Smart Services

Smart Business



Smart Services

- Services aimed at anticipating customer problems and needs, thanks to the use of ICT that facilitate the acquisition and processing of information
- The goal is to provide proposals for intervention, action, resolution in less time and with less effort and cost
- Three fundamental elements :
 - Artificial Intelligence
 - Connectivity
 - Co-creation of value by the customer

Smart Services Benefits

- Reduce the costs, incurred by the customer and the supplier, thanks to the reduction of human intervention during the supply process
- Increase market volumes, as a result of greater accessibility to the service for customers
- Increase the degree of innovation, thanks to the modular architecture underlying smart services, to facilitate the development of further services and solutions by emerging players

Smart Services Classification

		RUOLO DEL SERVICE PROVIDER			
_		ATTIVO	PASSIVO		
L CLIENTE	ΑΤΤΛΟ	 HIGH TOUCH SERVICE - H2H fornitura di un'interazione quasi-umana, tecnologia abilita relazioni a distanza 	2) SELF SERVICE - H2M autonomia del cliente nella richiesta e nella fruizione del servizio		
RUOLO DE	PASSIVO	3) SUPER SERVICE - H2M cliente non "disturbato" nella fornitura del servizio	4) HIGH TECH SERVICE - M2M monitoraggio e controllo remoto, nessun intervento umano		

High Touch Service – Human to Human (H2H)

- Both the customer and the service provider have an active role
- Technology does not replace humans but enables remote interactions
- The purpose is the co-creation of value between customer and provider

Eg., Telemedicine (ubiquitous Healthcare), remote system diagnostics, Indoor.Ninja

Self-Service – Human to Machine (H2M)

- The active role rests solely with the customer and the technology offers a self-service process
- The customer, thanks to the interface made available by the provider or its service network (e.g., app), can interface with the technology and carry out operations independently

E.g., self-diagnosis tool present in professional photocopiers, free floating car-sharing (Car2Go, Enjoy)

Super-Service – Human to Machine (H2M)

- The service is provided on behalf of the customer, who has a passive role
- The value is created without involving and disturbing the customer, who thus obtains a "super-service"

E.g., administration services, upgrades and bugfixes provided by the staff of a remote center who updates drivers, performs patches and launches executables on servers, operating systems and computers

High Tech Service – Machine to Machine (M2M)

- Technology replaces and automates the entire value creation process
- Customer and service provider have a passive role

E.g., remote control, condition monitoring and diagnostics of aeronautical and industrial turbines (Rolls Royce, GE), thermoregulation of a building or a home

M2M map



Smart services for Smart cities



Towards Public Administration 4.0



Social Media and Public Services

- Social Media bring innovation to services thanks to models of cooperation and participation
- Citizens are increasingly involved and participate from the design stage, they also play the role of investors and (content) suppliers



Public service 2.0

Public service 2.0, or *User-Generated Government*, new frontier of e-government services, based on user participation, and on the publication and sharing of knowledge between citizens and public administrations, as a primary value of public services

(Leadbeater 2008; Osimo 2009)

Policy Making 2.0

- Values:
 - Open to external contributions by default and from the initial phase
 - Act as a platform and facilitate horizontal collaboration between participants
 - Systemic approach: the human being is not a rational and predictable automaton, instability and unknown are rules and not an exception
 - Permanent beta policy: do not plan rigidly but monitor in realtime, anticipate possible future scenarios, iterate

Tools:

- Big data and sensors (IoT)
- Crowdsourcing
- Modeling and simulation
- Open data
- Opinion mining
- Social nets
- Serious gaming
- Visualizations

Open Government





Open government, definition

"An open and transparent administration is part of the political agenda. It aims to provide open access to (non-sensitive) public sector information and data for both citizens and businesses; citizens will thus be able to thoroughly analyze the "unfiltered" data (by the administrations) and draw their own conclusions; companies will be able to use public resources, hitherto hidden, for commercial purposes (to create new commercial *services*)." (OECD, 2010)

Open Government

- Web 2.0-based election campaign of Obama 2008
- Push towards open source and open data Memorandum & Open Gov Directive, 2009:

"Government as a platform"

