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Use of NPD Tools in Traditional Food Products

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Contents

1. TRAFFON Presentation
2. SPI Presentation
3. Traditional Food & New Product Development Tools
4. Determinants of success of a new product
5. New product development: the main stages
6. Survey of market needs / requirements
7. Case studies in traditional food
Contents

1. TRAFFON Presentation
2. SPI Presentation
3. Traditional Food & New Product Development Tools
4. Determinants of success of a new product
5. New product development: the main stages
6. Survey of market needs / requirements
7. Case studies in traditional food
TRAFFON - General Information

- **Name:** TRAFOON
- **“Traditional Food Network to improve the transfer of knowledge for innovation”**
- **Period:** 01.11.2013 – 31.10.2016
- **Project duration:** 36 months
- **Consortium:** 29 partners from 14 European countries

**Scope:** TRAFOON addressed SMEs from the sector of four product groups, which play a key role in the value chain of traditional food:

- Grain
- Vegetables & Mushrooms
- Sweet Fruits & Olives
- Fish
TRAFFON - Multi-component approach

• TRAFFON was a network of research institutions, technology transfer agencies and SME associations with the aim to secure the knowledge transfer and implementation of already existing innovations regarding traditional foods to SMEs in order to establish sustainable and innovative processes and technologies thus improving the quality, safety and environmental performance of traditional food products.

• This was achieved via a multi-component approach
TRAFOON – Consortium overview

29 partners from 14 European countries: Austria, Belgium, Czech Republic, France, Germany, Ireland, Italy, the Netherlands, Poland, Portugal, Serbia, Slovenia, Spain and Switzerland

- 9 Universities
- 9 Research institutions
- 5 Technology transfer agencies
- 5 SMEs associations
- 1 European food industry association
TRAFFON - Partners
TRAFOON - Book

**Consumer-oriented** book containing information about traditional dishes from all TRAFOON food categories.

The book includes short stories or descriptions and recipes, as a measure of **raising awareness** and **promoting** those products.
TRAFOON - Info Shop

Available in English, German and French at

www.trafoon.eu
TRAFFON - Preserving knowledge

Although TRAFOON has come to a close, it did not stop...

In order to preserve gained knowledge throughout the TRAFOON project, it is being transferred and applied to new projects.

This is being made by extending the network with partners from industry and academia that share our vision.
1. TRAFFON Presentation
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4. Determinants of success of a new product
5. New product development: the main stages
6. Survey of market needs / requirements
7. Case studies in traditional food
SPI (b. 1997) is an international consultancy firm with offices in Portugal, Spain, the United States, China, Brussels and operations in a wide range of countries.

SPI’s mission is the management of projects which foster innovation, entrepreneurship, promote international opportunities and strategic partnerships.
The SPI Group’s structure is composed of three main pillars that enable us to provide a unique portfolio of activities and services:
Contents

1. TRAFFON Presentation
2. SPI Presentation
3. Traditional Food & New Product Development Tools
4. Determinants of success of a new product
5. New product development: the main stages
6. Survey of market needs / requirements
7. Case studies in traditional food
Traditional Food & New Product Development Tools

• NPD and traditional food are compatible?

Focus on complete offer

Understand clients/consumer needs

When and how will the consumer use my product?

Don’t forget the service!
Contents

1. TRAFFON Presentation
2. SPI Presentation
3. Traditional Food & New Product Development Tools
4. Determinants of success of a new product
5. New product development: the main stages
6. Survey of market needs / requirements
7. Case studies in traditional food
Determinants of success of a new product

Generate good ideas

The ideas may have several origins:

- Suggestions / complaints of clients and workers;
- Identification of new needs;
- Production Spin-outs;
- Identification of new technologies, processes, design and packaging;
- Identification of new opportunities and business models;
- Utilization of creativity tools.
Determinants of success of a new product

Generate good ideas

The following initiatives should be applied:

• Idea generation campaigns (brainstorming, programmed pauses, periodical meetings, idea contests, open innovation, etc);
• Communication (the criteria and results of idea campaigns should be widely communicated inside the company to foster an innovation culture);
• Promotion of honest customer feedback.
Determinants of success of a new product

