

701 E. Chocolate Avenue, Suite 200, Hershey PA 17033, USA Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.idea-group.com

# Information Technology is Thriving in Yugoslavia! Case Study of Delta Holding

Lakshmi Mohan, Ph.D. and Jakov Crnkovic, Ph.D.
School of Business, University at Albany
State University of New York
BA 332, 1400 Washington Avenue, Albany, NY 12222
tel: (518) 442-4927, tel: (518) 442-5318
Fax: (518) 442-2568, Fax: (518) 442-2568
l.mohan@albany.edu, yasha@albany.edu

### **OVERVIEW**

The research was initiated as a result of a one-week intensive course on IT Strategy and E-Business conducted by the authors at the invitation of the Faculty of Economics, University of Belgrade. The participants were drawn from the various subsidiaries of Delta Holding, a private conglomerate company founded in 1991. The learning from the course was applied by the participants to their respective companies in the form of presentations by 3-4 participants on the last day of the course. The presentations revealed the extensive use of IT in Delta Holding, which would be impressive by any standard, but especially so in Yugoslavia. The decade-long political upheaval in the country has left its economy in shambles, dimming the likelihood of IT being used as an integral part of operations in Yugoslavian companies. The sophisticated nature of IT applications in Delta Holding, in particular, the use of the Web, triggered the research to address the question: What are the factors that create the environment for successful deployment of IT in a company despite the adverse economic climate in which it operates? The course participants are providing a valuable conduit into Delta Holding for the purpose of this study. The findings from this case study will be juxtaposed with another case study on Cemex, the Mexican cement company which has been hailed as a "digital innovator" and has become the most profitable cement company in the world, surpassing the European multinationals, LaFarge and Holcim.

### COMPANY BACKGROUND

Delta Holding was launched in February 1991, a time that was unfavorable for private enterprises in Yugoslavia due to the Bosnian War. The aftereffects of that war coupled with political instability have ripped the country apart making it a shadow of its former self. The early years of Delta Holding showed modest growth of revenues from USD 7.5 million in 1991 to USD 27 million in 1995. The real spurt in the company's growth came in 1996 when the company tripled its revenues. The company has kept growing through all the tumult in the country to reach the level of USD 550 million in 2001. Its workforce has expanded from 8 employees in 1991 to 537 in 1995 and 8,000 in 2001.

Delta Holding is comprised of five divisions, the largest of which is the Delta M Group. This division is again a mini-conglomerate of 10 business units in industries ranging from agribusiness, to chemicals, automobiles and retail, and includes a majority ownership in a Russian pulp and paper mill that exports raw materials to Asian, European and African markets. Another division of Delta Holding is the Delta Banka Group, which has been ranked by Finance Central Europe as the best private bank in Yugoslavia in 2001.

## INFORMATION TECHNOLOGY TODAY IN DELTA HOLDING

Our study will examine the status of IT in the Delta M Group and the Delta Banka Group. Delta M was selected for the study since it is the largest division in Delta Holding and is also a conglomerate with a diversity of busi-

nesses. The IT unit is a separate "non-profit" center at the corporate level, and has played a proactive role in setting up a global communications network. Starting with an internal network inside the corporate headquarters building, the IT unit went on to link through a WAN the branches in the country to the corporate office. With the advent of the Internet, the Corporate Website was created for connecting with customers and with the international branches of the company.

Aside from the global communications network, an Intranet portal has been created in Delta M which has reduced paperwork and minimized the time and cost of getting information. A simple application is the ordering of business cards through the portal, which aggregates small orders and gets a volume discount that yields a cost saving of over 500%.

The IT unit at corporate also addresses the requirements of the individual businesses within the Delta M Group. An example is Maxi Diskont, a chain of supermarkets and the market leader in its class in Yugoslavia. On-line shopping has been introduced to differentiate it from competitors and add value in terms of convenience to customers. The inventory control application links the cashiers at the checkout counters and the online site to the suppliers to ensure minimum level of stocks to meet demand.

