This program, based on a strategic partnership agreement between ZLC-MIT and Accenture, aims to train managers and executives in business strategy with focus on value chain transformation in a digitized network.
Modules

Module 1: Introduction

- Introduction to the Leading your Value Chain Transformation program
- Introduction to Zaragoza Logistics Center and Accenture Strategy
- Introduction to the applied project to optimize your value chain

  Duration: 3 hours

  Dr. María Jesús Sáenz, Director in Zaragoza Logistics Center and Mr. Pablo Caballero, Managing Director in Accenture Strategy

Module 2: New Strategies in Value Chains

- Supply chain strategy
  
  Duration: 3 hours

  Description:

  This course provides an overview of the entire initiative, clarifies the program rationale and introduces the basic concepts that will be developed throughout the program. In particular, we will set the basis for a strategic view of supply chain management introducing the key supply chain strategies as a function of make or buy decisions, product/service characteristics and global extension of the supply chain.

  Faculty: Dr. Davide Luzzini

- Financial impact along the value chains
  
  Duration: 6 hours

  Description:

  The finance module of this training program links supply chain management to the financial systems and objectives of the corporation. It is aimed to provide the students with the basic language and tools to assess and communicate the impact of supply chain decisions on a firm’s financial performance. It is not a finance course but rather a survey of financial topics from a supply chain perspective.

  The four key topics covered in this module include accounting fundamentals, accounting for inventory, dichotomy between accounting income and cash requirements, and financial ratio analysis. A series of data-rich business cases is used to facilitate learning. Students are encouraged to take an analytical approach to identify challenges and assess opportunities as they learn to translate between the language of finance and the language of operations.

  Faculty: Dr. Spyridon Lekkakos
Module 2: New Strategies in Value Chains (cont.)

- **Supply and purchasing management**
  
  **Duration:** 3 hours  
  
  **Description:**  
  This course explores the value creation potential of supply and purchasing management, focusing on the key managerial tools that should be adopted to manage the upstream supply chain. A series of company cases will be used to discuss the best practices in terms of purchasing strategy, processes and organisation.

  **Faculty:** Dr. Rafael Díaz

- **Lean management, operational excellence**
  
  **Duration:** 3 hours  
  
  **Description:**  
  A well-managed supply chain system complemented with a lean management system enables a more efficient and effective operation, therefore turning a company into a more profitable organization. This course explores and bridges the gap between strategic intent and issues surrounding transformation, business process reengineering, and productivity improvement. These interactions are examined through the discussion of two case studies. The sessions planned for this course examine Just-In-Time as a key building block for modern approaches to manufacturing logistics. As Lean management is a philosophy that considers a broad range of techniques intended to reduce operational waste, this class examines the linkages between production control and quality control as well as cross-functional and logistic drivers. Likewise, the sessions focus on exploring Lean management as a means to reduce the complexity of recording and tracking material flows while maximizing the integration and coordination within functional areas.

  **Faculty:** Dr. Rafael Díaz

- **Inventory management**
  
  **Duration:** 3 hours  
  
  **Description:**  
  A company’s inventory is one of the most important entries on a company’s balance sheet and inventory availability is the most important aspect of customer service. Inventory models help companies answer the questions of “how much material to order” and “when to order the material”. These models help firms determine the quantity and frequency of each order – in other words, an inventory policy – that minimize the total inventory holding costs and ordering costs subject to customer service level targets.  
  The inventory module of this training program is focused on the quantitative analysis of inventory models. The course begins with a presentation of (a) inventory decisions regarding economies of scale and (b) inventory decisions to ensure service levels (session 1). The application of these concepts is then demonstrated in practice through an online exercise (session 2).

  **Faculty:** Dr. Spyridon Lekkakos
Module 3: Optimizing Your Value Chain

- **Data analytical approach to decision making**
  
  **Duration:** 3 hours
  
  **Description:**
  
  This module is designed to help executives develop skills to employ data-driven decision models to solve real business challenges. Assuming that the firm has the required capabilities in regards to capturing and processing digital data, the focus of this course will be on the discussion of the analytical methods that allow the business managers make predictions about the future and be informed about the possible outcomes of the recommended courses of actions. That is, the course will introduce concepts and tools that will aid managers make the move from descriptive analytics to prescriptive analytics, and make best use of the pieces of information derived from the descriptive analysis of the collected/processed data. Examples and cases will be used to illustrate the potential of prescriptive analytics in guiding executives in decision making and enabling them to systematically estimate the expected impact of the actions taken on key performance indicators.
  
