

DIAS Technology Review

The International Journal for Business & IT

Vol. 2 No. 1

#3

www.dias.ac.in



APRIL - SEPTEMBER 2005

ARTICLES

- 10 **Compensating the Diversified and Information Technology Workforce**
Donatus I. Amaram
- 18 **Factors affecting Website Downloads and their Economic Implications**
Krishan Rana, Mel David Krohn
- 25 **Efforts Required for Performance Engineering of a Web Application**
K.K. Aggarwal, Yogesh Singh, Vandana Gupta
- 30 **Workplace Stressors: Story Behind the Scene**
Anu Singh Lather, Shilpa Jain
- 40 **Regulatory Mechanism for Financial Markets: Emerging Trends and Managerial Implications**
Anil K. Sharma, Ashutosh Vashishtha
- 51 **Role of Cooperative Banks' Lending to Priority Sector in Haryana : An Evaluation**
Vandana Shoora
- 58 **Fano's Inequality for Probability based on Renyl's Information**
Priti Gupta, Hari Arora

BOOK REVIEWS

- 64 **Financial Accounting**
Ashima Agarwal
- 66 **Managing Currency Risk using Foreign Exchange Options**
Ruchi Kansil
- 68 **TCP/IP Protocol Suite**
Sachin Gupta



DELHI INSTITUTE OF ADVANCED STUDIES

Plot No 6, Sector 25, Rohini, Delhi 110085

Tel.: 011-27932742/27934011/27934400, Email: dias@dias.ac.in , diasedu@vsnl.com

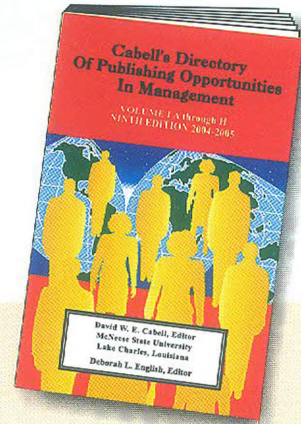


DIAS Technology Review

The International Journal for Business & IT

Now Listed In

10th Edition of
CABELL'S DIRECTORY, U.S.A.




STATEMENT ABOUT OWNERSHIP AND OTHER PARTICULARS OF THE JOURNAL

1. Name of the Journal	:	DIAS Technology Review- The International Journal for Business & IT
2. Language of the Publication	:	English
3. Periodicity of Publication	:	Half-yearly
4. Place of Publication	:	Delhi
5. Registration No.	:	DEL ENG / 2004 / 13506
6. Publisher's Name Nationality Address	:	Shri S.K. Nijhawan Indian Delhi Institute of Advanced Studies, Plot 6, Sector 25, Rohini, Delhi 110 085
7. Owner's Name	:	Delhi Institute of Advanced Studies, Plot No. 6, Sector 25, Rohini, Delhi
8. Chief Editor's Name Nationality Address	:	Dr. S.N. Maheshwari Indian Director Delhi Institute of Advanced Studies Plot 6, Sector 25, Rohini, Delhi 110 085
9. Editor's Name Nationality Address	:	Shri V.P. Arora Indian Delhi Institute of Advanced Studies Plot 6, Sector 25, Rohini, Delhi 110 085
10. Printer's Name	:	Shri Sanjay Sachdeva
11. Printed at	:	Swan Press of Lahore, B-71, Naraina Indl. Area, Phase-II, New Delhi - 110 028

I, S. K. Nijhawan, hereby declare that particulars given above are true to the best of my knowledge and belief.

Date : 28 April 2005
Delhi


(Signature of Publisher)

Copyright 2004 © Delhi Institute of Advanced Studies All rights reserved

Journal of "DIAS Technology Review- The International Journal for Business & IT", its editors, publisher, editorial board and Delhi Institute of Advanced Studies disclaim responsibility and liability for any statement of facts and opinion, originality of contents and of any copyright violations by the authors.

The Editorial Board invites original, unpublished contributions in the form of articles, case studies, research papers and book-reviews.

