



TENTATIVE PROGRAM

CENTRAL WORKSHOP (Virtual) To Celebrate Erasmus Days (To coincide GCWOT'20)

02:30 pm CET - 16 October 2020
University of Malaga, Spain

Welcome & Introduction	
02:30 pm	Welcome note by Prof. Enrique Nava
02:35 pm	Presentation on CENTRAL Project by Albena Dimitrova Mihovska
Technical Sessions (Tutorials)	
03:00 pm	Workshop 1: HUMAN CENTRIC DESIGN APPROACH: A TOOL FOR CREATING SUSTAINABLE START-UPS Authors: Vikas Shinde, Ambuj Kumar, Araballa Bhutto
03:20 pm	Workshop 2: ROLE OF INSTITUTIONAL LEADERSHIP AND FACULTY FOR SUSTAINABLE DEVELOPMENT OF ENGINEERING INSTITUTES THROUGH PROJECT BASED LEARNING: KIT A CASE STUDY Authors: Rahul Bhedasaonkar, Mahesh Chavan
03:40 pm	Workshop 3: PRACTICALITY OF THE LEAN CANVAS FOR INVENTION (LCI) FOR PRODUCT DESIGN AND DEVELOPMENT (PDD) COURSE, FOR DIGITAL TECHNOLOGY FOR BUSINESS TRANSFORMATION (DTBT) PROGRAM Authors: Arabella Bhutto and Adnan Pitafi
04:00 pm	Workshop 4: ASSESSMENT OF CORE COMPETENCY IN THE RELATED ENGINEERING DISCIPLINE: PROBLEM FORMULATION AND SOLVING SKILLS AS AN EXAMPLE IN DTBT PROGRAM Authors: Enrique Nova, Mohammad Aamir, Rehan Inam Qureshi, Bhawani Shankar Chowdhry
04:20 pm	Workshop 5: STATISTICAL ANALYSIS OF INFORMATION DISSEMINATION USING MOODLE Authors: Ajit S Patil, Tanaji B Patil, Ajay B Kapase, Mahesh Chavan
04:40 pm	Workshop 6: CUSTOMIZED MOODLE DEPLOYMENT FOR REMOTE LEARNING EXCELLENCE IN DTBT PROGRAM Authors: Dr Ahsan Ansari, Dr Faheem Yar Khuhawar, DR Isma Farah Siddiqui
05:00 pm	Workshop 7: PRACTICAL EXPERIENCES ON IMPLEMENTING BUSINESS MODEL INNOVATIONS IN TECHNICAL INSTITUTES Authors: Dr. Sachin Shinde, Mr. Rajesh Gade, Mr. Amar Renke
Concluding Session	
05:20 pm	Concluding remarks by Prof. Ramjee Prasad, CGC, Aarhus University

ABSTRACT 1

HUMAN CENTRIC DESIGN APPROACH: A TOOL FOR CREATING SUSTAINABLE START-UPS

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Often, in engineering education students work on projects, with tangible outcomes as prototypes, blueprints or software. There is a greater tendency in young engineering graduates to register a start up around their capstone projects. However, it has been found that only 10% start-ups survive for the next five years. This paper essentially introspects into this issue of the sustainability of the start-ups. Authors through their experience realised that in most of the undergraduate projects students do the project work in isolation without considering user requirements into the project. Due to this, the project work done by students fails to get converted into the useful product which can withstand market competition. Naturally, start-ups are more vulnerable and have high probability of failure. Thus, user requirement analysis becomes critical component to be added into academic projects to convert them into useful products. Human centric design process considers user at centre; process in which user requirements are collected, categorised and analysed to incorporate into the product design stage. The products made considering HCD process are most likely to meet user requirements and likely to succeed in the consumer market. Thus, implementation of HCD in academia will promote entrepreneurship and sustainable start-ups. Thus, use of Human Centric Design must be promoted in academia for promotion of entrepreneurship and start-up. The purpose of this paper is to share a framework of HCD which has been evolved through our shared experience. The paper explains various stages in the HCD with greater emphasis on user requirement analysis. The paper also reports an example of user requirement analysis and its impact on the product design.