Focus on client needs

- Center all development on consumer’s needs and expectations;
- Minimize project team subjective and involuntary distorted views;
- Translation from consumer’s requirements to the product specifications is the basis of the success of new products.
Determinants of success of a new product

Focus on client needs

- Consumer sphere
  - Consumer’s needs

- Functional sphere
  - Functional requirements

- Physical sphere
  - Product specification

- Process sphere
  - Process specifications
Determinants of success of a new product

Focus on client needs

- How the customer has explained...
- How the project leader understood...
- How the analyst designed it...
- How the programmer built...
- How the business consultant described...
- How the project was documented...
- What features were installed...
- What the customer paid...
- How was maintained...
- What the customer really wanted...
Determinants of success of a new product

Team/partners

- Team leader
- Team core
- Enlarged team
- Financial department
- Legal department
- Others
- Marketing
- Production
- Design
- R&D
- Suppliers
- Clients
- Sales
- Accounting
- Workers

European Food-STA Webinar
Determinants of success of a new product

Process Management

- Project planning (project description, team + resources, milestones, monitoring process, expected results)
- Documentation - allows clarity of decision processes and prevents information loss;
- QFD (Quality Function Deployment) matrix - use highly recommend.
Determinants of success of a new product

Process Management - QFD (Quality Function Deployment) matrix

- Components of the QFD Model
  - Correlation Matrix
    - Hows (Technical Measures)
  - Customer Importance
    - Relationship Matrix
    - Target Values
  - Whats (Customer Requirements)
    - Technical Competitive Assessment
      - Absolute Score
      - Relative Score
  - Customer Competitive Assessment (Rating)
Determinants of success of a new product

Risk management

The rate of failure in the development of new products lies in the range of 30% to 40%. At its source are problems that arise in the process of development of new products, such as:

- Adoption of ineffective processes;
- Fragile bets at early stages (time, people and other resources);
- Propagation of problems during the successive stages of design (and later production);
Determinants of success of a new product

Risk management

Some recommendations:

• Use risk calculation tools – FMEA - Failure Mode and Effect Analisys
• Recurrent cost evaluation (development and production):
  – allows project halt before substantial losses incur
• Project planning and incentives to NPD and RDI:
  – Increase focus on pluriannual planning of NPD and RDI initiatives.
• Other risk minimization strategies:
  – parallel project launch and quick prototyping/ transition between projects; risk sharing / partnerships; greater incorporation of knowledge to increase barriers of entry to other companies
Contents

1. TRAFFON Presentation
2. SPI Presentation
3. Traditional Food & New Product Development Tools
4. Determinants of success of a new product
5. New product development: the main stages
6. Survey of market needs / requirements
7. Case studies in traditional food
# New product development: the main stages

<table>
<thead>
<tr>
<th>Phase 0 – IDENTIFICATION AND SELECTION OF OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identification</strong></td>
</tr>
<tr>
<td>• Costumer and employees surveys evaluation</td>
</tr>
<tr>
<td>• Market trends analysis</td>
</tr>
<tr>
<td>• Sector analysis</td>
</tr>
<tr>
<td>• The product and company’s market</td>
</tr>
<tr>
<td><strong>Selection</strong></td>
</tr>
<tr>
<td>• Multi-pickup method (MPM)</td>
</tr>
<tr>
<td>• Matrix Criteria</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 1 – IDENTIFICATION OF LATENT CUSTOMER NEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market definition</strong></td>
</tr>
<tr>
<td><strong>Gather raw data from customers</strong></td>
</tr>
<tr>
<td>• Development of interview scripts</td>
</tr>
<tr>
<td>• Eliciting customer needs</td>
</tr>
<tr>
<td>• Interpret raw data in terms of customers needs/requirements</td>
</tr>
<tr>
<td>• Requirements analysis – Kano questionnaires</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2 – CONCEPTS/IDEAS GENERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creative thinking (IV)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3 – CONCEPTS/IDEAS SELECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multi-pickup method (MPM)</strong></td>
</tr>
<tr>
<td><strong>Matrix Criteria</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 4 – PRODUCT TECHNICAL FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product design – House of quality</strong></td>
</tr>
<tr>
<td><strong>Validation</strong></td>
</tr>
</tbody>
</table>
Contents

1. TRAFFON Presentation
2. SPI Presentation
3. Traditional Food & New Product Development Tools
4. Determinants of success of a new product
5. New product development: the main stages
6. Survey of market needs / requirements
7. Case studies in traditional food
Survey of market needs / requirements

The best and most effective way of surveying market needs and requirements is to use interviews!