DIAS Technology Review

The International Journal for Business & IT

Editorial Board

PATRON

Shri S.K. Sachdeva
Chairman, Delhi Institute of Advanced Studies

CHIEF EDITOR

Dr. S.N. Maheshwari
Director, Delhi Institute of Advanced Studies

EDITOR

Shri V.P. Arora
Reader, Delhi Institute of Advanced Studies

ASSOCIATE EDITOR

Dr. Suneel K. Maheshwari
Associate Professor - Accounting,
Marshall University, USA

MEMBERS

Dr. Chong W. Kim
Professor and Division Head,
Division of Management and Marketing,
Marshall University, USA

Dr. S.S. Agrawal
Prof. of Computer Science
Delhi Institute of Advanced
Studies, Rohini, Delhi
India

Dr. Mukesh Chaudhry
Prof. of Finance, Indiana University of
Pennsylvania, USA

Dr. Purnendu Mandal
Head, Information System
and Analysis Department
Lamar University
Beaumont, Texas, USA

Dr. Michael Newsome
Asst. Professor-Economics,
Marshall University, USA

Dr. T.N. Kapoor
Ex Vice-Chancellor, Punjab University,
Chandigarh, India

Dr. Angappa "Guna" Gunasekaran
Prof. of Operations Management,
University of Massachusetts, USA

Dr. Atul Gupta
Associate Professor-Management,
School of Business and Economics,
Lynchburg College, USA

Dr. Jagdish Pathak
Asst. Professor-Accounting Systems,
University of Windsor, Canada

Prof. David Ross
Management and Commercialization,
University of Southern Queensland,
Australia

Dr. Ibrahim J. Affaneh
Chairman, Deptt. of Finance & Legal
Studies, Indiana University of
Pennsylvania, USA

Dr. Krishan Rana
Prof. of Information System and
Decision Sciences, Virginia State
University, USA

Dr. Rakesh K. Agrawal
Associate Professor Operations
Research, University of Western Sydney,
Australia

Dr. Anand Krishnamoorthy
Asst. Professor-Finance, Troy State
University, Atlantic, USA

ASSISTANT EDITOR

Ms. Tripti Mishra
Faculty, DIAS

A BIENNIAL JOURNAL OF DELHI INSTITUTE OF ADVANCED STUDIES

Plot No.6, Sector 25, Rohini, Delhi 110 085, India
Website: <http://www.dias.ac.in>, Email: dias@dias.ac.in

DIAS Technology Review

The International Journal for Business & IT

INDEX

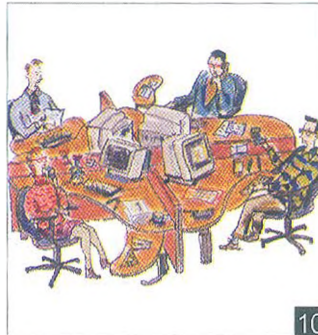
APRIL 2005

ARTICLES

10 **Compensating the Diversified and Information Technology Workforce**

■ Dr. Donatus I. Amaram

In order to retain skilled and talented employee the compensation package of employee should include factors that appeal employee's dignity, desire for autonomy and recognition. This paper suggests alternative compensations to high-tech workforce within a culturally diverse environment.



10

18 **Factors affecting Website Downloads and their Economic Implications**

■ Dr. Krishan Rana & Dr. Mel David Krohn

Exponential growth of E-commerce and its capture over market is based on connection speed as well as fast downloads. The paper discusses various factors affecting website downloads along with user's expectations of a website and their post bailout behaviour.

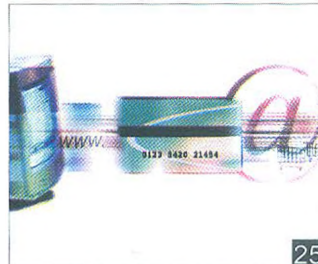


18

25 **Efforts Required for Performance Engineering of a Web Application**

■ Dr. K.K. Aggarwal, Dr. Yogesh Singh & Ms. Vandana Gupta

Performance testing is the most important activity that begins with customer's response to a software product. The paper discusses the need, resources required and methodologies used during this phase of software development life cycle.



