



Funded by the European Union's  
Seventh Framework Programme

*European*  
**FooD-STa**  
**WEBINAR**



# trafoon

*Traditional Food Network to improve the transfer of knowledge for innovation*

## Use of NPD Tools in Traditional Food Products

Susana Seabra

Miguel Carnide

16-03-2017

*European*  
**FooD-STa**  
**WEBINAR**



# 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

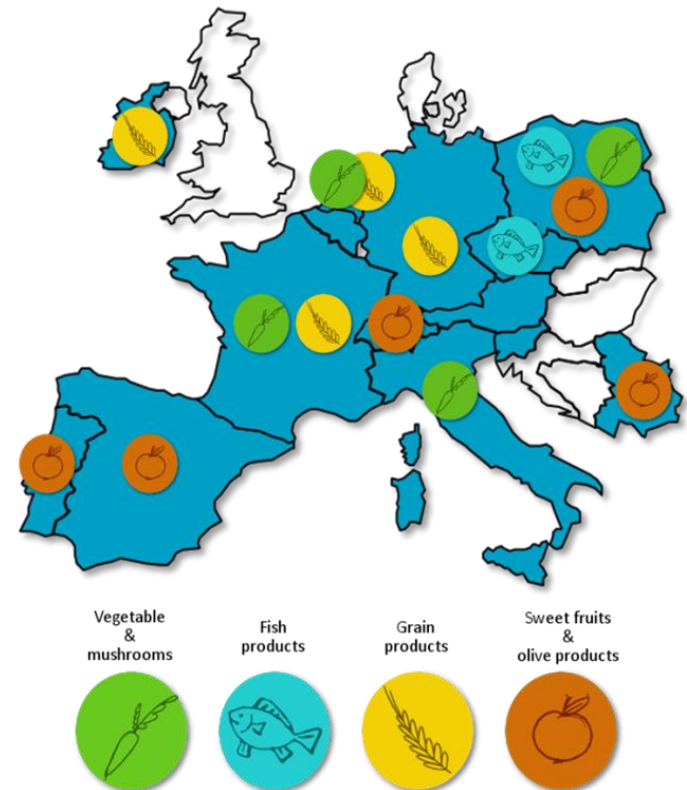
- **TRAFOON** was a network of **research institutions**, **technology transfer agencies** and **SME associations** with the aim to secure the **knowledge transfer** and implementation of already existing innovations regarding traditional foods to SMEs in order to establish sustainable and innovative 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 TRAF00N 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](http://www.trafoon.eu)

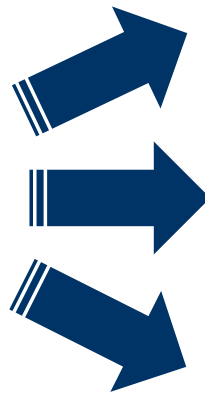


# TRAFFON - Preserving knowledge

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.



European  
FooD-STA



ISEKI Food Association

**New projects**

European  
FooD-STA  
WEBINAR



# 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

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:



**INNOVATION**



**SCIENCE AND TECHNOLOGY**



**TERRITORY**

For more information: [www.spi.pt](http://www.spi.pt)

