

Premise and background

Le Marche in Valigia



Marche d'eccellenza

Forum permanente sul
Made in Marche



JRC SCIENCE FOR POLICY REPORT

Food and gastronomy as elements
of regional innovation strategies

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2016



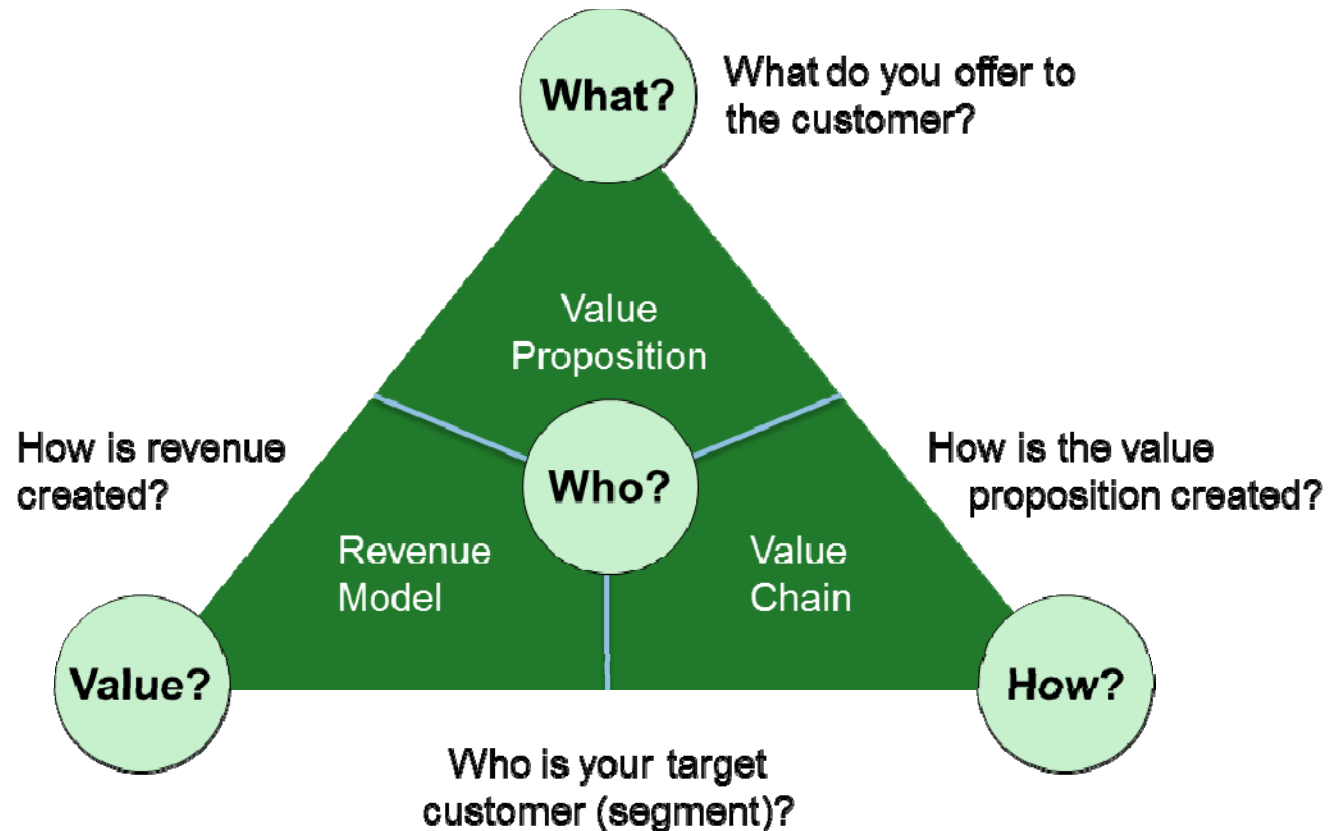
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A definition of «Business Model»

A business model describes the rationale of how an organization creates, delivers, and captures value in economic, social, cultural or other contexts.



