Proceedings of the ENTRENOVA - ENTERprise REsearch INNOVAtion Conference

Vol. 1, No. 1

Edited by:

Maja Baćović, Marin Milković, Mirjana Pejić Bach, Sanja Peković, Vanja Simicevic, Jovana Zoroja

ISSN 1849-7950

Udruga za promicanje inovacija i istraživanja u ekonomiji "IRENET", Zagreb, 2017
Impressum

3rd ENTRENOVA - ENTerprise REsearch InNOVAtion Conference

PUBLISHER
Udruga za promicanje inovacija i istraživanja u ekonomiji "IRENET", Zagreb, Croatia

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PRINT
WebArt, Zagreb

ISSN 1849-7950
**Focus and Scope**

The 2017 ENTerprise REsearch InNOVation Conference (ENTRENOVA '17) is dedicated to the advancement of the theory and practical implementations with the goal to provide practical advice for further research related to innovation, knowledge management and R&D issues. ETENTRENOVA conference was held in Dubrovnik, September 7-9, 2017. ENTRENOVA is organized by IRENET, Society for advancing innovation and research in economy in cooperation with University of Montenegro, Faculty of tourism and hotel management, Kotor & University North, Croatia.

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Contents

A Comparison of Algorithms for Text Classification of Albanian News Articles
Arbana Kadriu, Lejla Abazi

A Google Classroom-based Learning Management System: Empirical Evidence from SEEU
Lejla Abazi-Bexheti, Edmond Jajaga, Hirije Abazi-Alili, Arbana Kadriu, Marika Apostolova-Trpkovska

A Network Analysis of Innovation in Internet of Things Business
Fumihiko Isada, Yuriko Isada

Analysis of Food Consumption in Hungary
Katalin Tari, József Lehota, Nándor Komáromi

Are ICT Tools Recognized Enough as Management Support in Croatian Tourism?
Daniela Garbin Praničević, Judita Peterlin

Can UK High-tech SMEs be Ambidextrous?
Chaminda Senaratne, Catherine L. Wang

Change Management: A Change Everyone Fears?
Lidija Grdošić, Ammar Avdić

The Choice of Color, Topic and Toys: An Empirical Study of Gender Roles
Thorsten Litfin, Özlem Teckert, Julia Lamberz

Conversion of Foreign Currency Loans in the CEECs
Zsuzsanna Novák, Imre Vámos

Corporate Social Responsibility in the Water Industry Sector
Nora Rodek Berkes, Zoltán Birkner, Tivadar Máhr

Creativity Management and Creative Industries in Contemporary Russian Economy: Case of St. Petersburg
Kapustkin Vadim, Kapustkina Elena

Credit Scoring Analysis: Case Study of Using Weka
Frane Škegro, Jovana Zoroja, Vanja Šimičević

Crowdfunding of Entrepreneurial Projects in Sport
Ivan Novak, Blaženka Knežević, Petra Škrobot