25

30 **Workplace Stressors: Story Behind the Scene**

■ Dr. Anu Singh Lather & Ms. Shilpa Jain

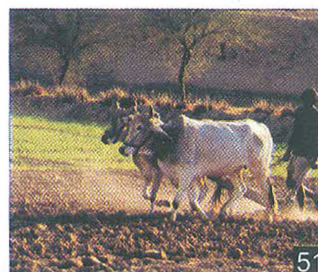
The article highlights workplace stressors both in public and private sectors. It reveals that lack of group cohesiveness, role conflict and inequality etc. are significant stressors for public sector associates while private sectors associates are significantly high on stresses due to constraints of change, rules and regulations, job requirement and capability mismatch etc. An interesting comparative study!



30

40 **Regulatory Mechanism for Financial Markets: Emerging Trends and Managerial Implications**

■ Dr. Anil K. Sharma & Ashutosh Vashishtha



51

India, with its strong liberalization and globalization policy has witnessed continuous cross border capital flow during last decade. Alongwith this progress comes financial irregularities and scams. The paper deals with state of regulation and regulatory issues prevailing in Indian financial market.

51 **Role of Cooperative Banks' Lending to Priority Sector in Haryana: An Evaluation**

■ Ms. Vandana Shoorra

Nationalization of commercial banks in India aimed at orienting lending Bank policies and ensuring the credit flow to certain sectors of the economy according to national planning priority. The paper studies priority sector lending by cooperative banking in Haryana, India and suggests improvements in this area.

58 **Fano's Inequality for Probability Based on Renyl's Information**

■ Dr. Priti Gupta & Mr. Hari Arora

Fano's Inequality is widely applied in different fields of communication theory. Fano's lower bound helps in analyzing attainable performance in communication channels where as upper bound helps in keeping worst case performance within known bounds. This paper explores Fano's bound for probability based on Renyl's entropy.

BOOK REVIEWS

64 **Financial Accounting**

■ Ms. Ashima Agarwal

66 **Managing Currency Risk Using Foreign Exchange Options**

■ Ms. Ruchi Kansil

68 **TCP/IP Protocol Suite**

■ Mr. Sachin Gupta

From The Editor's Desk

It gives me immense pleasure to present the third issue of "DIAS Technology Review The International Journal for Business and IT". The first and second issues have been very well received encouraging us to further improve the quality and contents of this Journal. This issue, like the earlier one, contains research articles from diversified fields.

The number of research papers received has been quite large and even after positive reports of the reviewer, many of the articles could not be accommodated in the third issue of the journal. While thanking the contributors and the reviewers, we expect the same kind of response in the forthcoming issues of the Journal.

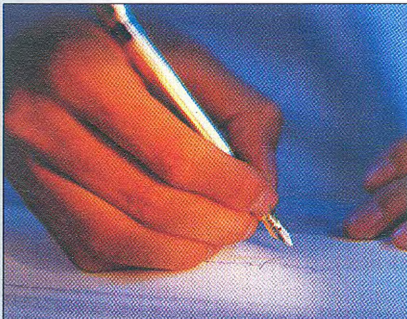
Indian economy, now Asia's 4th largest in GDP, is in good shape and is set to expand by 6.5 - 7.0% during the fiscal year 2004-05. The inflation is slated to be down to 5%, agriculture and allied sector is looking up despite deficient rainfall. Indian economy has been growing slowly but steadily due to strong foundation on which economy is being built brick by brick despite several adverse circumstances and events.

The Union Budget (2005-06) proposals meet the parameters of growth, stability and equity to make them as mutually reinforcing. The budget delivered the expectations of almost all sections of the society despite political and economic constraints. The accent in the budget is on the public and private sector to play complementary role towards economic development. The private sector would be the driving force in service sector while in manufacturing, the government and private sector both will move hand in hand to compete with each other.

India has a great potential for increasing its share in the growing international trade. The government's policy of liberalization and globalization over the last decade has provided impetus to internationalization efforts of the private sector companies despite some macro-level impediments and infrastructure inadequacies. To be globally competitive, India will have to focus on producing world-class products and services at lower prices since it is facing tough competition from other low-cost developing economies of the world.

