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Economic Crisis and ICT sector – Threats and Opportunities for the Macedonian ICT Companies

Abstract

This paper will not discuss about the source or the reason of the crisis, instead I will focus on the opportunities and the benefit for the ICT companies from the economic crisis. The ICT industry was hit in 2001 by a dot-com bubble and one of the key- drivers that helped to raise the industry back were government regulations and mandates like SOX. Governments have created tight rules and regulation that increased security, risk management, reporting and on the other hand transparency. All of these areas obviously depended on sophisticated and usually expensive information systems. During these days companies, as well as the governments again are faced with the same or even bigger problems. As a result, there will be new rules, policies and regulations in almost all processes. In order to achieve this, the companies, as well as governments will need sophisticated systems for control and reporting. This is a clear opportunity for:

- 1) software-developing companies - to benefit through creating the new software offering the requested solutions and
- 2) for system integrator companies - to integrate this new system with the existing one.

Keywords: *ICT industry, crisis, opportunity, threats*

Introduction

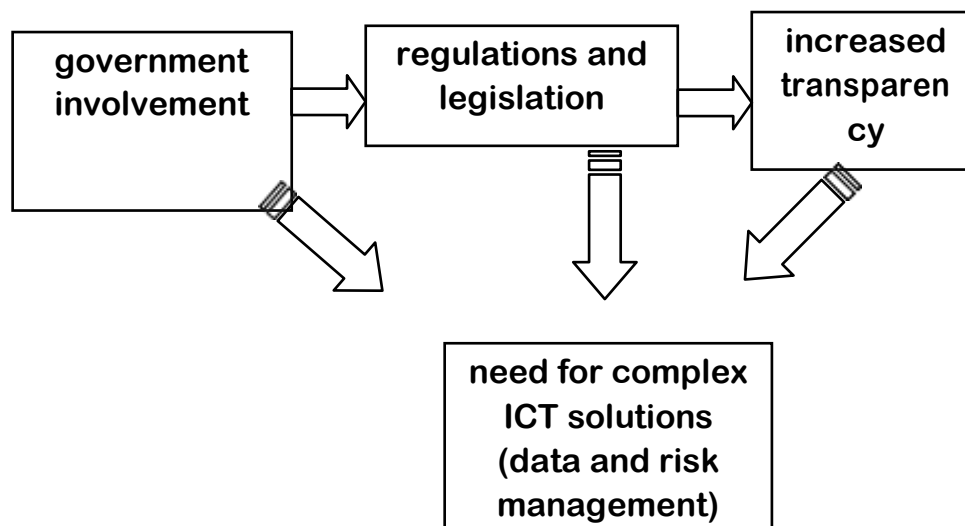
ICT industry already faced with a similar problem. Even more, a current economic crisis is not generated or initiated by the ICT industry and therefore ICT industry is collateral damage in this story. However, the real question is “Is there a real threat or real opportunity?”. The question is complex and the answer even more.

How was in the past? We do not need to go far in the past because ICT as an industry is relatively young, but the ICT may not survive in its present form for long. In 2001, when the ICT industry was hit hard by a dot-com crash, one of the elements that speed up the process and bring the industry back on tracks were new regulations and mandates, e.g. Sarbanes-Oxley.

Following unprecedented corporate scandals, especially the collapse of Enron and WorldCom, United States Congress very quickly enacted the Sarbanes–Oxley Act. The law places obligatory corporate governance and financial reporting standards on all U.S. publicly owned companies and strict controls on management consultants and public accounting firms. Corporations, financial institutions and even small companies suddenly got a demand for data and risk management applications, platforms, and ICT infrastructure to support those systems, just in order to comply with new regulations. Even though Sarbanes-Oxley describes specific mandates and requirements for financial reporting it is not mandatory for all companies. So the question raised here is “Do we need new legislation act a la “SOX”? I would not try to argue with the experts regarding this issue and will say – maybe yes, or maybe we need just a good execution and constant control of the current acts.

What is happening now?