Development and Implementation of Sustainability IoT Based Curriculum
Amr Elsaadany, Ahmed Helmi
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majlinda Fetaji, Labinot Morina, Bekim Fetaji, Mirlinda Ebibi</td>
<td></td>
</tr>
<tr>
<td>Devising New CLA Methodology in Teaching Programming Using Flipped Learning with Counterpart Learner Assistant - CLA</td>
<td>119</td>
</tr>
<tr>
<td>Majlinda Fetaji, Abdulmelih Gylcan, Bekim Fetaji, Mirlinda Ebibi</td>
<td></td>
</tr>
<tr>
<td>Differences in Self-determination of Slovenian Service Sector Employees</td>
<td>126</td>
</tr>
<tr>
<td>Simona Šarotar Žižek, Vesna Čančer, Živa Veingerl Čič</td>
<td></td>
</tr>
<tr>
<td>Eco-Innovation and its Determinants: A Review of the Emerging Literature</td>
<td>134</td>
</tr>
<tr>
<td>Mihaela Păcesilă, Carmen Nadia Ciocoiu</td>
<td></td>
</tr>
<tr>
<td>Educating Creativity in Advertising School by Using Innovation in Technology</td>
<td>145</td>
</tr>
<tr>
<td>Mădălina Moraru</td>
<td></td>
</tr>
<tr>
<td>Effects of Promotion Techniques at Higher Education Institutions: The Case of the Republic of Macedonia</td>
<td>154</td>
</tr>
<tr>
<td>Teuta Veseli-Kurtishi, Nexhbi Veseli</td>
<td></td>
</tr>
<tr>
<td>Embracing Sustainability in Global Companies – Does it Promote Subsidiary-Level Learning and Innovation?</td>
<td>158</td>
</tr>
<tr>
<td>Andrea Szalavetz</td>
<td></td>
</tr>
<tr>
<td>External Audit of Public Finance in Function of Macroeconomic Stability</td>
<td>165</td>
</tr>
<tr>
<td>Snežana Ljubisavljević, Milka Grbić</td>
<td></td>
</tr>
<tr>
<td>Factors Promoting Innovation with Formal or Informal R&amp;D among ASEAN Firm</td>
<td>172</td>
</tr>
<tr>
<td>Masatsugu Tsuji, Hiroki Idota, Hidenori Shigeno, Yasushi Ueki, Teruyuki Bunno</td>
<td></td>
</tr>
<tr>
<td>From Learning to Knowledge: Analysis of Relationships between These Organizational Processes</td>
<td>180</td>
</tr>
<tr>
<td>Lejla Turulja, Nijaz Bajgoric</td>
<td></td>
</tr>
<tr>
<td>Green hopes: Spatial and Settlement Development Operative Programs in the Programming Period 2014-2020</td>
<td>190</td>
</tr>
<tr>
<td>Tivadar Máhr, Zoltán Birkner, Nora Rodek Berkes</td>
<td></td>
</tr>
<tr>
<td>How Students as Consumers Learn Information about New Products</td>
<td>199</td>
</tr>
<tr>
<td>Jelena Šišara, Divna Goleš</td>
<td></td>
</tr>
<tr>
<td>Humor and Co-Creation as Levers of Valorization of Tourism Attractions: Case Study from Vodnjan, Croatia</td>
<td>207</td>
</tr>
<tr>
<td>Iva Slivar, Ana Periša, Andelina Horvat</td>
<td></td>
</tr>
<tr>
<td>Innovative Activities in Terms of Information Processing</td>
<td>213</td>
</tr>
<tr>
<td>Peter Balco, Martina Drahošová, Michal Greguš, Mojmír Kališ</td>
<td></td>
</tr>
</tbody>
</table>
Integrated Educational System – Pure Experiment or Model for the Future
Dušan Vasić, Aleksandra Stojković, Bojan Zdravković  219

Long-Run Elasticity of the Substitution in the Slovak Economy
Karol Szomolányi, Martin Lukáčik, Adriana Lukáčiková  228

Managing Innovation in an Unstable World: Challenges of Global Competition for European Innovative and Proactive Firms
Carlo Binder, Andrea Mantovani  223

Mobile Business Intelligence: Allocation of Mobile Workers for Competitive Information Gathering
Ofer Barkai, Elad Harison  240

New Geographies of Tourist Consumption: The Case of Montenegro
Sanja Pekovic, Jovana Vukcevic, Tatjana Stanovic, Djurdjica Perovic  246

NoSQL Databases as Social Networks Storage Systems
Dražena Gašpar, Mirela Mabić  251

Opening the Black Box of Innovation Processes in Virtual Communities
Meera Sarma  258

Opportunities and Obstacles of a Healthy Diet from an Economic and Psychological Aspect
Nikolett Mihály, Nándor Komáromi, József Lehota  266

Pension Policy Challenges and Communication Solutions
Nikolett Mihály, Nándor Komáromi  274

Pick my Desk and Go: A Solution to Improve Team Dynamics
Riccardo Bonazzi  282

Professional Development of Business Students: Vision Creating
Judita Peterlin, Vlado Dimovski, Simon Colnar, Barbara Grah  288