Information Technology Consultancy firm, Gartner Inc., in its report, has stated that outsourcing of Information Technology jobs will continue and by 2010, one out of every four high technology jobs in developed nations today may be outsourced to emerging markets such as India, China & Russia. According to the report, "In terms of offshore centres, India remains the undisputed leader with China & Russia emerging as strong contenders". The U.S. Business consultancy firm AT Kearney has certified India as No.1 outsourcing destination because of factors like cost advantage and a skilled workforce. The top ten are India, China, Malaysia, Czech Republic, Singapore, Philippines, Brazil, Canada, Chile and Poland. According to a study Business Process Outsourcing (BPO) market is expected to reach \$1 Trillion by 2006. To sustain and improve upon these achievements, consistent and vigorous efforts are required on the part of the Government, industry leaders and employees.

The Editorial team of "DIAS Technology Review The International Journal for Business and IT" is thankful to all the authors and reviewers for their contribution towards bringing out this issue in the present form. We, at DIAS, would however, always look forward to suggestions for continuous improvements in this Journal.



V.P. Arora
Editor

ABOUT THE CONTRIBUTORS

Dr. Donatus I. Amaram

Dr. Amaram holds the Ph.D. Degree from the Ohio State University in Columbus, Ohio, U.S.A., in Human Resource Management and Industrial Relations An M.B.A. from the University of Missouri, and a B.A. in Business and Liberal Arts from Howard University in Washington, D.C. his professional experiences include a four-year service in the Royal Canadian Navy. He has been a Professor of Management at Virginia State University in Petersburg, Virginia, U.S.A. since 1984 including nine years as Department Head. Before joining the Faculty of Virginia State University, he was a Professor of Management and Chairman of the Division of Business and Economics at Fort Valley State University in Georgia, U.S.A. for three years. His research and publications include topics in the areas of recruitment and retention, wage and salary administration, workplace violence and workplace safety issues, workplace drug testing, performance evaluation and reward systems, and cultural sensitivity in business organizations. He has also been active in consultancy and management workshop programs.

Email: damaram@vsu.edu

Dr. Krishan Rana

Dr. Krishan Rana is a Professor of Computer Information Systems at Virginia State University and has been teaching courses in Information Systems and Decision Sciences like Production/Operations Management, Management Science/Quantitative Methods and Analysis, Business Statistics, Supply Chain Management, Logistics for the last twenty years. He received his Ph. D. in Management Sciences from the University of Waterloo, Canada, a Diploma in Systems Management from Bombay University, and Bachelor's Degree in Mechanical Engineering from Thapar Institute of Engineering and Technology (Punjabi University), India. Before joining academia, he was a Commissioned Officer (Lieutenant Commander) with the Indian Navy. Dr. Rana has published more than sixty articles in leading academic journals and conference proceedings such as Transportation Science International Journal of Physical Distribution and Logistics Management, Computers and Operations Research, Scientific Journal of Administrative Management etc. He has won several Best Paper awards and Virginia State University Outstanding Faculty award. He has written several research grants proposals and got funded. He has been actively participating in professional organizations and conferences as track chair, session chair, paper reviewer etc. and will be the Program Chair of 2005 Southeast INFORMS (Institute for Operations Research and Management Science) Annual Conference.

Email: krana@vsu.edu

Dr. Mel David Krohn

Dr. Mel David Krohn is currently Coordinator of the Administrative Systems Management Program in the Department of Educational Leadership, School of Liberal Arts and Education at Virginia State University Petersburg. He earned his Ph.D. in Business Education at the University of Iowa, his M.B.A. at the University of Southern California, and his B.A. in Accounting at the University of Minnesota Moorhead. He is Former Chair of the Information and Decision Sciences Department at Virginia State University and has taught computer course at the University for 21 years. He has published and presented numerous papers reporting his research in the field of information systems.

Email: mkrohn@vsu.edu

Dr. K.K. Aggarwal

Dr. K.K. Aggarwal, Vice Chancellor, Guru Gobind Singh Indraprastha University, Delhi, India, obtained his Doctorate from Kurukshetra University, Kurukshetra. He also obtained his Bachelor's & Master Degree from the same University with 1st position at both the examination.

