

Questing for videos: a user-centric model for exploring the gastronomy domain

Elisa Chiabrando, Fabrizio Franceschi, Roberto Furnari, Fabiana Venero

PIEMONTE PROJECT

People Interaction with Enhanced-Multimodal Objects for a New Territory Experience

Introduction

- **Wanteat Video** is a prototype application for Apple iPad.
- It allows users to explore the gastronomy domain in a simple and entertaining way and to watch related videos.



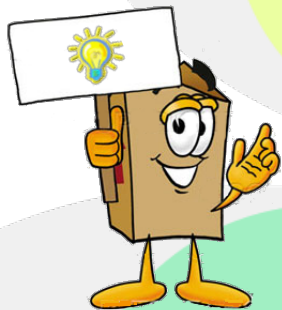
Outline



- WantEat Project
- What is WantEat Video
- All about Relationships
- Interaction Model
- Selecting Things
- Accessing Information
- Exploring the Gastronomy Domain
- Generating New Content
- Enjoying Videos
- Users and Content
- Users and Personalization
- Notes on the Knowledge Model
- Evaluation
- Conclusion

WantEat Project (1)

- Gastronomy as an important part of cultural heritage.
- **want eat** project:
 - ICT can contribute to the promotion of gastronomic culture:
 - Interaction with a social network of **Smart Things** as a way of getting in touch with the cultural heritage and gastronomy of a territory.
 - Smart Things can:
 - Create and manage **links** with people and other things, based on domain knowledge and user behavior (→ **mixed social networks** of users and things).
 - Structure, aggregate, synthesize and share **knowledge** (e.g., about themselves).
 - **Personalize** their interaction with users.



WantEat Project (2)

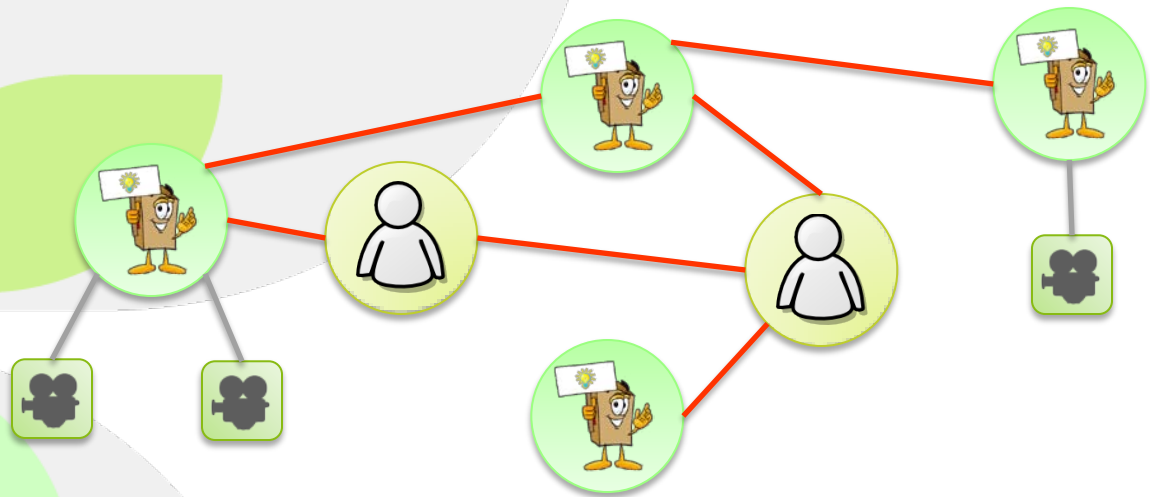
- **want eat** project:

- A suite of applications which target different categories of users and different contexts.



What is WantEat Video

- Wanteat Video allows users to interact with **mixed social networks** of users and things.
 - Network elements are described by means of text, images and **videos**.
 - Users have to access objects in the gastronomy domain to discover related videos.
- Relaxed fruition:
 - Restaurant context.
 - Personal context.



All about Relationships

- Relationships determine user navigation. They can be:
 - Explicitly defined in WantEat knowledge bases.
 - Derived by means of reasoning on WantEat knowledge bases.
 - Defined by rules that relate different elements in WantEat knowledge bases according to their properties.
 - Explicitly generated by users who:
 - Link themselves to other network elements because of their social actions.
 - Associate two or more network elements in their comments.
 - Inferred by means of reasoning on users' social actions:
 - For example: relationships among similar users or among network elements which are appreciated by the same users.