  **Faculty:** Dr. Mustafa Çagri Gürbüz

- **Supply chain network optimization**
  
  **Duration:** 6 hours
  
  **Description:**
  
  In this module, the participants will enhance their understanding of existing models and tools used for network decisions in supply chains. Problems like optimal location, size and number of facilities in a supply chain will be discussed and solved. In addition, the course will discuss and challenge participants to optimally dimension fleets of vehicles as well as arrange transportation flows between supply chain facilities.
  
  **Faculty:** Dr. Luca Urciuoli

- **Simulation for handling uncertainty in Supply Chain decisions**
  
  **Duration:** 3 hours
  
  **Description:**
  
  Supply chains are challenged to perform in dynamic business environments. The majority of tools at disposal of managers are static and can hardly handle uncertainty, likewise lack of visualization of processes and operations hardens the capability to understand dynamics and thereby make optimal decisions. These sessions will review the basics of simulation and thereby train and highlight how to use available tools in order to solve typical supply chain problems.
  
  **Faculty:** Dr. Luca Urciuoli
Module 4: Customer Driven Value Chain

Segmenting your supply chain
Duration: 3 hours

Description:
Supply Chain Segmentation, defined as the “dynamic alignment of customer channel demands and supply response capabilities optimized for net profitability across each segment” is known to facilitate sustainable growth whilst reducing costs. In today’s complex and fiercely competitive global business world, creating different supply chains for different segments -- as opposed to implementing “one-size-fits-all” strategies -- is key to preventing over or under servicing specific market segments. The tools to offer differentiated services and guarantee sustainable revenue growth will be discussed through the use of customer/product line/supplier/market segmentation practices from industry (e.g. Dell). The potential of such strategies in increasing revenues along with the risks involved will be briefly discussed. Special attention will be given to forward looking/responsive/flexible/customer-centric segmentation strategies in the light of the upcoming trends such as advances in data analytics, more shrewd and strategic customers, increased information transparency, mass customization capabilities, higher technology clock-speed, real time behavioral analytics capabilities, emergence of new customer segments (e.g., for “green” products)

Faculty: Dr. Mustafa Çagri Gürbüz

Omnichannel distribution

Duration: 3 hours

Description:
Consumers shop physically and digitally from everywhere, and expect the product to be delivered fast and for free. In order to meet customer expectations, companies need to re-design their distribution to deliver everything from everywhere to anywhere. To deliver in hours efficiently, retailers need to activate and offer the stock located in multiple points and be able to ship from the closer point to the customer. Retail supply Chain needs to be configured very close to the consumer, and requires the activation of multiple shipping points (distribution centers, stores, suppliers...) and the development of multiple delivery options (home delivery, convenient stores, lockers, etc.) around the customer.

Practitioner Professor: Mr. Víctor del Pozo

Module 5: Digitalizing Your Value Chain

Connectivity and visibility

Duration: 3 hours

Description:
Agility and the ability to react fast to exceptions is one of the key elements in the current Supply Chains. Globalization and larger complexities demand better information to take the right decisions on real time. In these sessions we will discuss how the leading companies are connecting to their ecosystems and using all available information to get visibility of their real time operations. We will learn how to build and use this elements to enhance the different decision layers and operations executions.

Practitioner Professor: Mr. Julio Sánchez
Module 5: Digitalizing Your Value Chain (cont.)

- **Industry 4.0**
  
  **Duration:** 3 hours
  
  **Description:**
  
  Brief description of concepts and implications on the current industrial revolution. Technological factors and operative and productive process redesign. Framework of operations and processes, impact of the different technologies on the supply/value chain elements, specific examples and deep dive on illustrative cases. Focus on 3D Printing as a technology with deep transformative potential of all related elements.
  
  Example of technologies: 3D Scanning/Kinnect, Virtual Reality, practical demos.
  
  Practical exercise: Roadmap visioning to identify possible technologies and its practical applications.
  