St. Gallen Business Innovation Model

New challenges in Circular and Sharing Economy perspectives

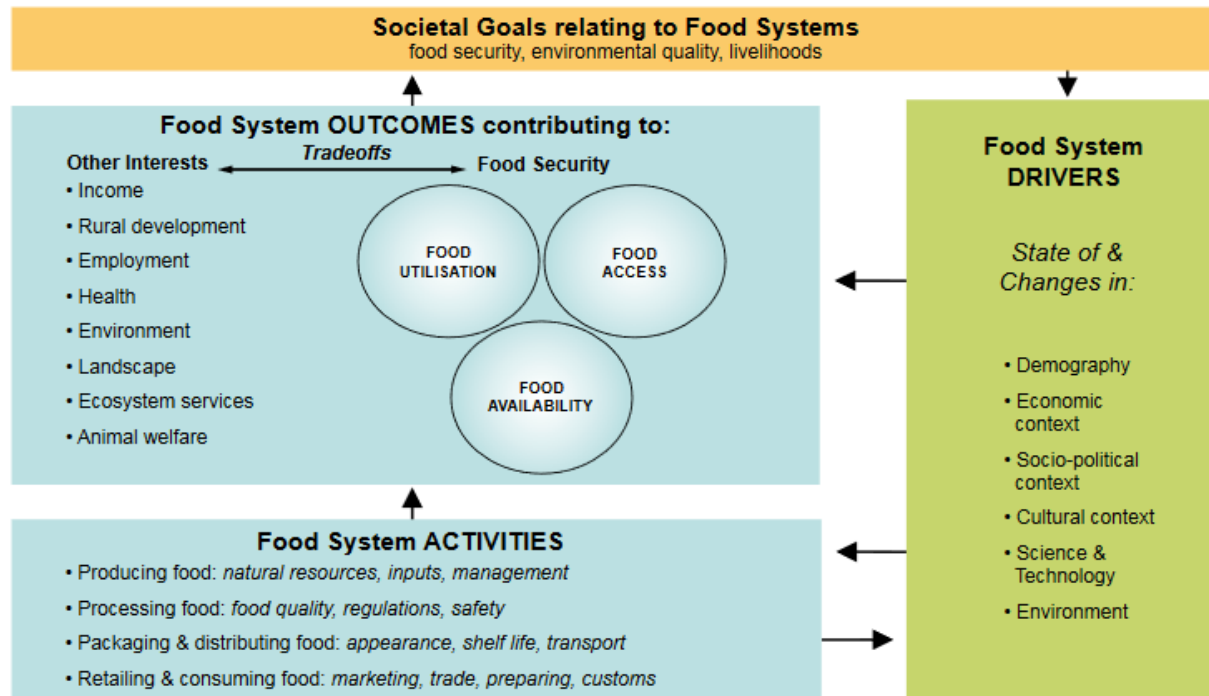
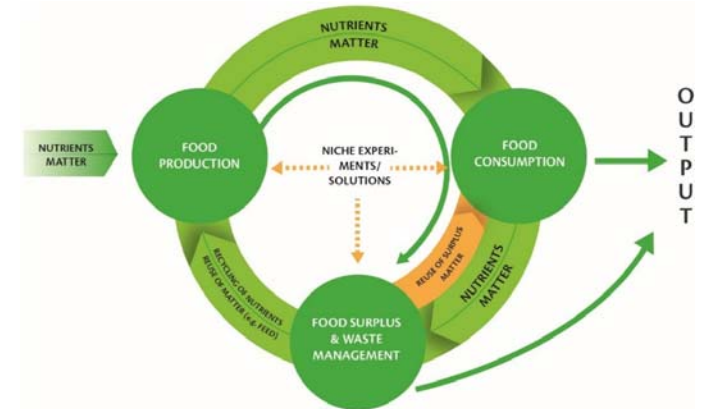
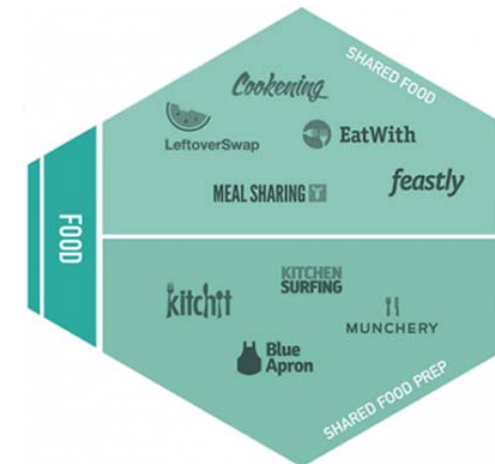


Figure 1: Key Food System Drivers, Activities, Outcomes and Feedbacks. [Derived from Ericksen, P.J. and Ingram, J.S.I. (2005) *IHDP Annual Report 2004-5*, pp. 45-46; and from Ericksen, P.J. (2008) *Conceptualizing food systems for global environmental change research. Global Environmental Change* 18, 234-245.]