Interaction Model

- Users should be able to:
 - i) Select some specific thing (or user) they are interested in.
 - ii) Access information about some specific thing (or user).
 - iii) Explore the gastronomy domain, moving from a certain thing (or user) to related ones.
 - iv) Generate new content.
 - v) Enjoy videos.
- Interaction should be:
 - Playful, serendipitous, curiosity-driven.



Relaxed fruition context

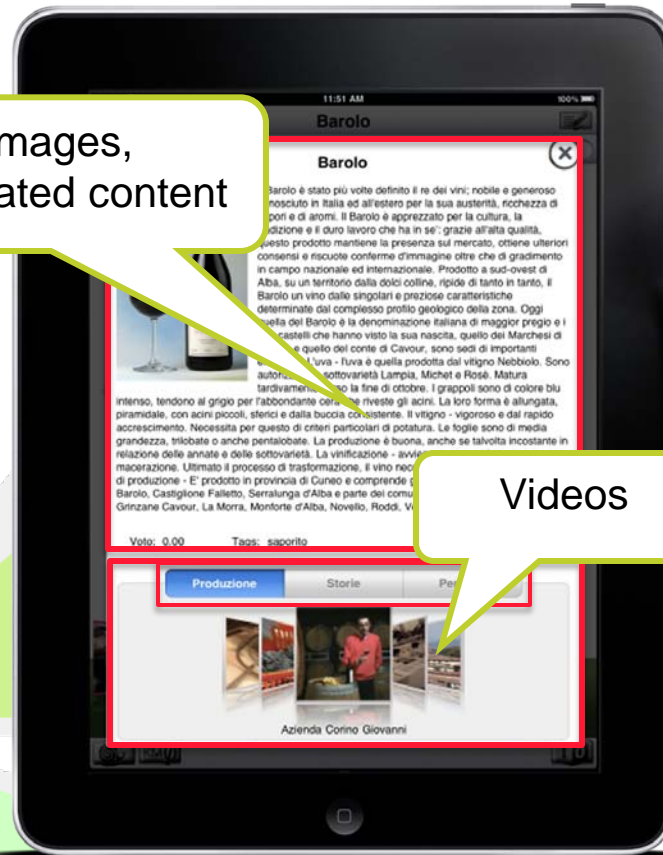
i) Selecting Things

- Users select a starting point for their exploration of the gastronomy domain:
 - **Restaurant context:**
 - Interactive menu.
 - Putting a thing in one's own dish.
 - **Personal context:**
 - Standard search facility.
 - Bookmarks.
 - Personalized recommendation.
 - Geo-localization.



ii) Accessing information

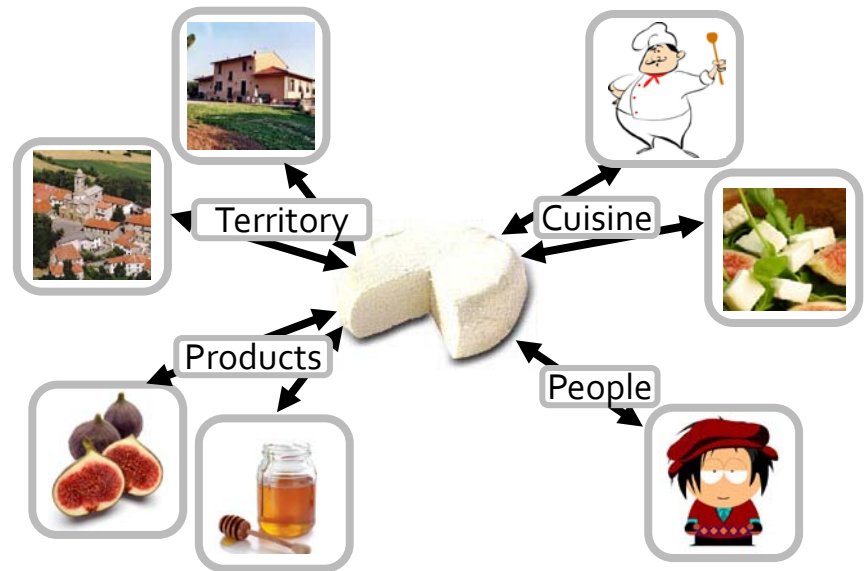
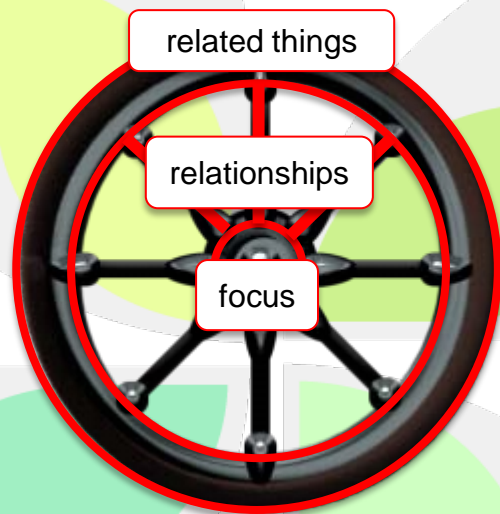
Text, images,
user-generated content