  **Practitioner Professor:** Mr. Julio Consola

- **Smart logistics and their impact on business decisions: IoT, drones, autonomous vehicles, RFID, etc**
  
  **Duration:** 3 hours
  
  **Description:**
  
  This session will present new trends in logistics 4.0, e.g. big data analytics, IoT, autonomous vehicles, etc. and thereby discuss with the support of business cases, how these technologies are revolutionizing logistics. Hence, how processes are being reengineered and how management in logistics companies are adapting their operative, tactical and strategic decisions.

  **Practitioner Professor:** Mr. Santiago Blasco

Module 6: Building Resilient Value Networks

- **Resilient and secure value networks**
  
  **Duration:** 6 hours
  
  **Description:**
  
  These sessions will address the typical problem of identifying and adopting optimal countermeasures in a supply chain, in order to mitigate risks. Participants will work with two cases: a postal security game, where students are challenged to solve security problems in a postal supply chains without affecting on-time deliveries. In the second case, the students will take the role of manufacturing/distributing companies in order to address security disruptions in transportation.

  **Case study: CISCO SYSTEMS, INC.: SUPPLY CHAIN RISK MANAGEMENT**
  
  The difficulties tackled after the tsunami in Japan allowed Cisco to learn how to improve their supply chain risk management strategies, starting from the design of their supply chains, until the crisis management. This case illustrates the peculiarities of Cisco’s supply chain and their internal and external vulnerabilities and exposes participants to the concept of supply chain resilience by design. It also demonstrates the evolution of the supply chain risk-management approaches at Cisco and examines the reasons behind this evolution.

  **Faculty:** Dr. Luca Urciuoli and Dr. María Jesús Sáenz
Module 6: Building Resilient Value Networks (cont.)

- **Collaboration in the supply chain**

  **Duration:** 3 hours

  **Description:**

  The new trends in Dynamic value networks are based on leveraging on collaborative practices, vertically with key stakeholders, suppliers, customers, logistics services providers, but also horizontally with competitors and non-competitors. This offers very rich opportunities for implementing synergies that can bring additional value and competitive advantage, such as cost savings, new markets, increasing efficiency and service, as well as market differentiation. The module will present the key mechanisms, benefits, drivers and barriers of sharing information and integrating operations in the value chain between different players. We will explore the mechanisms of balancing cooperation and competition in the new era as well as the current challenges of integrating vertical and horizontal collaboration. The participants will experience with all these practices in a role-play game and we will collectively discuss several experiences and business cases of successful companies that took advantage from implementing collaborative frameworks.

  **Faculty:** Dr. María Jesús Sáenz

Module 7: Applied Project to Optimize Your Value Chain

- **Duration:** 15 hours

  **Description:**

  This module will take place in different sessions along the program. Participants will be requested to work on an applied project in order to implement the tools and techniques learned on the rest of modules. This project will be determined by participants and will be an opportunity to develop innovative ideas on the value chain transformation, either from their working environment or from their entrepreneur experience.

  Each project will be mentored by a tutor that will be assigned at the beginning of the course, from either Zaragoza Logistics Center or from Accenture Strategy.

  There will be a number of deliverables to be presented to the rest of the class during the program, according to the published schedule. These deliverables will be the following ones:

  - Project deliverable 1: Scope and objectives definition
  - Project deliverable 2: Improvements identified at value chain level
  - Project deliverable 3: Business case
  - Final projects presentation

  Projects will be performed by groups of up to 4 participants.
Mr. Santiago Blasco

Mr. Santiago Blasco is a supply chain expert, featuring a Degree in Economics by the University of Zaragoza and a Master in Science in Logistics, Transport and Distribution by the University of Westminster (London). He joined DHL in 2005 and since then, among other roles (account management, business development, operations direction...), he has had different responsibilities related with innovation and development of new products and services for the diverse business units of DHL Supply Chain Iberia.

Mr. Julio Consola

Mr. Julio Consola is Senior Manager at the Supply Chain Center of Excellence of Accenture in Barcelona, with more than 25 years of experience in Manufacturing projects in different areas, with higher specialization in Production Planning and Scheduling and Manufacturing Execution Systems. He was the founder and general manager of a start-up focused in developing solutions for industrial companies in the area of Advanced Planning and Scheduling solutions for 12 years. Currently, he is responsible of the development of the 3D Printing Strategy offering. He studied Electronics Industrial Engineering at the UPC (Universitat Politècnica de Catalunya) and has collaborated as professor with different institutions as Centre CIM (Master en Direcció de la Producció) and the Master Executive en Lean Supply Chain Management. Dirección de Operaciones y Logística.

