



POLITECNICO
MILANO 1863

MSc in Management Engineering

Stream: Digital Business and Market Innovation

Digital Business and Market Innovation

Market needs

A series of thin, light blue vertical lines of varying heights, creating a comb-like or barcode-like decorative element that spans the width of the slide.

Digital Technologies are becoming more and more pervasive and strategic in all organizations – companies and government institutions – as a **powerful driver of innovation and renewal** at all levels (products/services, processes, business models, dataset, etc.)

Digital Business and Market Innovation

The risers– companies with the largest absolute increase in market cap

| Company name | Nationality | Industry | Change in market cap 2016-2017 (\$bn) | | Market cap 2017 (\$bn) | Market cap 2016 (\$bn) |
|--------------------------|----------------|-------------------|--|------|---------------------------|---------------------------|
| 1 Apple | United States | Technology | 149 | 25% | 754 | 604 |
| 2 Amazon.com | United States | Consumer Services | 144 | 51% | 423 | 280 |
| 3 Bank of America | United States | Financials | 97 | 69% | 236 | 140 |
| 4 JPMorgan Chase | United States | Financials | 96 | 44% | 314 | 217 |
| 5 Samsung Electronics | South Korea | Consumer Goods | 93 | 56% | 259 | 167 |
| 6 Facebook | United States | Technology | 86 | 26% | 411 | 325 |
| 7 Tencent | China | Technology | 80 | 41% | 272 | 192 |
| 8 Charter Communications | United States | Consumer Services | 78 | 345% | 101 | 23 |
| 9 Alibaba | China | Consumer Services | 73 | 38% | 269 | 196 |
| 10 Microsoft | United States | Technology | 72 | 17% | 509 | 437 |
| 11 Alphabet | United States | Technology | 62 | 12% | 579 | 518 |
| 12 Berkshire Hathaway | United States | Financials | 61 | 17% | 411 | 350 |
| 13 Citigroup | United States | Financials | 43 | 35% | 165 | 123 |
| 14 China Construction | China | Financials | 41 | 26% | 202 | 161 |
| 15 Johnson & Johnson | United States | Health Care | 39 | 13% | 338 | 298 |
| 16 HSBC | United Kingdom | Financials | 39 | 31% | 162 | 123 |
| 17 Unitedhealth Group | United States | Health Care | 35 | 29% | 158 | 123 |
| 18 Wells Fargo | United States | Financials | 34 | 14% | 279 | 245 |
| 19 TSMC | Taiwan | Technology | 31 | 24% | 161 | 130 |
| 20 Comcast | United States | Consumer Services | 29 | 19% | 178 | 149 |

Source: Pwc, 2017

Digital Business and Market Innovation

Technological sector

Technology overtakes Financials and is now the largest sector in terms of market cap (\$3,58 bn)

| Industry | Market cap 2017 (\$bn) | Number of companies 2017 | Change in market cap of current top 100 2016-2017 ⁽¹⁾ |
|----------------------|---------------------------|-----------------------------|--|
| 1 Technology | 3,582 | 12 | 20% |
| 2 Financials | 3,532 | 21 | 15% |
| 3 Consumer Goods | 2,660 | 17 | 10% (includes amazon) |
| 4 Health Care | 2,300 | 16 | 4% |
| 5 Consumer Services | 1,940 | 11 | 24% |
| 6 Oil & Gas | 1,411 | 8 | 7% |
| 7 Industrials | 876 | 7 | 5% |
| 8 Telecommunications | 859 | 5 | -1% |
| 9 Basic Materials | 278 | 3 | 20% |

Digital Business and Market Innovation

Market needs



All organizations – companies, government institutions, financial operators, consulting boutiques, etc. – need individuals able to understand and further **Digital Technologies-driven business innovation**

Digital Business and Market Innovation

The educational project – key goals and competences developed

- The educational goal of this track is to give students a **comprehensive and critical understanding of the business impact of Digital Technologies**
- The combination of theories, business cases and project works offers students a great and effective program (**action learning**)
- More precisely, students attending this stream will be able to:
 - Effectively interpret all the current trends and future scenarios regarding Digital Technologies
 - Play an active and driving role in digital innovations projects in any organization
 - Understand how to best take advantage of the infinite data and information available in the digital realm
 - Identify the business opportunities brought on by Digital Technologies and use them to create innovative startups

Digital Business and Market Innovation

The starting jobs

Digital Innovation Activist...

... there is an ample variety of opportunities in the job market for this professional figure:

- consultancy firms (both strategic and application)
- manufacturing and service-industry firms
- financial institutions
- public administration
- large global Internet companies & hi-tech companies

... with roles in

- Strategy
- Marketing
- IT management
- Innovation and project management
-

... moreover, the strong stimulus towards creative and entrepreneurial approaches creates a close relationship between this educational path and an entrepreneurial career

Stream Architecture

| Courses | Sem | ECTS | ECTS |
|---|-----|------|------|
| Digital Business Innovation + Designing Digital Business Innovation Lab | 2 | 15 | 15 |
| Multichannel Customer Strategy | 1 | 10 | 10 |
| Applied Statistics | 1 | 5 | 5 |
| Business Intelligence | 1 | 5 | |
| Digital Technology | 2 | 5 | |
| Additive Manufacturing | 1 | 5 | 5 |
| Branding and Communication | 2 | 5 | |
| Public Management | 1 | 5 | |
| Social Innovation | 1 | 5 | |
| Supply Chain and Purchasing Management | 1 | 5 | |
| Free GESLM | 1-2 | 5-10 | 5 |
| Free FREELM | 1-2 | 5-10 | 5 |
| Final Project (Thesis) | 1-2 | 15 | 15 |

Digital Business Innovation + Designing Digital Business innovation LAB

1

DIGITAL BUSINESS INNOVATION



2

DESIGNING DIGITAL BUSINESS INNOVATION LAB

1

DIGITAL BUSINESS INNOVATION

Strategic Analysis in the digital field...

What's the strategic value of digital innovation?

Let's understand it through methodologies you should be familiar with

- SWOT
- Business Portfolio Analysis
- Business Model Canvas
- [...]

** companies may change*



...applied to*



1

DIGITAL BUSINESS INNOVATION

Digital Driven Business Process Reengineering...

What's the impact of Digital Innovation on company processes?

- The relationship with the customer in the extended purchasing process (BPR)

...applied to*  **DECATHLON** **DIESEL**

- The interface processes among companies, i.e. Extended Enterprise (BPR, NPV, Payback)

** companies may change*

1

DIGITAL BUSINESS INNOVATION

Entrepreneurship

What's the role of Digital Business Innovation in entrepreneurship?

Let's understand it through

- Lean Startup methodology
- Lectures by entrepreneurs

2

DESIGNING DIGITAL BUSINESS INNOVATION LAB

The hottest topics in the digital innovation field

- eCommerce
- Big Data
- Internet of Things
- Mobile Strategy
- Supply Chain Finance
- Mobile Payments
- Mobile Enterprise

2

DESIGNING DIGITAL BUSINESS INNOVATION LAB

Project-works offered by TOP Companies* or...



** companies may change*

...Project-works to develop your digital entrepreneurial idea