Protection of 'Whistleblowers' Identity
Željko Mirjanić, Jasna Ćošabić  296

Psychological Well-being of Employees in Service Sector Organizations in Slovenia
Vesna Čančer, Simona Šarotar Žižek, Živa Veingerl Čič  303

Rebuilding the Hungarian-Romanian Border Zone as a Learning Region
Zoltan Zakota  312

Reporting Solution for Order Management
Darko Golec  319
Role of Accounting Information in Decision-Making Process, the Importance for its Users
Nexhmie Berisha Vokshi, Florentina Xheli Krasniqi

Service Design Guidelines for New Types of Wellness Tourism
Riccardo Bonazzi, Vincent Grèzes, Valérie Barbey

Statistical Analysis of Wind Speed for the Probability Evaluation of Cancelled Departure for Catamarans and Ferries
Nastia Degiuli, Biserka Runje, Andrea Farkas

Student Perceptions Regarding the Mind Map Application in Mathematical Education
Violeta Cvetkoska

Teamwork and E-learning as a New Approach in High Education
Danijela Kardaš, Bojan Knežević, Petar Gvero

Technology meets Psychology: Teaching Business Students Critical Thinking within New Learning Formats
Petra Hauptfeld

The Analysis of CSR Reports of Serbian Companies
Milena Stanisavljevic

The Analysis of Electromagnetic Field Impact of Mobile Communication Antennas: The Case Study of Lombardy, Italy
Virtyt Lesha, Besmira Kuqi

The Impact of an Internet-Based Computer Laboratory on Graduate Students’ Learning of Econometrics
Vesna Bucevska

The Influence of Modern Business Environment on Management Changes
Krešimir Buntak, Ivana Martinčević, Maja Mutavdžija

The Link between Human Resources in Science and Technology and Regional Economic Development in the EU
Jan Hunady, Marta Orviska, Peter Pisar

The Many Faces of Internet Marketing
Aleksandar Grubor, Olja Milovanov

The Opportunities of Small and Medium-Sized Cities in the Globalizing World
Zoltán Birkner, Tivadar Máhr, Nora Rodek Berkes

The Role of Total Cost of Ownership Tools in AAL Technology Assessment
Eoghan McConalogue, Paul Davis, Regina Connolly
The Role of Tutor’s Feedback in Writing E-Course
Giuli Shabashvili, Ketevan Gochitashvili 430

The State of Entrepreneurship and Innovativeness in Montenegro
Sanja Peković, Jelena Jovanović, Zdravko Krivokapić, Aleksandar Vujović 437

Tayeb Biad, Sadik Maliki, Hamid Housni 446

Univariate Weibull Distributions and Their Applications
Višnja Jurić 451

User-Friendly Website Design: A Combined Eye-Tracking Study
Julia Lamberz, Thorsten Litfin, Gunther Meeh-Bunse, Özlem Teckert 459
The Influence of Modern Business Environment on Management Changes

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Abstract
The business environment that is characterized by the dynamics of change has had a significant impact in the development of scientific thinking in the field of management from the beginning of the nineteenth century until today. In the 1950s, modern theories and management concepts were developed as a response to the demands of a new business environment. That particular feature, as well as the way in which its influence is accepted, enables them a potential application and importance even in a modern business environment. But, on the other hand, there are great differences between the environment in the world of the 1950s, when modern management theory appear, and the world and the environments that today are. Globalization, internationalization, virtual economy, and smart cities are just some of the features that are changing the contemporary environment and the world we live in, and which have a significant impact on the need for change and adaptation of traditional theories in business and management. The aim of the paper is to highlight the need for developing new theories and management concepts according to the problems that management and managers face today as the first as well as modern management theory has not been developed in accordance with today’s business and general environment.

