

## **CIIR ACTIVITIES 21 Oct. 2007 – 22 March 2008**

### **Overview of Main CIIR Activities**

From October 21, 2007 – March 22, 2008, CIIR pursued research & education activities of: (1) Implementation of Second offering of I\*I based course “Business Modeling with System Dynamics” (BMSD) at Institute of Management Technology (IMT) Ghaziabad from September-December 2007; BMSD was taught by Prof. Reema Khurana, IMT, Ghaziabad, (2) Paper correction and submission of semester-end final examination results for University of Pune Course (404210) MIS; Examination for the course MIS held in November 2007 and results submitted in March 2008; Core Course MIS under B.E. (Electronics) Degree of UoP is offered as introduction to I\*I, (3) Conducting of PG level “IIS” course under open education through YCMOU’s M. Phil. (IT) degree, (4) Conducting of UG Course Subject No. 404210 Management Information System (MIS) under B.E. (Electronics) degree of University of Pune, (5) Conducting of Counseling for M. Phil. (IT) degree course “Integrity Information System” (IIS) – (a) At YCMOU’s Mumbai Study Center at Dept. of Computer Science & IT, Kirti College, Mumbai, (b) At YCMOU’s Pune Study Center at Dept. of Computer Science & IT, Wadia College, Pune, (c) At YCMOU’s Aurangabad Study Center at IMTR, Aurangabad, (6) Conducting One-Day Teaching W/S on the course “Management Information System” (MIS) for students of B.E. (Electronics) Degree at Pravara Rural College of Engineering, Pravara Nagar, on March 12, 2008 (7) Participation in Fourth Day-Long Teacher Training Workshop conducted at AISSMS’ College of Engineering for Women for “Management Information System” course, on February 18, 2008, (8) Presentation of I\*I research paper at The 2<sup>nd</sup> International Conference on Information Systems, Technology and Management (ICISTM) held at Dubai from 6-8 march 2008, (9) Presentation of I\*I research Tutorial at The 2<sup>nd</sup> International Conference on Information Systems, Technology and Management (ICISTM) held at Dubai from 6-8 march 2008, (10) Delivering State of Art Invited Lecture presentation at 23<sup>rd</sup> National Convention of Electronics & Telecommunication Engineers, (11) Delivering Invited Talk at National seminar on Engineering Reliability and Failure Analysis organized by Dept. of Mechanical Engineering, Sinhagad Technical Education Society Vadgaon, Pune, (12) Delivering Invited Lecture on Information Integrity at Database Week organized by TCS, Pune, (13) Participation in I\*I Research Meeting at Tata Research Design and Development Center (TRDDC), Pune, (14) Chairing a session at “Research Methodology Meet” organized by MMMCOE, Kothrud, Pune and delivering a key note address on “Research Opportunities in I\*I Knowledge Area”, (15) Delivering Chief Guest’s address on “I\*I – Technology Development Opportunities” at Annual Day of Computer Science & IT students of M.C.E. Society’s Abeda Inamdar Senior College, Pune, (16) Delivering an invited lecture on “An Overview of Information Integrity Knowledge Area” to MBA students at Marathwada Mitramandal, Kothrud, Pune, (17) Delivering an invited lecture on “I\*I Research Areas” to Computer Science and Electronics and telecommunications faculty at Marathwada Mitramandal’s College of Engineering, Kothrud, Pune, (18) I\*I Research, education and networking interactions, (19) M.Phil. Research Projects Meetings, and (20) Conducting Seminar and Assignments’ Examination for IIS students.

The CIIR activities, mentioned above, are briefly described here.

1. **Implementation of Second offering of I\*I based course “Business Modeling with System Dynamics” (BMSD) at Institute of Management Technology (IMT) Ghaziabad from September-December 2007; BMSD was taught by Prof. Reema Khurana, IMT, Ghaziabad.**

During its tri-semester administered from January 2007 - March 13, 2007, Institute of Management Technology (IMT), Ghaziabad, under its Full-Time Management program *Post-Graduate Diploma in Business Management (PGDBM)*, implemented the first offering of the course “Business Modeling with Systems Dynamics” (BMSD).