Identification of groups of people to interview:

• Direct customers
• End users/consumers
• Different categories: current customers, potential and former clients; satisfied or dissatisfied customers, etc.; Different positions regarding market trends;
• Opinion makers/stakeholders: People connected to the sector or to a parallel one whose opinion hits customers/market;
Survey of market needs / requirements

Gather raw data from customers

➢ Development of interview scripts - one to each type of customers

- Which are the problems that you have experienced...
- Problems or weak points (past)
- What do you think when you chose...
- Current considerations (present)
- Possible improvements (future)
- Which new features...
- Ideal product specifications
- What comes to your mind...
- How would you like...
- Images
Survey of market needs / requirements

Gather raw data from customers

- Individual interview
- Total freedom of expression of wishes
- Impartiality of the interviewer
Survey of market needs / requirements

Gather raw data from customers

➢ Eliciting customer needs

Extract from them the "voice of customer", expressing their manifest or latent needs or desires.
Survey of market needs / requirements

**Gather raw data from customers**

- Interpret raw data in terms of customers needs:

<table>
<thead>
<tr>
<th>Voices</th>
<th>Images</th>
<th>Key-points</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>To learn something</td>
<td>education</td>
<td>education</td>
<td>Having information</td>
</tr>
<tr>
<td>Age appropriate</td>
<td>age</td>
<td>age</td>
<td>Being age appropriate</td>
</tr>
<tr>
<td>Being in a group</td>
<td>group</td>
<td>socialize</td>
<td>Having groups</td>
</tr>
<tr>
<td>The marriage of food and wine</td>
<td>education</td>
<td>food and wine</td>
<td>Pre knowledge</td>
</tr>
<tr>
<td>Visit a new country</td>
<td>travelling</td>
<td>discovering</td>
<td>Having cultural content</td>
</tr>
</tbody>
</table>
Survey of market needs / requirements

10 interviews tend to yield 80% of the overall set of requirements expressed!

Typical curve of the percentage of requirements expressed in terms of the number of interviews conducted.
Survey of market needs / requirements

Gather raw data from customers

- Requirements qualitative analysis

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Unimportant (1)</th>
<th>Important (3)</th>
<th>Very important (9)</th>
<th>Score</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having information</td>
<td></td>
<td>8</td>
<td>4</td>
<td>60</td>
<td>5</td>
</tr>
<tr>
<td>Being age appropriate</td>
<td></td>
<td>4</td>
<td>10</td>
<td>102</td>
<td>1</td>
</tr>
<tr>
<td>Having groups</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>61</td>
<td>4</td>
</tr>
<tr>
<td>Pre knowledge</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>71</td>
<td>3</td>
</tr>
<tr>
<td>Having cultural content</td>
<td>7</td>
<td></td>
<td>6</td>
<td>75</td>
<td>2</td>
</tr>
</tbody>
</table>
Survey of market needs / requirements

Gather raw data from customers

➢ Requirements qualitative analysis – Kano questionnaire

The respondents will be asked about how they would feel in the absence and presence of each requirement (functional and dysfunctional analysis):

- **If the product ... how would you feel?**
  - Like it (1)
  - It must be (2)
  - Neutral (3)
  - Tolerable (4)
  - Don't like (5)

- **If the product don't ..., how would you feel?**
  - Like it (1)
  - It must be (2)
  - Neutral (3)
  - Tolerable (4)
  - Don't like (5)
Gather raw data from customers

➢ Requirements qualitative analysis – Kano questionnaire analysis

The purpose of using Kano questionnaires consists in classifying each of the requirements of the customers within one of the following five possible categories: Mandatory, One-dimensional, Attractive, Indifferent or Questionable.
Survey of market needs / requirements