Keywords: management, virtual economy, business environment, globalization, smart cities
JEL classification: M00

Introduction
From the first theories of management, which focused mainly on the problems of the organization as a whole and employee motivation, through modern theories, which stress the significance of quality in all segments of business, we reach the situation in the contemporary world. This begs the question: do such theories still function in this environment? Technology is constantly advancing, and we are witnesses of the rapid changes all around us, which we are all part of. Most would claim that ‘globalization’ is the starting point of all features of the modern world. This is certainly not incorrect, but there is a plethora of its consequences which significantly affected the development of the today’s world. The manager and the company are set in the centre of these changes. They are exposed to the outside influences and so the main question is: “Does the 21st century environment require new management theories?”
The contemporary characteristics of the modern world largely differ from those that were prevalent when the traditional and modern management theories arose. Precisely this dynamic and changeable environment greatly affects businesses and general management. Managers are facing modern technologies and innovative ways of doing business, which in turn changes their role in managing the company.

**An Overview of Management Theories**

Management theories can be split into two major groups based on the time period in which they appeared; these are traditional and modern theories.

*Figure 1*

Management theories

![Management theories diagram](source)

*Source: Own work, as per Pfeifer, S. (2012). Interna skripta za kolegij Menadžment*

Traditional management theories are whose which are widely employed in practice. They are a cornerstone that other management theories build upon. Even though the practice of management began long ago, formal studies began only in the 19th century. Three schools of thought developed within the framework of traditional management theories. These are: classical school, behavioural school, and science management. Each of these traditional approaches is particular to the time period during which it had been developed. By taking a closer look at all the traditional approaches, it can be concluded that neither has been developed to function in practice on its own.

During the 1950s, modern theories of management appeared as an answer to changes in the business environment. The changes in business environments and factors of success of the company also changes the problem approach to the theory of management and management in practice. (Zekić 2007:83)

The most important approaches that have been developed within the modern management theory are: systems approach, contingency approach and excellence and quality approach. Modern theories are especially important since exactly those theories were proposed as an answer to the demands of the business environment and have the possibility of functioning in the contemporary environment as well.
System Approach
The systems approach is based on systems theory. The system is defined with a system border and connections between the systems. „When it comes to the company, the systems theory starts with the assumption that a company is a system since it comprises a multitude of interlinked and interdependent subsystems. A company is analysed as an open system since it is linked with two-way links to its environment and wider systems in which it is a subsystem“. (Belak 2014:56)

Precisely those “interlinked subsystems together transform the input of work, materials, financial and other resources into outputs in the form of services or products. These subsystems are:
1. Psychosocial subsystem, comprising the relations between the individuals and groups
2. Technical subsystem, which determines the properties of the used input and produced output and the nature of the transformation process
3. Information subsystem, which collects and analyses data and information necessary for the decision-making process
4. Management subsystem, which creates and manages the organisation. “ (Zekić 2007:80)

All the components of this approach are already known and this approach does not mark a significant improvement in doing business. All companies today must be aware of its corporate structure (and systems structure), just as well as it has to be aware of the environment with which it relates. A major focus is put onto the system, which connects this approach with the traditional schools of thought, and turns the focus away from the more modern schools of thought towards which the approaches should gravitate.

Contingency (Situational) Approach
The contingency approach is based on the postulates that situations can be categorised and then, for each of those categories, certain rules can be made, instead of for each of the situations.“ (Zekić 2007:81)

In today’s dynamic environment and constant technological changes, situations in which companies find themselves simply cannot be categorised. The rules which the contingency approach sets for certain stations simply cannot be applied in the today’s world, as situations change with incredibly speed and the situation in which the company finds itself today can be wholly different tomorrow.

According to the contingency approach, managers should be flexible when choosing the management style. A style that is adequate for one set of situations need not necessarily be applicable elsewhere. This approach stresses that there is no need to imitate management and management decisions, as that is not something which will ensure company growth.

„Successful management can quickly and precisely recognise key factors of a certain situation and then apply the appropriate measures. “ (Zekić 2007:81)

Business Excellence
Business excellence is the best way of managing the company and attain the best possible results compared to the competition. The main goal of business excellence is to ensure that the manner of completing the company’s goals and achieve competitive advantages be sustainable in the future as well. Business Excellence is a theory based on TQM, which was first devised by Tom Peters, and American quality, management, and business experts. It places the manager in the centre of the
quality improvement process. When steering towards the goal of total quality, the focus is placed on analysing the processes and their constant improvement (Joiner et al., 2017).

