CONTENTS

EDITORIAL

Interconnections Between Businesses

Motto
It's not about who you know... but who knows you!!

With the rise of the industrial revolution in the 18th and 19th centuries came the need for businesses to collaborate and trust a wider range of people and other businesses. In business, risk sharing and resource pooling became more common as a way of „expanding the pie" and making more profit for everyone involved. A business network is a type of business social network which is developed to help businesspeople connect with other managers and entrepreneurs to further each other's business interests by forming mutually beneficial business relationships.

Nowadays exponential technology advances, greater consumer power and increased competition mean all industries face the threat of commoditization. The winners will act now, and build a strategic advantage that leaves their counterparts wondering what happened.

Some of representative types of networks emerged over time are: business voice communication on mobile phones, linked together by cellular networks or on Smart - phones connected to Voice over Internet Protocol (VoIP) networks; financial networks, specialized in printed money and checks to flow between individuals and banks, while funds; Automated Teller Machine (ATM) networks and Automated Clearing House (ACH) network, through which banks transmit electronic payment requests and disbursements; services networks of wholly owned or franchised locations where services are sold and performed; retail networks affiliated with one specific brand or others that sell goods from multiple manufacturers; supply networks through which manufacturers buy the raw materials and fabricated components needed to produce finished goods; social networks which have always been foundational to business being used to produce measurable, positive impact business results.

The thinking of today's network engineers as they plan „next-generation" infrastructure is dominated by massively distributed computing, software definite networking and network functions virtualization. Alex Hoff presented on the website www.auvik.com some of the

coolest network research projects taking place right now – amazing projects that could have a big impact on the network designs and careers of tomorrow.

Time cloaking – The goal of this project is to create „bubbles in time" by tracking gaps between photons. If this works, information can be encoded within the gaps and transmitted by laser lights and fiber optics. For now, this remains highly experimental.

The Machine from HP – Speaking of nano-age super-computers, engineers work on new hardware and software that stands to revolutionize the way computers „think and communicate". The platform brings three new computing components to the table: nanoelectric memory called memistors, ultra-fast phototonic buses, and an operating system tailor-made for the device.

Ambient backscatter – On the topic of major advances in wireless communications, researchers are working to open new doors in the Wi-Fi world by *„backscattering" wireless signals*. That means re-using existing radio frequency signals instead of generating new ones.

Wireless data links for drones – Academic and industry researchers are now working to make long-distance, high-speed wireless networking feasible.

4D network – This research project has a hugely ambitious goal: replace the Internet Protocol (IP) as the basis for computer networking. The 4D refers to four network planes: decision, dissemination, discovery, and data.

eXpressive Internet Architecture – or XIA project aims to build „a single network that offers inherent support for communication between current communicating principals – including hosts, content, and services – while accommodating unknown future entities."

Diamond semiconductors – Smaller than silicon wafers, 20 times better at displacing heat, and more efficient as a conductor of electrons, diamonds are already helping to build new generations of devices.

In these conditions, the future of networking depends on of how fast the businesses realize that they must use digital channels to engage with their key stakeholders to maintain relevance and drive the conversation. The proliferation of digital channels, platforms and devices has produced a generation who are born 'plugged-in'. This „Generation Y" already plays a major role in accelerating the emergence of a new, digital world, and its impact on new types of networking is impossible to ignore.

Florin Dãnãlache,
Senior Editor

ABSTRACTS

Simulation Models for Enhancing the Health Care Systems

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Health care is a very vast and complex system in which different departments interact with each other to deliver services to patients. In this paper we study, specifically, the emergency department of a hospital with its existing problems and how simulation can influence solving these problems, increase patient satisfaction and increase revenue. The simulation has emerged as a popular decision support in the domains of manufacturing and services industries. In this study, we will present the advantage of this technology in improving the health care services. A review of the advantages of the simulation modeling is presented along with a comparison between the most two popular simulation software in the market nowadays: ARENA and SIMIO.