Dr. Rafael Diaz

Dr. Rafael Diaz is a Professor of Supply Chain Management at the MIT-Zaragoza International Logistics Program. He is also a Research Affiliate at the MIT Center for Transportation and Logistics. Previously, he has been a Research Associate Professor of Modeling and Simulation at Old Dominion University’s Virginia Modeling, Analysis, and Simulation Center (VMASC). He has a Ph.D. degree in the field of Modeling and Simulation focused on Operations and Supply Chains Management and an MBA degree in financial analysis and information technology from Old Dominion University. He holds a BS in Industrial Engineering from Jose Maria Vargas University, Venezuela. His research interests lie in the general area of supply chain management, logistics, production planning, lean manufacturing systems, and the intersection between operations management and information and technology. He is also interested in researching healthcare management and humanitarian logistics systems. His publications have appeared in several prestigious peer-reviewed journals including Production and Operations Management (POM), International Journal of Production Economics (IJPE), Computers and Industrial Engineering (CAIE), and Transportation Research Part A and Part E. Over the years, his research has been supported by a number of sponsors including National Institutes of Health (NIH), Virginia Department of Emergency Management (VDEM), U.S. Housing and Urban Development (HUD), and the U.S. Department of Labor (DOL).

Dr. Mustafa Çağri Gürbüz

Dr. Mustafa Çağri Gürbüz is PhD Program Director and Professor of Supply Chain Management at the MIT-Zaragoza International Logistics Program. He is also a Research Affiliate at the MIT Center for Transportation and Logistics. He completed his PhD at the Department of Management Science at the University of Washington in July 2006. He earned his BS and MS degrees from the Department of Industrial Engineering at Bilkent University, Turkey in 1999 and 2001, respectively. His main research interests are inventory and supply chain management, optimizing distribution systems, contracts, and modeling operations systems. Mr. Gurbuz has been a consultant to AT&T Wireless, AREX, and RENFE. He has also published in journals such as Management Science and Operations Research Letters.

Dr. Spyridon Lekkakos

Dr. Spyridon Lekkakos is an Assistant Professor at Zaragoza Logistics Center. He obtained his PhD in Logistics and Supply Chain Management at the MIT-Zaragoza International Logistics Program. He holds a BS in Aeronautical Engineering by the Hellenic Air Force Academy in Athens (Greece), a MS in Engineering and Management by the Massachusetts Institute of Technology in Boston, (USA) and a MBA-Total Quality Management by the University of Piraeus in Athens (Greece). His main research interest lies in the interaction of supply chain and finance. Prior to his academic career, Dr. Lekkakos worked as independent Management Consultant and Air Force Officer at the Hellenic Air Force.
Dr. Davide Luzzini

Dr. Davide Luzzini is currently Associate Professor at Zaragoza Logistics Center. Before that he worked as Associate Professor at Audencia Nantes School of Management. He got his PhD in Management, Economics, and Industrial Engineering in 2010 at Politecnico di Milano, where he later became an Assistant Professor. Since 2006, he has been conducting research, teaching, and consulting activities in the area of Purchasing & Supply Management (PSM) and Supply Chain Management (SCM). He has been also teaching general management courses such as Decision Making, Project Management, and Business Process Reengineering.

Mr. Víctor del Pozo

Mr. Víctor del Pozo is the COO of Privalia, e-commerce leading company with presence in Spain, Italy, Brasil & México, that recently has become part of the Vente Privée Group. With 20 years of experience in operations management and a strong background in Retail, he had leadership roles at CVC, CTC Ingeniería Dedicada, and DHL Supply Chain where he was vice president leading the multicusomer networks, serving manufacturers and retailers in the Consumer and Fashion sectors in Spain. Del Pozo holds a BS in Marine Engineering by UP (Universitat Politècnica de Catalunya), and he took the PDD (General Management Program) in IESE and graduated on the Supply Chain Leadership Executive Program at the University of Wisconsin-Madison. He also holds the SCProTM certification by the CSCMP (Council of Supply Chain Management Professionals).