The most distinctive representative of the total quality method was Edward W. Deming, who developed an innovative approach for quality improvement in Japan - Total Quality Management (TQM). He outlined the basics of TQM in 14 points, marked as 14 obligations of the management. The aim of these 14 points is to change the approach to work in both the management and the workers, to reduce expenses for the company and raise the level of quality and productivity. (Pavletić, Šuman 2008:134-136)

Another notable person who helped define the TQM is Joseph Moses Juran. His philosophy regarding quality is that quality is gauged by the level of satisfaction of the buyers by the product. „Juran feels that the development of the organizational system necessarily linked with abandoning the current level of quality and attaining the higher level with the help of a well-made implementation process.” (Šiško Kuliš, Mrdujaš 2009:73-74).

The introduction of total quality management is assured by the employment of the American business excellence model. There are three business excellence models: Japanese, European, and American.

The basics of the Japanese excellence model were put forward by W. Edwards Deming. “The particular feature of Deming’s reward is that it does not demand the candidate to adapt to the model; the candidate is expected to understand their current situation, establish their own goals and themes, as well as improvement and transformation throughout the company. Benchmark criteria encompass the results achieved and the effectiveness that is expected in the future.” (Samardžija i Kolak 2009:212)

The European business excellence model, known as EFQM – European Foundation for Quality Management was established by the European Foundation for Quality Management in Brussels. (Vusić 2007:52) The excellence model was developed in Europe as an answer to the global market developments, which necessitated a creation of a competitive position of European companies on that market. The basic assumption of this model is: “Excellent results of an organization in doing business, customer relations treatment of employees and society are achieved with excellent leadership which defines the politics and strategy. The strategy is secured by resources and processes and implemented by the employees and partners.” (Vusić 2007:52)

The American models is based on the Malcolm Baldrige National Quality Award, one of the most recognizable awards in the world. This reward motivates other companies to strive for excellence in order to become competitive in the global market.

Characteristics of the Modern World
There are major differences between the world of the 1950’s, when the first modern theories of management were developed, and the world of today.
The contemporary world demands adaptability and creativity to achieve business success in the end. The characteristics of the contemporary world such as digitalisation, IT development and new economy are a great threat for companies since they can completely shut down certain businesses as well as mark the development of new ones.

Globalization enabled the countries from all continents to participate in international trade, i.e. it has enabled the world to become connected. The
development of transportation, communication and information technologies has further strengthened the effects of globalization and created a new form of mass culture with new values that are in contrast with the traditional values.

Along with globalization, internationalisation and regionalisation have appeared as emerging challenges. Regionalisation is the process of creating new levels of government, which can vary in terms of responsibilities and powers. Internationalisation and regionalisation also become challenging for the countries of today. New international and regional unions are being created, which can then be employed to pressure state governments, but also create connections between people all over the world. (Lončar 2005:96) Internationalisation is a process of crossing country borders with a particular interest. It can pertain to the entry of foreign companies into the domestic market and vice-versa.

„Information technology – IT or Information and communications technology – ICT are technologies necessary for the electronic processing of data.” (Bhatt and Emdad 2010:6). IT combines people with computer resources, software, data, and computer network. (Fox 2013:1) Information technology has largely eased the job of the management as it enables better communication with the employees and lower management and complete organisation of business processes in the company.

The pervasive use of IT technologies has resulted in the development of a new concept – the concept of a smart city. A smart city is also defined as a city that satisfied all the needs of its citizens in total and effectively, in line with or above the standards and goals prescribed by local, national and international standards for sustainability.

The key factors of success for smart cities which must be managed are: economy, government, infrastructure, community, natural environment, organisation, politics, and technology. Precisely these factors are interdependent and understanding the connections between them represents a success in creating and maintaining a smart city (Chourabi et al., 2017).