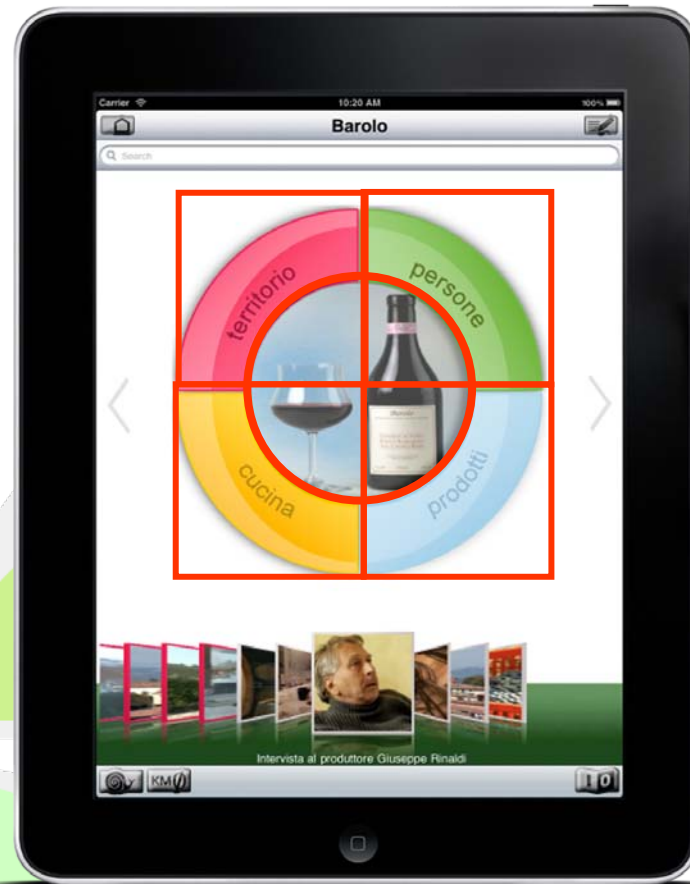
Videos

iii) Exploring the Gastronomy Domain (1)

- Relationships among objects and users define possible navigation paths for exploring the gastronomy domain.
- A wheel-like navigation model was devised for navigating relationships.



iii) Exploring the Gastronomy Domain (2)



iii) Exploring the Gastronomy Domain (3)



iii) Exploring the Gastronomy Domain (4)