Course ***BMSD*** is designed as an analytical, advanced level introduction to information integrity technology for business modeling for competitive advantage in complex and changing market environment. CIIR Site [ciir.org.in](http://ciir.org.in) gives the details of the course. Prof. Mandke was invited by IMT to conduct the course in the capacity of the Instructor-In-Charge. Natasha Kapoor assisted Prof. Mandke in the teaching task.

IMT implemented the second offering of the course from September-December 2007. Prof. Reema Khurana, IMT, Ghaziabad was the Course I/C. Total 35 students credited this course offering.

2. **Paper correction and submission of semester-end final examination results for University of Pune Course (404210) MIS; Examination for the course MIS held in November 2007 and results submitted in March 2008; Core Course MIS under B.E. (Electronics) Degree of UoP is offered as introduction to I\*I.**

University of Pune (UoP) under its UG level B.E. (Electronics) Degree offers a *core course (404210) Management Information Systems (2003 Course)*. For this course, which is implemented at 10 engineering colleges across the State of Maharashtra and was implemented from August – November 2007, the semester-end examination was conducted in November 2007.

During the period February-March 2008, Prof. Mandke participated in correction of these examination papers and in submission of results to University of Pune in March 2008.

3. **Conducting of PG level “IIS” course under open education through YCMOU’s M. Phil. (IT) degree:**

Starting November 2007, implementation of “Integrity Information System” (IIS) course under M. Phil. (IT) degree program of YCMOU is an important activity CIIR has been involved in during the period under consideration. This course in its second offering (first offering was from November 2006-August 2007) targets teaching faculty and is conducted through open education. As a result over 100 teachers from institutions across Maharashtra are studying Information Integrity subject area. Teacher training on this dimension will go a long way in the dissemination of I\*I knowledge. Further after the current course learning is over, some faculty studying the

course may even opt to do research projects in I\*I area. This will only further strengthen I\*I education and research initiatives, which are now coming to the fore.

4. **Conducting of UG Course Subject No. 404210 Management Information System (MIS) under B.E. (Electronics) degree of University of Pune**

During January-May 2008, 10 engineering institutions spread across the State of Maharashtra with total B.E. (Electronics) Degree student intake capacity of about 500 under University of Pune (UoP) are implementing core course “MIS”, which is a UG level introduction to integrity of information system and information there from (actual number of students attending the course will vary as it depends on actual admissions to the institutions offering the degree program and the student eligibility).

5. **Conducting of Counseling for M. Phil. (IT) degree course “Integrity Information System” (IIS)**

Yashwantrao Chavan Maharashtra Open University (YCMOU) at Nashik, Maharashtra, India under its M. Phil. Degree in Information Technology (IT) offers a course (subject) “Integrity Information System” (IIS). School of Computer Science of YCMOU, which administers the computer science and IT degree education of the University, is currently conducting the course from November 2007- August 2008. M. Phil. Degree programs of YCMOU are designed as research programs for serving teaching faculty and over 100 faculty members are undergoing M. Phil. (IT) program during academic years 2007-08. YCMOU conducts the open education at the University’s study centers, where course-counseling sessions are implemented. Prof. Mandke is a counselor for “IIS” course.

a. **At YCMOU’s Mumbai Study Center at Dept. of Computer Science & IT, Kirti College, Mumbai.**

From November 15-17, 2007, Prof. Mandke conducted IIS course counseling at YCMOU’s Mumbai Study Center at Dept. of Computer Science & IT, Kirti College, Mumbai. Dr. (Mrs.) Seema Purohit, Head, Dept. of Computer Science & IT and Coordinator, YCMOU Study Center at Kirti College, Mumbai organized the counseling.

b. **At YCMOU’s Pune Study Center at Dept. of Computer Science & IT, Wadia College, Pune.**

