

Ingeniería de producción y gestión de operaciones

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Spauit-

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MARS
incorporated



WRIGLEY

Project Task 1

Description of general details of the firm

Wrigley -> Mars. Inc.



- 2008: Mars Inc. takes over Wrigley
- Wrigley is an independent subcompany

- Founded 1891, Chicago, by William Wrigley Jr.
- New York Stock Exchange since 1924
- Production facilities in 14 countries
- 18,000 associates around the globe
- Wrigley brands are sold in over 180 countries



- 1893 Juicy Fruit & Wrigley's Spearmint



- 1920-1924 Wrigley Building- Headquarter in Chicago





- 2006 Wrigley Science Institute



- 2008 Mars. Inc. takes over Wrigley
- Producing...





- Net Sales (in billions)

2000 \$ 2.1

2001 \$ 2.4

2002 \$ 2.7

2003 \$ 3.0

2004 \$ 3.6



Project Task 2

- Organizational chart

Overview of the Organizational chart

Global Management

President: Dushan Petrovich

-> Regional Managements

- Finance
- Sales
- Marketing
- Purchasing, IT & Administration
- PLD (Program for Leadership Development)

Project Task 3

- Strategy followed by the firm to get a competitive advantage



- First big chewing gum company in the world
- Wrigley's Spearmint and Wrigley's Juicy Fruit- first chewing gums in American market
- Wrigley's Spearmint is called to be the synonym for chewing gum at all- and until the seventees there have just been three sorts of chewing gum, all from the wrigley company
- The competitive advantage here is above all the trust people built up for an established product, which was market leader for such a long time.
- Another important strategy of Wrigley is the constant innovation and implementation of new products
- Wrigley Global Innovation center in Chicago 300 experts from different fields and countries work together
- Wrigley completes their range of products with a big diversity of candies
- Quality, know-how and trust

Project Task 4

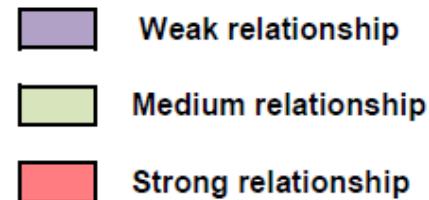
- House of Quality



House of Quality (Quality Function Deployment)

QFD

House of Quality



Project Task 5

- Applying the ideas of Cem Kaner's Quality Cost Analysis on the firm



Quality Cost Analysis of “Wrigley Spearmint 2.0 New generation”

- The objective of quality cost analysis is to minimize the total cost of quality across the life of a product. => reduce the quality costs
- Therefore you have to know the Quality costs.
Quality costs are the costs you have to find, prevent and correct failures in your work of producing a product.
- **Total Cost of Quality:** The sum of costs: Prevention + Appraisal + Internal Failure + External Failure



- Wrigley Spearmint 2.0 New generation-

Prevention Costs:

- Adequate employee selection (starts in the Wrigley Research center)
- Staff training
- Requirements analysis
- Recipe experiment
- Early prototyping
- Market situation analysis
- Clear specification
- Accurate internal documentation
- Evaluation of the reliability of development tools or of other potential components of the product (Evaluation of the Wrigley Research center)

Appraisal Costs:

- Testing (in the labor, customers prospects, simulated supermarket setting test, ...)
- Customers opinion survey (also about the Package, Advertisements, ...)
- Design reviews
- Raw material testing (sensory, chemical, substitution experiments, ...)



- **Internal Failure Costs:**

- Bug-fixes
- Wasted tester time
- Wasted research time
- Wasted marketer time
- Wasted advertisements in case of delayed release
- Costs of late shipment (lost sales)
- Opportunity cost of late shipment (lost time for other projects)

- **External Failure Costs:**

- Investigation of customer complaints
- Recalls
- Testing of interim bug fix releases
- Shipping of renewed product
- PR work to soften drafts of harsh reviews
- Lost sales
- Lost customer goodwill
- Discounts to resellers to encourage them to keep selling the product
- Warranty costs
- Costs on lawyers, ...
- Penalties (food law, ...)

