

Course Outline

Business Process Reengineering

Contact Info

Tutors:

- Dr. F. Lampathaki
- Dr. S. Koussouris
- Prof. J. Psarras

Email:

bpr@epu.ntua.gr

Course Material:

<http://academics.epu.ntua.gr>

Mission

- Learn about Modelling and Optimising Business Processes
- Understand the fundamentals of BPR
- Witness the impact of BPR in known industries and governments
- Learn how the overall business environment influences BPR
- Get hand-on experience on known modelling tools and BPR practice for simple processes
- Put IT high in your business agenda
- Think of ways to improve your business/organisation

Course Structure 1/2

| Section | Contents |
|---|--|
| 1. Introduction to BPR | Introduction, Definition, Basic Keywords, The need for BPR, Advantages, Constraining Factors, Challenges |
| 2. BPR Life Cycle Methodology | The BPR Lifecycle Methodology, Guidelines for BPR steps, Extensive Case Studies |
| 3. BPR and KPIs | KPIs Definition, Measuring KPIs, Methodologies (Common Assessment Framework (CAF), Balanced Scorecards), Case Studies |
| 4. Role of IT in BPR - Hands On | IT and BPR, Enterprise Architectures, BPM and BPR supportive Systems, Case Studies |
| 5. BPR, Model and Simulation – Theory and Practice | Process Modelling, Notations, Case Studies, Hand-On on BP Modelling and Simulation of Processes, Case Studies and Toolkits |
| 6. Business Models & Innovation for BPR | Business Models, Web 2.0, Innovation Management, How specific methods are applied in BPR, Case Studies |

Course Structure ^{2/2}

| Section | Content |
|--|---|
| 7. Governance & BPR | Total Quality Management, Risk Management, Organizational Structures, BPR Project Management |
| 8. Change Management & BPR | The Power of Habit in organizations. The role of eLearning environments. How gaming applications can facilitate BPR. |
| 9. BPR in Software Development: Applying Lean & Scrum | Introduction to Lean & Scrum methodologies, Basic principles, Relation to BPR |
| 10. Research & Practice Perspectives in BPR | Discussion on research challenges, and practice challenges for industry and governments |
| 11. BPR Demonstrations | Discussions on case studies from COCKPIT, Service Cost-GIC Demo, Governments and Industry cases |

Course Implementation

- In-class lectures
- In-class discussions
- Case Study Presentations
- Assignments to be presented in class

Course Examination

1st Option

Final exam without support from notes/textbooks
(threshold 5/10)

2nd Option

Final exam without support from notes/textbooks
(threshold 5/10)

+

In-class presentation of assignments
(up to 3 points bonus)

Bibliography

- The Internet!
- Champy (1995). Reengineering Management. Harper Business Books
- Davenport (1993). Process Innovation: Reengineering work through information technology. Harvard Business School Press
- Hammer & Champy (1993). Reengineering the Corporation: A Manifesto for Business Revolution. Harper Business Books
- Hammer & Stanton (1995). The Reengineering Revolution. Harper Collins. London
- Hansen (1993). Automating Business Process Reengineering. Prentice Hall
- Johansson, McHugh, Pendlebury & Wheeler (1993). Business Process Reengineering: BreakPoint Strategies for Market Dominance. Wiley
- *To be complemented in every lecture with specific sources!*