From November 19-21, 2007, Prof. Mandke conducted IIS course counseling at YCMOU’s Pune Study Center at Dept. of Computer Science & IT, Wadia College, Pune. Dr. (Mrs.) S. C. Shirwaikar, Head, Dept. of Computer Science & IT and Coordinator, YCMOU Study Center at Wadia College, Pune organized the counseling.

c. **At YCMOU’s Aurangabad Study Center at IMTR, Aurangabad.**

From December 22-23, 2007, Prof. Mandke conducted IIS course counseling at YCMOU’s Aurangabad Study Center at IMTR, Aurangabad. Ms. Natasha Kapoor assisted Prof. Mandke in the course counseling. Mr. Jaulkar, Coordinator, YCMOU Study Center at IMTR, Aurangabad organized the counseling.

6. **Conducting One-Day Teaching W/S on the course “Management Information System” for students of B.E. (Electronics) Degree at Pravara Rural College of Engineering, Pravara Nagar, on March 12, 2008.**

Dept. of Electronics of Pravara Rural Engineering College, Pravara Nagar conducted one-day teaching w/s on March 12, 2008 on subject “Management Information System” for its students of B.E. (Electronics) Degree.

Dr. Dharendra Shukla, Principal, Pravara Rural Engineering College presided over the w/s inauguration function, which was organized by Mr. Chopade, Head of Dept. of Electronics and Prof. Bhambhare, Faculty, Dept. of Electronics. Prof. Mandke conducted the day-long workshop in expert’s capacity.

7. **Participation in Fourth Day-Long Teacher Training Workshop conducted at AISSMS’ College of Engineering for Women for “Management Information System” course, on February 18, 2008.**

**Background:**

CIIR Activity Reports of 31<sup>st</sup> May and 30<sup>th</sup> September 2006 have reported that, from the Academic year 2006-07, University of Pune (UoP) under its B.E. (Electronics) Degree program has introduced, at the 4<sup>th</sup> and final year level, a UG Course *Subject No. 404210 Management Information System (MIS)*. The course is designed as an introduction to Information Integrity of Information Systems (IS) and Information therefrom. It is a semester long 100 marks core paper with weekly 4 hrs. lecture teaching. CIIR Activity Report of 31<sup>st</sup> May 2006 has given the course content in brief. And CIIR Activity Report of 30<sup>th</sup> September 2006 in Appendix 2 has given the detailed course syllabus.

Under University of Pune, 10 engineering colleges offer B.E. Electronics Degree. These colleges are spread across the Indian Western State of Maharashtra. Colleges are located at various cities/towns, namely, Pune, Alandi, Pimpri, Hadapsar, Ahamadnagar, Copergaon, Pravaranagar, Nashik, Sangamner, etc. The first offering of *the course Subject No. 404210 MIS* was from January-May 2007.

It is to facilitate the “MIS” course offerings at above UoP engineering institutions that, as reported in above mentioned CIIR Activity Reports, three Teacher Training Workshops were been conducted in Pune. The first day-long w/s was in July 2006 and was organized by the Electronics Department of the AISSMS’s College of Engineering, Pune, the second in August 2006 by the Dept. of Electronics of Maharashtra Academy of Engineering’s College of Engineering, Alandi and the third in February 2007 by the Dept. of Electronics of Dr. D. Y. Patil College of Engineering, Pimpri.

**Fourth One-Day Teacher Training Workshop at AISSMS’s College of Engineering for Women at Pune on February 18, 2008**

Within the same framework of I\*I teacher training objective as above, during the CIIR Activity period currently under consideration (i.e., October 2007-March 2008), the fourth Day-long w/s was held at All India Shri Shivaji Memorial Society’s College of Engineering for Women

(AISSMS's COEW), Shivajinagar, Pune, on February 18, 2008. Prof. Shedge, HOD, Dept. of Electronics, AISSMS's COEW and Member, Board of Studies for Electronics Discipline, UoP, guided and organized the w/s and Ms. Anupama, faculty of Dept. of Electronics, AISSMS's COEW coordinated the w/s proceedings, which were attended by 14 participants including faculty of 10 engineering colleges from across the State of Maharashtra offering MIS course.

