

A panorama of the e-health services to illustrate the telecom innovation

WIVE – Industrial Session on R&D and Prospective – October 2010, 12th

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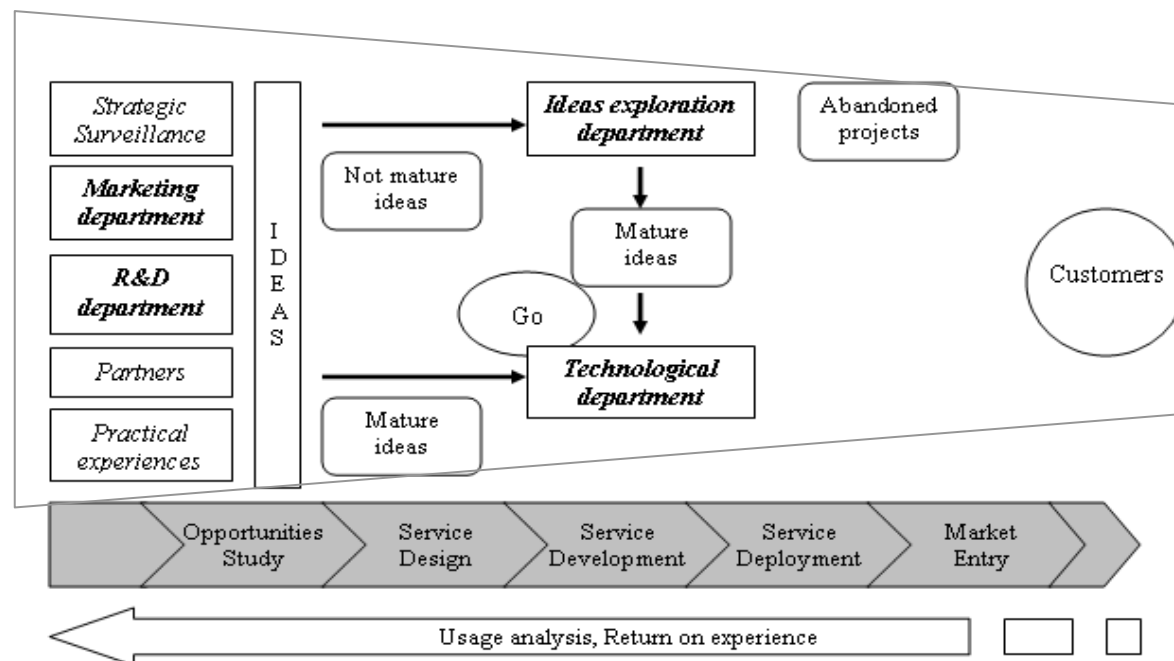
6 Discussion

Introduction to the telecom innovation

→ They are among major actors of services innovation :

- From “networks” and “telephony” sellers to “services providers”
- Focus on the core business + association with value networks
- Growing interest for services sectors (eg. Healthcare, education, etc.)
- Evolution of the role and implication of the customers
- Impact of the ICT on the way of conceiving, delivering and consuming services

→ Services design process :



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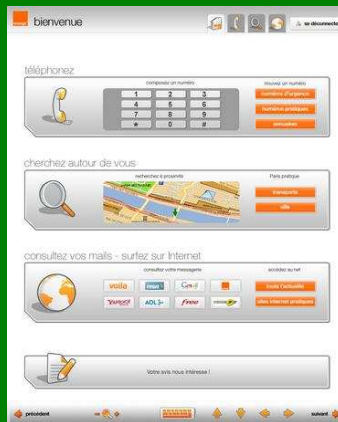
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Models and tools for the designers

Configurer/paramétrer le service de téléconférence	
1.1	disposer d'une interface unique
1.2	protéger l'accès à la téléconférence
1.3	personnaliser l'interface de la téléconférence (langue, logo, image, photo)
1.4	gérer les contraintes techniques propres au service
1.5	...
Préparer une téléconférence	
2.1	sélectionner les participants dans l'annuaire d'entreprise
2.2	visualiser la disponibilité des participants
2.3	...
2.4	marquer des participants obligatoires
Piloter le déroulement de la téléconférence	
3.1	pouvoir passer en mode visio
3.2	afficher la liste des participants
3.3	afficher le statut de l'orateur et des participants
3.4	gérer ses appels entrants pendant la téléconférence
3.5	...



Creating a list of functionalities



Creating and testing a prototype



Models and tools for the designers



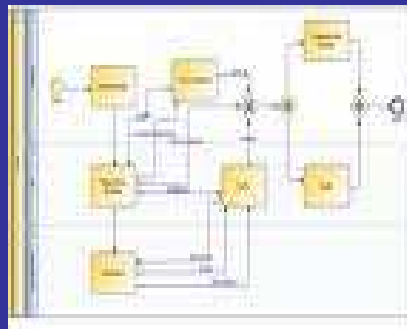
Sharing, searching for and analyzing existing studies



Organizing focus groups, creativity sessions, etc.



