it is a moderate one;

[11] For the period 2000-2015, the data available in the WorldBank database is complete only for these four regions, which is why a comparative analysis of the six regions is not relevant from our point of view

➢ Asian destinations consolidated at the level of international tourist arrivals (an average increase of about 11% compared to ECS which recorded an average increase of about 7%) and departures (an average increase of approximately 10% compared to ECS which showed an average increase of about 7%). In 2014, the SAS region recorded surprising results at the level of the ITA (a strong increase of about 62% over the previous year) due to the growth as a tourist destination of the sub-regions of India, Sri Lanka and the Maldives. These beneficial effects were felt at the level of ITR and ITE, this region also registering the most significant average increase among all the analyzed regions.

**Table 2.** ITA growth at regional level (annual %)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2015/ 2000 | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EAS** | 0 | 5.51 | 8.15 | -10.19 | 27.96 | 7.94 | 7.68 | 10.64 | -0.73 | -1.64 | 12.78 | 6.06 | 7.08 | 6.58 | 5.49 | 5.78 | 2.51 | 6.61 |
| **ECS** | 0 | 0.11 | 2.97 | 0.70 | 4.51 | 5.58 | 5.29 | 5.94 | 0.52 | -5.20 | 2.82 | 6.60 | 3.81 | 5.24 | 2.33 | 4.43 | 1.56 | 3.04 |
| **SAS** | 0 | -7.05 | -3.67 | 14.92 | 21.96 | 5.11 | 13.59 | 11.55 | 3.70 | -3.59 | 14.49 | 12.54 | 3.20 | 8.93 | 61.91 | 1.48 | 3.98 | 10.61 |
| **LCN** | 0 | -2.67 | -4.61 | 2.77 | 11.80 | 8.00 | 3.32 | 4.09 | 4.27 | -3.64 | 3.99 | 5.29 | 3.53 | 2.13 | 11.13 | 7.85 | 1.73 | 3.82 |

*Source: Author's own elaboration based on World Development Indicators Database, World Bank*

**Table 3.** ITD growth at regional level (annual %)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2015/ 2000 | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EAS** | 0 | 5.99 | 2.80 | -1.56 | 16.56 | 6.22 | 7.26 | 8.95 | 2.35 | -0.62 | 14.77 | 7.58 | 8.40 | 7.32 | 4.72 | 6.89 | 2.54 | 6.51 |
| **ECS** | 0 | 0.18 | 0.95 | 1.19 | 4.39 | 6.76 | 1.18 | 5.98 | 2.74 | -5.74 | 2.23 | 3.49 | 1.92 | 4.65 | -3.75 | 2.63 | 1.32 | 1.92 |
| **SAS** | 0 | 1.92 | 8.25 | 10.36 | 15.43 | 15.04 | 12.60 | 18.75 | -1.11 | 12.08 | 12.88 | 8.02 | 6.56 | 5.21 | 9.80 | 10.65 | 3.98 | 9.76 |
| **LCN** | 0 | 1.98 | -6.65 | 1.01 | 12.04 | 8.71 | 5.50 | 8.97 | 2.19 | -3.48 | 8.01 | 11.77 | 7.27 | 4.06 | 7.27 | 6.67 | 2.05 | 5.02 |

*Source: Author's own elaboration based on World Development Indicators Database, World Bank*

**Table 4.** ITR growth at regional level (annual %)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2015/ 2000 | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EAS** | 0 | 2.45 | 9.84 | 1.10 | 30.59 | 6.05 | 9.29 | 19.35 | 10.98 | -4.88 | 22.37 | 16.31 | 9.88 | 8.77 | 19.78 | -1.16 | 4.37 | 10.71 |
| **ECS** | 0 | 0.88 | 6.57 | 16.31 | 16.77 | 3.85 | 7.98 | 14.93 | 8.72 | -13.03 | -0.49 | 13.94 | -2.06 | 9.31 | 3.59 | -11.36 | 1.98 | 5.06 |
| **SAS** | 0 | -6.62 | 4.11 | 31.96 | 32.02 | 18.43 | 17.19 | 22.35 | 10.13 | -8.14 | 26.50 | 21.11 | 4.07 | 7.99 | 11.19 | 4.17 | 5.80 | 13.10 |
| **LCN** | 0 | -0.92 | -3.17 | 9.37 | 13.49 | 12.83 | 8.33 | 9.81 | 7.50 | -8.16 | 5.28 | 7.77 | 6.43 | 5.61 | 6.97 | 4.33 | 2.25 | 5.70 |

