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Wastes and tools in the lean marketing strategy: an exploratory study in the Italian SMEs

Andrea Payaro, Ph.D.
Anna Rita Papa

P&P Consulting & Services

Andrea Payaro

- 1999: Degree in Management Information System at University of Padua
- 2002: Ph.D. in Business Management at University of Padua
- 2004: Post Doc. in Business Management at University of Padua
- 2004-2011: Visiting Professor at University of Padua
- Today:
  - Consultant certified by European Logistics Association
  - CEO of P&P Consulting & Services
  - Teacher of lean management at "Cattolica" University in Milan, University of Verona and United Nations General Service Center in Brindisi.
  - Marketing Researcher at *Largo Consumo*, Italian magazine of marketing and economics
- Author: Payaro, 2014. *Help! How defend yourself from marketing and its strategies.* Aras Ed.

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HELP!
HOW TO DEFEND YOURSELF
AGAINST MARKETING AND
ITS STRATEGIES
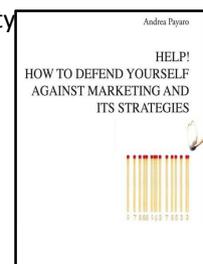
Agenda

- The lean philosophy: background and history
- The wastes in the marketing context
- The research
- The cases study
- Conclusions
- New fields of research

The lean

- What is Lean?
  - It is focused on eliminating waste in all processes
  - It is about expanding capacity by reducing costs
  - It is about understanding what is important to the customer (e.g. value)
  - It is not about eliminating people

Lean Thinking
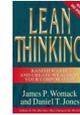
- The 5 principles of lean (Womack and Jones, 1996) :
  - Specify value from the perspective of the customer
  - Identify the value stream to expose waste
  - Create flow to reduce the costs
  - Make only what the customer want
  - Seek perfection by continuously improving quality and eliminating waste

Profitability

Marketing is a social & managerial **process** by which individuals & groups obtain what they need & want through creating, offering & exchanging products of **value** with others (Kotler, 2002).

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- In other words, the lean philosophy aim to give to the customer products or services of value, that is what the customer want.
- The company must improve quality, reduce costs and increase its profitability.

it sounds familiar !

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The History

- 1574: King Henry III watches the Venice Arsenal produce finished galley ships using continuous flow processes
- 1799: Eli Whitney perfects the concept of interchangeable parts

Venetian Galley

- 1902: Sakichi Toyoda establishes the jidoka concept
- 1910: Henry Ford moves into Highland Park, the "birthplace of lean manufacturing" with continuous flow of parts
- 1938: Just-In-Time concept established at Toyota
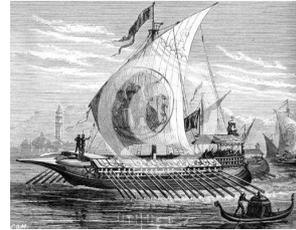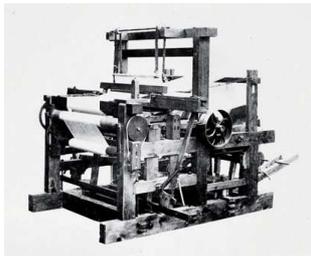
Toyoda Automatic Loom

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The History

B-24 Bomber

- 1940: Consolidated Aircraft builds one B-24 bomber per day, later improves production to one B-24 per hour
- 1949: Taiichi Ohno promoted to shop manager at Toyota, develops "elimination of waste" concept

- 1975: First English translations of TPS are drafted
- 1990: Womack and Jones publish The Machine That Changed the World, becoming the definitive text creating the term "lean", followed by Lean Thinking in 1996

Toyota AA
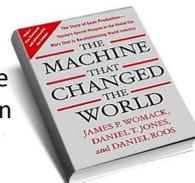
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The wastes

- Waste: Anything that does not add value to a process and that which a customer would not want to pay for, if given a choice (Ohno, 1988).
- 8 Forms of Waste
    - D efects or rework
    - O verproduction
    - W aiting
    - N on-utilization of talent
    - T ransportation or travel
    - I nventory
    - M otion
    - E xtraProcessing