Prof. Wani, Dean of Engineering, College of Engineering, Pune, UoP was the Guest of Honor at the W/S Inauguration function. Dr. Kulkarni, Principal, AISSMS's COEW chaired the inauguration function. Prof. Shedge introduced the w/s objective. Prof. P.A. Patil, HOD, Dept. of Electronics, AISSMSCOE, Pune, Prof. Mahesh Goudur, MAECOE, Alandi and Prof. (Mrs.) Bhavana Amundkar, DYPCOE, Pimpri also participated in the inauguration function. Prof. Mandke explained the MIS course structure at the Inauguration function.

Following the inauguration function, Ms. Smita Patil, who is YCMOU's first batch M. Phil. (IT) student currently doing her M. Phil. research project on pedagogic aspects of delivering Information Integrity education through e-learning and who is Faculty of Marathwada Mitramandal's College of Vocational Education, gave a presentation on her research work to Prof. Wani, Dr. Kulkarni, Prof. Shedge, Prof. Patil and to the W/S participants. The research presentation detailing e-delivery of MIS and IIS courses was well appreciated.

This was then followed by the Day-Long expert's lectures on the course MIS by Prof. Mandke to the W/S participants.

8. **Presentation of I\*I research paper at The 2<sup>nd</sup> International Conference on Information Systems, Technology and Management (ICISTM) held at Dubai from 6-8 March 2008**

University of Florida, USA and Institute of Management Technology (IMT), India jointly organized International Conference on Information systems, Technology and Management (ICISTM2008) at Dubai from March 6-8, 2008. For details of ICISTM2008 and program schedule, please refer to [www.imt.edu](http://www.imt.edu).

The conference attracted 131 papers from 40 countries. From these based on reviews 53 papers by 60 participants were presented at the conference. These 60 participants represented 22 countries.

Specifically, a paper entitled "Managing Information Integrity" by Natasha Kapoor, Reema Khurana and Vijay Mandke was presented at the conference. The paper appears in the conference proceedings.

9. **Presentation of I\*I research Tutorial at The 2<sup>nd</sup> International Conference on Information Systems, Technology and Management (ICISTM) held at Dubai from 6-8 March 2008**

Further, a tutorial entitled "Business Modeling with Information Integrity Technology" by Vijay Mandke, Reema Khurana and Natasha Kapoor was also presented at ICISTM2008.

While the paper by Natasha Kapoor, Reema Khurana and Vijay Mandke mentioned at Item (8) was scheduled on March 6th 2008 in the 3rd session, the tutorial was scheduled from 14:45 Hrs. - 16:00 Hrs. on 7th March 2008.

Reema Khurana attended the conference from IMT, Ghaziabad, India. Prof. Mandke and Natasha Kapoor attended the conference from CIIR. The paper at Item No. (8) as well as the tutorial was developed based on the recent, ongoing CIIR research works of the contributors. A highlight of the tutorial was presentation of modeling software exercise for integrity information system.

Please find enclosed here a short background introduction to the tutorial.

Background introduction to the tutorial:

Businesses have changed a great deal but it is the models and processes by which businesses are designed and implemented that have changed the most. The majority of businesses are still comparatively simple, but internal as well as external customer aspirations are becoming increasingly local and instant. In a business traditionally geared to work under externally generated alternatives and information decision, need -in the presence of the reality of ever-present external and internal business system and market environmental factors - is now to continuously and locally generate alternatives and their information requirements. This dynamic decision-making process model is demanding informational work activities, hitherto not considered, namely, information processing for observation, verification, evaluation, prediction of consequences of non-critical environmental (external and internal) factors (interdependent, evolving, conflicting) on future states, precompiled responses (standards) and reasoning, storage, retrieval, communication, use and discard or storage for future use. And in the presence of system and market environmental factors all these activities assume complex and changing character besieged with uncertainty. As a result of these new information processing demands today; the businesses are increasingly burdened with the data and information, that too fraught with uncertainty. These tend to slow down the process and increase the risks of failures. These informational failures, which can now be seen as an increasing problem as systems move from crisis to crisis call for simplification and speed Within this framework the tutorial analytically introduces business modeling and processes and applies System Dynamics Modeling as a tool for Information Integrity Technology design basis for business competitive advantage in a complex and changing market environment. Information Integrity (I\*I) is dependability and trustworthiness of information and controlling it is a key factor – a new market space - determining strategic business advantage. Its attributes are accuracy, consistency and reliability of information system (IS) and information there from.

**10. Delivering State of Art Invited Lecture presentation at 23<sup>rd</sup> National Convention of Electronics & Telecommunication Engineers**

Prof. Vijay Mandke delivered State of Art Invited Lecture presentation at “23<sup>rd</sup> National Convention of Electronics & Telecommunication Engineers” organized by The Institution of Engineers (India) Pune Local Center, Pune on October 28, 2007.

**11. Delivering Invited Talk at National seminar on Engineering Reliability and Failure Analysis organized by Dept. of Mechanical Engineering Sinhgad Technical Education Society Vadgaon, Pune**

Prof. Vijay Mandke delivered an invited talk on “RELIABILITY AND FAILURE ANALYSIS-INFORMATION INTEGRITY BASED APPROACH” at Dept. of Mechanical Engineering Sinhgad Technical Education Society Vadgaon, Pune on October 31, 2007.

**12. Delivering Invited Lecture on Information Integrity at Database Week organized by TCS, Pune**

On December 18, 2008, Prof. Vijay V. Mandke and Ms. Natasha Kapoor delivered invited talk on “Future Databases and Information Integrity” at DATABASE WEEK organized by Pune branch of Tata Consultancy Services, Pune.

**13. Participation in I\*I Research Meeting at Tata Research Design and Development Center (TRDDC), Pune**

On 31 January 2008, Prof. Vijay Mandke and Natasha Kapoor participated in “I\*I Technology Development” meeting at Tata Research Development and Design Center (TRDDC), A division of Tata Consultancy Services, 54-B Hadapsar Industrial Estate Pune 411 013 India, with Mr. Arun G. Bahulkar, Head-Software Engineering Lab, Member-Corporate Technology Board, TRDDC, Dr. Harrick Vin, Vice-President (R&D) and Head-Systems Research Lab, TRDDC, Mr. Sreedhar Reddy, TRDDC and Mr. Hemant Joshi, TCS. During the meeting Prof. Mandke and Ms. Natasha Kapoor presented a discussion of the subject "Beyond Quality: Information Integrity Imperative - Emerging New Market".

**14. Chairing a session at “Research Methodology Meet” organized by MMMCOE, Kothrud, Pune and delivering a key note address on “Research Opportunities in I\*I Knowledge Area”**

On January 12, 2008, Prof. Mandke chaired a session at “Research Methodology Meet” organized by MMMCOE, Kothrud, Pune and also delivered a key note address on “Opportunities for research in I\*I Knowledge Area”.

**15. Delivering Chief Guest’s address on “I\*I – Technology Development Opportunities” at Annual Day of Computer Science & IT students of M.C.E. Society’s Abeda Inamdar Senior College, Pune**

Prof. Mandke delivered a Chief guest’s address on “I\*I – Technology Development Opportunities” at Annual Day of Computer Science & IT students of M.C.E. Society’s Abeda Inamdar Senior College, Pune, on January 7, 2008. Dr. E. M. Khan, HOD, Abeda

Inamdar Senior College, presided over the Annual day function, which was organized by Prof. (Mrs.) Shakila S.

**16. Delivering an invited lecture on “An Overview of Information Integrity Knowledge Area” to MBA students at Marathwada Mitramandal, Kothrud, Pune**

On January 24, 2008, Vijay delivered an invited lecture on “An Overview of I\*I knowledge Area” to MBA students at Marathwada Mitramandal College, Kothrud, Pune.