- " As far as possible and subject to valid restrictions only, **agencies must publish information online using an open format** that can be retrieved, subject to download actions, indexed and searched through the most commonly used web search applications.
- By open format we mean a format independent of the platform, readable by the computer and made available to the public without preventing the reuse of the information conveyed"

Open Data

- Model or philosophy that enable PA data and information "open" and accessible online
- Decalogue of the OD:
 - Complete, primary, timely, accessible, computer readable, non-proprietary, licensefree, reusable, searchable, permanent



Some OpenGov initiatives

USA

- Data.gov
- WhiteHouse.gov
- USASpending.gov
- IT Dashboard
 - Treemap
- Recovery.gov
- <u>eRulemaking</u>
- <u>Dep of Labor</u>
 UK
- http://data.gov.uk/
- The World Bank



Data Collection and Analysis



Crowdsourcing: what to do with the data?

Challe Government Chal	nge.gov lenges, Your Solutions	FOLLOW US ON CONSTRUCT
HOME FIND CHA	ALLENGES	C e.g.: "Apps" or "Health"
Challenge.gov government ca	is a place where the public and n solve problems together.	
Sign Up and Participa	or Learn More	
Sign Up and Participa	es <u>1 2 3 4 5</u>	BROWSE GOVERNMENT CHALLENGES

Policy evaluation



EU Farm subsidies for Italy, All years

These pages list farm subsidy payments made in Italy as published directly by the government of Italy or sourced via freedom of information requests. Italy is **23rd** in our transparency index which measures how good governments are at opening up their data to the general public.

Show subsidies for All Years 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

Top recipients

Recipient name	Amount	
ITALIA ZUCCHERI SPA	€139,754,719	
ERIDANIA SADAM SPA	€125,262,919	



Transparency rating

The transparency rating for Italy is 35% (23rd overall)

Compare countries.

Simulation and gamification for civic engagement

Community PlanIt

Community Plant is an online game platform that fosters deliberation and civic participation in planning processes to engage as wide and diverse a group of stakeholders as possible. Community Plant not only facilitates trust-building between citizens and organizations, but is itself a powerful data collection tool that allows users to meaningfully analyze community input and truly engage the public in the planning process.



CHALLENGE

Within a series of time-limited missions, players compete with each other to earn influence in their community to fund local projects. At the same time, they learn about key issues related to the topic of the engagement process, connect with each other, and suggest solutions to problems. Each game culminates in a face-to-face community event, where players meet with each

Civic Hacking: MySociety





Help us to make more useful things. Donate to mySociety

Search

Home Projects Hire us Get involved Blog About us



Hello! We are mySociety – we run most of the UK's best known democracy websites.

Using our services, **200,000** people have <u>written to their</u> <u>MP</u> for the first time, over **65,000** potholes and other broken things <u>have been fixed</u>, over **120,000** people get emailed about <u>things that happen in Parliament</u>, and at least **77** tiny hats have been <u>knitted for charity</u>.

View all our projects »

Get involved

mySociety is built on volunteers; from simple things, like playing a game to help us make sense of video from the House of Commons, or reporting a broken paving slab, to building a new service with our data or helping us look after one of our websites.

Or just joining our discussion groups and telling us how to make stuff better.

See what you could do »

Hire us

If you work in the public, private or third sector, and are trying to adapt to the new world of citizens empowering themselves through the internet, mySociety can help you by building sites, consulting, or helping you to make plans.

We've worked for No10, the BBC, and Google, and we'd love to work for you.

Find out more »

Civic Hacking: Santander City Brain



... and in Italy?

- Manifesto for the Open Gov, guidelines defined by Ass. OG 2010
- Italian Open Data Licence (IODL) v1.0
- LineaAmica (<u>http://www.lineaamica.gov.it/</u>)
- MiaPA, mobile app
- dati.piemonte.it, 1st Italian PA site with open data
- In September 2011 the 1st Apps4Italy contest opens
- The compass of transparency of Italian PA sites
 <u>http://www.magellanopa.it/bussola/</u>
- Smart city: <u>http://info.sii-mobility.org/</u>
- OpenMunicipio: <u>http://senigallia.openmunicipio.it/</u>

Dati.piemonte.it



Alberghiero (19) aree (24) Atti (34) bandi (15) Commercio (25) consiglio comunale (23) delibere (24) Esercizi (23) Esercizi commerciali (24) giunta comunale (18) Imprese (23) istituzioni (22) naturale (16) patrimonio (18) presenze (20) Rivendita (23) Scuola (14) Scuole (14) Turismo (34) Viabilita (15)

Musei e beni architettonici del Piemonte in modalità open data

Disponibili in modalità open data i dati su attrattive turistiche del Piemonte censite dal portale www.piemonteitalia.ue. Si possono da oggi scaricare da questo portale, in forma...