iv) Generating New Content



tags

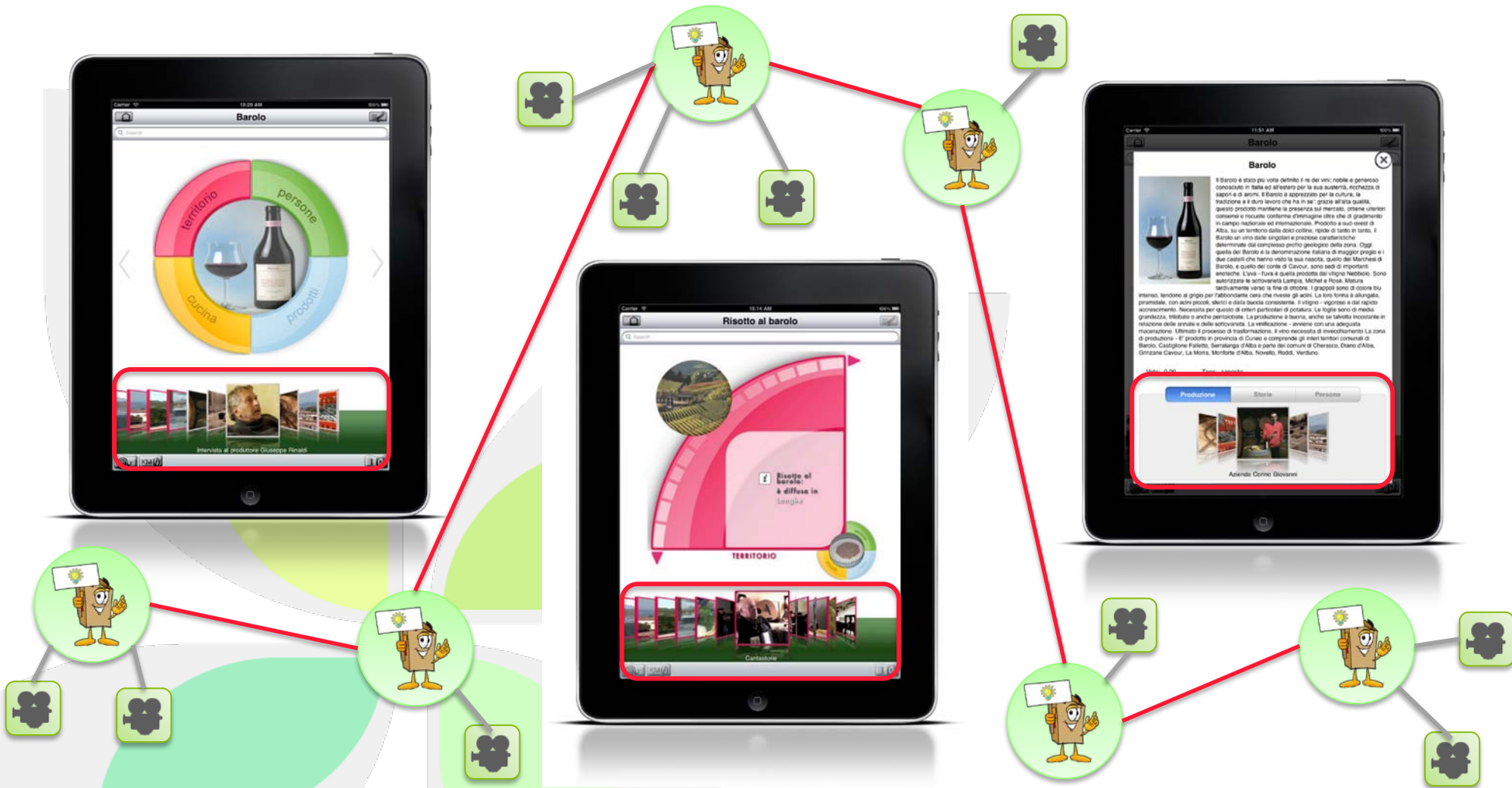


comments



ratings

v) Enjoying Videos (1)



v) Enjoying Videos (2)



- Videos are annotated with a label which classifies the content of the video with respect to predefined categories:
 - For example, a video telling the evolution of a recipe in the years is labelled as **history**.

v) Enjoying Videos (3)

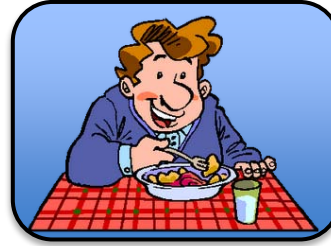


- When users select a video to watch, information is presented about:

- Its main features:
 - Title.
 - Short description.
- User actions:
 - Tags.
 - Ratings.
 - Comments.
 - Bookmarks.

Users and Content

Content Producers







- Enrich the existing network with first-hand evaluations.
- Create new explicit or implicit relationships among them.
- Contribute to content organization.