# 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

---

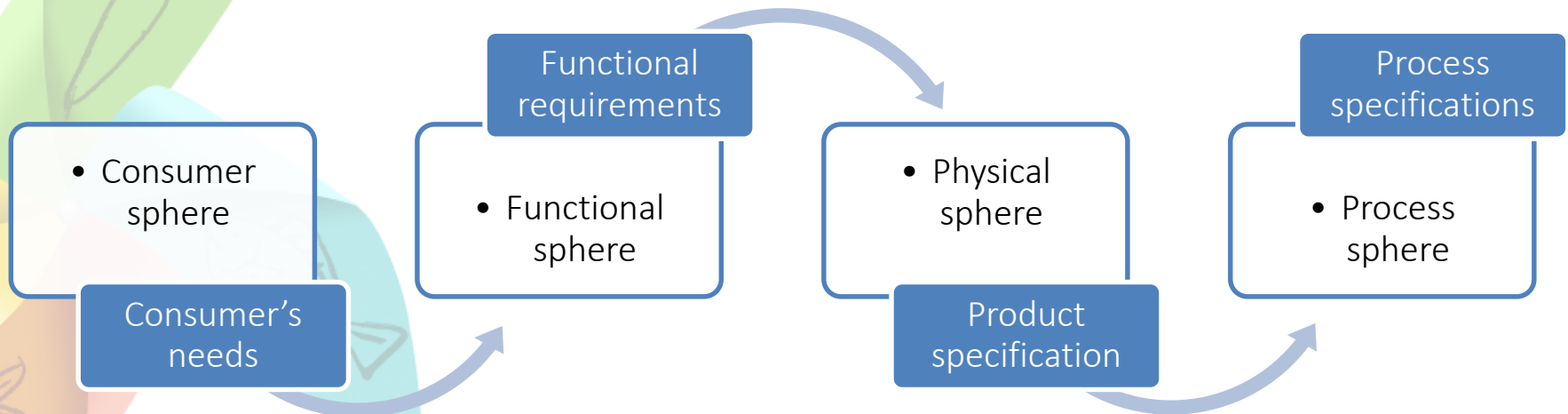


## Focus on client needs

- 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



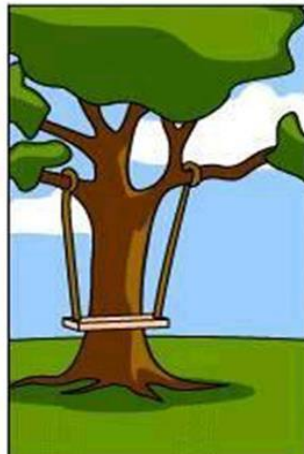


# Determinants of success of a new product

## Focus on client needs



How the customer has explained...



How the project leader understood...



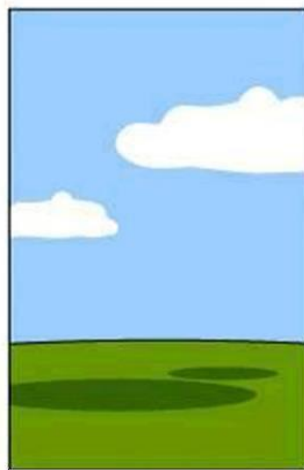
How the analyst designed it...



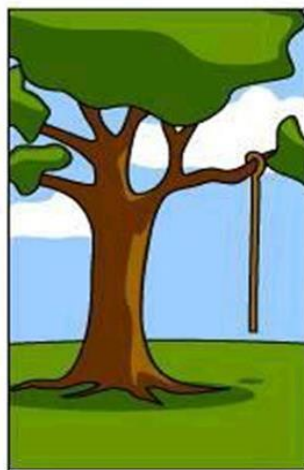
How the programmer built...



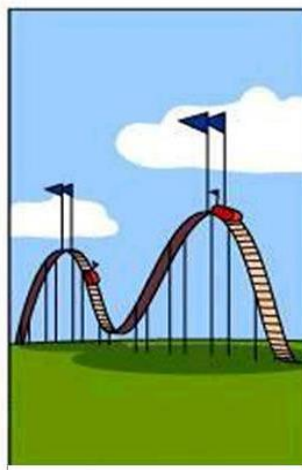
How the business consultant described...



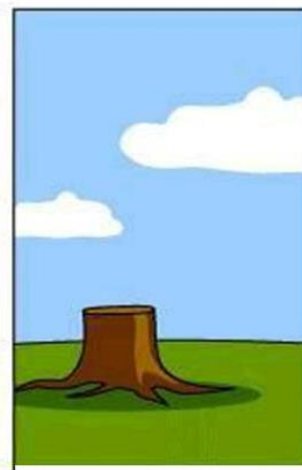
How the project was documented...



