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| LOGO | **INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE**  EPGP/EEPITM  Course Outline |

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| Course Title | Management of IT Products and Services |
| Instructor(s) | Prof. Mohammed Shahid Abdulla |
| Course credit | 2 |
| No. of PF Sessions | 6 |
| Session Duration | 3 hr |
| Term |  |
| Year | 2013-14 |

**1. Introduction**

Management of high value technology is a course focused on the entire life cycle of the Development, Launch, Sales, Implementation, and Support of IT Products and Services. The course addresses concepts and practical aspects of product development, project management, service delivery, proprietary and open source products, TCO, pre-sales consulting, post-sales support, channel sales and project delivery models, the challenges and opportunities of cloud computing, and, business development in the private sector and public sector. The content is kept updated to reflect changes in the industry. The Indian IT industry has gained significant importance from several perspectives. The growth of India’s Government and Citizen Services as well as Industry growth has increasingly become modernized over the past two decades with a high dependency on IT systems. Therefore, IT products and services present vast opportunities and pose global challenges, as technology and usage trends evolve.

**2. Objectives and scope**

The purpose of this course is to enable students of Management to take up careers in the specialized domain of IT products and services management. The scope of the course will teach students the principles around IT product and service management, and provide extensive knowledge of technology, products, R&D, services, branding, globalization, go-to-market and IP related topics. The course is a heavily industry and practice oriented course with a stress on project management, estimation, TCO, service delivery, different support models and differences between private and public sectors. Much of the coverage is related to the real world, business and economic perspectives, with a stress on project lifecycle issues.

3 **Text Books**

1. K. Venkatesh; *Marketing of Information Technology: Concepts, Products, Services and Intellectual Property*, McGraw-Hill Education; ISBN 9780070152939/ 9780070248724.

**(b) Additional Readings :**

**Cases**

1. Case: Wipro: Building a Global B2B Brand; Chattopadhyay and Kohli.

(<http://www.wipro.com/documents/insights/insead_building_a_global_b2b_brand.pdf>)

1. Case: Product Management Case Study from casact.org

(<http://www.casact.org/education/rpm/2009/handouts/casestudy.pdf>)

1. Case: Analysis of Consulting Services, and Technical Support processes at a major IT OEM in India

**Articles**:

1. The Discipline of Product Management. (<http://www.windley.com/docs/Product%20Management.pdf>)
2. Organizing and Leading Heavyweight Development Teams

(<http://www.auburn.edu/~boultwr/8heavytm.pdf>)

1. SAP and the Online Procurement Market

(<http://gsbapps.stanford.edu/cases/documents/EC5.pdf>)

1. IDC outlines ten must-have software licensing policies

(<http://www.electronics-eetimes.com/en/idc-outlines-ten-must-have-software-licensing-policies.html?cmp_id=7&news_id=222901340>)

1. Other articles from CIO.com, Wired, Businessweek, Economist, ZDnet, GigaOm, Gartner as mentioned in session plan.

**4.** **Evaluation Scheme**

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| **Components** | **Weightage (%)** |
| Course Participation | 20% |
| End-of-Class Quizzes | 30% |
| End Term Exam. | 50% |

**5. SESSION PLAN**  (each 3hr platform session is broken into 2, equal, halves)

Session 1: Introduction to Products and Services

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| Concepts | A brief introduction to the course methodology and expectations; IT Products and Services from a Global Perspective; Today’s challenges; Alignment with market demands; Strategic intent; Solution evolution. |
| Readings | Chapter 4 of TB  Seven Steps to a Green Data Centre: <http://www.cio.com.au/article/10925/seven_steps_green_data_centre/>? Tech Trends for 2012: <http://www.channelworld.in/features/tech-trends-2012-part-1-big-data-bpm> ; China's IT Services Industry Challenges India in Outsourcing: <http://seekingalpha.com/article/225245-china-s-it-services-industry-challenges-india-in-outsourcing>; 3G - What does it mean for you: <http://www.livemint.com/2009/06/23213109/3G-what-does-it-mean-for-you.html> |

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| Concepts | Classification of IT Products Market, Infrastructure, Applications, Devices, Communications; Evolution of Products; Appliances. |
| Reading | Chapter 2 of TB |
| Supplementary Readings | Why Intel’s Processors aren’t big in Cell phones?: <http://www.wired.com/gadgetlab/2009/07/atom-processor-phones/>  Motorola has a lot riding on Android phones: <http://www.businessweek.com/magazine/content/09_31/b4141054559731.htm> |