Content Consumers

- Explore the gastronomy domain:
 - Browse the available contents
 - Follow the relationships which link them
 - Watch related videos

Personalized user
experience

Users and Personalization

Target	
Generic context	
Specific context	
Single user	

Notes on the Knowledge Model

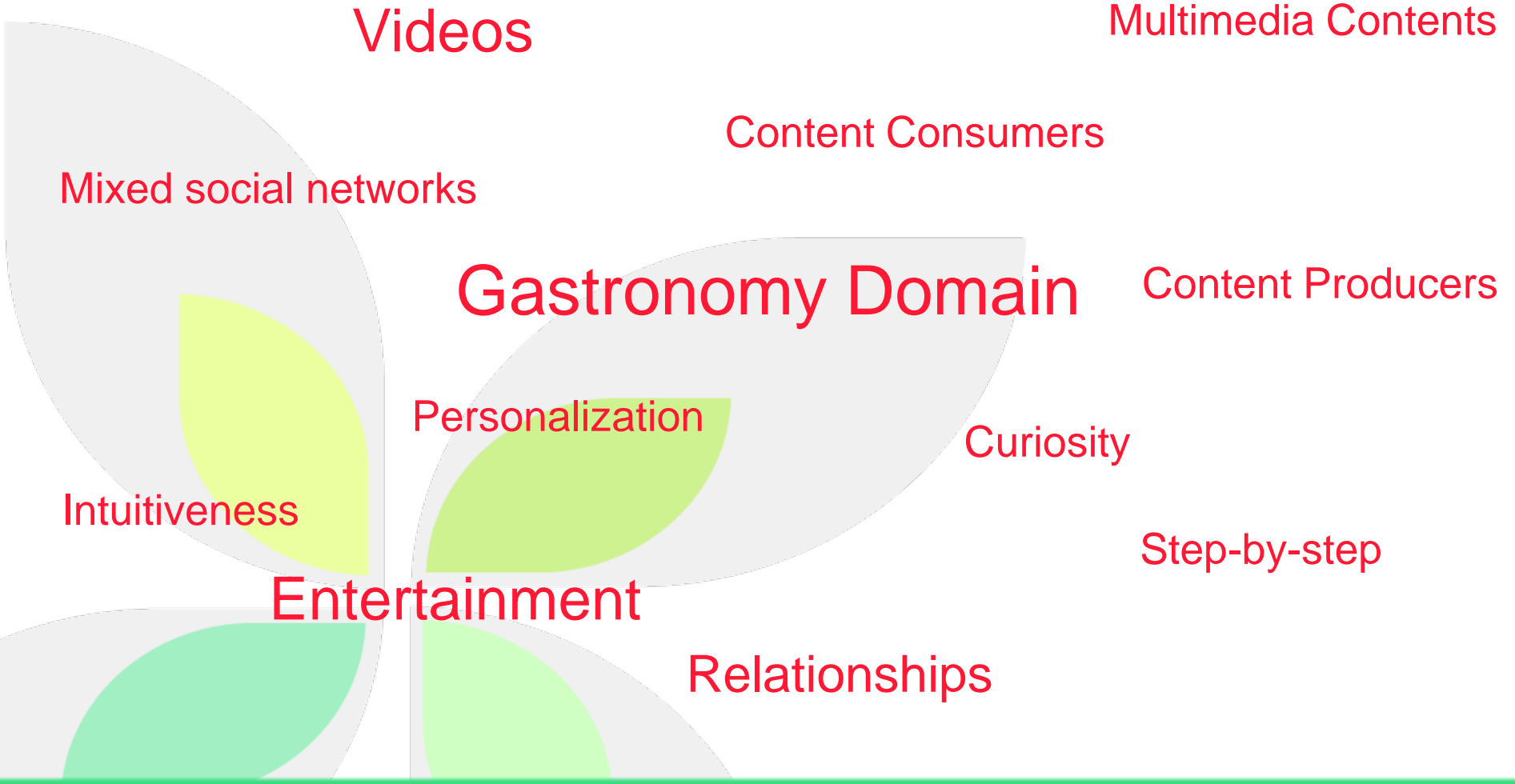
- Information is represented as a set of connected resources organized in a Resource Oriented Architecture.
 - Resources are:
 - Domain objects (“Smart Things”).
 - Users.
- Knowledge describing resources derives from heterogeneous sources:
 - Domain knowledge base (modelled as an ontology).
 - Social knowledge base.
 - Multimedia knowledge base.

Evaluation

- Large quantitative evaluation of the wheel metaphor at “Salone del Gusto”:
 - 684 structured interviews.
 - Both “soft” and “hard” technology users.
 - Very positive results as for ease of use, understandability, aesthetics and usefulness.
- Next step:
 - Evaluation of the whole user experience in realistic contexts.



Conclusion





Thank you

for your attention!



Follow us on:

<http://piemonte.di.unito.it/index.html>