Dr. Maria Jesús Sáenz

Dr. Maria Jesus Sáenz is currently the Director of the Zaragoza Logistics Center. She is also Professor at the MIT-Zaragoza International Logistics Program, where she teaches different courses on Supply Chain Management, Warehousing Logistics and Project Management. Additionally, she is the Director of the Behavioral SCM research group and a Research Affiliate at the MIT Center for Transportation and Logistics. She is Professor in the School of Engineering at the University of Zaragoza, where she teaches Project Management and Logistics. Previously, she was the Academic Director of the Zaragoza Logistics Center and the Director of the Spanish National Center of Excellence in Logistics. Regarding education, she is certified in Participant Centered Learning by Harvard Business School. She received Cum Laude and the Outstanding Doctoral Thesis Award for her PhD in Manufacturing and Design Engineering from the University of Zaragoza, where she previously obtained her Master’s Degree in Industrial Engineering. While studying Industrial Engineering she also studied Mathematic Sciences for three years at the same university. Dr. Saenz’s research interests centre on Inter-organizational Learning in Supply Chain Innovations and Global Supply Chain Risks. She has acted as head coordinator in several national and international research projects. She has also conducted various research and development projects for companies on Supply Chain Management innovation, like Carrefour, Clariant, DHL, Leroy Merlin, Ralph Laurent or Caterpillar, among others. Dr. Saenz is the co-author of several books on these subjects and has published a number of articles in leading international journals.

Mr. Julio Sánchez

Mr. Julio Sánchez is a Senior Manager in the Accenture Strategy Consulting practice with more than 12 years of experience based in Barcelona. Julio has been focused all his career on supply chain strategy and consultancy projects across different industries namely on Communications, Media and Technology companies. Holding a major in Computer Engineering by the Universidad Autonoma de Barcelona, he has been delivering Supply Chain Strategy, S&OP, operating model definition, Supply Chain Organizational design and shared services set-up for the headquarters of many Forbes’ List companies.

Dr. Luca Urciuoli

Dr. Luca Urciuoli is Associate Research Professor at the MIT-Zaragoza International Logistics Program. He has a MSc degree in Industrial Engineering, from Chalmers University of Technology, Gothenburg, and a PhD from the Engineering university of Lund. He has been working at the research unit of the Volvo group as a project manager developing telematics services in the areas of transport and logistics optimization, security, and uptime management and diagnostics. He also led the research of the Cross-border Research Association in Switzerland and collaborated in several consultancy and FP7 research projects, with a focus on topics like e-Customs, trade facilitation, supply chain security, waste security and postal security. Prior to moving to Zaragoza, Dr Urciuoli was a senior lecturer at the Engineering University of Borás, teaching in courses related to physical distribution, risk and resilience, and supply chain management.
### Fridays and Saturdays every other week:

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**Friday, April 7th, 2017**  
Introduction  
Supply chain strategy  

**Saturday, April 8th, 2017**  
Supply and purchasing management  
Financial impact along the value chains

**Friday, April 21st, 2017**  
Data analytical approach to decision making  
Lean management, operational excellence  

**Saturday, April 22nd, 2017**  
Inventory management  
Project deliverable 1

**Friday, May 5th, 2017**  
Financial impact along the value chains  
Supply chain network optimization  

**Saturday, May 6th, 2017**  
Supply chain network optimization  
Simulation for handling uncertainty in SC decisions

**Friday, May 19th, 2017**  
Omnichannel distribution  
Segmenting your supply chain  

**Saturday, May 20th, 2017**  
Connectivity and visibility  
Project deliverable 2

**Friday, June 2nd, 2017**  
Industry 4.0  
Smart logistics and their impact on business decisions  

**Saturday, June 3rd, 2017**  
Resilient and secure value chains networks  
Project deliverable 3

**Friday, June 16th, 2017**  
Resilient and secure value chains networks  
Collaboration in the supply chain  

**Saturday, June 17th, 2017**  
Projects Final presentation
Timetable

FRIDAYS:

Session 1: 11:30 to 13:00
15 minutes break
Session 2: 13:15 to 14:45
1 hour lunch
Session 3: 15:45 to 17:15
15 minutes break
Session 4: 17:30 to 19:00

SATURDAYS:

Session 1: 08:00 to 09:30
15 minutes break
Session 2: 09:45 to 11:15
30 minutes brunch
Session 3: 11:45 to 13:15
15 minutes break
Session 4: 13:30 to 15:00

Venue

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