Listing the ideas, propositions, etc.



Describing and modeling a scenario




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Models and tools for the designers



Searching for existing technologies, etc.

A collage of icons representing various technologies: a control panel, a laptop, a wireless antenna, a cityscape on a monitor, and a server tower.



Creating a business model

An icon showing a person drawing a business model on a whiteboard with a large pencil.



A futuristic tent structure on a grassy field and a screenshot of a software interface titled "bienvenue".

The software interface shows a "Météo" section with a table of weather data, a "Géolocalisation de votre site" section with a map, and a "consultez nos outils - surfer sur Internet" section with various icons.



Validating the concept and transfer to the next stage

An icon showing a person running with a ball, symbolizing validation and transfer.

Models and tools for the designers

Personas

Steve Turner, Rajiv Daman, Tom and Sean, Jane Wright. Each card includes a name, age, occupation, and background information.



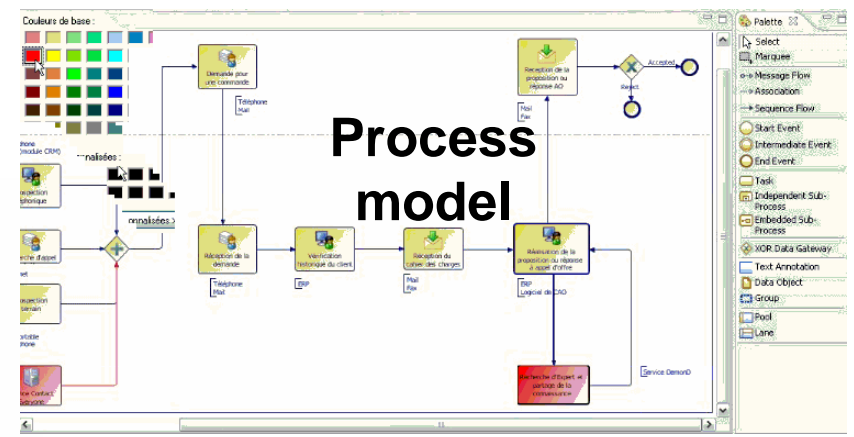
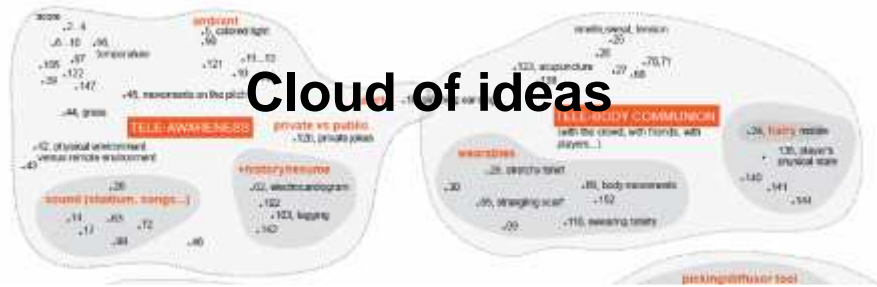
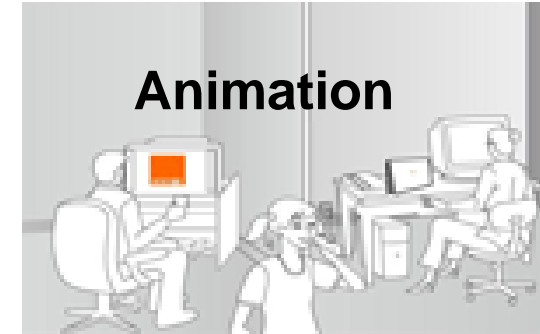
Service blueprint