Keywords: Human Centric Design, Product Design, Start-up, User requirement analysis, case study

ABSTRACT 2

ROLE OF INSTITUTIONAL LEADERSHIP AND FACULTY FOR SUSTAINABLE DEVELOPMENT OF ENGINEERING INSTITUTES THROUGH PROJECT BASED LEARNING: KIT A CASE STUDY

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The foremost method in the Engineering education is a ‘chak and talk’ as pedagogy tool for imparting the engineering Education, though many researchers have validated its Ineffectiveness. Now a day’s various accreditation agencies expecting the change. The current Engineering education deals with the insecurity due to uncertainty in the demands and the requirements of the industry. The review of industries, accreditation criteria and review of Engineering education specifically in the developing countries alarming the change requirements in current philosophy and delivery in Engineering Education. Concern to this issue the KIT have decided to implement the Project based learning Model in Academics. In this research paper an attempt has been made to present a case study of Course level PBL Model implementation in KIT academics. It is observed that the role of Institute leadership and teachers plays a vital role in implementation and quality enhancement of the student. For this the various steps undertaken by KIT are change in mindset of the faculty, faculty training, Development of Course curriculum in PBL, its implementation, Critical assessment and Evaluation, student’s responses. It is seen that the implementation results were more promising and reflected in improvement in important process skills in engineering students such as problem solving, critical thinking, team work, communication and self directed learning. These observations are clear indication of capacity building of KIT faculty and students. These trained faculty can impart their knowledge in implantation of DTBT curricula developed by Consortium institution under the CENTRAL funded by EU.

Keywords: PBL, CENTRAL.

ABSTRACT 3

PRACTICALITY OF THE LEAN CANVAS FOR INVENTION (LCI) FOR PRODUCT DESIGN AND DEVELOPMENT (PDD) COURSE, FOR DIGITAL TECHNOLOGY FOR BUSINESS TRANSFORMATION (DTBT) PROGRAM

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The development of a new postgraduate course named Digital Technology for Business Transformation (DTBT), funded by Capacity building and Exchange towards attaining Technological Research and modernizing Academic Learning (CENTRAL) Project, European Commission is underway. The purpose of this program is to equip the graduates with the IT and business knowledge and develop their capacity for employability and entrepreneurship. One of the programs to be taught in this degree course is titled as Product Design and Development with the aim of developing new product and services and bringing ideas through strategies to implementation. In recent literature a new tool has been introduced named Lean Canvas for Invention (LCI), designed for STEM graduates to convert their ideas to inventions with potential of commercialization. This paper explores usability of the LCI for a course, “Product Design and Development (PDD)”, arguing in its favour. The inclusion of the LCI in the PDD course is proposed after teaching the LCI to the STEM project teams in an entrepreneurial university in USA. The feedback received from participants is presented in this paper through the Stages of Concern and has proved a significant role of LCI for business development. Based on these findings the proposed PDD course contents are mapped on 11 components of the LCI and proposing its fitness and inclusion. The paper concludes that in order to meet the aim of capacity building for business transformation the LCI can enrich the knowledge of graduates and broaden the intellectual mission of the CENTRAL project.

ABSTRACT 4

ASSESSMENT OF CORE COMPETENCY IN THE RELATED ENGINEERING DISCIPLINE: PROBLEM FORMULATION AND SOLVING SKILLS AS AN EXAMPLE IN DTBT PROGRAM

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The fourth industrial revolution is blurring the lines between traditional technological domains with unprecedented speed. This is expected to impact almost every industry where some industries like transportation and banking are already feeling its influence. The fast-paced change also has the potential to generate newer jobs and raise global income levels. However, for the businesses to survive and to take benefit from this revolution, they must transform to adapt to the extraordinary penetration of technology and the changes it brings. To accomplish these goals, people are required to be trained in interdisciplinary fields of technology and business, so they are empowered to transform and create new businesses. This premise is established in this paper with the help of feedback from the industry. The paper also presents a model for graduate level education where people from multidisciplinary backgrounds learn to provide interdisciplinary technological solutions for the modern businesses.