We are witness of everyday news that many governments all over the world are increasing initiatives and support for the financial institutions as well corporations and enterprises through guarantees and ‘forced’ pump of ‘government’ liquidity. We are witnesses of something that is imaginable for well-developed markets, but it is happening almost everyday and I will call it ‘trend’. This trend is nationalization of the privately owned financial institutions (banks, insurance companies ...) and enterprises. However, let us look at the bright side - ICT side. I think that any government involvement (especially big as it is now) will mean more and/or strict regulations. More government regulations will mean more legislation and on the other hand will lead to increased transparency, which on the other hand will lead to increased number of processes and more day-to-day work and complications. As an outcome, there will be need for sophisticated ICT solution (usually very expensive).



I agree with (Perlow, 2008) who mentioned that the result will be “more infrastructure consolidation, with SOA, virtualization, and cloud computing leading the way”. Last year the CTO of CapGemini in the Netherlands Mr. Ron Tolido, raised some interesting points about degree of the crisis impact, discussing that the fallout from all the financial turmoil raging around world will include the need for more and better information technology. He said “It sounds utterly cynical, but we should not be surprised if the current misery leads to a pile of new ICT work. The government is clearly back at the wheel in many places and the public opinion just won’t tolerate even the slightest suggestion of misconduct in business. Rules and regulation will be tighter than ever.” What that means? As I already stated this will mean more risk and data management, increased reporting and in general a demand for total transparency. These issues areas depend on sophisticated information systems.

The global financial crisis has thrown businesses across all industries into disarray, with the real estate and auto industry leading the way and was being one of the hardest hit. Real-estate industry is not ICT dependent and therefore is not directly connected as auto-industry is. Moreover, perhaps no industry is suffering to a greater degree than Auto industry.

Since auto-industry ICT business model is usually based on outsourcing, contracts with outsourced are written to be flexible enough to

scale up when an acquisition is made or down when a plant is closed and the scope of work provided by the outsourcer is correspondingly curtailed.

Today, many companies are facing with a liquidity problem and some of them are even bankrupting. This trend will result in increased numbers of mergers, acquisitions, and spin-offs in the months and years ahead. Recently, we read about the negotiations for mergers between Chrysler and Fiat as well as Magna (Canadian car parts manufacture) and Opel. Some estimation said that this merger would lead to huge spending on ICT products and services. What does this mean for the ICT companies? A lot of integration work between massive and usually different ICT infrastructures, as well as extensive support within enterprise architecture, standardization, inter-working and carefully crafted integration solutions. Busy times lie ahead for the ICT industry, if the industry steps up with solutions directed at increasing the transparency and agility of the enterprise.

What about ICT companies that have had contract with big financial institutions like Bear Stearns, Citigroup, Lehman Brothers, Merrill Lynch and AIG? Those companies will suffer a lot. Probably some of them will need organizational changes. IT service sector have to reorganize, specialize and diversify, especially those firms that are focused on deals with some of these big financial companies and that engage in huge, risky contracts.

Companies with strong cash flow would like to quote that during the crisis winners are those that will keep the same level or growth. Moreover, for sure there will be many companies that will have benefit from the crisis. Some of the ICT businesses that will have trouble to survive during this crisis times are low cost service or product companies (e.g. distributors of hardware components). "A lot of customers are very interested during these tough times in extending the life of their current systems," said Erik Dithmer, vice president and general manager for Dell's SMB Americas group. Every article with a title: 'How to survive in the time of crises' recommends: lower budget spending, save money, reuse everything that is still operational, and reduction of spending on unnecessary items. The basic idea is to lower the spending on capital expenditures and ICT has significant share from those expenses. Many CEO's read those articles and definitely a lot of the companies will reduce their budget expenses or postpone the investments in ICT infrastructure, and the existence of the ICT supporting companies will be under question mark. Many companies will search for the possibility to reallocate the

existing ICT systems i.e. they will give them other functionality within the business process or handing them out to employees.

Some of the ICT trends that lead to lower CAPEX are:

- ICT consolidation,
- virtualization,
- low cost telecommunication services,
- advanced applications
- ICT outsourcing,
- managed services

One technology gaining attention because of its money-saving potential is virtualization, which is key to more efficient use of the company's ICT infrastructure.

What is the status of the Macedonian ICT market?