Digital Experience Festival a Torino

Dal 25 maggio al 2 giugno si svolge a Torino,



Open data Italia

- Dati.gov.it
- Dati.veneto.it
- Dati.lombardia.it
- <u>Regione Sicilia</u>
- Comune Cesena, incidenti
- Apps4Italy 2012, winning applications:
- <u>http://www.openparlamento.it/</u>
- <u>http://www.lodlive.it/</u>
- <u>http://www.bikedistrict.org/</u>
- <u>https://play.google.com/store/apps/details?id=it.nealogic.parisponde</u>
- Il giro della nera a Milano (2010)

Opinion mining: collect and select good ideas (Ideascale)

Ideario per Cagliari

Cerca Idee Cerca

Come funziona?



Gli utenti inviano le loro idee.



La nostra comunità discute e vota le idee.

Le idee più votate salgono in cima alla lista.

Benvenuti all'Ideario per Cagliari

In questa comunità puoi scrivere idee, votare idee esistenti, oppure aggiungere commenti.

- Per **inviare** una nuova idea, clicca sul pulsante giallo qui sotto. Puoi scegliere un titolo ed una categoria per la tua idea.
- Puoi anche aggiungere dei tag all'idea.
- Per votare un'idea, semplicemente clicca sui tasti "pollice su", pollice giù a sinistra della descrizione di ogni idea

Per i nuovi ideatori c'è anche un <u>Vademecum</u> con suggerimenti per come scrivere le vostre idee. Si suggerisce inoltre di leggere il <u>Regolamento e i termini di utilizzo</u>.

Le categorie presenti sono principalmente tratte dal <u>programma di Massimo Zedda</u> più alcune altre. Se volete altre categorie, scrivete un'idea su questo!

Nota importante: l'ideario per cagliari è un'iniziativa dal basso, nata per creare partecipazione sulla nostra città dopo l'elezione del nuovo sindaco, Massimo Zedda. L'ideario non appartiene ad un partito, né al Comune di Cagliari, né allo staff di Massimo Zedda. Questi soggetti pertanto non hanno alcuna responsabilità sui contenuti dell'Ideario stesso.

Per ulteriori informazioni potete scrivere a ideariocagliari@gmail.com

Invia una Nuova Idea

Open Data Barometer



Corruption Perception Index CORRUPTION PERCEPTIONS INDEX 2018 SCORE Highly Corrur 0-9 10-19 20-29 30-39 40-49 50-59 60-69 70-79 80-89 90-100 No dat

	Shared Facilities	Business Ecosy	stems _{Na}	tional Innovation Systems
Partner involveness	Open Science Co-patenting Spin-off	Collaborative Innovation	FieldLabs	Open Business Co-marketing
		Co-engineering Co-learning	Out-licensing	Business Models Co-branding
,		Spin-out	Co-Design	Open Business Models Co-production
		The Inno	ovati	on Paths
S			Smart Cities	Co-Creation Community
mer involvenes	Co-working spaces	Collective Intelligence		E-participation Co-Creation Labs
Custo	Crowdsourcing	Crowdfunding)pen Data	Open Source

Innovation

- Some factors of innovation in services:
 - New models for productivity
 - Knowledge and technology
 - The servitization
 - The partecipation

- Corporate reorganization

The Evolution of Business Processes

Business processes have evolved following the Web 2.0 criteria:

- Incorporating collaborative spaces
- Composing a mix of integration, all interactions and updates are visible and usable in a bidirectional way

Entreprise 2.0 + Open Innovation + Social CRM = Social Business

Value Chain 2.0



Dr Xavier L.Comtesse, Pr. Jeffrey Huang, ThinkStudio, 2008

Value Chain Evolution (1)