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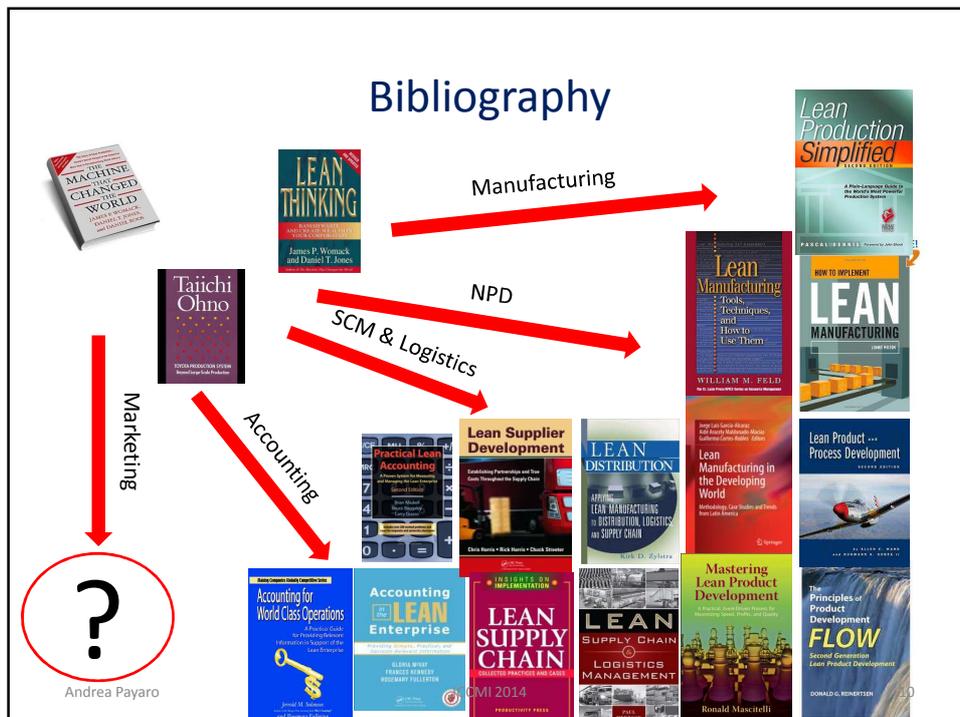
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Manufacturing

NPD

SCM & Logistics

Accounting

Marketing

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Not a scientific proof

Lean Management: 6,169 results

Lean Manufacturing: 4,628 results

Lean Marketing: 716 results

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Lean marketing?

- Some issues:
  - The Ohno's model is valid in marketing context?
  - Do they exist any tools to reduce or eliminate the wastes?
  - Can we use the relationship between wastes and tools to reduce the time to developing a new strategy?

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Wastes in Marketing

Muda by Ohno	Wastes in marketing	Example of Tools
Over-production	Information, materials or functions that exceed what is actually needed.	Quality Function Deployment
Inventory	No or incorrect demand forecasting. Excess unsold products or stockouts.	Just In Time, Demand Planning
Waiting	Service provision or distribution times exceed what the customer requires. Response times are longer than customer expectations.	Value Stream Mapping
Extra-processing	Complex procedures in delivering value to customers. Customers perceive much lower value than is actually supplied by the company.	Makigami Process Mapping
Transportation	Logistics systems - from raw materials management, to production, distribution and sale - are poorly integrated and inefficient	Collaborative Planning Forecasting Replenishment; Milk Run; Vendor Managed Inventory; Consignment Stock.
Motion	Products or services have low levels of usability and accessibility	Design For Usability; Design for Manufacturing and Assembly
Defects	Defects in products or service provision that create high costs of non-quality	Failure Mode Effect Analysis; Fishbone Analysis; 5Ws

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The research

- The sample is composed by 10 Italian SMEs (Over than 99 % of north east Italian companies are SMEs)

- All the enterprises belong to different industries.

