Economic Factors Affecting Business Decision Making

Istat Visnja[1], Jelena Jovičić[2], Saša Arsovski[3], Mira Živković-Drezgić[4], Darko Badjok[5]

[1]University of Belgrade, Faculty of Organizati onal Science, Jove Ilica 154, Serbia,
11000 Beograd, Serbia
visnja,istrat@gmail.com
[2] Faculty of Faculty of Law, University of Kragujevac,
34000 Kragujevac, Serbia
jelenajovicickg@hotmail.com
[3] Guarantee Fund of Autonomus province of Vojvodina, Hajduk Veljkova 11,
21000 Novi Sad, Sebia
sasa.arsovski@gmail.com
[3] City Tax Administration, Bulevar Mihajla Pupina 3, Novi Sad
21000 Novi Sad, Serbia
miraboric@yahoo.com
[5] University of Novi Sad,Techical Faculty M. Pupin Zrenjanin, D. Djakovica bb,
23000 Zrenjanin, Serbia
darko.badjok@gmail.com

Abstract. Innovation is driving force for future growth. Economies of many countries are mostly based on old, traditional linear models of "closed" innovation, that include none or minimal external stakeholder engagement in creating market value. However, in order to achieve the well-being of the whole society, all relevant external stakeholders should be involved in creating open innovation environments and platforms that foster collaboration and co-creation of new business solutions. In today's knowledge society ICT enables availability of different and various pieces of information in global terms. One of the most brilliant scientists Einstein long time ago said that "Imagination is more important than knowledge". The core of every successful business or project is imagination. In order to use information to create new real market value and innovative business approaches, good ideas, imagination and intuition is necessary. Wisdom of innovative open-minded stakeholders creates wisdom society. How can entrepreneurs contribute to the modern economy? What should be changed so that better environment for creative thinking and doing can me make?

Keywords: Social media, Decision making, Information Systems.

1.   ICT as enabler for Open Innovation Environment

Social Media Technologies enable Connectivity

Since its inception, the Internet has become a platform for interaction and collaboration - allowing people and organisations to communicate, exchange ideas and trade goods and services globally, in new, more efficient and exciting ways. It is now an essential part of the fabric of commerce and society, and a primary engine of sustainable economic growth and social benefit [1].

Social Media Technologies (SMT) are the new and personalized face of the Internet [2]. Nowadays social media represent one of the most powerful tools that affect the core of doing business. The Internet's contributions to European economy are substantial, profound and pervasive The Internet economy in the EU grows seven times faster than overall EU GDP [3]. Connecting different stakeholders (consumers, producers, managers, etc.) enable faster information flow, better expressing one's opinions at convenient way using very popular ICT enabled platforms. Faster than ever before, it is possible to connect at no-time impressively big number of engaged stakeholders. ICT have crucial role in changing the basics of business and creation of jobs and growth. ICT has transformative nature that is an important tool in transforming people's lives to more prosperous, easier and happier side. ICT if used in appropriate manner, can be marked as the most important driver for change in modern economies. Social media enable connectivity cross-border in no-time. Connectivity that enables exchange of ideas, thoughts and collaboration is more important than single competence. Connected competences make the difference. Connectivity creates mass collaboration and great values.

Connectivity creates competitive advantage of enterprises. Moreover, ICT-enabled connectivity creates competitiveness of economies world-wide. The bigger investments in ICT research & development should create the more powerful knowledge and skills of ICT experts. The better outcome as aggregation of value at the market becomes, the more predictable future comes. ICT represent key tool for addressing societal challenges. The companies that know will become creators of the society development.

Fig 1. Social Media Technologies Platforms enable stakeholder connectivity – key to business success

Current main social media technologies (SMTs) platforms that provide efficient communication, knowledge sharing and value creation:

1. Blogs and user-generated content
2. Social networks
3. Wikis and open source
4. Forums, ratings and reviews
5. RSS and widgets
6. Twitter (and alike)
7. Co-creation via crowd-sourcing and workshops
8. Sharing knowledge and assistance in the innovation process

It is interesting to note that knowledge in Western cultures represent object that one possesses; in Eastern cultures knowledge is rather process and relationship between multiple actors. Open innovation is also process that engages multiple stakeholders; it is interesting to spot similarity of Open Innovation 2.0 paradigm with knowledge adoption process in Eastern cultures. Both are continuously open and endless processes. There is space for researchers to analyze the role and impact of knowledge adoption as endless flow, as well as the role of Open Innovation in that process. The role of SMTs should be oriented more to support knowledge sharing by using Open Innovation 2.0 paradigm. These would enable collaboration, interaction and assistance among the people each one with the specific purpose that results in more efficient and effective upgrading the value of the products/services. The companies that are able to set up the organizational culture where SMTs are widely and appropriately used will have competitive advantage as the leader at the market. The key questions whose answers should put provide guidelines to more effective use of SMT are [16]:

- How to use SMTs for creating business value?
- How to engage users to SMT to provide value?
- How to engage consumers to be prosumers?