In order to give a better and clearer picture lets look in the past two-three years. In the year 2007 Macedonian ICT market grew for more then 40% and has reached 121 million USD. According to IDC Adriatic, Macedonian ICT market in the next 3-4 years will be doubled compared with 2007. With a predicted yearly growth of 13%, in 2011 Macedonian ICT market will reach 206 million USD, while total ICT spending will grow by 20% yearly. Last year (2008), Information and communication technology (ICT) market in Macedonia grew by 63 percent.

Selling of hardware components has the major part of the total ICT market that on the other hand demonstrates that Macedonian ICT market is not mature enough. The optimism comes from the software developing companies, especially those that export software products because they generate the biggest portion of value added services.

In addition, Macedonian government initiated educational programs that led to increased number of computer and internet users. On the other hand, this trend led to creating a better picture for the level of ICT literacy in Macedonia. All these positive movements helped Macedonia to become one of the countries on the map of the foreign ICT companies that are searching for country for outsourcing of Software development. Western European and USA companies are shifting software development into low cost labour markets, like Macedonia, and ICT companies from the Republic of Macedonia have possibility and chance to grab piece of the

outsourcing market. Moreover, because government investments and initiatives in ICT sector were significant in the past two years.

My opinion is that Macedonian IT companies have the potential to offer qualitative services on the market, but that potential should be constantly upgraded, especially taking into consideration the world trends in the field of management (strategic, operational, project, human resources, sales and marketing, etc.). The existence of almost all well – known vendors (through their representatives or companies) is very strong driver for improving the total quality of the ICT offers, because the vendors among the technology transfer, offers transfer of knowledge, experience as well as other important factors for success in the ICT business. If Macedonian ICT companies are building intensively their capacities, I am sure that in a very short time, they can satisfy the companies' needs.

However, not everything is so bright; there are some dark spots as well. In order Macedonian ICT market to be more successful, there are some prerequisites that have to be fulfilled.

Some of them are:

- ICT equipment in the companies to be treated as necessary asset, not an expense;
- Companies and the government need to spend more time and money on education, meetings and conferences to increase the IT awareness;
- IT clustering and merging of smaller ICT companies.

Macedonian ICT companies should take bigger steps while presenting the advantages of using the business software, especially for the top management (CEO, CFO, COO) in the companies-users, because my opinion is that presenting it only in front of the CIO of the company in most of the cases doesn't worth. Organizing of meetings and conferences, making market research and comparative analysis for the advantages of using of the business software from the top management, could be one of the measures that will "help" to the top management when taking decision for investing in business software. One practical example is that in the world around 50% of the best local companies are using SAP system, however in Macedonia only few companies are using it. According to some research, the rating and the value of the company are increasing if they are using this kind software. I do not want to be wrongly understood, but the experience shows that if the manager has to decide whether he will invest

in his new luxury car or business software, manager will rather invest in luxury car. In my opinion, this way of thinking must be changed, as it is of interest for the whole society.

I do not believe that current economic crises will hit hard on Macedonian ICT market. There are many reasons for that optimistic statement but I will try to summarize it in a couple of sentences. If we made comparison of the Macedonian economy and the others in the region, we can see that they are not on the same level. As a result, there are not many companies in Macedonia that are using complicated and massive ICT products and services. Macedonia has very small corporate sector that do not have power to spend too much on ICT solutions. Only some banks and Telecom operators significantly invest in ICT equipment. On the other hand, Macedonian government is very proactive in that field and is the biggest single investor in ICT sector in Macedonia. Personal computers penetration is not so high compared with the other countries from the region and selling of hardware components will grow but I do not see big potential in that sector.

I think that more and more companies will shift to software as a service (SaaS), open source products, virtualization and computer clouding; mainly to reduce capital expenditures and Total Cost of Ownership and to increase efficiency. However, if we look at the bright side, many more innovations will come out of the efforts to be more efficient and to do things in other ways with less money.

So, is this recession a really bad thing? For some people/organizations, definitely it will be!

At the end, I will conclude in the same manner as I began – optimistically, with one very good quote from Mr. Rahm Emmanuel (*White House Chief of Staff*):

He said “You never want a serious crisis to go to waste. - What I mean by that is it's an opportunity to do things that you think you could not do before”...

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