Virtual organisations are groups of people who gather for a common purpose. They do not exist in space proper, but they can exist in a wide spectrum of commercial and non-commercial types of networks and locations. (Radut 2009:122)

The availability of information has enabled the transformation of the traditional economy and has created a new virtual trend - a trend of virtual economy. The economic development of virtual economy is unpredictable, with sharp growth and sudden downturns. The economy is consumer-run, and product and technology life cycles are short.

**Key Changes**

With the development of globalisation and IT, a new economic reality has also emerged, which then in turn demands a new economy, adapted to all new business conditions.

The new economy is the answer to all newly-emerging changes in the world and to the development of technology which increased the amount of information available to all individuals. The goal of the new economy is constant and long-term growth, since because of the availability of all the data provided by the Internet and other technologies, it is possible to constantly educate oneself.

The new economy and the resulting phenomena have affected the new definition of the term ‘employee’ in the sense of new characteristics related to that term appearing. Some of these demands and characteristics are: „multiple skills, job instability, personal career development, continuous education, teamwork and coping with alienation and stress.” (Buble et al. 2012:13)
New company values result from the trend of socially-responsible companies. “The wider aim of social responsibility is to create higher and higher standards of sustainable living, while preserving the profitability of the corporation or the integrity of the institution, for peoples both within and outside these entities.” (Hopkins, 2006: 299). The concept that arises within the CSR is the so-called three balance-sheet concept which marks the “concept under which the total company business is measured through the benefits it provides towards economic growth, ecologic quality and social capital.” (Vrdoljak Raguž, Hazdovac 2014:43)

With corporate social responsibility, new value also appears though care for employees. Employee as a cornerstone of doing business must have the appropriate conditions for growth and work.

A new company is a new company concept developed based on new values and new employees under the influence of the new economy. A company must change its organisation, the allocation of work, functions, employee status and others, all because of a growing influence of environmental factors, the importance of corporate social responsibility, employee care and all other characteristics of the new employee and new value.

Changes in the world exert an increasing influence over the existing business models and demand the development of new business models in line with the key characteristics of the contemporary world. For the creation of a new business model, managers are responsible since they are the people who should recognise where the company is headed and link and organise certain functions within the company in order to achieve synergies to achieve improvements and success.

**Traditional and Modern Management Theories in the 21st Century**

Globalisation, which has opened up the markets and enabled unbridled access of capital and workforce, is a source or all problems, but also possibilities faced by the classic management today. With the appearance of virtual organisations, the company is not a classical system anymore, which is precisely defined with its borders and subsystem. The non-existence of formal organisation is seen increasingly often. More precisely, there are less physical companies where the manager has a leading role and can clearly manage the business.

In its original form, systems theory is not appropriate for the latest changes in the contemporary world. The focus on the company as a system does not have an important influence in the modern companies and precisely that which has been ignored in the systems theory is put into the spotlight – that is, a person as an individual.

The situational, i.e. contingency approach, on the other hand, takes into account the situation which the company is currently facing, and stresses that each situation should be analysed separately. Therefore, speaking of contemporary changes that take place very often, the companies are facing situations that are changing constantly, and are often unpredictable.

Quality and excellence approach is one of the approaches that certainly functions even today, but tin this age it is neither revolutionary nor innovative, but mandatory. Constant improvement and quality control of services or products is the cornerstone of doing business and the companies are aware that a quality product or service is a stepping stone to competing in the market.
Manager Competencies in the 21st Century

The contemporary environment is extremely demanding when it comes to managers’ knowledge and skills. The role of manager in the 21st century has changed in full thanks to the globalization and information-communication technology.

The main management competence of managers today is to know “everything about everything”. Managers are required to be competent in almost all fields to a large degree. A manager must recognize human potential in time and invest their time in the development of such potential with the goal of creating quality and irreplaceable employees and innovative business solutions.

Managers are expected to manage and coordinate teams and establish successful communication among the team members. A manager must know how to train employees for teamwork and achievement of common goals. One of the key competencies which are required of managers is the ability to set priorities.