*Source: Author's own elaboration based on World Development Indicators Database, World Bank*

**Table 5.** ITE growth at regional level (annual %)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2015/ 2000 | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EAS | 0 | -3.84 | 7.60 | 0.36 | 25.92 | 6.41 | 1.23 | 13.32 | 9.24 | -5.98 | 20.84 | 15.43 | 15.65 | 8.85 | 32.65 | 11.45 | 4.25 | 10.61 |
| ECS | 0 | 0.02 | 7.85 | 18.40 | 14.49 | 6.25 | 4.36 | 16.11 | 7.77 | -13.76 | 1.85 | 10.27 | -0.28 | 8.47 | 3.78 | -13.32 | 1.91 | 4.82 |
| SAS | 0 | 10.77 | -1.64 | 14.28 | 30.98 | 30.78 | 8.99 | 18.93 | 13.12 | -23.53 | 14.06 | 26.31 | 3.99 | 3.60 | 19.57 | 2.52 | 4.55 | 11.52 |
| LCN | 0 | -2.57 | -11.11 | 3.34 | 13.19 | 18.19 | 10.82 | 18.26 | 11.75 | -5.83 | 18.13 | 18.48 | 9.16 | 9.82 | 1.00 | -13.00 | 2.43 | 6.64 |

*Source: Author's own elaboration based on World Development Indicators Database, World Bank*

Concerning 2016, the distribution of international tourist arrivals by geographical regions shows Europe's leading position (616.2 million), followed by Asia and the Pacific (308.4 million) and America (109.3 million). It follows Africa and the Middle East. The distribution of receipts from international tourism by geographical region reveals Europe's world leadership position (US $ 447.3 billion), followed by Asia and the Pacific ($ 366.7 billion), Americas ($ 313.2 billion) Middle East ($ 57.6 billion) and Africa ($ 34.8 billion)[12].

Based on the annual evolution of the indicators analyzed over the period 2000-2015, we conclude that tourism was one of the economic sectors facing the global economic crisis of 2008-2010. To underline the previously highlighted aspects, we consider to be relevant the rankings of the world tourist destinations listed below (Tabel 6 and 7). When ranking top international tourist destinations, it is preferable to consider more than one indicator. Thus, the ranking is based on the two key indicators for recipient tourism: international tourist arrivals and international tourism receipts.

Comparing the Top 10 in 2015 to the Top 10 in 2000, we conclude that, in terms if ITA, top leaders have remained the same (the top three countries ranked in this top: France, USA, Spain); Italy and China have changed their place in the league; The United Kingdom, Mexico and the Russian Federation have come down in the rankings, while Germany has climbed three positions; the new ranked in the list is Turkey, while Canada left the Top 10. Significant percentage growth was registered in Turkey, Germany, China and United States.

[12] UNWTO Tourism Highlights 2017.