Jurgilevich et al. (2016)



Owyang (2014)

Rabbinge & Linnemann (2009) "European Food Systems in a Changing World"

Feeding the world cities; Demand-driven food systems; Internet of Things and the power of Big Data; Sustainable food systems and the circular economy (Lambregts – Berenschot/IFAMA, 2016)

The emerging phenomenon of «City-regions food systems»

Sustainable Food Cities Network



Sustainable Food in Urban Communities



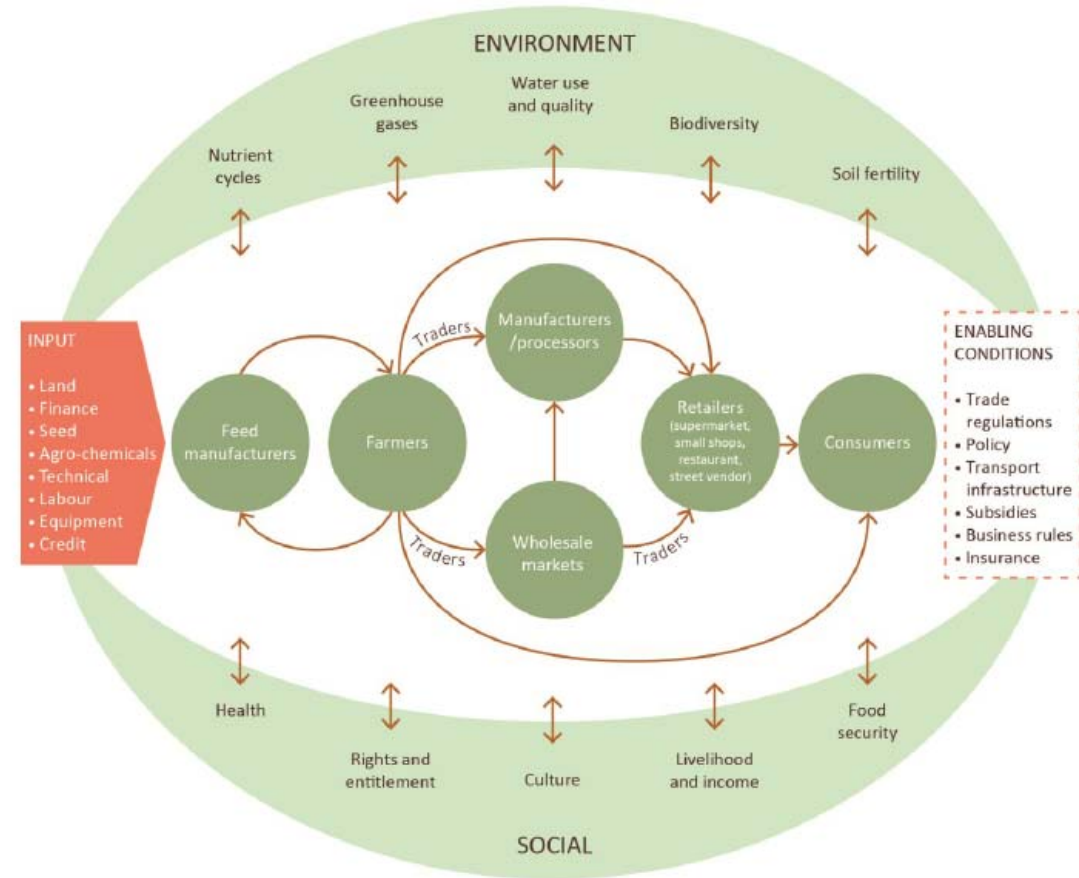
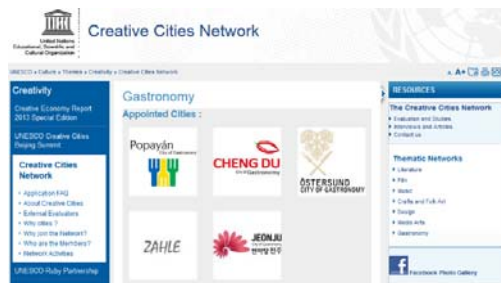
Cittàslow International



