2nd Joint MSR-FAPESP Workshop

Cross media
for e-government services

Escola Politécnica da USP

Laboratório de Tecnologia de Software

Grupo de Estudos em interação

Project funded by

FAPESP

Microsoft Research

Agenda

- A (very) quick view about X-Gov
- Results
- Open research questions
- Management issues

X-GOV

Objective:

We shall develop a framework to support cross media government services

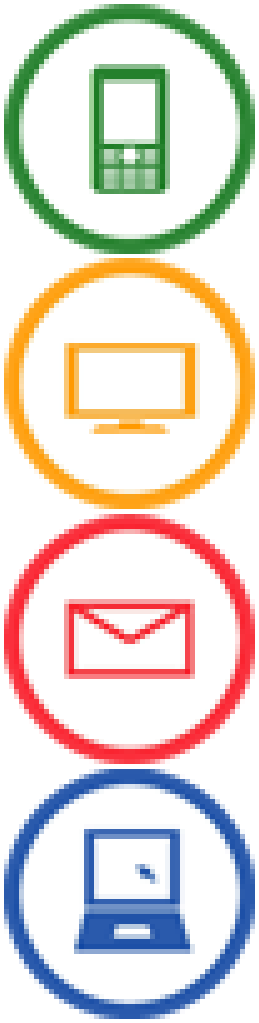
Project funded by
FAPESP
Microsoft Research

Cross media?

Project funded by

FAPESP

Microsoft Research



Cross media is the **orchestration** of different media and devices to deliver a story, in which each media contributes with its strengths.

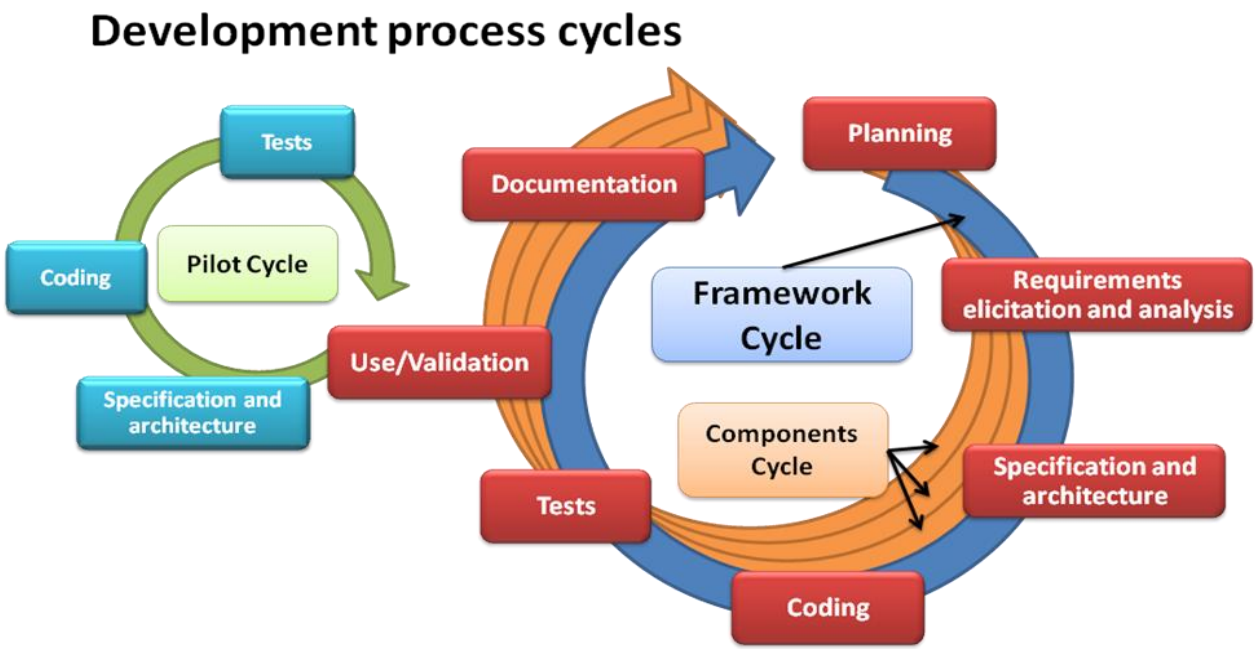
Cross media is

- A new interaction paradigm
- A new way of using C&I technology
- A world trend in marketing and entertainment