- The companies were selected on a voluntary basis.

- At moment, we are using the proposed model in the 10 companies

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The PDCA

- **Plan)** Semi-structured interviews with Chief Executive Officers (CEOs), sale force, R&D, and customer service aim to identify the main wastes
- **Do)** Tools identification, presentation to company's functions and application
- **Check)** Two months after the start of the project, we control the results through interviews with Chief Executive Officers (CEOs), sale force, R&D, and customer service;
- **Act)** Process standardization and extension of the solution to other areas of the company.

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The cases

#	Company	Wastes	Tools	Main Results
1	Manufacture and sale of construction and mining equipment, utilities, forest machines and industrial machinery	Waiting, Over-processing	Makigami e Value stream Analysis	Reduction of time of delivery of the finished goods to the customer from 15 to 11 days. Increased level of customer satisfaction. Increase inventory control and reduction of WIP.
2	Manufacture of brazing alloys and brazing fluxes	Over-processing	Makigami	Delivery within 24 hours of your order for a selected number of items. Increased level of customer satisfaction.
3	Auto dealer (the biggest in the north east area)	Waiting, Over-processing	Makigami e value stream analysis	Reduction of the number of vehicles deposited in a pivot parking with a consequent reduction of costs. Reduction of time of delivery to the customer from 2 to 1 week through a review of the sales processes.
4	Design and manufacture of Wood stoves, fires and pellet stoves	Over-production	Quality Function Deployment	Revision of projects and development of a new product able to meet the needs of the customer. Registration of a new patent.
5	Design and manufacture of industrial humidification and ambient air control systems.	Defects	Failure Mode Effect Analysis, Fishbone Analysis	Reduction of the number of defects; Reduction of time of maintenance of components.

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The cases

#	Company	Wastes	Tools	Main Results
6	Production of air conditioning plants for large spaces.	Inventory	Consignment Stock, Milk run system	Reduction on delivery time from 25 to 22 days. Reduction of Stock outs. Reduction of defect rates.
7	Production of fillings and parts made of flexible and integral polyurethane, and PVC, chairs. Automotive spare parts.	Transportations, Inventory	Collaborative Planning Forecasting and Replenishment	Increased goods quality, reduction of WIP, increased control of inventory.
8	Fastening systems	Transportations, Inventory	Consignment stock	Increased customer satisfaction; New service developed for customers.
9	Production of chain and belt conveyor systems.	Waiting, Over-processing	Makigami	Reduction of time from the request for quotation to quotation.
10	Complete plants for bricks and roofing tiles with particular focus on preparation, storage and extrusion equipments.	Motion, Defects	Design For Manufacturing and Assembly	Reduction of components per product; Modularization of product; Reduction of cycle time. Reduction of defects in finished goods

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Cases and tools

Value Stream Mapping is used to identify the Waitings

Redudancy

TO BE
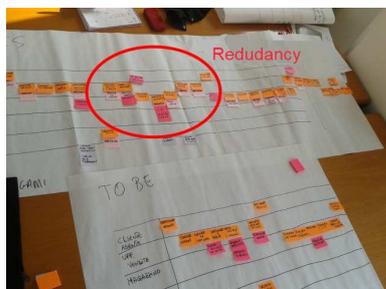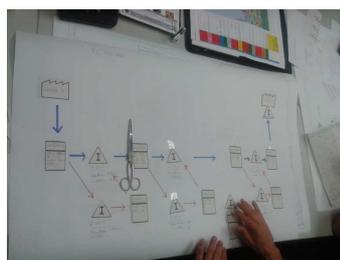
Makigami helps us to discover the over-processing from order to delivery.

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Cases and tools

The QFD is a useful tool to identify some functions that exceed what is actually needed.