Eating City – International Platform



Creative Cities – Gastronomy UNESCO



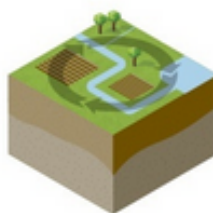
The term city region food system has been defined as, “the complex network of actors, processes and relationships to do with food production, processing, marketing, and consumption that exist in a given geographical region that includes a more or less concentrated urban centre and its surrounding peri-urban and rural hinterland; a regional landscape across which flows of people, goods and ecosystem services are managed. www.cityregionfoodsyste.ms.org

“Resource-Smart Food Systems”

What are Resource-Smart Food Systems?

They are food systems in which the environmental basis is not compromised to deliver food security, livelihoods and human health for future generations. This implies sustainable use of renewable resources based on efficient use of all resources and low environmental impacts.

- 1 Sustainable land and water management: to ensure future productive use.



- 4 Higher nutrient and energy efficiency along the food chain.



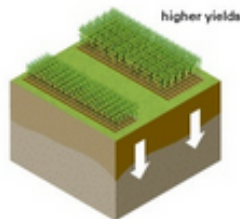
better recycling of minerals in animal manure and city wastes, use of food wastes as compost, etc.

Individual options could lead to

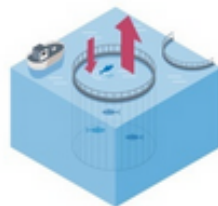


5-20%
efficiency increase

- 2 Sustainable intensification of crop production: higher yields without increasing the environmental impact.



- 5 More efficient aquaculture systems, with lower nutrient losses and less impact on coastal systems.

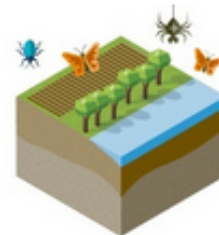


Combined options could lead to



20%-30%
efficiency increase for some resources.

- 3 More effective use of ecosystems services.



Integrated pest management to reduce pesticide use

- 6 More energy- and water-efficient food processing.

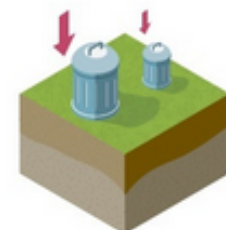


- 8 Reduced overconsumption and changed unhealthy dietary patterns.



shift in affluent societies to more plant-based diets

- 7 Reduced food losses at farms; reduce food waste throughout food chain.



Typologies of new business models: ICT+Agribusiness

1. Basic Data Sales

Companies create data in their primary process, package this data into a feed and sell it in a single transaction or a subscription.



2. Product Innovation

Companies create new products or services based on the data they generate in their primary process.



3. Commodity Swap

Commodity providers offering their original products (electricity, water, telecom etc.) at a large discount or even for free but charge for services provided in combination with the commodity products.



4. Value Chain Integration

Two companies exchanging (usually sensitive business) data to integrate parts of their value chains in order to save money or optimize business performance.