What features were installed...



What the customer paid...



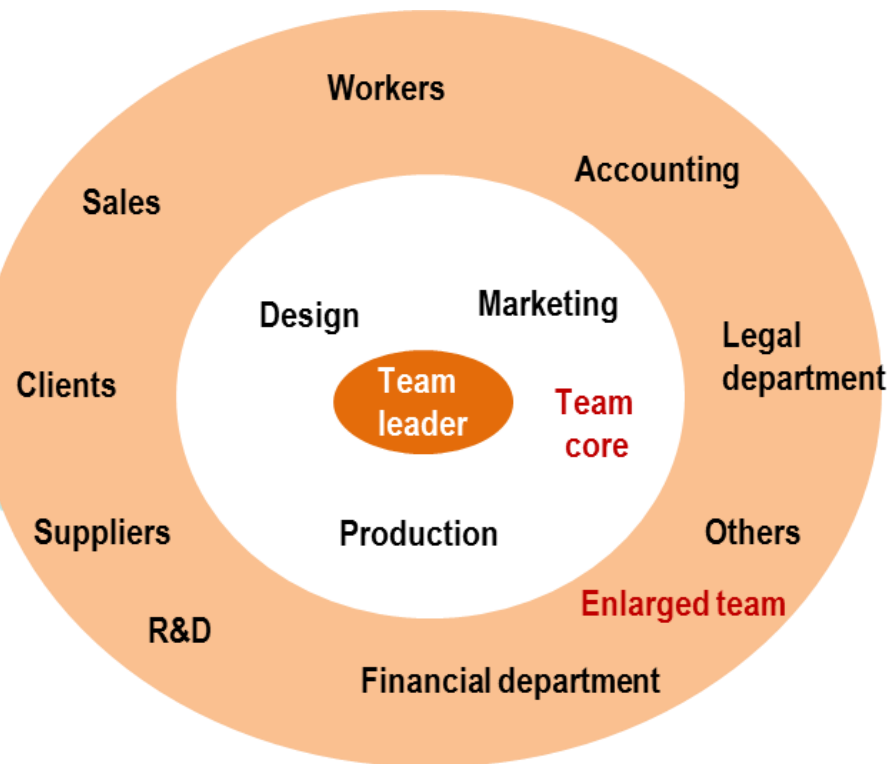
How was maintained...



What the customer really wanted...