- Obey the mandatory requirements
- Be competitive in dimensional requirements
- "Enchant" the customer with attractive requirements
Contents

1. TRAFFON Presentation
2. SPI Presentation
3. Traditional Food & New Product Development Tools
4. Determinants of success of a new product
5. New product development: the main stages
6. Survey of market needs / requirements
7. Case studies in traditional food
Case studies in traditional foods

**Determinant: Generate good product ideas**

*meia.dúzia® – Inspiration for new ideas*

meia.dúzia® is a Portuguese brand that produces jams and biscuits with traditional Portuguese flavour. The jams are presented in an innovative packaging – tube.

The inspiration for the creation of the tubes came from the promoters’ interest on painting - a completely different universe from the agro-food sector - the creative process is essential in the development of ideas that foster different and innovative concepts.
Case studies in traditional foods

Determinant: Generate good product ideas

meia.dúzia® – Inspiration for new ideas

meia.dúzia® created new concepts to experience Portuguese flavours, with unique combinations of national products.

Taste experiences (e.g.):
• Strawberry with Port wine and chili
• Orange and Madeira wine

www.meiaduzia.pt/
Case studies in traditional foods

Determinant: Focus on client needs

Frutaformas – reshape fruit

Frutaformas® is dedicated to dehydrate fruit through a natural process. Frutaformas products are dehydrated fruit snacks made from Certificate of Origin fruits. Products are marketed in different shapes: slices, lingots and hearts, and are available in two varieties: gourmet and healthy. Targeted at younger audiences, there is also the “Little Fruit” product, which presents the fruit in a “healthy and fun way” to children.
Case studies in traditional foods

Determinant: Focus on client needs

*Frutaformas – reshape fruit*

The focus is to develop products without artificial additives, nutritionally balanced and fit to be consumed safely by all consumer groups (including celiacs and diabetics).

- Healthy and attractive alternative to sugary snacks.
- Artisanal production, without additives or preservatives, no added sugar or oils.
- Certified fruit with designation of origin

[www.frutaformas.pt](http://www.frutaformas.pt)
Case studies in traditional foods

Determinant: Team

*Nono Sentido – Food and Wellness*

Nono Sentido markets noble Portuguese products, boosting their value and redirecting them to the international market.

Chocolate Truffles with Extra Virgin Olive Oil & Gold
Case studies in traditional foods

Determinant: Team

Nono Sentido – Food and Wellness

The company is committed to developing distinctive products, in partnership with universities and scientific institutions that complement the traditional Portuguese portfolio of products.

The research work led to the development of products using an Olive Oil “matrix”: Olives and the Algae of the Atlantic coast.

www.nonosentido.com
Case studies in traditional foods

Determinant: Process management

TerriuS – adding value to protected designation of origin products

TerriuS is an innovative project in the agro-food sector, based in local partnerships of trust and fair trade with small producers and industries in the region.

TerriuS commercializes dehydrated, milled, canned, processed and fresh products, using local raw materials (Marvão Region).
Case studies in traditional foods

Determinant: Process management

Terrius – adding value to protected designation of origin products

• Product development is based on successive experimentation and evolution. Feedback is collected from customers, importers, service providers, and other stakeholders.

• Commitment to service innovation, not just product: the company’s link to gastronomic tourism (itineraries with food tasting) adds value and an emotional connection to the product.
Determinant: Risk management

**AlgaPlus – Introduction of algae**

AlgaPlus is a small Portuguese company devoted to the research and production of seaweed and seaweed-based products. After market research, found ancient use of algae in Portuguese diet and came up with the idea of incorporating seaweed into typical Portuguese meals like cod fish/sardines.

Pre-cooked meal of cod with algae
Case studies in traditional foods

Determinant: Risk management

AlgaPlus – Introduction of algae

The strategy also includes partnerships with other companies to use AlgaPlus algae to enrich their customary products. This way it is possible to promote the AlgaPlus brand, associating the quality assurance transmitted by the partner brand (reducing risk).
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trafoon
Traditional Food Network to improve the transfer of knowledge for innovation

Questions?

www.spi.pt
Thank you for your attention!

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