5. Value Net Creation

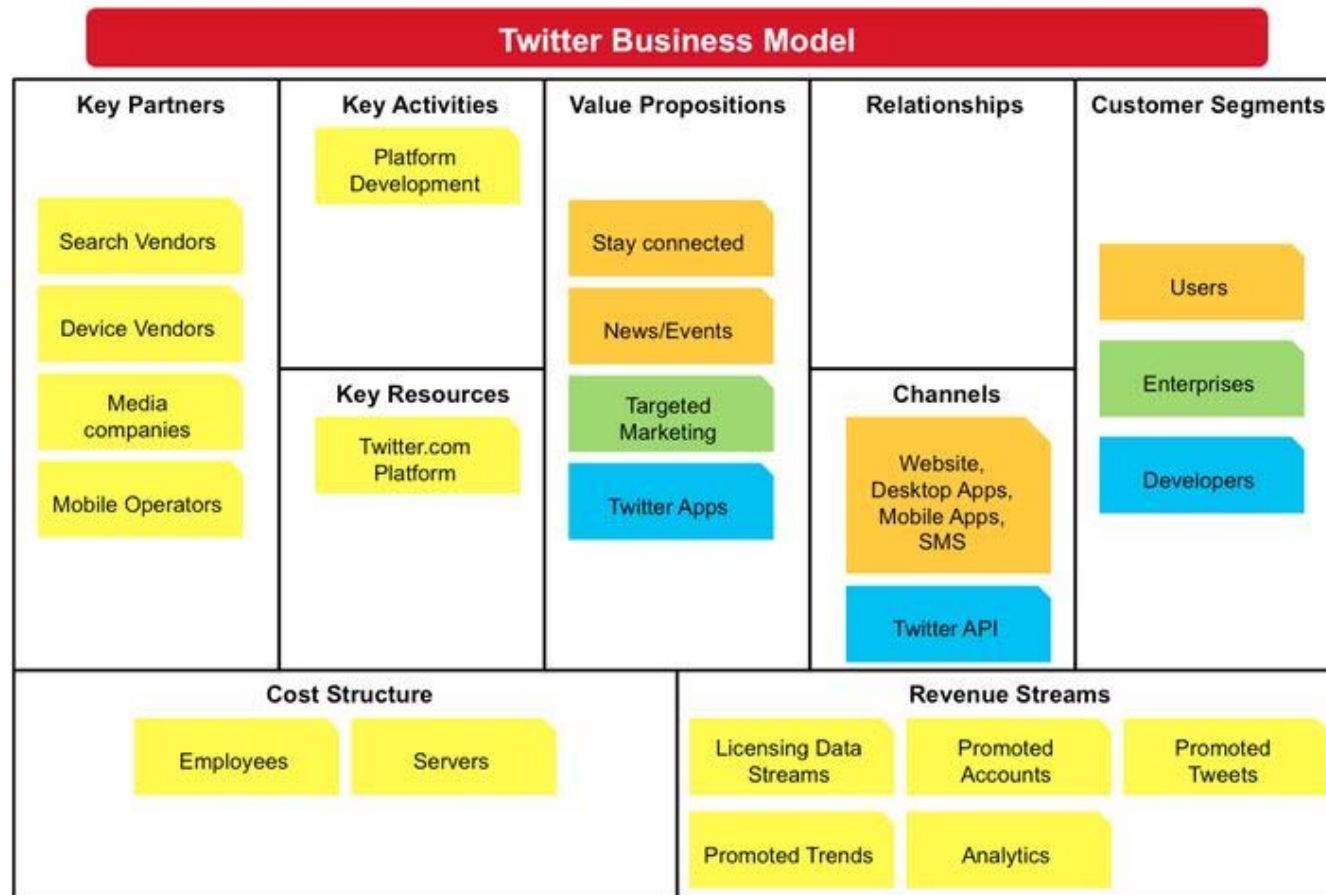
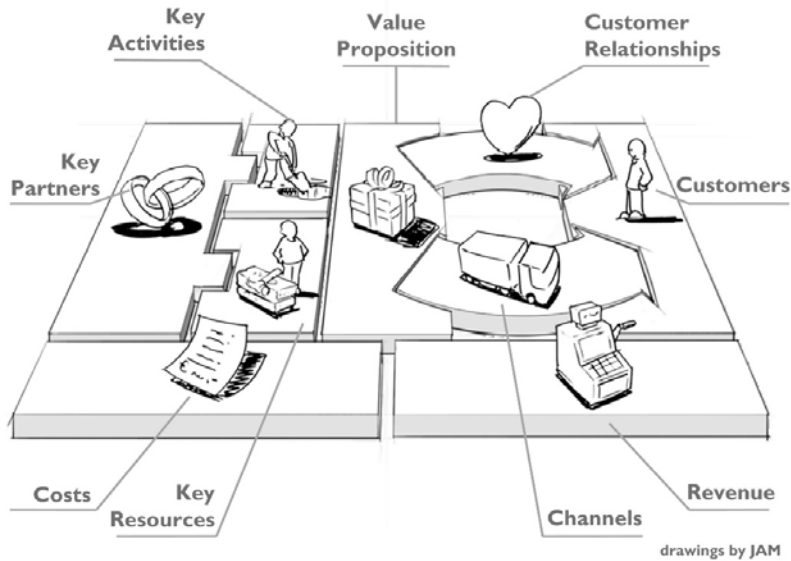
Multiple companies sharing the same customer exchange data in a 'value network' with the aim to provide unrivalled service to the customer.