# Determinants of success of a new product

## Team/partners



# Determinants of success of a new product

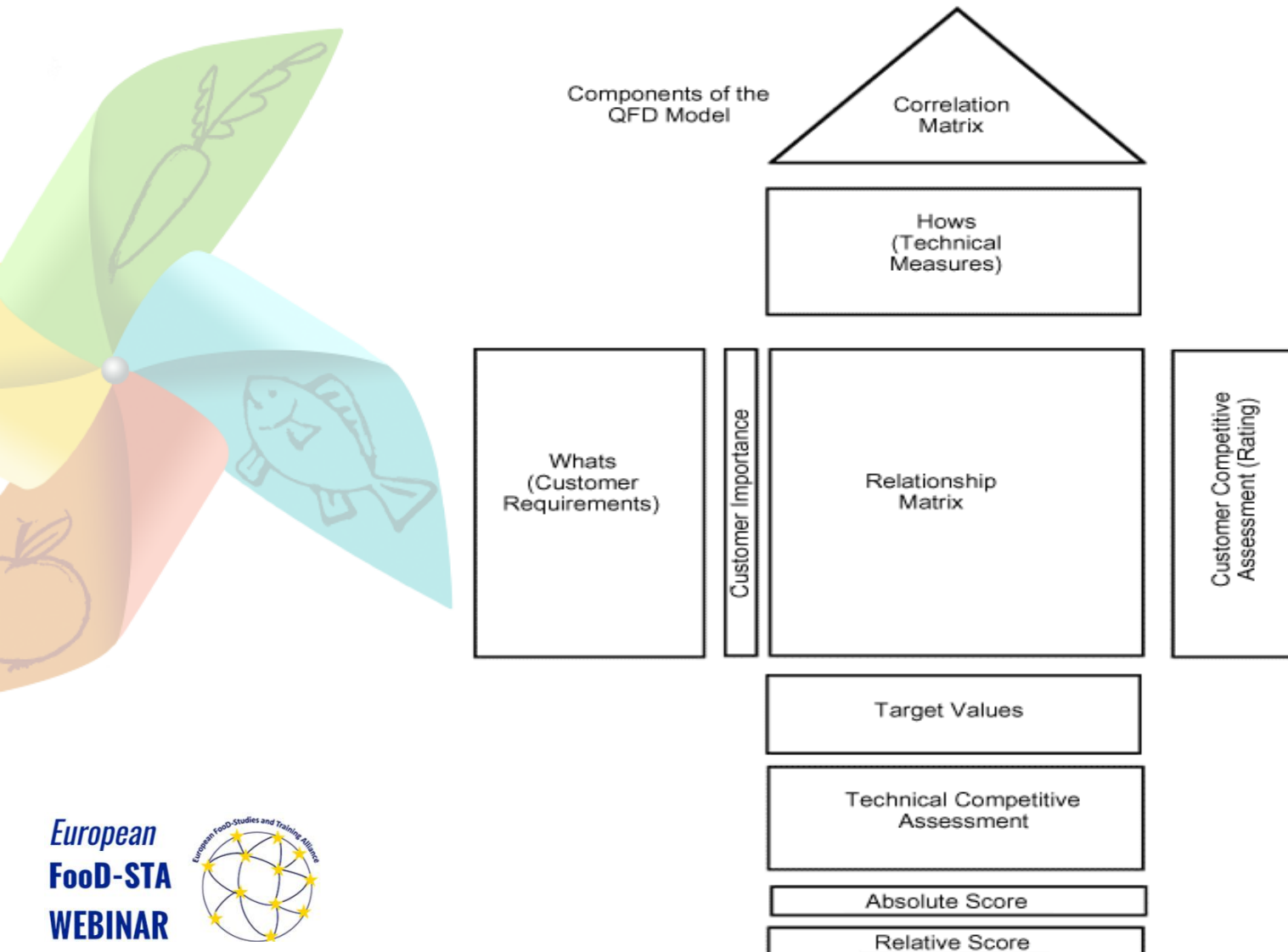
---

## 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



# 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 Analysis
- 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

## Phase 0 – IDENTIFICATION AND SELECTION OF OPPORTUNITIES

### Identification

- Customer and employees surveys evaluation
- Market trends analysis
- Sector analysis
- The product and company's market

### Selection

- Multi-pickup method (MPM)
- Matrix Criteria

## Phase 1 – IDENTIFICATION OF LATENT CUSTOMER NEEDS

### Market definition

### Gather raw data from customers

- Development of interview scripts
- Eliciting customer needs
- Interpret raw data in terms of customers needs/requirements
- Requirements analysis – Kano questionnaires