The customer activity	Find out if it's on the way	Get to the service department	Finalize the right person at service reception	Confirm the right work area zone	Pay the bill	Wait for the car to be brought around	Check over the car and leave
What will the customer think?	Is the car ready? How long it will be? How long it will be? How long it will be?	Can I get a staff or a staff member to help me? Can I get a staff or a staff member to help me?	Do I need to see the same person to finalise the car? Do I need to see the same person to finalise the car?	What are the car details? What are the car details?	When will the car be brought around? When will the car be brought around?	Do I need to see a staff member to check the car? Do I need to see a staff member to check the car?	Can I see the car? Can I see the car?
What will the customer feel?	Customer can't find the car. Car not ready. Car not ready.	Can't get through to the person who can help. Can't get through to the person who can help.	Service area crowded. Service area crowded.	Work done, not clear of the car. Work done, not clear of the car.	Bill not ready. Bill not ready.	Car not ready. Car not ready.	Car not ready. Car not ready.
What will the customer do?	Check the car. Check the car.	Wait for the car. Wait for the car.	Wait for the car. Wait for the car.	Wait for the car. Wait for the car.	Wait for the car. Wait for the car.	Wait for the car. Wait for the car.	Wait for the car. Wait for the car.
Opportunity to delight the customer?	Low	Medium	Medium	Medium	High	Medium	Low
What will we do to delight the customer?	Staff or phone operator when car is ready on the way.	Staff or phone operator when car is ready on the way.	Staff or phone operator when car is ready on the way.	Staff or phone operator when car is ready on the way.	Staff or phone operator when car is ready on the way.	Staff or phone operator when car is ready on the way.	Staff or phone operator when car is ready on the way.
Opportunity to disappoint the customer?	High	Low	Medium	High	High	High	High
Is this a moment of truth?	Yes	No	No	Yes	Yes	Yes	Yes

Another service carried out without any problems and his car was ready. I was glad to see the car ready. I was glad to see the car ready.

Scenario

A block of text describing a scenario, likely related to the service blueprint.



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Among the new territories of growth : the e-Health field

→ Some promising markets :

- Immersive videoconferencing / telepresence
- New uses for mobiles
- Cloud Computing
- etc.

- E-Health !



Among the new territories of growth : the e-Health field

- Definition :

Use of the ICT to meet the needs of citizens, patients, healthcare establishments and professionals, services providers, etc.

- A fast-changing environment :

- People are living to a much older age
- The number of people suffering from chronic illness is rapidly growing
- There are huge inequalities in the healthcare systems of different countries
- There are strong budgetary and regulatory constraints
- There is a problem with the professionals geographic distribution

- Important opportunities :

- A patient-centered evolution (well-being and autonomy)
- The most important market growth (between 15 and 20 % in coming 5 years).
- A current technological “mutation” (high speed Internet, network organization, etc.)

Among the new territories of growth : the e-Health field

- Telecom's roles :
 - Reliability of the communications, data transfers, terminals, etc.
 - Interoperability (an healthcare platform)
 - Ability to work within a complex network (coordination of the actions)
 - Services, advices and capacity to operate the maintenance, etc.
- 3 main aspects of the Telecom strategy :
 - Anticipation : positioning itself, clarification of the legal issues, etc.
 - Conviction : participation to several conferences/seminars
 - Pragmatism : partnerships and experiments
- 3 dimensions of medical care :
 - Hospital & emergency departments
 - Healthcare outside of hospitals
 - Prevention and well-being
- Orange's know-how is not a recent development
 - Creation of a specific division dedicated to health in 1998
 - Launch of a telesurgery experiment between New York and Strasbourg in 2001 (the Lingbergh Operation)

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Some examples of e-Health telecom innovations



Prevention /
education



Therapeutic
accompaniment



Remote monitoring of
elderly people



Hospital of the future



Very high speed for
imaging network

http://www.orange.com/en_EN/group/activities_key/health/index.jsp
http://www.orange-innovation.tv/webtv/e-sante/liste_video-25-fr-page-3
http://www.orange.com/sirius/dossiers_anim/orange_esante/index_fr.html

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A broad scientific and operational lock

- The e-Health ecosystem is complex
- The possible scenarios are numerous
- The “Opportunities Research” step aims at :
 - Describing the targeted services situations
 - Identifying some new ideas of IT or telecom solutions
- It requires a collaborative and complex practice :
 - Involving a remote and inter-professional network of innovators
 - With basic problems : they do not understand each other, they fail to make contact and pursue a project over time, they do not have adapted tools, etc.
 - Creating some lists of technical functionalities or describing some business processes... but it is not adapted to the healthcare reality !

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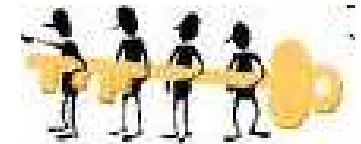
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Discussion

- The e-Health field presents some interesting opportunities for the telecom operators
- But it is linked to complex, dynamic, distributed and heterogeneous systems
- The telecom operators already have numerous technical platforms, features and networks to quickly propose efficient solutions
- But their ability to answer the needs of the e-Health actors requires the understanding of this universe and its systems
- The notion of « Service System » (PhD work of F. Bugeaud at Orange Labs & UTT/Tech-CICO) :
 - Helps them to formalize the « service configurations »
 - Seems to be useful for the convergence of the actors' points of view
 - Supports the “creative” nature of the innovation process by the enrichment of the services situations description
- The future of the design : the emotional design (Kansei : emotions, feelings, sensory)



Thank you !

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