SMTs should be used for business purposes as the source of large number of consumers where the opinion on new products or services or developing ideas should be tested. The accent should be put in future on creating new business models based on SMTs as future most popular technologies.

2.   Some ways SMTs can accelerate large-scale change

Facebook, Twitter, YouTube, Linkedin, instant messaging, video-conferencing, web meetings: These and many other collaboration and social media platforms are now an everyday part of people's lives around the world. They are also finding their way into enterprise communications and management strategies. But how these social media applications and technologies can help to address even greater challenge—helping companies and government agencies successfully implement major business change programs?

According to numerous studies [26], from 50 percent to 80 percent of change programs do not live up to expectations. Although the reasons for failure vary, many can be traced to the difficulty with managing multiple talent and organizational elements effectively across a global enterprise—creating a shared vision, gaining buy-in across locations and

levels, dealing with expectations and handling the day-to-day upheavals inherent in change. There are social media and collaboration tools that find the solution to business problems. Based on numerous experiences with corporations and government agencies that have successfully pioneered social media solutions, there are some ways in which collaboration tools and social media technologies, properly planned and implemented, can support more rapid and predictable management of large-scale change [27].

3. Building a collaborative culture

Executives know that achieving success at major business transformation requires more than simply telling everyone about the new ways things are going to be done. Acceptance of change—processes, services, working relationships, policies and more—can be accelerated across the organization through the real-time sharing of experiences. Social networking and collaboration applications are extremely effective ways of bringing employees together to perform new processes and to share experiences—both the successes and the temporary setbacks. People with common interests or related roles can form communities to learn from and support one another. Social media can also help in cases where creating a more collaborative culture is one of the major objectives of the change initiative.

USTRANSCOM, company from USA, has launched several social media initiatives including an executive blog and a Q&A blog hosted on the Command's intranet, as well as a public presence on Facebook and Twitter. The executive blog (which has been recognized by the U.S. Department of Defense as a best practice) enables executives to hear from staff directly, without having messages filtered through intermediate management levels. These social media programs—which quickly generated more than 5 million impressions—have flattened the organizational hierarchy and driven positive culture shifts, as measured by an annual staff survey.

The collaboration and networking platforms are empowering employees, customers and partners to be active participants in the global conversation [3]. New business models should be created based on collaboration and networking platforms where all engaged stakeholders can participate in the creation of final products or services. Crowdsourcing of knowledge based on SMTs can be the future of creating successful companies with large share at the market due to the co-development of ideas co-creation of products/services.Collaborative culture incorporated into business is one of the basic characteristics that determine the successful positioning of the company at the market.

4. Establishing more effective communication

Critical issue for ecosystems that should be addresses is trust building. All actors involved in communication should be secured via suitable social media platforms. This would require different rules for social platforms in future. There is the need for researchers to elaborate more on the issue of providing safe ecosystems to address the needs of all participants in communication process. Trust is the precondition to build effective working environment that can contribute to successful business projects.

Informal communication is also one of the hubs for creating successful business. Networks of professionals sharing information online should be ensured to have stabile platforms that work successfully. Informal communication among experts should be supported by various online tools. Cross-disciplinary communication is also very important; personal or profiled contacts from different fields sharing their knowledge and experience via SMTs could be the starting point for many new ideas that improve state-of-the-art of science. At later phase projects in real-term settings could develop. Such environments should be created by the SMTs. Social media tools provide an effective communications medium—for the core change program teams and across the organization as a whole—as a large-scale change initiative proceeds. In addition, by monitoring and participating in online discussions, managers can more readily see where any misunderstandings that exist across the enterprise and take steps to address them. For example, one global resources company recently established a presence on Yammer, a secure and enterprise-strength social network that enables co-workers to communicate and share information with one another. Seventy percent of the company's team members signed up for Yammer after its initial launch and 25 groups were created to discuss work-related issues. Today, about 2,000 messages are posted each month [27].

Participation by leadership in social media-based collaboration platforms is essential [11]. Collaboration tools can actually undermine change effectiveness if they merely cause confusion and discontent to multiply across social networking sites. Management must establish a mechanism for delivering the "voice of truth"—an authoritative, trusted and believable source of information [9]. This reinforces the idea that social media can be used by employees not only to voice ideas and concerns but also to get accurate and credible answers regarding the company's change effort.