## Phase 2 – CONCEPTS/IDEAS GENERATION

### Creative thinking (IV)

## Phase 3 – CONCEPTS/IDEAS SELECTION

### Multi-pickup method (MPM)

### Matrix Criteria

## Phase 4 – PRODUCT TECHNICAL FEATURES

### Product design – House of quality

### Validation

# 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!

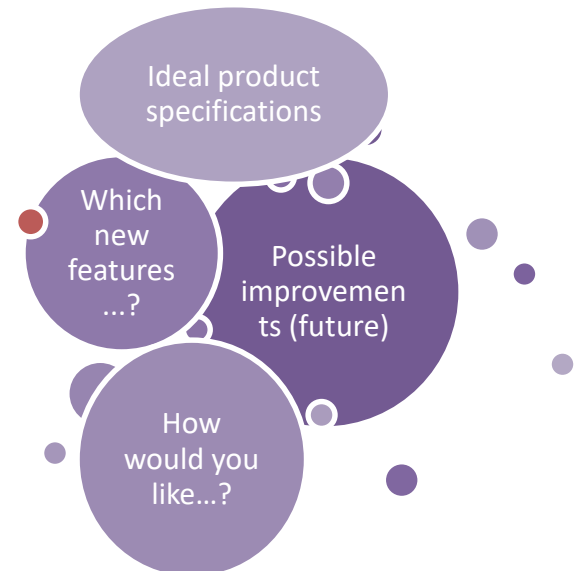
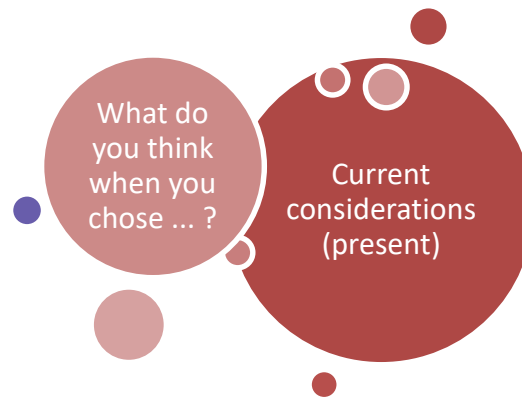
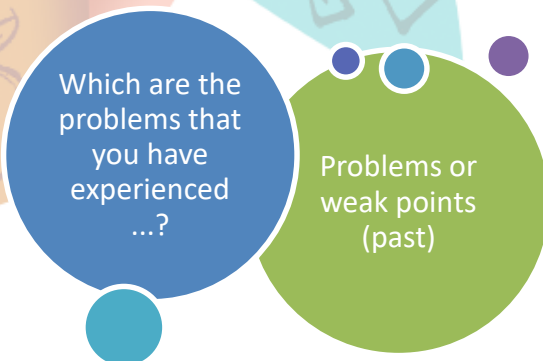
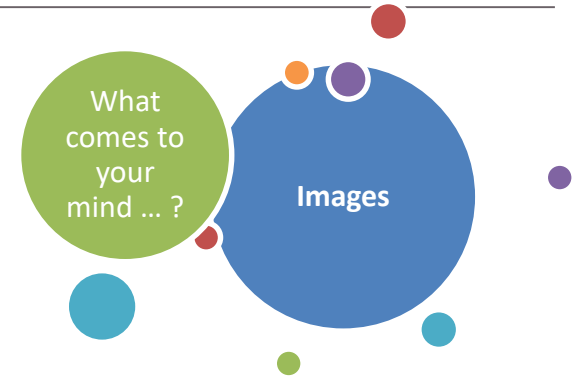
## Identification of groups of people to interview:

- 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

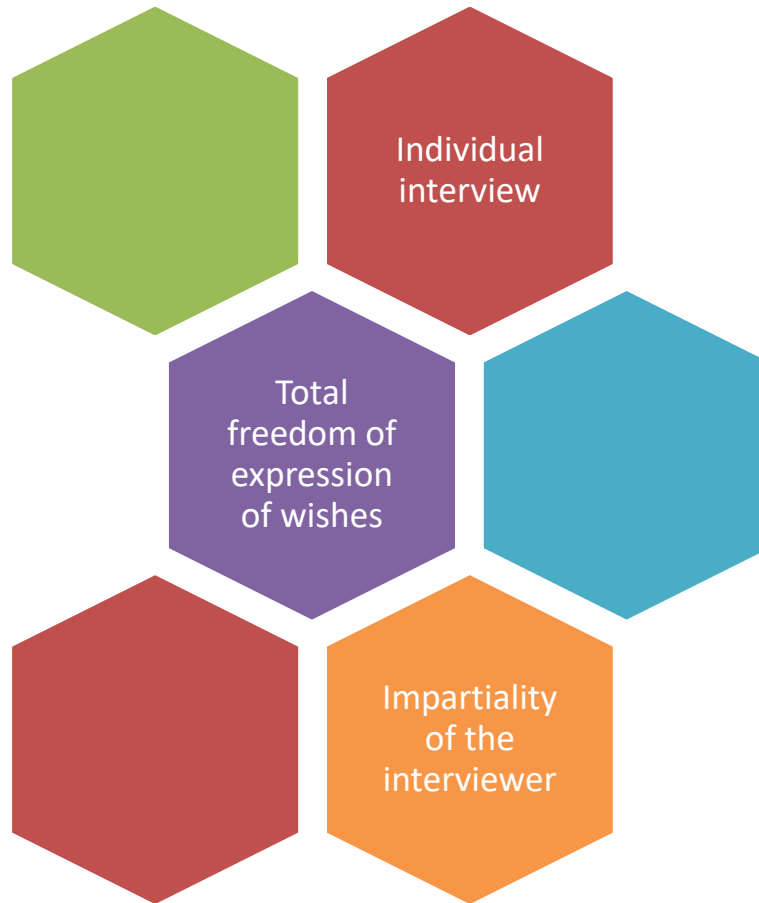
- Development of interview scripts - one to each type of customers