- **External Failure Costs for the Customer:**

- Frustrated employees quit
- Cost of replacing the product
- Injury / Death (contamination)
- Frustration

Project Task 6

- Specific applications at Wrigley



Internet:

- Homepages with Information about Chewing gum itself and its production, Information about the company's product line and basic information about the Wrigley itself
- Advertisements at other Homepages
- YouTube- Advertisements
- Facebook groups
- Wikipedia

...

Intranet: most likely**CIM – Computer Integrated Manufacturing:**

- CAD- Computer Aided Design (for package design, 3D Modelling,...)
- CAM- Computer Aided Manufacturing
- Robots

- AGVs- Automatic Guided Vehicles

Project Task 7

- Using Tools for Process Design

Project Task 7

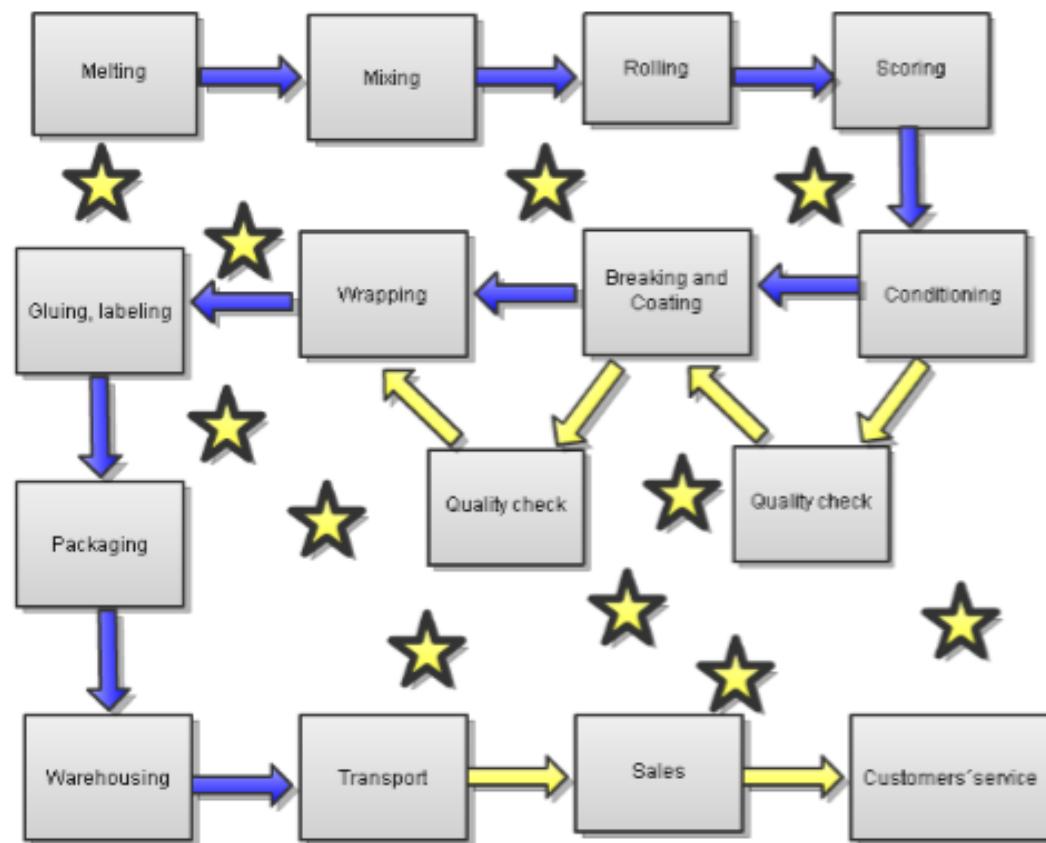
- How the customer's service is nowadays:

The customer can contact with the company only by email or by fax – only these information are available on the website. In case of need of further information, the customer has to wait for the response from the company with the additional contact information.

- How we would improve the customer's service:

We would suggest introducing following strategies which would make the customer feeling that his/her question or complain is considered and to avoid this feeling that the huge international concern is not caring about single consumers – every one must have the right to express its opinion about the product. This channel company-customer can be improved by:

- Website with online chat
- Feedback
- Immediate response
- Telephone number



→ Material flow

→ Information flow

Thank you!

