intelligent Business Transformation

Strategy, Intelligence, Architecture and Implementation

(By A. Trad, dr. for IBISTM, 2024).

RATIONALE:

The recent intelligent business global communication infrastructure has compelled modern organizations to develop new paradigms of business transactions and relationships. Although the networked new economy has resulted in many successful businesses many organizations are still making the transition to global economy where it is becoming increasingly important to be networked with other organizations. It is critical for today's business managers to be able to understand the driving principles and issues that underpin the increasingly networked organisation so as to be able to formulate coherent *intelligent Business Transformation (iBT)* Strategy, Artificial Intelligence (AI), Architecture and Implementation that take full advantage of the opportunities often on a global scale. A special attention will be given to e-Business fields (e-Marketing, e-Commerce, e-Money and other).

SYNOPSIS:

The aim of this course is to teach the students (and professionals) the basic concepts and drivers of the networked organisation in the global economy so that students develop the skills to enable them to think strategically about *iBT* related businesses and markets in an increasingly global context. In order to complete this course, students must be equipped and have basic knowledge of mentioned fields.

OBJECTIVES:

On successful completion of this course, a student will be able to:

- Understand key drivers and challenges faced by networked organisations in *iBT* transformation and integrated intelligence;
- Formulate coherent *iBT* Strategies and be able to evaluate these strategies effectively;
- Understand key issues in relation to the infrastructure and just-in-time AI for *iBT*;

- Understand the key issues in the management of business processes and webservices (and other protocols) in networked organisations;
- Understand the key strategy implementations issues for globalized organisations; and
- Research so as to gain an understanding of new and emerging technologies in terms of their business application for networked AI based organisations.
- Understand the forms and benefits of *iBT* solutions.
- Understand the Enterprise Architecture of *iBT*.
- Understand the integration *iBT* and intelligence and especially BigData in globalized institutions.

TOPICS:

Description

1. *iBT* Strategy and Valuation
2. *iBT* MIS-Enterprise Architecture, Infrastructure and Data-Centers
3. *iBT* Enterprise Processes and Webservices (SOA & Microservices)
4. *iBT* Enterprise Artificial Intelligence and Mathematical Models
5. *IBT* Qualitative and Quantitative Data-Sciences concepts
6. *Quantitative and Qualitative Methods.*
7. Data Modelling, Data Analysis and BigData implementation
8. Action Research, Machine & Deep Learning and OR.
9. *iBT* Holistic Implementation Issues
10. *iBT* Benefits, Architecture, Tools and legal aspects
11. New and emerging methodologies, AI technologies and applications

Duration: 24h.

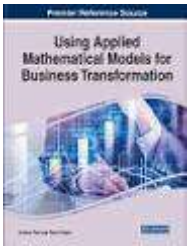
Course levels:

1. BA of Business Administration and ICT.
2. Master of Advanced Sciences.
3. MBA.
4. Doctorate of BA or ICT.

Course's Books:

1) Using a Generic Artificial Intelligence Pattern for Business Transformation (Antoine Trad, 2021).

2) Using Applied Mathematical Models for Business Transformation (Antoine Trad, 2020).



Traditional business practices have been left behind due to the increased use of data analytics and information technology in companies worldwide. This development has led to businesses implementing transformative projects that use these new technologies in their decision-making systems. Altering the entire architecture of a company is a daunting task; however, researchers are finding methods through applied mathematics that can make it easier on companies. Implementing analytical models into current business processes is vital for professionals across the globe.

Using Applied Mathematical Models for Business Transformation is an essential reference source that discusses the advancement of decision-making systems in business environments with the use of applied mathematics, algorithms, and information technology. Featuring research on topics such as decision-making systems, critical success factors, and global enterprise architecture, this book is ideally designed for project managers, financial analysts, business strategists, software engineers, technical architects, students, researchers, and educators seeking coverage on the transformation of business practices using applied mathematics and information technology.

1) Farhoomand, Ali. Managing (e)Business Transformation: A Global Perspective

"Managing (e)Business Transformation" comprises text and cases designed to show students how a business can be transformed into an internetworked enterprise where IT infrastructures are used to link customers, suppliers, partners and employees to create superior economic value. The book is written based on the premise that integrating internet technologies throughout the value chain is crucial to building and managing customer relationships. Importantly, it underscores the

centrality of basic business and economic principles within the context of a networked environment. The book builds on established business and economic theories, concepts and fundamentals to show that "e-business" will soon be synonymous with "business." The book takes a strong managerial perspective to argue that the internet is simply an enabling technology, which allows firms to build the infrastructure needed to operate in an evolving business world. The application of theory/concepts is emphasized throughout and contains a range of international case studies enhance the learning experience.

Other optional Books:

- Kollmann T., Virtuelle Marktplätze - Grundlagen, Management, Fallstudie, Verlag Vahlen 2001
- Schneider D., Schnetkamp G., E-Markets. B2B-Strategien im Electronic Commerce: Marktplätze - Fachportale - Plattformen, Gabler Verlag 2001
- Electronic Commerce a managerial Perspective. Efraim turban. Prentice Hall 2004
- Systems analysis and design. Shelly Cashman Rosenblatt. Shelly Cashman Series 2006
- Successful service operation management. Richard Metters Kathryn King-Metters Madeleine Pullman. Thomson South-Western 2004

Implementation Project:

Is optional and concerns a hands-on implementation of a project and strategy.

Requirements

1. *Define a Project and its requirements.*
2. Define the Project's *iBT* Strategy and Valuation
3. Design the Project's Enterprise Architecture
4. Implement the Project's Enterprise Processes and Webservices
5. Define the Project's Enterprise Artificial Intelligence Models
6. Determine the Project's Qualitative and/or Quantitative Data-Sciences concepts
7. Integrate Data Modelling and BigData implementation
8. Implement the solution

Duration: TBD.

Course levels:

1. Passed the course successfully.

e-Business Strategy

By A. Trad, dr.

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SYNOPSIS:

The aim of this course is to teach the students the basic concepts and drivers of the networked organisation in the global economy so that students develop the skills to enable them to think strategically about electronic business and markets in an increasingly global context. In order to complete this course, students must have Internet access.

OBJECTIVES:

On successful completion of this course, a student will be able to:

- Understand key drivers and challenges faced by networked organisations in **E-business** transformation;
- Formulate coherent E-Business Strategies and be able to evaluate these strategies effectively;
- Understand key issues in relation to the infrastructure for E-Business;
- Understand the key issues in the management of business processes in networked organisations;
- Understand the key strategy implementations issues for networked organisations; and
- Research so as to gain an understanding of new and emerging technologies in terms of their business application for networked organisations.

- Understand the forms and benefits of **e-Markets**.
- Understand the Architecture of e-Markets.
- Understand the integration e-Business and e-Markets in the Financial institutions.

TOPICS:

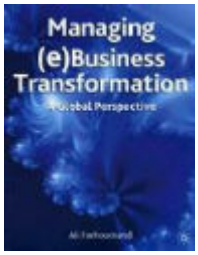
Description

1. E-Business Strategy and Valuation
2. E-Business Infrastructure
3. E-Business Process Management
4. E-Business Implementation Issues
5. E-Markets Benefits, Architecture, Tools and legal aspects
6. New and emerging technologies and applications

Course levels:

1. BA of Business Administration and ICT
2. Master of Advanced Sciences
3. MBA

Course's Book:



Farhoomand, Ali
Managing (e)Business Transformation: A Global Perspective

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