# Survey of market needs / requirements

---

## Gather raw data from customers



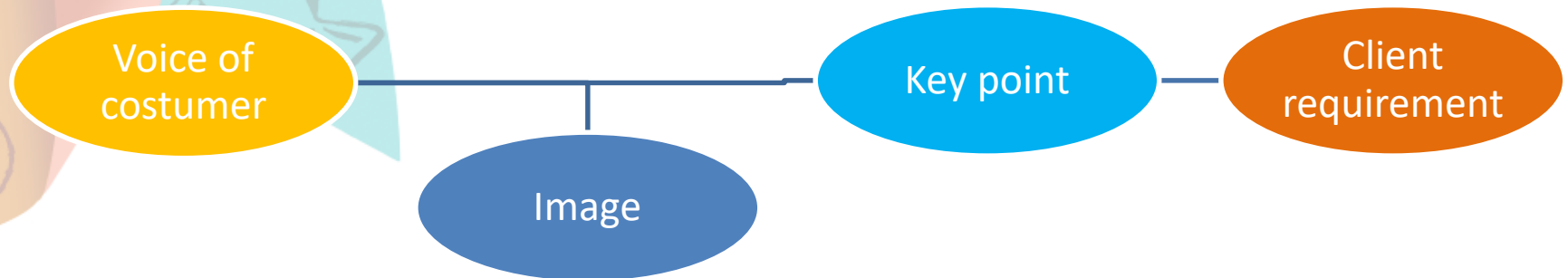


# Survey of market needs / requirements

## 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

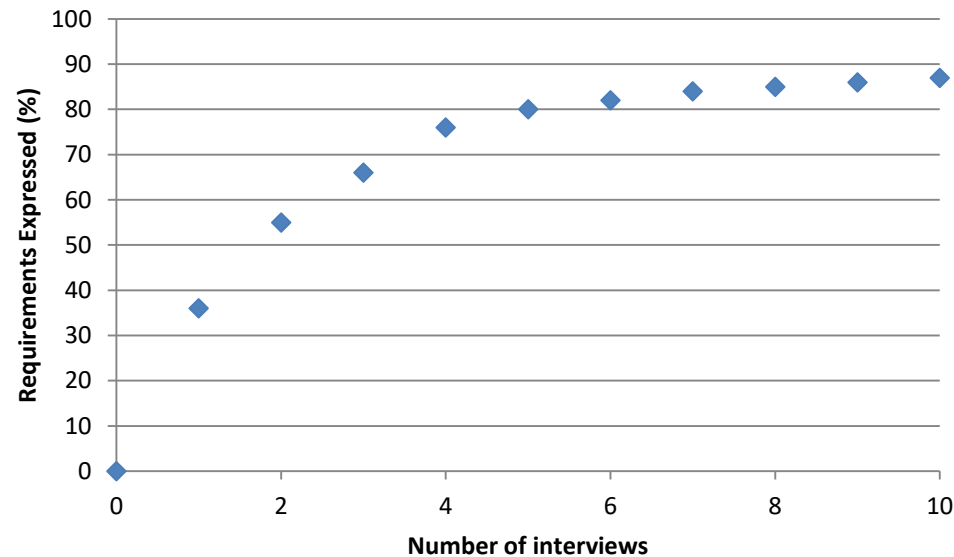
## Gather raw data from customers

- Interpret raw data in terms of customers needs:

Voices	Images	Key-points	Requirements
To learn something	education	education	Having information
Age appropriate	age	age	Being age appropriate
Being in a group	group	socialize	Having groups
The marriage of food and wine	education	food and wine	Pre knowledge
Visit a new country	travelling	discovering	Having cultural content

# 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

Requirement	Unimportant (1)	Important (3)	Very important (9)	Score	Ranking
Having information		8	4	60	5
Being age appropriate		4	10	102	1
Having groups	1	5	5	61	4
Pre knowledge	2	8	5	71	3
Having cultural content		7	6	75	2

# 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)

# Survey of market needs / requirements

## Gather raw data from customers

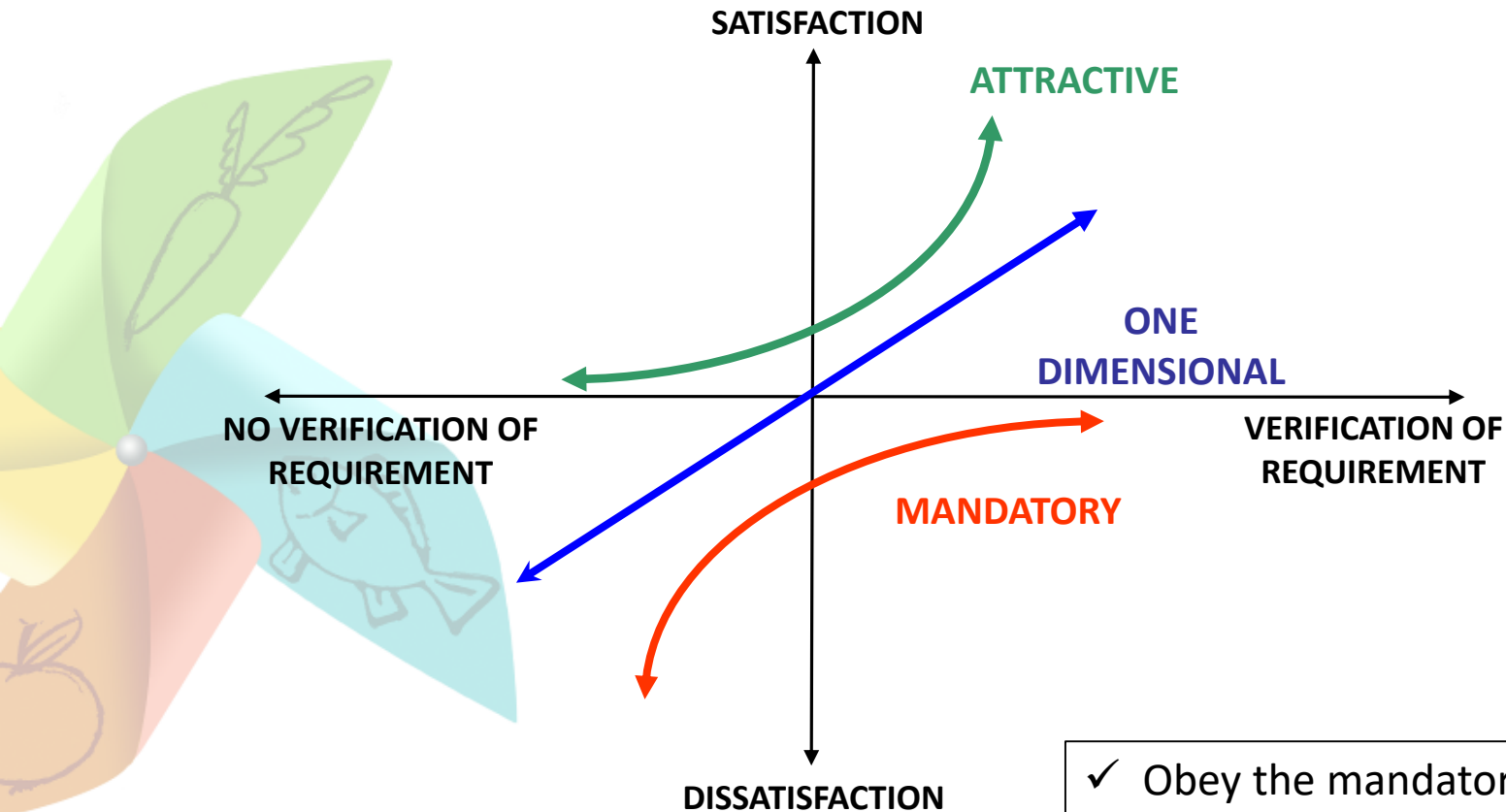
### ➤ Requirements qualitative analysis – Kano questionnaire analysis