Keywords: Simulation Modeling, Optimization, Healthcare, ARENA, SIMIO

Towards Total Risk Management

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A situation involving exposure to danger is a risk. The objective of risk management is to reduce different risks related to a pre-selected area, up to an acceptable level. He may refer to numerous types of threats caused by environment, technology, humans, organizations, and politics. Risk management is a range of coordinated activities with the aim of directing and controlling an enterprise on risk. It allows a company to identify mitigation strategies data, so the company should be able to achieve its objectives. No definition is advanced as a correct one in our article,
because no one definition is suitable for all problems.

The Impact of New Technologies on Networking

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ICT has been all – pervasive, fertilizing and empowering nearly all areas of our life, creating interaction and interdependence. The present paper examines some of the developments, starting with the economic and technologic state of the industry, the transition from mM to MtM and the impacts on individuals and society. Additionally, it renders tribute to the two anniversaries deserving special attention: 50 Years of „Moore's Law" and 25 years of public Internet.

Keywords: Moore's law, storage class memory, neuromorphic chips, social networking

Career-Oriented Collaboration

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The pace of knowledge growth is so rapid during the last decades that even the valedictorian knowledge become obsolete in the coming years and the lifelong learning emerges as a natural solution. However, unlimited access to unimaginable amounts of data determines a paradigm shift as far as a learning process: from learning to learning to learn. Technology will continue to be the driving force in changing the world: computing, mobility, automation and robotics, an open world of science, neuro-technology, chemistry, nanotechnology, fabulous new intelligent materials – to mention just a few of them. Career paths of the future must be understood and conceived from a quite different viewpoint: the future shall stretch as much as possible our abilities to grow, adapt and learn. Volatile, temporary roles may be superposed over what shall consider being the backbone of our profession. Professions will change dramatically and fast, and switching from one profession to another is going to become the norm. The career planning is turning into professional life planning: from making strategic decisions for career progressing within the certain profession to integrate them in meta-strategic decisions made for fore-sighting one's successful sequence of professions. The purpose of this paper is to launch a discussion about professional life planning – which is changing professions across an extended active life-span (made possible by an increased life ex pectancy, as result of the same extraordinary technology progress): are we, educators and students, human resource managers and policy makers, ready for this type of meta-strategic decisions?

Keywords: learning paradigm shift, metastrategic decisions, professional life planning

Selected E-Commerce Entities for Cooperation

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The paper presents partial results of a comprehensive research of online reputation of small and medium-sized enterprises operating on specific market in Central Europe. More specifically, it deals with the issue of online reputation of e-commerce entities operating on the Slovakian virtual market. The objective of the analyses presented in this paper is to identify the main players from among the wide range of e-shops operating on this selected market, to do the primary analysis of these entities reputation by the method called Net Promoter Score (NPS), to identify key factors for success in terms of customer preferences and to review the extent to which changes in customer preferences are significant in relation to the reference studies undertaken in the relevant market in the past. Based on our findings, recommendations for e-commerce entities with emphasis on preferences of their current as well as potential customers are formulated in order to improve their competitiveness and increase their efficiency.

Keywords: reputation, electronic commerce, consumer, Net Promoter Score (NPS), competitiveness, online reputation management (ORM)

Effects of the Entrepreneurial Culture on the Business Incentive

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There are various factors that influence both entrepreneurial culture and the business environment. Of these, the paper aims to prove the influence of entrepreneurial culture through knowledge and information on business incentive. This article's main focus is on finding if there is a reasonable and quantifiable effect of the entrepreneurial culture on the personal system of making the decision of starting a business in Bucharest region. For this, it shall be utilized the forgotten effects model. The author generally considers that the culture of origins is an important field of research in locating „the evil" in the disparities of incomes among people and regions, for the un-synchronicities and the lack or the delays in the convergence to the medium levels of the EU. From this study, the author tries to extract a coherent tool in order to be applied to other regions for finding relevant results in what regards the role of the entrepreneurial culture on the socio-economical behavior.

Keywords: entrepreneurial culture, fuzzy logic, laws and institutions, forgotten effects model

Partners Identification on an Ethical Basis

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A new base for mathematical modeling in the field of information ethics is proposed. A concept of the so-called biased derivative is introduced. It has a potential to investigate dynamical properties of information processing systems where rules of ethics are formulated.