ABSTRACT 5

STATISTICAL ANALYSIS OF INFORMATION DISSEMINATION USING MOODLE

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Now a day's access to online resources landscape has been changed never before. The situation like COVID 19 pandemic forced the research community to search the various alternatives for knowledge dissemination and sharing. Students and teachers and other stake holders are bound to their homes so that the technology is the only alternative to communicate and upgrade the skills. The HEIs world wide specifically in developing countries are facing lot of problems in content creation and online delivery. The present paper deals with performance evaluation of effective utilization of Learning Management System in delivery of DTBT curriculum which is developed by a consortium of HEIs under project CENTRAL from six countries. One of the key challenges like common platform for information dissemination for total 9 partner institutions from six different countries and from different continents has been elaborated. One of the popular open source alternatives MOODLE is introduced and discussed. Awareness about this platform is quite low in teaching community that needs to be encouraged for the capacity building of the HEIs. The use and implementation of various plug-ins specifically elaborated in the paper in context to the DTBT course. This paper also presents statistical insights about dissemination of MOODLE resources amongst the faculty members. This analysis is possible because of the Project CENTRAL under the umbrella of EU.

Keywords: LMS, MOODLE, DTBT, CMS

ABSTRACT 6

CUSTOMIZED MOODLE DEPLOYMENT FOR REMOTE LEARNING EXCELLENCE IN DTBT PROGRAM

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The world, as we know is suffering currently with a COVID-19 Pandemic. This pandemic has brought a drastic change in work behavior of the entire world. Lockdown, work from home have become new normal for the society. Especially the developing world is suffering from it quite heavily as they must struggle hard to live with the new normal. With the rapid spread of COVID-19, educators all around the world have been tasked with shifting to emergency remote teaching. A move from in-person to remote classes made necessary by pressing circumstances. However, educators all around the world were completely unprepared as they have limited or no opportunities to learn how to teach with technology, including how to find, evaluate, adapt and use technology to achieve excellence in learning.

Therefore, almost every educational organization all around the world are now adopting learning management systems (LMS) to enhance their learning and training requirements. Compared to traditional classrooms, an LMS offers several advantages. The biggest one is that LMS allows learning at your own pace. Out of several types of LMS available, Moodle is the most popular Learning Management System. Moodle is an open source, free to download, offers flexible user-friendly eLearning platform and is supported by a global community. Moodle is an open source LMS designed to effectively support online education (e-learning). It is extremely flexible and customizable with a user-friendly interface that does not require any special technical knowledge or skills.

Moodle's ability to allow students to contact teacher responsible for the course. Moreover, the teacher can inform students if there is any change in program or occurrence of additional events are one of many wonderful features. Nevertheless, many such features are not enough to satisfy all learning needs in academic institutions. Therefore, additional tools or features must somehow be developed / integrated into Moodle. One important useful feature for instance is face-to-face online meetings.

Therefore, this tutorial will demonstrate everything about Moodle ranging from setting up Moodle at your organization to adding some additional tools or features to satisfy all learning needs on an academic institution.

ABSTRACT 7

PRACTICAL EXPERIENCES ON IMPLEMENTING BUSINESS MODEL INNOVATIONS IN TECHNICAL INSTITUTES

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Business model (BM) is an integral part of any business nowadays. The Business Model is a universal model which tells us “how to run any business”. This paper studies practical experiences of implementing Business Model Innovations in Technical institutes. Business model is used for local industries and students in technical institutes. Further the industries in Kolhapur and nearby Kolhapur are jobbing industries. BM varies according to product and jobbing industries. Product based Business model was demonstrated to local industries in Kolhapur and their views on the business model. The boot camp on business model canvas (BMC) and value proposition canvas was conducted for nearby institutes in start-up ignition outreach program and the batch under project based learning (PBL) activity, students responded positively for the activity. Further the product based BM was also taught to final year students of electronics and mechanical engineering, students were benefited in the entrepreneurial prospective. Finally how the bee lab and bee tool helps in downloading was enlightened to the students.

Keywords: BMC, PBL, BM, MBM, Value Preposition canvas.