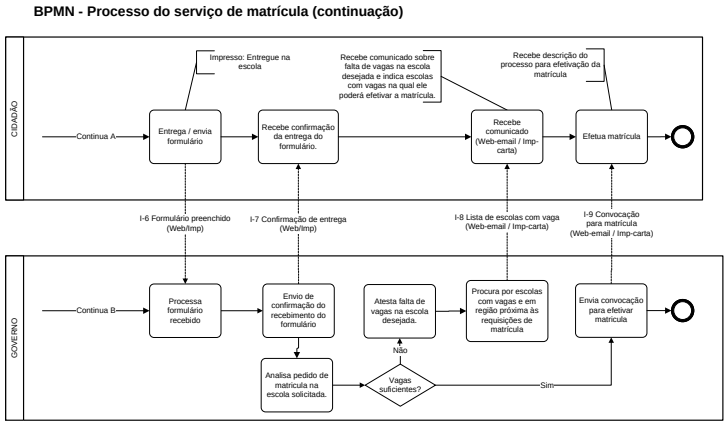
X-gov is defined as the delivery of **public services** across **multiple media**, in which **G2C** communication is supported by several media alternatives, each one **directing** the citizen to the next step in the interaction process and to the more suitable media for that step.

A framework?

RESULTS


Development process cycles
Tests
Coding
Pilot Cycle
Specification and architecture
Use/Validation
Documentation
Planning
Framework Cycle
Requirements elicitation and analysis
Components Cycle
Specification and architecture
Tests
Coding

1st. POC (I WS)



Objectives:

Service planning

iDTV and mobile development technology

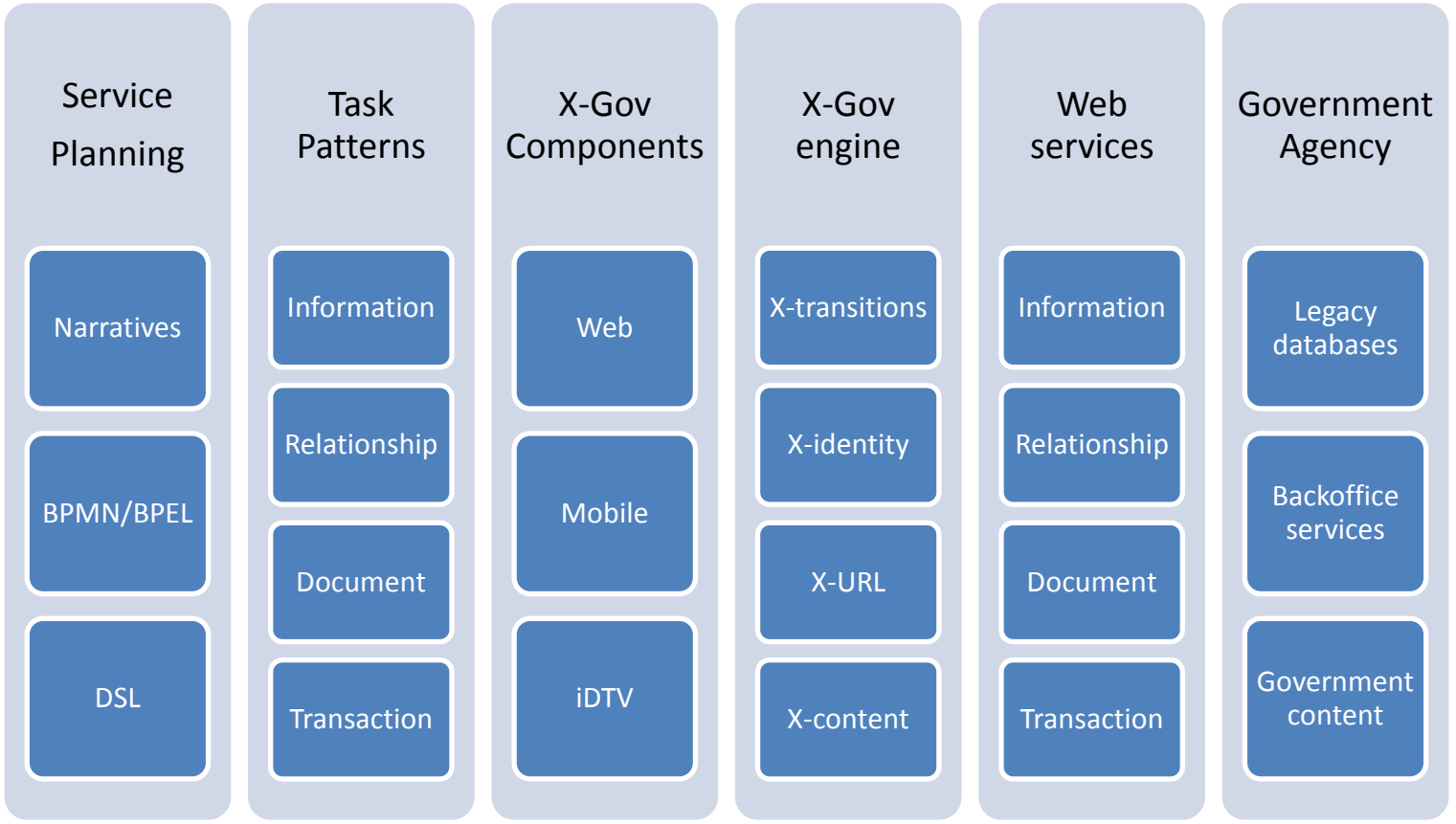
2nd. POC

- **reusable software for e-government services**
- **transitions between different media and devices**

Task Patterns List

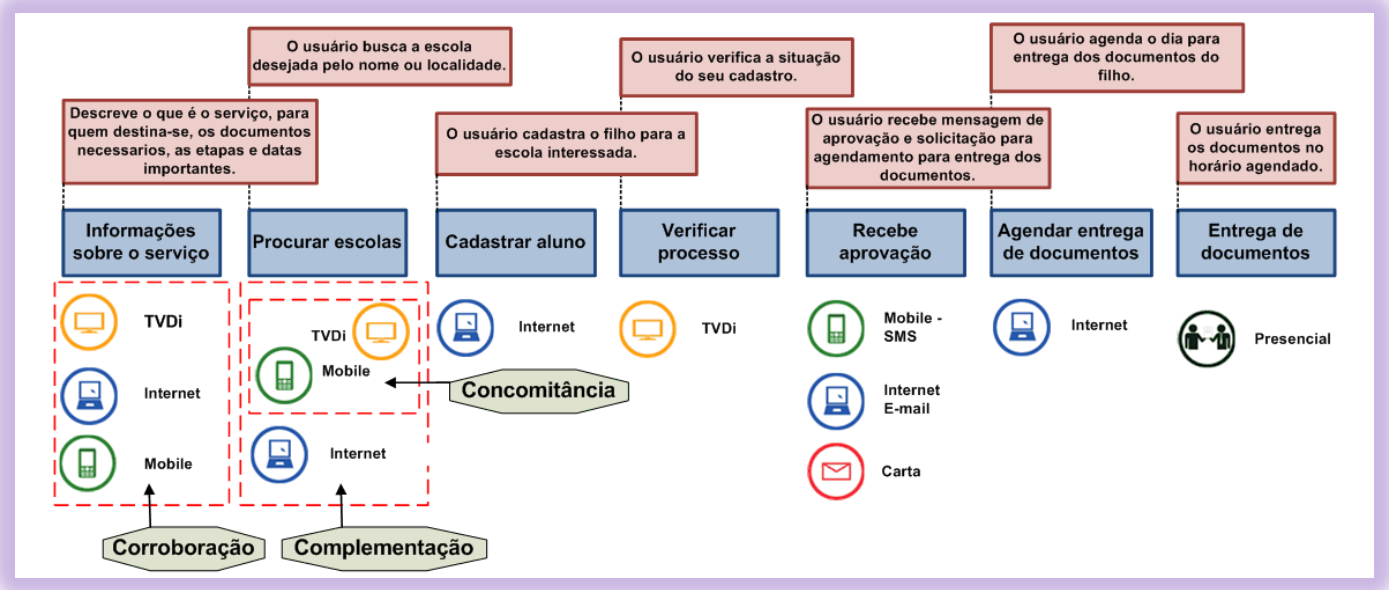
Information	Document	Transaction	Relationship
Obtain pre-service information	Get digitally certified document	Authentication	Talk to the ombudsman
Submit information to government	Create an invoice	Get track id	Receive a message
Submit personal information	Verify document validity	Pay fee/tax	Track a process
Find public information	Print document	Schedule	
Find information about entity	Save as file		
Find private information			