Arent Vant Spijker (2014) «The new oil. Using innovative business models to turn data into profit»

Krijn Poppe (2016) "Data Innovations in the Agri-Sector: in search of data-driven business models"

A practical tool: the business model canvas



A practical tool: the business model canvas

KEY PARTNERS Who are our key partners? Who are our key suppliers? Which key resources are we acquiring from our partners? Which key activities do partners perform?	KEY ACTIVITIES What key activities do our value propositions require? Our distribution channels? Customer relationships? Revenue streams? KEY RESOURCES What key resources do our value propositions require? Our distribution channels? Customer relationships? Revenue streams?	VALUE PROPOSITIONS What value do we deliver to the customer? Which one of our customers' problems are we helping to solve? What bundles of products and services are we offering to each segment? Which customer needs are we satisfying? What is the minimum viable product?	CUSTOMER RELATIONSHIPS How do we get, keep, and grow customers? Which customer relationships have we established? How are they integrated with the rest of our business model? How costly are they? CHANNELS Through which channels do our customer segments want to be reached? How do other companies reach them now? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines?	CUSTOMER SEGMENTS For whom are we creating value? Who are our most important customers? What are the customer archetypes?
COST STRUCTURE What are the most important costs inherent to our business model? Which key resources are most expensive? Which key activities are most expensive?		REVENUE STREAMS For what value are our customers really willing to pay? For what do they currently pay? What is the revenue model? What are the pricing tactics?		

Collaboration and cross-fertilisation

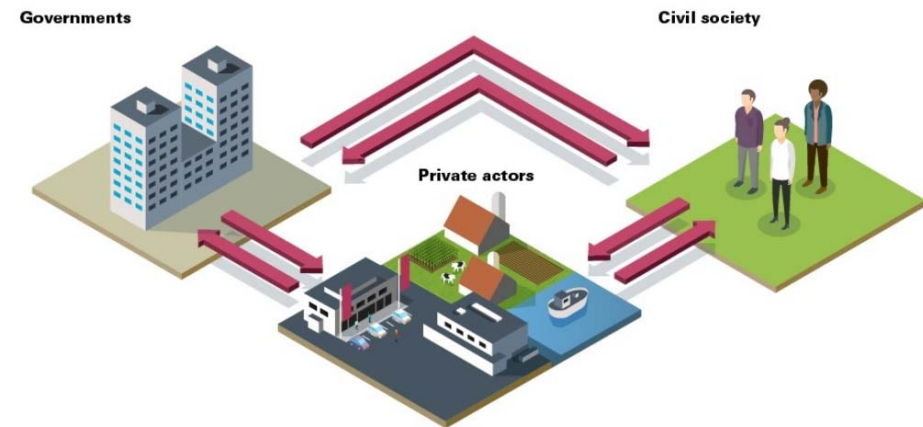
Multistakeholder engagement as «wicked problem»

Multi-stakeholder actions are processes “in which actors from civil society, business and governmental institutions come together in order to find a common approach to an issue that affects them all” (Roloff, 2008).

Wicked problems” refer to issues which are highly **complex**, have **innumerable** and **undefined causes**, and are **difficult to understand and frame**.

- there is broad disagreement on what ‘the problem’ is
- the search for solutions is open ended
- imply a wise stakeholders’ management
- the problem solving process is complex because constraints, such as resources and political ramifications, are constantly changing (Roberts, 2000)

Thus, wicked problems cannot be resolved through finding “right answers” or “solutions”, but rather, **they must be managed**.





THANKS!

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