**17. Delivering an invited lecture on “I\*I Research Areas” to Computer Science and Electronics and telecommunications faculty at Marathwada Mitramandal’s College of Engineering**

On January 28, 2008, Prof. Vijay Mandke delivered an invited lecture on “I\*I Research Areas” to Computer Science and Electronics and telecommunications faculty at Marathwada Mitramandal’s College of Engineering, Kothrud, Pune.

**18. I\*I Research, education and networking interactions:**

During the period under consideration CIIR had I\*I research and education interactions with following experts, researchers:

- a. Meeting at PG Dept. of Computer Science, S.N.D.T. University, Juhu Campus, Mumbai on November 14, 2007,
- b. I\*I research and education meetings at Delhi center with Reema Khurana, IMT, Ghaziabad on December 26-27, 2008,
- c. Meetings with Dr. Jain, Principal, Dr. D.Y.Patil College of Engineering (DYPCOE), Pimpri, Pune, Ms. Bhavana Amundkar, HOD, Dept. of Electronics & Telecommunications, DYPCOE, Pimpri and faculty members of DYPCOE, in December 2007 and January 2008,
- d. Meetings with Dr. S.P. Kallurkar, Principal, MMCOE, Kothrud, faculty of MMCOE and Mr. Bharat Bhushan, Director, Rel Tech, Pune, in January and February 2008,
- e. Meeting with Dr. Sameer Das, I<sup>2</sup>IT, Hinjewadi Pune, in January 2008,
- f. Meeting with Mr. Hemant Joshi, TCS, Pune in February 2008,
- g. I\*I research & education interactions of Reema Khurana and Natasha Kapoor at Delhi center between February 19-24, 2008,
- h. Meetings with CIIR researchers at Pune on 27-28 October 2007; 1, 3-4 November 2007; 18 Nov. 2007; 1, 14-17 December 2007; 4-8, 11-13, 26 January 2008; 8, 25 February 2008; 1 March 2008; 16 March 2008, etc.

**19. M.Phil. Research Projects Meetings**

Dept. of Computer Science of YCMOU, Nashik offers research level M.Phil. Degree programs. These M.Phil. programs are of 1½ -2 years' duration. Specifically, in 2<sup>nd</sup> year of the M. Phil. Degree program, students are required to work on research projects. As reported in CIIR Activity report till October 2007, one important outcome of offering of Information Integrity System (IIS) course under YCMOU's M. Phil. degree is that from the first (i.e., 2006-08) batch of M.Phil. students, in 2007-08, total 11 M. Phil. students – both from IT as well as Computer Science disciplines - have opted to do their research projects in I\*I area.

During the CIIR activity-reporting period, presently under consideration, i. e., during the period October 21, 2007 – March 22, 2008, one major activity undertaken was continuous research interactions with the above M. Phil. students doing research projects in I\*I area. Specifically, these interactions – mainly major one-day interactions - were held as follows:

- a. On October 27, 2007 at Marathwada Mitramandal, Deccan, Pune,
- b. On November 24, 2007 at CIIR, Pune,
- c. On December 9, 2007 at Marathwada Mitramandal, Deccan, Pune,
- d. On December 23, 2007 at IMTR, Aurangabad
- e. On January 8, 2008 at CIIR, Pune,
- f. On January 12, 2008 at MMCOE, Kothrud, Pune,
- g. On February 16, 2008 at CIIR, Pune,
- h. On February 18, 2008 at AISSMS's College of Engineering, Pune.

**20. Conducting Seminar and Assignments' Examination for IIS students**

Prof. Mandke conducted seminar and assignments' examination for YCMOU's 2006-2007 batch IIS students from Wadia College Study Center: Ms. Sukeshini Jadhav, Mrs. Inamdar and Mrs. S.S. Joshi, on March 19, 2008.

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