Participatory activities instead of primary activities

- Open Inbound Logistics:
 - Logistics chain (reception, storage, distribution of raw materials) can be entrusted to the customer or external companies
- Co-operations:
 - Client actively participates in the production process (e.g. Wikipedia)
- Outbound by Costumers:
 - Customer is partially or totally responsible for the shipping activities (e.g. Ebay)
- Viral:
 - Viral Marketing Techniques Engage Customer (e.g. Amazon)
- Communities of Practice:
 - After-sales services entrusted to CoP

Value Chain Evolution (2)

Global Activities instead of Support Activities

- Multistakeholders infrastructure:
 - Several connected infrastructures (e.g. Cloud)
- Customer Network Management:
 - HR management extended to the customer network (e.g. LinkedIn)
- Co-creation:
 - R&D integrates customer creativity (e.g. P&G)
- Open Procurement:
 - Customer also involved in the distribution chain (e.g Amazon)

Social Organization

 Organization is increasingly a network of connections



Social Organization, tools

Social organization tools matrix



Organizational Knowledge evolution

Closed and Open Innovation

- Closed: the flows of knowledge that go from the idea of new products, design and subsequent production are bound to the boundaries of the company
- Open: the efficiency and effectiveness of innovation processes are increased with research beyond company boundaries and collaboration with suppliers, competitors and users

Open Innovation

 Companies choose to no longer and not only rely on internal ideas and resources, but also on ideas, solutions, tools and technological skills that come from outside, e.g. from startups, universities, research institutes, suppliers, inventors, programmers and consultants



Open Innovation (2)

- The paradigm of open innovation has developed because in recent years it has clearly emerged that closed innovation was no longer sufficient:
 - knowledge and talents travel at an ever-increasing speed due to networks and ease of travel
 - the markets, as the case of the Silicon Valley startups shows, have begun to focus on companies based on completely new and disruptive business models and approaches compared to the past



Wipro to open innovation lab in Silicon Valley

The firm is seeking to build products on automation, artificial intelligence tech in partnership with innovative start-ups

From Closed Innovation to Open Innovation

Until the 2000s, innovationit was exclusively in-house process: total control by the company



Ideas, projects and technologies present on the market did not meet the expectations





From Closed Innovation to Open Innovation









Increase revenues

Reduce timeto-market

Costs reduction



OI Typologies

olcs	NON DEFINED	Partner-oriented Open Innovation	Fully Open Innovation
To	PREDEFINIED	Classical inter-firm cooperation	Topic-oriented Open Innovation
		PRESELECTED	ANYONE
	PARTNERS		NERS

Open Innovation, 8 steps

- 1. Problem setting
- 2. Scenarios planning
- 3. Enabling technologies
- 4. Complementary assets
- 5. Alliances
- 6. Product / service configuration matrix
- 7. Value proposition
- 8. Business Model Innovation

Social Web & Open Innovation

 The social web allows to activate and develop networks of relationships in which different actors exchange and develop ideas, projects and knowledge



Crowdsourcing

- Business model in which a company or an institution requires the development of a project, a service or a product, to a distributed group of people, even outside the company
- Outsourcing of a process with social media
- Collective intelligence

How Crowdsourcing Works in 6 Easy Steps



From http://www.ebizq.net/blogs/enterprise

Open Innovation Companies

Google

- The first rule of innovation for Google is "Innovation comes from anywhere", Encourage exchanges with other startups, some of which are acquired directly or funded through Google Ventures
- Google Home was
 produced in Korea with
 the collaboration of other
 companies



Samsung

- Samsung has opened several open innovation centers, including one in Silicon Valley, to create collaborations with startups
- Launched various contests to find ideas for IoT products





Lego

- Lego activates its users through the site <u>Create and Share</u>, and <u>Lego Ideas</u>
- Create and Share allows members of the Lego community to share their Lego designs and images,
- Ideas aims to release new products





Who did not believe in the OI

Striking cases that have missed the appointment with open innovation and have failed:

- Kodak had an employee at home who invented the first digital camera and told him not to talk about it
- Sony launched the first e-book reader, but Amazon prevailed with its Kindle, although it came second in order of time, because it was able to take greater account of the ecosystem that surrounded it