Session 2: IT Services Market

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| Concepts | Classification of IT Services Market, Characteristics, Requirements, Differentiation; Service Sales, Estimation, Off shoring, Productized Services, India’s SWOT analysis; Impact of Cloud computing. |
| Case | Wipro: Building a Global B2B Brand; Chattopadhyay, Kohli. <http://www.wipro.com/documents/insights/insead_building_a_global_b2b_brand.pdf> |
| Readings | India - R&D Stronghold: <http://www.businessweek.com/globalbiz/content/aug2008/gb20080811_250527.htm>; How Cloud Computing is Changing the World: <http://www.businessweek.com/technology/content/aug2008/tc2008082_445669.htm> |

Session 3: IT IP and Product Management

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| Concepts | IP, Licensing, Marketing; Organization requirements, Challenges, Buying and Selling of IP. | |
| Reading | Chapter 4 of TB | |
| Supplementary Readings | Monopolies of the Mind: <http://www.economist.com/node/3376181?story_id=3376181>  Microsoft ‘offered to underwrite SCO funding’: <http://www.zdnet.co.uk/news/regulation/2006/10/09/microsoft-offered-to-underwrite-sco-funding-39283921/> | |
| Concepts | | Product Management, Team Structures, Heavyweight and Lightweight, Owned and Hybrid |
| Reading | | Chapter 3 and 5 of TB  Product Management Case Study: <http://www.casact.org/education/rpm/2009/handouts/casestudy.pdf>; The Discipline of Product Management: <http://www.windley.com/docs/Product%20Management.pdf> |
| Supplementary Reading | | Organizing and Leading Heavyweight Development Teams: <http://www.auburn.edu/~boultwr/8heavytm.pdf> |

Session 4: Sales and Marketing of Enterprise Software Products, TCO

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| Concepts | Multi-stage sales cycle; Marketing and support of Enterprise Software Products; Channel model vs Direct model |
| Readings | Handouts will be discussed related to the marketing and support of UNIX, Linux, Windows, Java, Databases, Applications and Services through the direct and channel models. |
| Supplementary Reading | SAP and the Online Procurement Market: <http://gsbapps.stanford.edu/cases/documents/EC5.pdf> |
| Concepts | Total Cost, Direct and Indirect, Initial and Recurring; Disruptions, TCO and ROI; Forecasting, Budgeting spanning Infrastructure, Applications, Databases, Services and Upgrades. |
| Reading | Chapter 5 of TB |
| Supplementary Reading | Software costs more than a year's salary for many Africans: <http://tectonic.co.za/?p=260> |

Sessions 5: Pricing of IT IP, Products and Services. The IT Market

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| Concepts | Pricing structures, Pricing in IT vs non-IT, Basis of pricing; Competing against free-for-life products and services; Pricing IP, Products, Services, Training, Documentation. |
| Reading | Chapter 6 of TB  The Cathedral and the Bazaar, Eric Raymond: <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CC4QFjAC&url=http%3A%2F%2Fgeneration.feedbooks.com%2Fbook%2F4285.pdf&ei=TMHVTuqPJIyurAfm4aS6Dg&usg=AFQjCNFRtyBBMZiiaLfrGlK8FVi85L2Tjw> |
| Supplementary Reading | IDC outlines ten must-have software licensing policies: <http://www.electronics-eetimes.com/en/idc-outlines-ten-must-have-software-licensing-policies.html?cmp_id=7&news_id=222901340> |
| Concepts | Monetizing IP; Change management, Hacks, Piracy; Grey markets; Comparison with other industries; Anti-piracy mechanisms. |
| Reading | Chapter 6 of TB |
| Supplementary Readings | Fakes!: <http://www.businessweek.com/magazine/content/05_06/b3919001_mz001.htm>; Microsoft Helps Nab $900M Piracy Ring: <http://www.huffingtonpost.com/2008/02/08/microsoft-helps-nab-900m-_n_85733.html> |

Session 6: Free and Open Software, Free Services

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| Concepts | Why software and services for free? For how long? Comparison with other industries; Freeware vs Commercial s/w lifecycles; Marketing of Freeware. |
| Reading | Chapter 7 of TB |
| Supplementary Readings | An Open Source Shot in the Arm: <http://www.economist.com/node/2724420?story_id=E1_NSNQQND>; Europe and the US philosophically divided on open source? <http://www.zdnet.co.uk/news/application-development/2005/11/08/europe-and-the-us-philosophically-divided-on-open-source-39235707/> |

(PS: My acknowledgements to Prof Jyotinath Ganguly, Adjunct Faculty, IIM Kozhikode, for his original work on developing this course outline. –Shahid.)