The other division selected for the study, the Delta Banka Group, has made continuing investments in IT to not only improve existing systems but also provide modern electronic banking services to its clients. Delta Bank has improved its competitive standing to rank among the top three private banks with regard to gross profit, assets and return on equity.

Both these divisions are moving forward with aggressive plans for broadening the application of IT to B2B E-Commerce, Customer Relationship Management, and the like.

### CEMEX: IF CEMENT CAN, ANYONE CAN

Cemex is perhaps the most unlikely of today's digital innovators. Its roots are in a single cement plant founded in Hidalgo, Mexico, in 1906. Cemex has taken a commodity-based asset-intensive, low-efficiency business, and enhanced its profitability by adding a brilliantly integrated layer of IT – a "bits" factory designed to complement and support the "atoms" factory.

The Cemex case demonstrates that, in today's business world, anyone can play. Even if a company has a remote location with no special advantages in terms of talent base or IT infrastructure, it can perform at a world-class level if the quality of its thinking to devise and implement a "digital business design" is world-class. The major success factors in Cemex were:

- Bench-marking the best world-class practices for systems that sense the environment and respond quickly;
- (b) Re-structuring the organization based on lessons learned from best practices;
- (c) Investing in IT infrastructure;
- (d) Exploiting the potential of IT to support and grow the business; and,
- (e) Bringing about change in IT culture and management style.

### 948 Information Technology and Organizations

Above all, the key was the powerful partnership between the CEO, who was attuned to the strategic value of IT and the CIO hired by him, who had a genuine understanding of business. This type of teamwork has become a characteristic of many of today's successful digital businesses.

### FOCUS OF OUR STUDY

The purpose of our study is to examine the factors that foster investments in IT even in a depressed economic climate in a country like Yugoslavia

that has been buffeted for over a decade with political turmoil. For example: How is IT organized in Delta Holding, the parent company, and in the Delta M Group and Delta Banka Group, two of its major subsidiary companies? Who is the champion of IT in the business units? How are the business units connected to the IT group? What makes Delta Holding's culture different from that of other private companies in Yugoslavia? The Cemex case will provide a backdrop for evaluating the findings of the Delta Holding study.

0 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/proceeding-paper/information-technology-thrivingyugoslavia-case/32195

### Related Content

### Emergent Forms of Technology-Influenced Scholarship

Royce Kimmons (2015). Encyclopedia of Information Science and Technology, Third Edition (pp. 2481-2488).

www.irma-international.org/chapter/emergent-forms-of-technology-influenced-scholarship/112664

# An Empirical Analysis of Antecedents to the Assimilation of Sensor Information Systems in Data Centers

Adel Alaraifi, Alemayehu Mollaand Hepu Deng (2013). *International Journal of Information Technologies and Systems Approach (pp. 57-77).* 

www.irma-international.org/article/empirical-analysis-antecedents-assimilation-sensor/75787

# Visualization and Analysis of Frames in Collections of Messages: Content Analysis and the Measurement of Meaning

Esther Vliegerand Loet Leydesdorff (2012). Research Methodologies, Innovations and Philosophies in Software Systems Engineering and Information Systems (pp. 321-339).

www.irma-international.org/chapter/visualization-analysis-frames-collections-messages/63270

# An Intelligent Retrieval Algorithm for Digital Literature Promotion Information Based on TRS Information Retrieval

Tong Ni (2023). International Journal of Information Technologies and Systems Approach (pp. 1-14). www.irma-international.org/article/an-intelligent-retrieval-algorithm-for-digital-literature-promotion-information-based-on-trs-information-retrieval/318458

### A SWOT Analysis of Intelligent Products Enabled Complex Adaptive Logistics Systems

Bo Xingand Wen-Jing Gao (2015). Encyclopedia of Information Science and Technology, Third Edition (pp. 4970-4979).

www.irma-international.org/chapter/a-swot-analysis-of-intelligent-products-enabled-complex-adaptive-logistics-systems/112945