

# WantEat: an app for supporting sustainable gastronomy

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## ABSTRACT

In this paper we describe WantEat, an interactive system that aims to support sustainable gastronomy. Making people aware of the cultural heritage of a territory and allowing them to participate in keeping cultural heritage alive are the keys for supporting sustainable behavior and for promoting quality productions.

## Author Keywords

Food. Cultural heritage for supporting sustainable gastronomy.

## ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## INTRODUCTION

Food is an essential part of cultural heritage and is deeply rooted in our everyday life. It is part of our identity and is given highly symbolic meanings. Loosing the link between food and culture led to many of the bad behaviors about food production and consumption that affect our times. This has already been the object of a successful rethinking process in the direction of critical reflection on the part of Slow Food and Terra Madre ([www.slowfood.com](http://www.slowfood.com)), a non-profit organization whose aim is creating a new model of sustainable gastronomy, where food is good, clean and fair and where people are aware of the cultural heritage behind a food product and become co-producers, i.e., part of the chain that brought the product to their dish [1].

This is an important cultural revolution and we think that ICT can provide some interesting contributions to support it. The WantEat project is our two cents contribution. WantEat is the result of a research project by Telecom Italia, University of Torino, Slow Food and the University of Gastronomic Sciences. WantEat allows people to get in touch with the cultural heritage of a territory in a playful way, using food products both as a mean (they are testimonials of their territory) and as a goal (the ultimate aim is to promote quality gastronomy and sustainable behaviors about food). WantEat connects into a social network of objects and people entities such as food products, restaurants, shops, geographic places and actors such as restaurateurs, food producers and store owners.

People can become part of this network and, interacting with the objects and people of the network, can share knowledge with them, explore and discover them and their relations and thus get in touch with the cultural heritage of a territory and contribute to keeping it alive. WantEat is also an instrument that allows local community to promote their quality productions, supporting actors by favouring networking, which can result in sharing experiences and creating direct links with customers and short distribution chains.

## A SOCIAL NETWORK OF PEOPLE AND OBJECTS TO ENHANCE REFLECTION ABOUT FOOD

WantEat is based on three main ideas: (i) enhancing the user experience by supporting playful interaction with a web of things; (ii) embedding social intelligence in things; (iii) extending the notion of social networking from people to things. By social intelligence we mean three main abilities: the ability of things to aggregate, structure and synthesize information and knowledge and share them; the ability of things to create and manage dynamically relationships with people and other things; the ability of things to offer the users intuitive and playful personalized forms of interaction [2].

WantEat interactive system was inspired by the idea that food items are silent actors and witnesses of the cultural heritage of a territory. The goal of WantEat system is to use technologies to give voice to food items, with no need to infrastructure and without intervening on the current production and distribution processes. In this way they can tell stories about them and about their world. They can also listen to people and thus their knowledge evolves based on these interactions. They are socially smart, so that on the one hand they can establish relations with people and other things, on the other hand they can introduce people to the network of their friends, which includes people and other things (for example for a food product such a network may include the place it comes from with its history and traditions, its producers, recipes that make use of it, people who talked to it, ...). Thus interacting with an object offers to a user an enhanced playful experience, highlighting the hidden process and elements that are related to our everyday food consumption practices and stimulating exploration and discovery.

This has been implemented adopting an innovative interaction model which exploits multi-touch smartphone for simulating the encounter with objects and their social network and which exploits visual recognition (taking a photo of an object or of its label) as the way to establish a contact with it.

In a typical scenario, it is possible for a general user, using the WantEat Mobile application, to simply frame a product food label (left part of Fig. 1, with the user framing a label of a cheese wheel) obtaining immediately information about the product (Fig. 1 (c)) and how this product is in relationship with other objects (Fig. 1 (b)); we use a wheel as a metaphor for the square where I can meet the object surrounded by its friends, where I can tell stories to it (Fig. 1 (f)) and where I can explore the friends of the object I am interacting with (divided into four sectors based on their type), by focusing on one of the sectors of the wheel and exploring the items in it (Fig. 1(d)).



Figure 1. WantEat iPhone Application.

The user can explore this social network in a serendipitous way and is invited to discover, strengthening its relation with foods, its cultural heritage, its chain and its territory. The networks in turn evolve based on users' behavior.

We also developed other applications that allow stakeholders (e.g. producers) to enter the social network with their items (e.g. their products) and on the one hand get feedback about users' behavior (e.g., feedback on their products) and on the other hand establish direct links with their customers (e.g., with restaurants serving their products). This is a concrete support to more sustainable food chains.

## EVALUATION AND TRIALS WITH USERS

A prototype of WantEat mobile application has been tested at "Salone del Gusto 2010" where 684 users provided a very positive feedback about the system and at "Cheese 2011" where about 157 users participated to a field trial in the form of a game. As an example of the results, the application was considered particularly attractive for exploring and learning the cultural heritage of the territories related to food products (82,1%) and knowing opinions of other users about food products (77,8%).

## CONCLUSION AND CONTRIBUTION TO THE WORKSHOP

WantEat is a concrete example of how ICT and the design of suitable interactive system can contribute to the topic of the workshop. The aim of WantEat is to stimulate, in a playful way, people to become aware about the cultural heritage behind the food products they are buying, of the dish they are eating and about the biodiversity characterizing each territory and its traditions. This is, in our view, a fundamental leverage on the one hand to stimulate sustainable behaviors of people and on the other hand to support small quality producers to promote their products. In fact, WantEat could enhance user engagement and stimulate critical reflection in a network where everyone can learn, collaborate and actively promote the change to more sustainable food production and consumption practices. The evaluations we performed confirm that this approach stimulates users' participation and engagement and that this is due to the combination of a number of factors in the design of our system (including both human and technological factors).

We claim that the lesson we learned from the design and experimentation of WanEat in a multidisciplinary research team, which involves computer scientists, designers, anthropologists, psychology experts, and, most importantly, the know how and philosophy brought by Slow Food, can contribute to the discussion in the workshop.

## REFERENCES

1. Petrini, C. 2007. *Slow Food Nation: Why Our Food Should Be Good, Clean, and Fair*. Rizzoli.
2. Console L. et al. Interacting with Social networks of intelligent things and people in the work of gastronomy, to appear *ACM Trans on TIIS*, 2012, Short version in proceedings of ENTER2012, eTourism Present and Future Services and Applications 2012, Springer Wien, New York.