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.

		Dysfunctionality				
		1	2	3	4	5
Functionality	1	Q	A	A	A	O
	2	Q	I	I	I	M
	3	Q	I	I	I	M
	4	Q	I	I	I	M
	5	Q	Q	Q	Q	Q

Requirements Categories
Mandatory
One-dimensional
Attractive
Indifferent
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



# Case studies in traditional foods

## Determinant: Focus on client needs

### *Frutaformas – reshape fruit*



FRUTAFORMAS

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.



9° SENTIDO  
A ESSÊNCIA DOS ELEMENTOS



Chocolate Truffles with Extra Virgin Olive Oil & Gold

# Case studies in traditional foods

## Determinant: Team

[www.nonosentido.com](http://www.nonosentido.com)

*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.



# 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.



# Case studies in traditional foods

## 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).



Choosing which seaweed to use

Guaranteeing the quality of the product

Choosing the packaging





Funded by the European Union's  
Seventh Framework Programme



Fakulta rybářství  
a ochrany vod  
Faculty of Fisheries  
and Protection  
of Waters

Jihočeská univerzita  
v Českých Budějovicích  
University of South Bohemia  
in České Budějovice  
Czech Republic



# trafooon

*Traditional Food Network to improve the transfer of knowledge for innovation*



## Questions?

European  
Food-STA  
WEBINAR



[www.spi.pt](http://www.spi.pt)





Funded by the European Union's  
Seventh Framework Programme



Fakulta rybářství  
a ochrany vod  
Faculty of Fisheries  
and Protection  
of Waters

Jihočeská univerzita  
v Českých Budějovicích  
University of South Bohemia  
in České Budějovice  
Czech Republic



# trafooon

*Traditional Food Network to improve the transfer of knowledge for innovation*



## Thank you for your attention!

### CONTACTS

Susana Seabra – [susanaseabra@spi.pt](mailto:susanaseabra@spi.pt)

Miguel Carnide - [miguelcarnide@spi.pt](mailto:miguelcarnide@spi.pt)

European  
Food-STA  
WEBINAR



[www.spi.pt](http://www.spi.pt)