Dr. Aggarwal, during his vast and enriching career, has held many important positions viz., Chairman of Department of Electronics, Communication & Computer Engineering at Regional Engineering College, Kurukshetra; Dean (Academics) of the REC, Kurukshetra; Director of the Centre for Excellence for Manpower Development in

Reliability Engineering in Ministry of Human Resource Development, Govt. of India etc. He has also served as Pro Vice Chancellor of Guru Jambheshwar University, Hisar, India for 3 years.

Dr. Aggarwal has left his impact on industrial world also. He has delivered lectures in several industrial and research organizations such as Tata Consultancy Services (TCS), Bharat Heavy Electricals Ltd. (BHEL), TVS Electronics, Indian Space Research Organization (ISRO), Defence Research Labs and Ford Motors, Detroit, USA to name a few. His most notable contribution has been towards the Reliability Analysis of PSLV (Polar Satellite Launch Vehicle). He has also conducted full-day Programme for Information Management Resources, Florida, USA.

Dr. Aggarwal has more than 200 papers to his credit published in various journals of repute. He has also authored a number of books, some of which have been published abroad. His honours include "Man of Decade Award" by American Bibliographical Institute, USA; "LC Verman Award" by Institute of Electronics and Telecommunication Engineers, India, "Indira Gandhi Priyadarshini Award" for his outstanding services in the field of education. He has been listed as one of the first five hundred personalities of the new millennium world over by American Bibliographical Institute, USA.

Email: kka@jpu.edu

Dr. Yogesh Singh

Dr. Yogesh Singh is Professor & Dean of University School of Information Technology and also the Dean of School of Engineering & Technology, Guru Gobind Singh Indraprastha University, Delhi, India. He received his M.Tech. and Ph.D. (Computer Engineering) Degrees from National Institute of Technology, Kurukshetra (previously known as Regional Engineering College, Kurukshetra). Prior to this, he was Founder Chairman, Department of Computer Science & Engineering, Guru Jambheshwar University, Hisar, Haryana, India. His area of research is Software Engineering focusing on Planning, Testing, Metrics and Neural Networks, though he has also actively worked in the area of fuzzy systems. He has more than 100 publications in International / National Journals and Conferences. He is a referee for various journals of International and National repute in the area of Information Technology and allied fields. He has co-authored a book on "Software Engineering". He was the Principal Investigator of the successfully implemented MHRD-AICTE Project entitled "Experimentation & Development of Software Reliability & Complexity Measurement Techniques". He is a member of IT-Task force and a member of its Core-group on E-Education, Govt. of NCT of Delhi. He is a Member of Review Committee for Direct Central Assistance Schemes Project, Ministry of Human Resources Development, Govt. of India and Member of various committees constituted by AICTE and UGC. He has visited University of Portland and University of California, San Diego, USA in July and August 2003 to explore the possibility of an academic / research alliance. He is Fellow of IETE (F158608) and Member of IEEE (41481854).

Email: ys@jpu.edu

Ms. Vandana Gupta

Ms. Vandana Gupta is currently working as Lecturer in Computer Science Department at Kalindi College For Women, Delhi University, Delhi, India. She has a Bachelor's Degree in Sciences, as well as a Post Graduate Degree in Computer Applications from Maharishi Dayanand University, Haryana. She teaches undergraduates in the field of Software Engineering, Database Management Systems and programming languages. Currently she is pursuing her research in the field of Software Testing at University School of Information Technology, Guru Gobind Singh Indraprastha University, Delhi. Her area of research is Regression Testing, Software Test Metrics, Fuzzy Logic, Performance Testing and Test Effort Estimates. She has authored and co authored numerous number of papers in International / National Journals and Conferences.

