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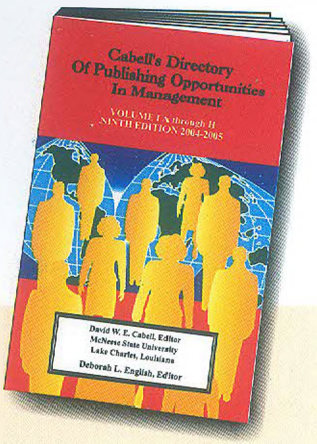

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ARTICLES

10 Managing Interruptions

❑ **Dr. Andrew Sikula, Sr. & Dr. John Sikula**

The most critical issue in overall management is time. Today's managers are required to provide information round the clock. They are interrupted to supply information, data and knowledge. The article discusses various types of such interruptions and methods to deal with it giving optimum productivity.

18 Psychoacoustic Model Based Audio Data Compression Technique : An Approach using DWT and VQ

❑ **Dr. Jyoti Singhai, Mr. Rakesh Singhai & Dr. R.P. Singh**

Audio compression is required to provide cost effective storage, minimize transmission cost and improve channel capacity. Using Vector Quantization (VQ) and employing optimal wave length based coding scheme, the paper proposes a compression algorithm that reduces redundancies, thus saving storage and processing time complexities.

28 Internet-Based Secure Monitoring and Control for Utility Companies and Process Plants

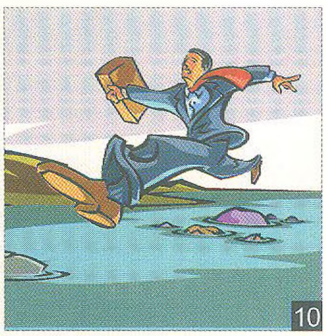
❑ **Prof. James H. Graham & Mr. Sandip C. Patel**

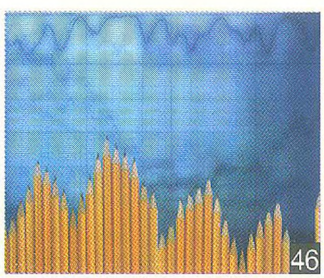
The SCADA system is remotely controlled distributed network of sensor and switches and finds wide application in measurement and control of industrial system. The paper discusses an Internet based SCADA system where current process information can be acquired and control data can be sent to a remote plant using web browser securely.

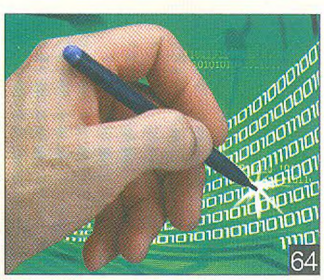
34 Corporate Social Responsibility: Indian Context

❑ **Mr. Kalyan Kumar De & Dr. S.K. Tayal**

Corporate's image just as a profit-earning unit, responsible to its shareholders' only has gone for a makeover. Today, it is playing a role and having a voice in all social, political and economical agenda. Society has definitely benefited by support and development provided by some of the companies. The article highlights this progress and the relationship of Indian corporates with Government Bodies and NGOs.







46 Dividend Policy of NSE and BSE Firms: Impact of Profitability, Size and Growth on Dividend Distribution.

❑ **Dr. Sanjeev Mittal & Ms. Monika Chopra**

Dividend decisions play a major role in deciding the maximization of shareholders' wealth. This paper studies dividend trends for past five years and comes out with a positive relationship between dividend paid and profitability, growth and size of firms.

56 Wal-Mart Prepares to Enter Indian Retail Sector : Strategic Implications

❑ **Dr. P. Raj Devasagayam**

With the liberalization of Indian market, Wal-Mart is entering the Indian retail sector. The paper traces the history of Wal-Mart and growth of retail sector in India and the challenges that will be faced by Wal-Mart's business in Indian retail sector.

64 Non-linear Blind Source Separation Using Cross Power Spectral Density & Cross Correlation.

❑ **Mrs. Sangeeta Nakhate, Dr. R. P. Singh & Dr. A. Somkuwar**

Acoustic signals, especially speech mixes in the unknown non-linear process instantaneously. Based on storing the statistics independence of source signal this paper presents Blind Source Separation Algorithm which enables the extraction of target speech from observed mixed speech analysis. The paper synthesizes BSS Algorithm on Field Programmable Gate Array (FPGA) and gives performance comparison between the proposed and ICA related FPGA implementations.

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From The Editor's Desk

It gives me immense pleasure to present the fifth issue of DIAS Technology Review as with this issue DTR has entered its third year of publication. A seed has turned into sapling indeed.

World has undergone immense changes from being an agrarian society to an industrial society and then leapfrogging to information age. Each era had it's own requirement of knowledge base. Slowly but steadily globalization has built up- not around any country or company but around individuals. It has changed the competitive settings of all the countries.

In order to maintain the competitive edge it is required to use the existing knowledge and generate new knowledge that could be used in development of new strategies to face the challenges. Globalization has transformed the entire economy to knowledge-based economy and the society to knowledge society. This 'knowledge society' driven by innovation is continuously converting knowledge into wealth for the betterment of the society.

An innovative and highly inspired workforce is the need of the hour. Fortunately this is the best time for young men and women to enter the workforce. IT and Management students all around the world have got the best salaries and the highest pay hikes. There is no dearth of opportunities in both the fields across the globe. This is a good indication of growth of economy and living standards of people.

However, there is a distressing side of this seemingly bright picture that indicates severe shortage of people with right skills and knowledge. The weak link in the entire structure is education. The supply is much less than the demand. Thus quality Management education and IT training are becoming all the more essential to face innumerable, intricate changes. Education should have the potential of creating tremendous value for the individual, developing organizational skills and competencies and turning them not only as managers but also as social emancipators.

As suggested by Indian President Dr. A.P.J. Abdul Kalam, every nation should develop an efficient innovation system that creates a cluster which are networks of: (a) inter-dependent firms, (b) technology and knowledge producing Institutions like universities, colleges, research Institutes and technology providing firms, (c) Institutions like think-tank, providers of technical or consulting services, and (d) customers linking the value added production chain. The managers & technocrats of today must also contribute to above networks through their research and propagate new ideas & theories, thus improving management practices.

Every issue of DIAS Technology Review seeks to contribute to the research fields pertaining to management and IT. The articles in the present issue encompass a wide range of topics.

In the management section the article "Managing Interruptions" describes why the unexpected work that flows in the form of intrusions, social gossip and emergencies must be minimized whereas affirmative expected interruptions must be encouraged.

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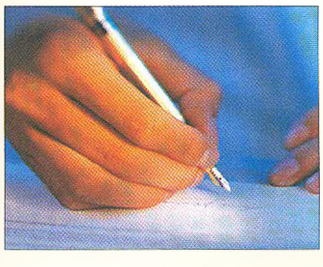

We hope the articles incorporated in the present issue will make an interesting and informative reading for our esteemed readers.

In order to have continuous interaction with our readers, we are introducing a new column "Letters To Editor" where they can share their views and information related to the articles.

Tripti Mishra

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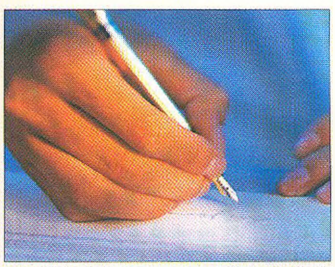

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