Course Descriptions Master 2017-2018

Course Title	Business Intelligence for Smart Services
Course Code	EBC4221
ECTS Credits	5,0
Assessment	Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
2	30-10-2017	22-12-2017	X			X	

Level	Advanced
Coordinator	Visara Urovi For more information:v.urovi@maastrichtuniversity.nl
Language of instruction	English

Goals

After following this course, you will have gained the following competences:
• Understand the main concepts of Business Intelligence and its role in organizational decision-making and smart service innovation. You will acquire knowledge of data warehouse models and tools for visually reporting and analysing data.
• Knowledge application: You will learn to use and your knowledge on realistic cases and datasets.
• Critical Thinking: You will be provided with literature. The material also includes academic papers in which the research methodology to measure the impact of decision-making in the context of smart services is discussed.
• Research Skills: You will apply business intelligence techniques, which directly contribute to your research skills. Moreover, you will gain experience with reporting data and data mining by using two intuitive Business Intelligence tools.
• Communication and professional attitude: to realize the above learning objectives, interaction, feedback, and teamwork will be key. As a result, you will also sharpen your communication skills and improve your professional attitude.

Description

Business Intelligence for Smart Services covers a set of theories and methodologies that handle large amounts of data and information to assist decision-makers with automated processes, measurements, and analysis of business performance. This course will combine theoretical frameworks and practical approaches to explain the structural utilisation of business intelligence for smart services within organisations. The course explores the underlying technologies facilitating the integration of business intelligence and business analytics by focusing on relevant digital platforms and data systems.
This course is based on practical case studies on Business Intelligence applications and it provides the means to apply information tools used to assist decision-makers.

Literature

Mandatory:
• The 3rd edition of Ramesh Sandra, Dursun Delen, Efraim Turban Business Intelligence: A Managerial Perspective on Analytics.
• 'Information Technology Implementers' responses to user resistance: Nature and Effects' by Suzanne Rivard and Liette Lapointe
http://www.misq.org/skin/frontend/default/misq/pdf/appendices/2012/V36I3_Appendices/RivardLapointeAppendices.pdf
• 'Shackled to the Status Quo: The inhibiting Effects of Incumbent System Habit, Switching Costs, and Inertia on a new System Acceptance', Great Polites and Elena Karahanna
https://pdfs.semanticscholar.org/1618/7ce4cc7163bb8a0b4937ad4346d79a26f949.pdf
• User Cynism at ETI as described in Cynicism as user resistance in IT implementation, Lisen Selander and Ola Henfridsson http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2575.2011.00386.x/full

Recommended:
• Four Strategies for the age of Smart Services: https://hbr.org/2005/10/four-strategies-for-the-age-of-smart-services
• Datawarehouse Overview available at https://www.microsoft.com/en-us/research/wp-content/uploads/2016/02/sigrecord.pdf
• Healthcatalyst https://www.healthcatalyst.com/news/three-health-catalyst-clients-recognized-for-data-driven-quality-success-hfma/
• 'Why do employees resist knowledge management systems? An empirical study from the status quo bias and inertia perspectives' by Jia Li, Minghui Liu, Xuan Liu
https://www.researchgate.net/profile/Xuan_Liu38/publication/309609207_CHB-online_version/links/581982bf08ae1f34d24acff6.pdf
• A study on Big Data and Datawarehouse http://www.ijcttjournal.org/Volume9/number-4/IJCTT-V9P137.pdf
• Read Ambient Intelligence and Smart Environments: The state of the Art. This article can be found here https://pdfs.semanticscholar.org/f585/8c4ddd20fcf3854508d67bcd8d12d44007e1.pdf
• Read Autonomous Systems. Social, Legal and Ethical Issues. This article can be found here:
http://www.raeng.org.uk/publications/reports/autonomous-systems-report
• Read Homes and their Users: A systematic analysis and key challenges
https://core.ac.uk/download/pdf/29109288.pdf

Prerequisites	This is a mandatory course for the MSc Business Intelligence and Smart Services Program. There are no specific pre-requisites, although an understanding of database technology is helpful.
Keywords	
Teaching methods	PBL
Assessment methods	Participation / Written Exam
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation	MSc Business Intelligence and Smart Services	Compulsory courses