The world which surrounds us is exposed to constant changes and the fate of the company can change in a very brief time period. One of the competencies which is required in the contemporary world is the management of changes.

Managers are required to recognize the potential before the competition does. Quality employees are the key to successful functioning of a company, especially in the contemporary era when creativity, innovation and being different are the keys to the creation of a new product or a service, which in turn ensures the success of a company.

Another extremely important competence, which is required from a 21st century manager, is managing stressful situations. Stress is one of the most common occurrences within the company and it can create a negative business environment. A manager must know how to manage stressful situations.

Management Models in the 21st Century

Numerous authors have proposed new theories in this contemporary age. From all those countless models, Buble stresses the most important four, which are a way out of the crisis of traditional management. Those models are: radical management, reinventive management, agile management, and management 2.0 (Buble, 2017).

Radical Management

Radical management is fundamentally different from traditional management that is pervasive today in the large organisations.

The goal of this model is achieving the greatest client satisfaction and the provision of value to the client by way of constant improvements, controls, and benchmarking. Companies led with this management model stress teamwork and cooperation between the management and the employees, since the goal is to work together in order to satisfy the clients’ needs.

Under this model, the management gives to the employees the right to take responsibility of ensuring the clients’ satisfaction and to organizes in teams which will have a motivating effect on the group and in which everyone will be able to contribute to the creation of a solution. Communication is also regarded as important; not only among the employees, but also between the employees and any level of management, which creates a relationship of them as partners.
Reinventive Management
Julian Birkinshaw is considered the founder of reinventive management. "According to him, management must define goals, motivate the employees to achieve those goals, coordinate their efforts and make decisions. In this sense he talks of four dimensions of management, of which two are treated as resources, and two as goals." (Buble, 2017).

Each of these four dimensions of management affects one another to different extent. Reinventive management contains four management models that are appropriate for several types of businesses, different situations, and different leaders. Those models are: discovery model, planning model, quest model and science model. The goal of reinventive management is to make smart decisions. This is achieved by following these four key steps: understanding, evaluating, envisioning, and experimenting.

Agile Management
Agile management was first mentioned by a Dutchman Jurgen Appelo. He established a third management phase that is particular for the current 21st century, and named it Management 3.0. Agility represents the "primary feature of contemporary producers of services and goods in in quickly-changing conditions of the global market." (Kolaković 2010:22)

Agile companies are a constant part of the changes and innovate the existing products and services, or create new ones which will satisfy the needs of the market. The goal is, besides steering the company towards the existing companies, to constantly grow and expand to new markets and create new consumers. This management model stresses constant conditions and demands awareness for the market. Companies must, aside from knowing then to recognise an opportunity at the right time, also have a developed strategy to proceed correctly in such situations and know what their next step will be.

Management 2.0
Management 2.0 is a term mostly connected with Gary Hamel, who opines that he Internet should be the model for the transformation of management. Management 2.0 was formed based on the development of Web 2.0, i.e. the development of the Internet and the ever-increasing availability of information through it. The use of the Internet has had a significant effect on humanity and companies must not disregard this effect when it comes to the functioning of the company.

Hamel consider the Internet as "the most adaptable, innovative and engaging thing that human beings have ever created. In many ways, the Web is the new technology of management." (Hamel 2009:251)

Conclusion
The ever-growing changes that are taking place in the world in 2017 have a decisive effect on the business operations of companies. Many are wondering whether we have reached the peak of technological progress or if it has just begun. What we know for certain is that new technologies and changes are constantly catching up to us.

The current business environment is too dynamic to let the companies lean on modern management theories and accept them as valid. The company itself as a term has changed its meaning and we cannot simply approach it as a system with certain interlinked subsystems. Doing business becomes complex since it has the
option of crossing spatial borders and other barriers that used to limit the companies. Flexibility, adaptability, and innovativeness are the key characteristics that the companies must accept in order to survive in the market.

It is undeniable that the world is developing constantly and that doing business will continue to change as well as the tasks and the roles of managers. All this will affect the development of new management theories that will complement the current situations which the companies are facing.

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