Effective two-way communication is very important for companies to get the feedback from the employees and consumers so that it can help improving business processes or end-products and services.

5.   Improving employee involvement and engagement

One of the critical success factors for managing large-scale change programs is engaging employees in the change—helping them to feel ownership in the initiative and tapping into their energy to resolve issues and advance the business. Social media and collaboration solutions allow information to flow in multiple directions rather than just from the top down. For example, using wikis and microblogs - applications for sharing short bursts of information in Twitter-like fashion—organizations can "crowdsource" ideas and involve employees more directly in the change program. Organizations can build greater internal loyalty by actively soliciting continuous feedback on issues related to the change. One US bank initiated a major change program to improve the customer experience as a means of gaining market share. The bank leveraged a crowdsourcing tool to tap into its workforce for ideas about how to improve customer service. In the first use of the tool, more than 250 employees submitted 50 separate ideas resulting in seven high-quality innovations for the company—many of which resulted in programs that have generated value for the bank.

6.   Cloud Computing

The Digital Agenda for Europe (DAE) is the European Union's roadmap for bringing the benefits of a digital society and economy to Europe's citizens [4]. DAE highlights the importance of developing EU-wide strategy on Cloud Computing. Neelie Kroes, Vice-President of the European Commission responsible for the Digital Agenda in says that Europe should be 'cloud-active' rather than only 'cloud-friendly'. She founds Cloud critical for further growth in Europe. To take full advantage of the cloud's potential, while protecting the citizens' interests, Europe needs a cloud-friendly legal framework, and a cloud-active community of providers and users [7]. In 2012 it was expected that European Commission propose European Cloud Computing Strategy. In addition, new initiative on cloud computing has been announced – the European Cloud Partnership. Within the right framework, cloud computing can help create jobs and boost economic growth [7].

The three broad areas for the cloud strategy are [4]:

1. The legal framework which addresses the questions about data protection and privacy in international dimensions, as well as the other laws and rules.
2. Technical and commercial fundamentals with the aim to extend EU's research support and focus on critical issues such as security and availability of cloud services.
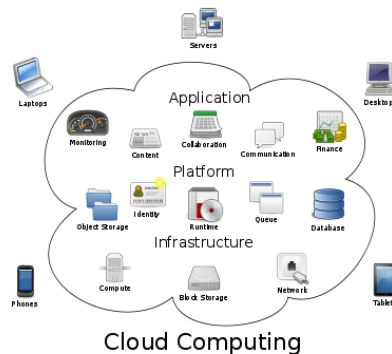3. The market where pilot projects will be supported aiming at cloud deployment.

Fig 2. Cloud Computing – emerging trend that fosters e-services and enables societal growth

Cloud computing is a general term for anything that involves delivering hosted services over the Internet [4]. The name cloud computing was inspired by the cloud symbol that's often used to represent the Internet in flowcharts and diagrams. These services are broadly divided into three categories: Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS). The name cloud computing was inspired by the cloud symbol that has often been used to represent the Internet in flowcharts and diagrams. A cloud service has three distinct characteristics that differentiate it from traditional hosting. It is sold on demand, typically by the minute or the hour; it is elastic -- a user can have as much or as little of a service as they want at any given time; and the

service is fully managed by the provider (the consumer needs nothing but a personal computer and Internet access) [5].

A cloud service has three distinct characteristics that differentiate it from traditional hosting. It is sold on demand, typically by the minute or the hour; it is elastic -- a user can have as much or as little of a service as they want at any given time; and the service is fully managed by the provider (the consumer needs nothing but a personal computer and Internet access). Significant innovations in virtualization and distributed computing, as well as improved access to high-speed Internet and a weak economy, have accelerated interest in cloud computing. A cloud can be private or public. A public cloud sells services to anyone on the Internet. (Currently, Amazon Web Services is the largest public cloud provider.) A private cloud is a proprietary network or a data center that supplies hosted services to a limited number of people. When a service provider uses public cloud resources to create their private cloud, the result is called a virtual private cloud. Private or public, the goal of cloud computing is to provide easy, scalable access to computing resources and IT services [8].