**Tabel 6.** The performance of the main countries sought by tourists according to UNWTO

| | World's Top Tourism Destination 2015 | No. of tourists (mil.) | | World's Top Tourism Destination 2000 | No. of tourists (mil.) | Growth (2015/2000) |
|---|---|---|---|---|---|---|
| 1 | France | 84.5 | 1 | France | 75.5 | France: 11.9% |
| 2 | United States | 77.5 | 2 | United States | 50.9 | United States: 51.3% |
| 3 | Spain | 68.2 | 3 | Spain | 48.2 | Spain: 41.5% |
| 4 | China | 56.9 | 4 | Italy | 41.2 | Italy: 23.2% |
| 5 | Italy | 50.7 | 5 | China | 31.2 | China: 82.2% |
| 6 | Turkey | 39.5 | 6 | United Kingdom | 25.2 | United Kingdom: 36.7% |
| 7 | Germany | 35.0 | 7 | Russian Federation | 21.2 | Russian Federation: 47.7% |
| 8 | United Kingdom | 34.4 | 8 | Mexico | 20.6 | Mexico: 55.5% |
| 9 | Mexico | 32.1 | 9 | Canada | 20.4 | Canada: - Turkey: 311.8% |
| 10 | Russian Federation | 31.3 | 10 | Germany | 19 | Germany: 84.22% |

*Source: Author's own elaboration based on UNWTO data*

Furthermore, comparing the Top 10 in 2015 to the Top 10 in 2000, in terms of ITR, the changes in the ranking reflect not only the relative performance, but also the fluctuations in the exchange rate between the local currencies and the US dollar. This was a special case in 2015, when the US dollar appreciated considerably against the euro and many other world currencies. The top four places in the ranking are occupied by the same countries as in the case of ITA, but in a different order. It is interesting to note that for some countries ITR have increased considerably: China (+ 604%), Hong Kong - China (+358%) and USA (+ 140%). At the bottom of the top are situated the two Chinese destinations, Hong Kong and Macao, which have special administrative arrangements. We emphasize that China, together with the two Chinese destinations, Hong Kong and Macao, occupies three positions in this top.

**Tabel 7.** The performance of the countries with the highest tourist receipts according to UNWTO

| | World's Top Tourism Destination 2015 | ITR (billions USD) | | World's Top Tourism Destination 2000 | ITR (billions USD) | Growth (2015/2000) |
|---|---|---|---|---|---|---|
| 1 | United States | 204.5 | 1 | United States | 85.2 | United States: 140.0% |
| 2 | China | 114.1 | 2 | Spain | 31.0 | China: 604.3% |
| 3 | Spain | 56.5 | 3 | France | 29.9 | Spain: 82.3% |
| 4 | France | 45.9 | 4 | Italy | 27.4 | France: 53.5% |
| 5 | United Kingdom | 45.5 | 5 | United Kingdom | 19.5 | United Kingdom: 133.3% |
| 6 | Thailand | 44.6 | 6 | Germany | 17.8 | Thailand: n/a |
| 7 | Italy | 39.4 | 7 | China | 16.2 | Italy: 43.8% |
| 8 | Germany | 36.9 | 8 | Austria | 11.4 | Germany: 107.3% |
| 9 | Hong Kong (China) | 36.2 | 9 | Canada | 10.8 | Hong Kong (China): 358.2% |
| 10 | Macao (China) | 31.3 | 10 | Greece | 9.2 | Macao (China): n/a |

*Source: author's own elaboration based on UNWTO data*

At global level, the ITA is estimated to grow on average by 3.3% by 2030, although the growth rate is expected to fall from 3.8% the start of the period 2010-2030 to 2.9% in 2030. In absolute figures, ITA will increase by about 43 million per year, compared with an increase of about 28 million per year for the period 1995-2010. Forecasts show that international tourist arrivals is expected to reach 1.4 billion in 2020 and 1.8 billion in 2030, according to the World Tourism Organisation report.

The most dynamic growth rates are projected to be recorded in regions with emerging economies such as Asia, Latin America, Central and Eastern Europe, the Middle East and Africa. The most significant development is expected to be recorded in the Asia Pacific region, where the ITA are projected to reach 535 million tourists in 2030, an increase of 4.9% per year by 2030. The Middle East and Africa are expected to more than double the international tourist arrivals (from 61 million in 2010 to 149 million in 2030). A relatively lower growth is estimated for Europe (from 475 million in 2010 to 744 million in 2030) and America (from 150 million in 2010 to 248 million in 2030).

The result will be an increase in the global market share for Asia and the Pacific (up to 30% in 2030 compared to 22% in 2010), Middle East (to 8% from 6%) and Africa (to 7% from 5%), while the share of the European regions and America decreases: to 41% from 51%, respectively to 14% from 16%. This is mainly due to slower growth in North America and North Western Europe.