LA VOCE DEL CLIENTE	PESO	MULTIFUOCO	CERAMICHE	CAPACITA' DEL SERBATOIO	ELETTRONICA	QUALITA' DI COMBUSTIONE	FACILITA' DI PULIZIA	NOSTRO PRODOTTO	CONCORRENTE 1 (MCZ)	CONCORRENTE 2 (NORDICA)	IMPROVEMENT FACTOR (BEST/OUR)	OVERALL IMPORTANCE
BELLA	10,0		9					9	8	7	1	10,0
RISCALDI	12,3	9	9					9	8	8	1	12,3
PREZZO CONTENUTO	8,8	-3	-3					4	6	5	1,5	13,3
COSTO DI MANTENIMENTO BA	8,3	-1			3			5	5	5	1	8,3
AFFIDABILE	7,3							7	7	6	1	7,3
SEMPLICE DA USARE	7,2			1				6	6	6	1	7,2
FACILE DA PULIRE / MANUTENZ	7,0		-1				9	7	6	5	1	7,0
LUNGA VITA	7,0		3					10	8	7	1	7,0
VERSATILITA'	5,0	9	3					8	8	8	1	5,0
DIMENSIONI	4,0			-3				7	6	7	1	4,0
EFFICIENZA	6,5	9						9	9	8	1	6,5
ASSISTENZA POST VENDITA	6,2	-1						9	8	6	1	6,2
LIBRETTO ISTRUZIONI FACILE	4,5	-1						6	5	5	1	4,5
RUMOROSITA'	5,8	-9						6	7	7	1,167	6,8
RATING		95	190	-5	25	0	63					

Cases and tools

With the DFMA we reduce the number of fastener systems and the material wasted during a process of extrusion

Analysis of the flow of the vehicle from the order to the delivery. Reduction of time of delivery to the customer from 2 to 1 week through a review of the sales processes.
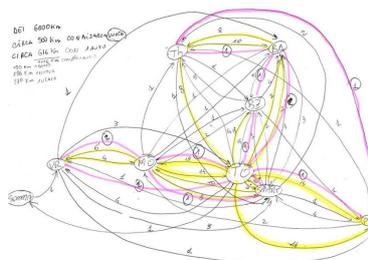
Conclusions

- Ohno's classification of wastes should be valid in marketing context.
- The companies involved in the project have a positive verdict on the model. They say :
    - The model helps to identify more quickly which tools use to improve the level of customer satisfaction;
    - The model presents some tools that the company did not know;
    - The model increases the level of knowledge of customers;
    - The model increases the level of customer satisfaction;
    - The model has a positive effect on other business functions such as warehouse and R & D.
- All ten SMEs are using this classification to identify the wastes in their marketing strategies.
- The main results are an increasing customer satisfaction, the standardization of processes and the reduction of process cycle time.

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New fields of research

- The model should be improved by a better contextualization on marketing

- The tools presented are not exhaustive because other tools can be useful to reduce some type of wastes.

- We need a set of tools to apply exhaustively the lean marketing.

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Work in Progress

- How should we measure the lean improvements?

- In collaboration with the Italian Association of Logistics and Supply Chain Management (AILOG) a teamwork is analyzing a model to identify 10 KPIs.
- The indicators must be valid for different industries.
- Some companies involved: Iveco, Komatsu, Epta Refrigeration, Campari, Swegon, Umicore, etc.
- The model will be ready at the end of 2014.

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Thanks for your attention!

Today we live the choices made in the past.
Now we can choose how to live in the future.
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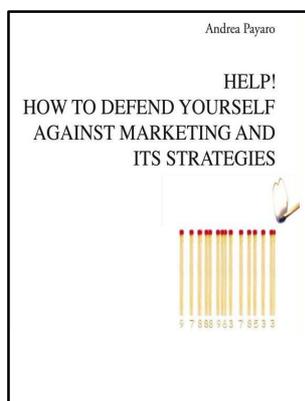
Andrea Payaro
andrea@payaro.it

Anna Rita Papa
annaritapapa@payaro.it

E-book available on line in Amazon

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