Main advantages of Cloud Computing are better availability of e-services with significant cost savings [4]. Therefore, companies and national economies that will use in the future advance business concept cloud computing rather than the traditional will have bigger ROI and will contribute to more efficient societal development. In addition, new concepts and ICT enabled technologies create various kinds of different jobs towards prosperous societal development. Open innovation concept together with social media and cloud computing will create new business environment where all stakeholders are engaged in value aggregation and will have crucial impact on filling the targets of Europe 2020 strategy. Removing the barriers by creating the legal framework for cloud computing strategy and setting the wide community of active users is one of the ways to boost growth and jobs. Unlocking the full potential of social media technologies, cloud computing and other Internet-based emerging solutions will foster the process of establishing open innovation environment where new business solutions are being made.

7.   Conclusion

Open innovation creates wisdom society. Emerging ICT technologies such as social media, cloud computing, Future Internet private public partnerships enable better connectivity and innovative forms of entrepreneurship. Investing in new technologies and connecting people can bring competitiveness to the economies. Open innovation environments where all stakeholders are engaged from the beginning in the process of creating value at the market should encouraged by getting the appropriate legislature and legal framework for actions. Use of crowd-sourcing concept, crowd-funding and crowd-sharing of experts around the Globe in order to put together the experience and knowledge is essential for creating new valuable types of entrepreneurship for new wisdom society. Innovative business approach involves users as co-creators of change from the beginning of process by of transferring business idea to the final product or service at the market. The creation of jobs and growth could be fostered by Open innovation environments as the hub where creative thinking brings new ideas to the market is changing the way of modern economy.

Istat Visnja1 et al.

References

1. Internet 2018: an Essential Platform for the Global Economy and Society, Business Vision Paper, OECD Ministerial Meeting on the Future of the Internet Economy, Seoul, Korea, June (2008)
2. Forum on tax administration: taxpayer services sub-group, Information note, Social media technologies and tax administration, Organization for economic co-operation and development, (October 2011)
3. S. Hoorens, D. Elixmann, J. Cave, Man Sze Li, G. Cattaneo, "Towards a competitive European Internet industry, a socio-economic analysis of the European Internet industry and the Future Internet Public-Private partnership", Final study report, (May 2012)
4. http://ec.europa.eu/information_society/activities/cloudcomputing/index_en.htm
5. http://searchcloudcomputing.techtarget.com/definition/cloud-computing
6. www.ifm.eng.cam.ac.uk/ctm/teg/openinnovation.html
7. N. Kroes 'The silver lining", The Parliament', politics, policy and people magazine, Issue 350, 11, pages 17-18, (June 2012)
8. http://www.fi-ppp.eu/eit-ict-labs-and-fi-ppp-signing-memorandum-of-collaboration-on-21-june-2012/
9. http://www.businessdictionary.com/definition/dynamics.html
10. Blog: Design thinking and design-driven innovation a la Verganti, Antii, Hautamaki, Sunday, August 15 2010 9:47 pm
11. http://www.15inno.com/2009/11/09/userdriven/
12. www.csreurope.org/enterprise2020
13. http://www.bu.edu/itec/action/building-global/
14. Anthony D. Williams, "The Rise of the Micro-Multinational: How Freelancers and Technology-Savvy Start-Ups Are Driving Growth", Jobs and Innovation, the Lisbon Council Policy Brief, Ann Mettler, (October 2011.)
15. http://www.enterprisingnonprofits.ca/about_social_enterprise/definitions/
16. http://www.socialenterprisemagazine.org/
17. Green growth and developing countries - a summary for policymakers, Organisation for Economic Co-operation and Development, Development co-operation Directorate, Development Assistance Committee, DAC Meeting, (June 2012)
18. Call for proposals, Economic Impact of Social Enterprises, Grant Programme 2012, Enterprise & Industry Directorate General, European Commission, , page 3, (June 2012)
19. http://ec.europa.eu/information_society/activities/collectiveawareness/index_en.htm
20. http://www.businessdictionary.com/definition/freelance.html
21. C.Ta'eed, C. Ta'eed, "The Freelance Statistics Report" Rockable press, (2007).
22. http://www.freelancer.com/
23. E. Arolas, E.; González Ladrón-de-Guevara, "Towards an integrated crowd-sourcing definition", Journal of Information Science (in press), (2012).
24. Open Innovation Yearbook 2012, Directorate-General Information Society and Media, page-4, (2012)
25. http://francisgouillart.com/wordpress/?p=720
26. M. Ghafoor, T. Martin, "Six ways social media technologies can accelerate large-scale change", Accenture, Outlook point of view, no 1, (January 2012)
27. http://www.dashe.com/blog/social-learning/how-social-networks-can-harness-the-power-of-weak-ties
28. http://searchcloudcomputing.techtarget.com/definition/cloud-computing