Towards 2030, domestic tourism will grow as well, with the growth of international tourism, this phenomenon mainly affecting developing countries in Africa, Asia, the Middle East and Latin America. as well as in highly industrialized countries where the population will practice various forms of domestic tourism.

## Conclusions

Tourism represents one of the pillars that should be supported by governments worldwide in order to stimulate economic growth, due to the fact that travel and tourism industry will become one of the major players in international commerce and one of the main income sources for many developing countries.

Based on the aspects presented in this paper, we conclude that during the period 2000-2015, the explosion of the tourism phenomenon was felt both at the level of international tourist arrivals, respectively departures, as well as at the level of international tourism receipts, respectively expenditure.

All this is the result of factors such as: changing consumer preferences for tourist destinations and expanding travel habits, significant increase of countries and geographical areas included in the tourist circuit, improving national legislation in many countries to stimulate tourism, considerable increase of tourist demand and supply in areas such as Southeast Asia, Eastern Europe, New Zealand and Australia, airspace liberalization and increased low-cost flights supply.

We conclude that there is still considerable potential for expansion in the next period. New destinations can benefit from this trend if they adopt appropriate policies in terms of business environment, infrastructure, marketing and human resources.

In order to further support this upward trend, World Tourism Organization continues to encourage local governments to make many efforts to facilitate travel, simplify visa application and processing formalities, improve information and communication technologies with consumers.

Based on all aspects analysed in the present paper, it is important to highlight the new factors whose influence will accelerate the growth of international tourism and the role of the travel and tourism industry as an economic motor at global level:

- increase in low-cost carriers: global market share has risen from 7% in 2003 to 16% in 2013 and is projected to increase to 21% in 2033, according to Boeing data. As far as Europe is concerned, there has been an increase in the market share of 18% in 2013 compared to 2008. Low-cost transport companies focus on business and operational practices that reduce airline costs, such as: secondary airports, the use of one type of airplane, the increase in airplane use, the focus on direct sales, frequent avoidance of routes, the maintenance of low-cost labor costs, the sale of ancillary services. The immediate result is the increased flexibility in the "packaging" of tourist products: those who fly at a low cost can opt for accommodation at their destination in a 5-star hotel;
- demographic changes and migration;
- increasing population welfare and attitudes towards work and leisure (more and more people perceive holidays as a necessity rather than a luxury);
- ethical values;
- technological progress;
- a fragmentation of tastes (people are increasingly looking for unique experiences to express who they are, which increases demand for active holidays);
- a self-catering phenomenon (for example, AirBnB and Couchsurfing);
- Visa policy changes in many countries (visa facilitation) lead to an increase in international tourism (international tourist arrivals and international tourism receipts) and employment levels.

During the world economic crisis or in other political and social disturbing periods, tourism has proved to be the best engine of the economy in many countries. In the Caribbean, Pacific, East Africa and underdeveloped (or developing) countries, tourism is one of the main branches of the economy or even the main economic engine. Small or economically underdeveloped countries with natural potential and fewer natural resources have as an alternative to economic growth tourism. Compared with other sectors of activity, tourism has a great advantage, namely that it does not involve a production cycle and large material investments. Only tourist potential (natural, cultural, ecological, etc.) and infrastructure (access roads to the tourist destination), besides the intermediary and the merchant, i.e. the active element of the tourist system (travel agency, government, hotels, spaces accommodation, etc.).

The limitations of this study is given by the fact that does not provide a complete picture of the evolution of ITA, ITD, ITR and ITE at regional level due to the fact that data were not available at Worldbank - World Development Indicators database during 2000-2015 for all regions.

An important future research direction could consist in analysing the economic impact of tourism at global level and regional level during 2000-2015, such that to underline the role of economic engine that this industry plays worldwide: tourism is responsible for creating jobs and reducing poverty, contributes significantly to the Gross Domestic Product annually at the global level and adapts continuously to the changing environment.

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