Business Process Analysis: from modeling to mining

Lecturer: Dario Ambroggi

Language

English

Course description and objectives

Today the success of a company depends on the good knowledge, operation and management of its business processes (marketing and sales, procurement, production, logistic etc.). Companies need to know their processes in detail and keep them under control in order to make them efficient, effective and streamlined with the company's goals. For this reason and for the constantly changing market they adopt a holistic approach in managing business processes defined as 'Business Process Management".

ARIS is the leading software in Business Process Management combining process design, process sharing, process analysis and process mining . Through ARIS, companies gain a deep understanding of their business processes and their whole enterprise structure (Enterprise Business Architecture). In this way companies are able to provide a precise picture of their functioning and can analyze the process performances (process reporting and analysis) in order to continuously improve their business. ARIS is widely used by the most important companies all around the world having more than 10.000 customers. Moreover, the leading consulting companies use the process modeling approach in order to drive different type of projects (Business transformation / Merge and Acquisition / Governance Risk & Compliance / IT Implementation) and require their consultants to have Business Process Analysis skills.

Upon successful completion of this course, students should be able to:
- design a business process architecture (a 360-degree view of company processes)
- design a detailed business process map
- perform basic analysis of a business process performance (time, resources etc.)
- identify a data structure for process mining and create simple analysis

Audience

The course is open to all Bocconi students. In particular it is targeted at:
- EMIT and Management students and graduates
- students who want to pursue a master's degree thesis in business processes modeling or business process management
- students who want to complement their organization studies with the knowledge of a software tool that puts into practice organization theory

Prerequisites

Knowledge of management fundamentals.
Note: it is essential to subscribe to www.ariscommunity.com with your student email address (domain "@unibocconi.com"). This will give to the student the possibility to download ARIS software, receive free student licenses, access to e-learning advanced material, access to videos & articles. Moreover, any community member can get support by posting inquiries related to the ARIS software on the different forums available on the ariscommunity

Duration

16 hours

Teaching mode

This course will be only taught in person. Online mode will not be provided.

Calendar

Lecture	Date	Time	Room
1	Sat 10/02/2024	09.30 – 11.00	InfoU01
2	Sat 10/02/2024	11.15 – 12.45	InfoU01
3	Sat 17/02/2024	09.30 – 11.00	InfoU01
4	Sat 17/02/2024	11.15 – 12.45	InfoU01
5	Sat 24/02/2024	09.30 – 11.00	InfoU01
6	Sat 24/02/2024	11.15 – 12.45	InfoU01

7	Sat 02/03/2024	09.30 – 11.00	InfoU01
8	Sat 02/03/2024	11.15 – 12.45	InfoU01

Syllabus of the course

Lecture	Topics	Book reference
1	**Introduction to ARIS** - BPM methodology and ARIS - Models, objects, occurrences and relationship	**Ch. 1, 3, 5, 6, 8, 11, 15**
2	**Before modelling a process…create the object libraries** - The ARIS metamodel and the object libraries (organizational chart and application portfolio) - Object Properties *Exercises*	**Ch. 4, 5, 8, 9, 11, 14**
3	**Model a process (part 1)** - Fundamentals of process modelling - EPC (Event-Driven-Process-Chain) methodolology - Process flow rules	**Ch. 7**
4	**Model a process (part 2)** - Detailed process design - Process hierarchy and Model's assignment *Exercises*	**Ch. 7, 12, 13**
5	**Model a process (part 3)** - Connecting processes together: process interfaces - Top-Down approach - End to End process navigation	**Ch. 12 and 13**
6	**Process Analysis & Simulation** - Impact Analysis - Queries - Process Simulation *Exercises*	**Ch. 10 and 16**

Lecture	Topics	Book reference
7	**Introduction to Process Mining**	**Ch. All**
	- Fundamentals of process mining	
	- The future of BPM with AI	
	- Process Data structure	
	Exercises	
8	**Built your own process mining project**	

Software used

ARIS Design Platform & ARIS Process Mining available for academic purposes trough the subscription to the ARIS community (www.ariscommunity.com) by using the Bocconi email account. The temporary license, received after subscribing to ARIS community, allows every student to install ARIS also on his/her personal computer.

Suggested bibliography

Davis R., Brabander E., *ARIS Design Platform – Getting Started with BPM*, Springer ,2007 Springer Slides, exercises, forums, blogs and articles are available to registered students on the website www.ariscommunity.com.

Available seats

This activity is limited to **110** participants. Registrations cannot be carried out once this number has been reached or after closing of the registration period.