Email: write2vgupta@rediffmail.com

Dr. Anu Singh Lather

Dr. Anu Singh Lather is Associate Professor in the University School of Management Studies, Guru Gobind Singh Indraprastha University, Delhi, India. Her teaching and research experience is spread over 17 years. Her research

ABOUT THE CONTRIBUTORS

thrust is OB, HRM and OD. She has been actively and closely associated with industry and has developed many corporate training modules. Some of her very popular corporate training modules are "How To Be A Team Player", "Succeeding Through Communication", "Developing Corporate Leaders" and "A Journey From Manager To Leader". Dr. Lather has many empirical research papers published in journals of National and International repute. She has also attended various international and national conferences, workshops, conventions, seminars, symposias both in India and abroad in capacity of a presenter, Keynote Speaker, Panelist and Chairperson of technical sessions. She was Founder Head of Department of Applied Psychology, Guru Jambheshwar University Hisar.

Email: anusinghlather@yahoo.com

Ms. Shilpa Jain

Ms. Shilpa Jain is a full time Research Scholar in the University School of Management Studies, Guru Gobind Singh Indraprastha University, Delhi, India, working in the area of Organizational Behaviour. She is currently pursuing her doctoral degree under Dr. Anu Singh Lather. She has to her credit a number of research papers published in journals of repute.

Email: shilpajain77@yahoo.co.in

Dr. Anil K. Sharma

Dr. Anil K. Sharma is Faculty in the Department of Management Studies, Indian Institute of Technology (IIT), Roorkee, India. A first class first in M.Com and a gold medallist in M.Phil., Dr. Sharma has earned his Ph.D. in the area of Finance and Accounting from Panjab University, Chandigarh. Before joining IIT Roorkee, Dr. Sharma has taught in Panjab University, Chandigarh, Kurukshetra University, Kurukshetra and Himachal Pradesh University, Shimla. He is Visiting Faculty to Asian Institute of Technology, Bangkok and a registered Consultant to Asian Development Bank, Manila. He has published about twenty research papers in national and international journals of repute like Journal of Measuring Business Excellence, Corporate Governance of Emerald Publishing and Singapore Management Review. He is actively engaged in supervision of Ph.D. scholars.

Email: anilfdm@iitr.ernet.in

Mr. Ashutosh Vashishtha

Mr. Ashutosh Vashishtha is Research Scholar in Department of Management Studies, Indian Institute of Technology (IIT), Roorkee, India and pursuing Ph.D. in Finance. A through out first class and MBA from Department of Management Studies, Kurukshetra University, Kurukshetra, Mr. Vashishtha has about five years of teaching and research experience in reputed Management Institutes affiliated to Kurukshetra University. He has published about five research papers in journals and conferences of repute like Finance India, XII World Congress of International Economic Association, Buenos Aires, Argentina (CD-ROM Edition) and Conference Volume publication of second Annual Conference, UTI Institute of Capital Markets, Mumbai. His research interests are Risk Management Practices and Regulation of Financial Markets.

Email: atvbkddm@iitr.ernet.in

Ms. Vandana Shoora

Ms. Vandana Shoora is working as a Lecturer in Delhi Institute of Advanced Studies, Delhi, India. She is Post Graduate in Commerce from University Business School, Panjab University, Chandigarh, NET-JRF qualified and a Company Secretary from Institute of Company Secretaries of India (ICSI), Delhi. She has two years of teaching experience. Presently, she is pursuing her Ph.D. from University Business School, Panjab University, Chandigarh.

Email: vandanashoora@yahoo.com

Dr. Priti Gupta

Dr. Priti Gupta is currently working as a Reader in the Department of Statistics, M.D. University, Rohtak since 1986. A Ph.D. in Mathematics, Gold Medalist in M.Phil from the same University, she has attended about 10 National/International Conferences. She has published about 18 Research Papers in leading National/International Journals.

Email: hari_arora@hotmail.com

Mr. Hari Darshan Arora

Mr. Hari Darshan Arora is currently working as a Lecturer in the Department of Applied Mathematics, JSS Academy of Technical Education, Noida, an Engineering College, for the last one and half years. Apart from teaching mathematics, he has 3 years exposure of teaching Statistics and Operations Research to young management students. He has done his Bachelor in Science from Delhi University with First Division, is a Gold Medalist in M.Sc. (Operations Research), holds degree MBA from Institute of Business Studies and M.Phil in Operations Research from Delhi University. Presently, he is pursuing Ph.D. under the supervision of Dr. Priti Gupta.

Email: hari_arora@hotmail.com