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Course : Big Data, Data Science, Machine Learning, their impact on the enterprise

Seminar - 2d - 14h00 - Ref. BMD
Price : 2020 CHF E.T.

4,5 / 5

BEST

The digital revolution has been made possible by the explosion in the volume of data exchanged inside and outside companies. This revolution has given rise to many new uses, and we're only at the beginning. Without going into technical details, architectural aspects or data models, this seminar will give you an overview of the impact that Big Data, Data Science and Machine Learning can have on new business models.

Teaching objectives

At the end of the training, the participant will be able to:

- Discover the fundamentals of Big Data, Data Science and Machine Learning
- Evaluate how data is taking on a predominant position in new business models
- Understand the role of Data Science within the organization and information governance
- Present the challenges of using Machine Learning, Deep Learning and their organizational impacts
- Justify IS openness to the outside world, in terms of both data collection and supply

Intended audience

Company directors, financial directors, business managers, project managers, CIOs, IT managers, consultants, auditors, IT specialists.

Prerequisites

No special knowledge required.

Course schedule

PARTICIPANTS

Company directors, financial directors, business managers, project managers, CIOs, IT managers, consultants, auditors, IT specialists.

PREREQUISITES

No special knowledge required.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

1 History and context of the explosion in data-driven uses

- The digital revolution is underway... driven by an informational tsunami!
- What are the main functional and technical building blocks of information asset management?
- What is Big Data? Definition and general scope.
- A little history on the origins and explosion of Big Data.
- Big Data isn't just a fad, it's part of the digital revolution, the fuel of innovation.
- Big Data: today's main uses.
- A few key technological concepts to remember, and how to survive among all these technical acronyms.
- How can different generations of data management systems coexist?
- What does the future hold for all these solutions and uses? What is the level of maturity to date?

Storyboarding workshops

Collective reflection on the digital revolution.

2 Big Data, Data Science, Machine Learning, AI

- Creating and enhancing business capabilities with Big Data.
- The major application bricks for Big Data in the enterprise.
- From statistical analysis to Data Science: which profiles, for which benefits?
- The main applications of Artificial Intelligence.
- Artificial Intelligence in predictive analysis.
- Machine Learning.
- Learning through mass processing of collected information: Deep Learning.
- Artificial Intelligence, Machine Learning and Deep Learning: what's at stake for our companies?

Storyboarding workshops

Collective reflection on the evolution of Big Data, Data Science, Machine Learning and Artificial Intelligence.

3 Information asset management and value management

- The place of data in the digital revolution.
- The place of data in disruptive business models.
- The value of data at the heart of business challenges.
- Can you know and manage the value of your information assets?
- What is the risk of infobesity? How can you protect yourself?
- Information monetization opportunities.
- How do you establish a data culture within your company?
- The weight and cost of data quality for assets managed by the company.
- Adding value through data affects all our customers' businesses.

Case study

Case study on data value analysis.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

4 Big Data players and the associated organizational challenges

- Organization, roles and governance: new models in the age of Big Data.
- Why are organizational silos a major obstacle to data exploitation, and how can they be overcome?
- Data Science: adapting statistician profiles to new challenges.
- Specialists in new fields and their working methods.
- Data governance implementation themes.
- Data governance players.
- Those in charge of data quality.
- What are the major regulatory trends in data management, and how should they be tackled?

Demonstration
Demonstrating the importance of data governance.

5 Extended Big Data

- The company's place in its data ecosystem.
- Data at the enterprise frontier (DMP).
- Data provided by partners: social networks, etc.
- The Internet of Things (IoT) or how to make your company sensitive to new uses.
- Open Data and its contribution to data analysis: new data, enrichment, cross-referencing.
- The emergence of chatbots or the automation of customer interface functions: what impact will this have on our organizations?
- The augmented customer experience, a lever for the digital transformation of companies.
- Data supply as a new source of revenue.
- Data, fuel for business innovation.

Demonstration
Demonstrations on innovation based on Big Data, Data Science and Machine Learning.

6 Concepts to take you further and a few ideas to get you started

- What are the risks not to be taken into account when managing information assets?
- Data trends for the next three years.
- Technological solutions: Big Data and Machine Learning.
- How to launch a Big Data initiative.
- Big Data techniques: an overview.
- Data professions, functions and roles: overview and different levels of implementation.
- Why are companies embracing Big Data?

Dates and locations

REMOTE CLASS
2026 : 12 Mar., 19 May, 15 Oct., 8 Dec.