http://lts-i.pcs.usp.br/xgov/taskpatterns.html


Service Planning
Narratives
BPMN/BPEL
DSL
Task Patterns
Information
Relationship
Document
Transaction
X-Gov Components
Web
Mobile
iDTV
X-Gov engine
X-transitions
X-identity
X-URL
X-content
Web services
Information
Relationship
Document
Transaction
Government Agency
Legacy databases
Backoffice services
Government content

X-Gov 3 C's

Confirmation
Complementation
Concomitance



X-gov

Publications

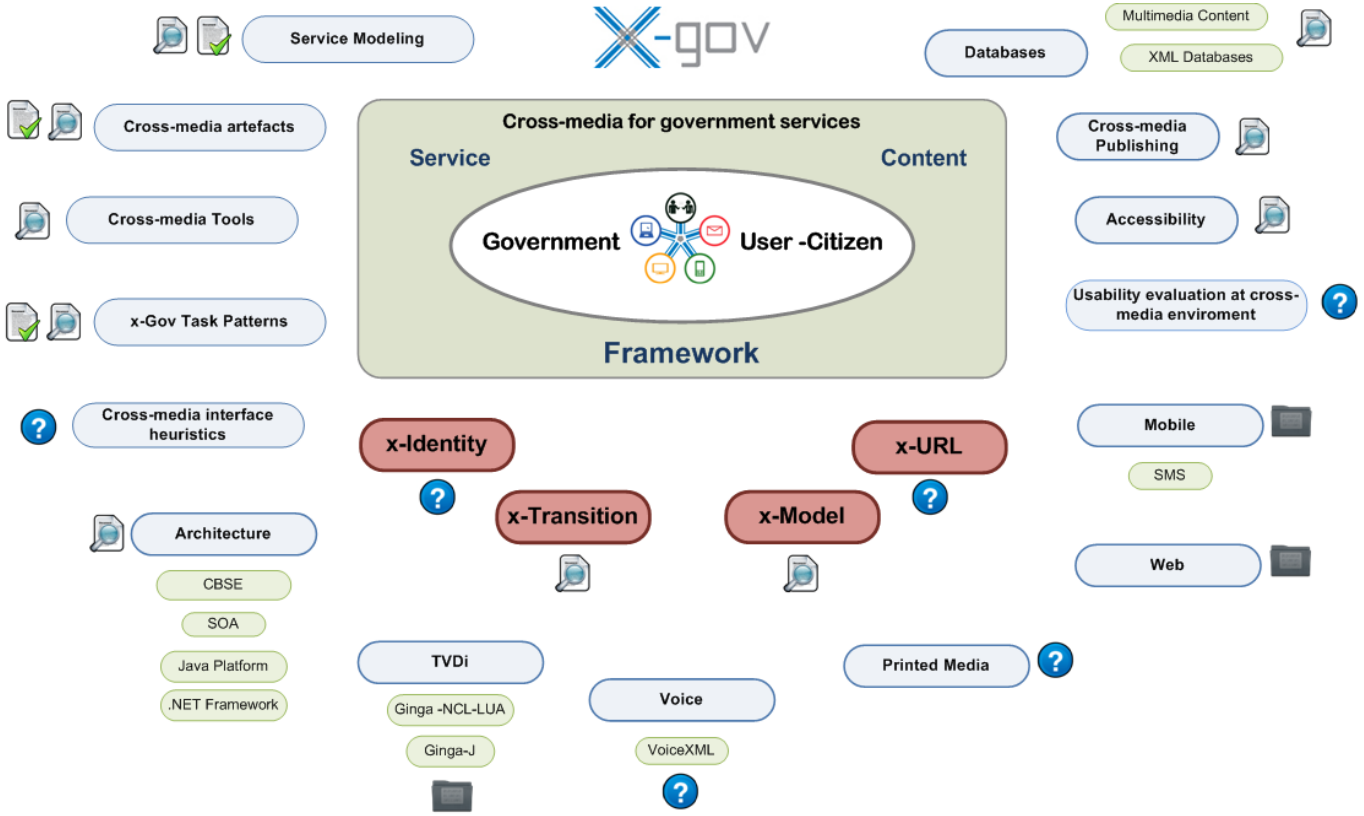
- Filgueiras, L. V., Correa, D. O., Neto, J. S., and Facis, R. P. 2008. X-Gov Planning: How to Apply Cross Media to Government Services. In *Proceedings of the Second international Conference on Digital Society* (February 10 - 15, 2008). ICDS. IEEE Computer Society, Washington, DC, 140-145. DOI= http://dx.doi.org/10.1109/ICDS.2008.29

- de Oliveira Neto, J. S. and Filgueiras, L. V. 2008. Crossmedia application design: exploring linear and non-linear narrative abilities. In *Proceedings of the 26th Annual ACM international Conference on Design of Communication* (Lisbon, Portugal, September 22 - 24, 2008). SIGDOC '08. ACM, New York, NY, 225-234. DOI= http://doi.acm.org/10.1145/1456536.1456582

- Miyamaru, F., Leite, L., Bertuzzi, A. and Filgueiras, L. 2008. Task patterns for e-government services. In *Anais do VIII Simpósio Sobre Fatores Humanos em Sistemas Computacionais.* (Porto Alegre, Brazil,October 1-24, 2008). IHC2008. SBC. ISBN 978-85-7669-203-4

- Miyamaru, F., Leite, L., Bertuzzi, A. and Filgueiras, L. 2008. Mídia cruzada em serviços de governo: conceito e aplicação . In *Anais do VIII Simpósio Sobre Fatores Humanos em Sistemas Computacionais.* (Porto Alegre, Brazil,October 1-24, 2008). IHC2008. SBC. ISBN 978-85-7669-203-4

OPEN RESEARCH QUESTIONS


Service Modeling
X-gov
Databases
Multimedia Content
XML Databases
Cross-media artefacts
Cross-media for government services
Service
Content
Government
User -Citizen
Framework
Cross-media Publishing
Cross-media Tools
Accessibility
x-Gov Task Patterns
Usability evaluation at cross-media enviroment
Cross-media interface heuristics
x-Identity
x-URL
Mobile
SMS
x-Transition
x-Model
Architecture
CBSE
SOA
Java Platform
.NET Framework
Web
TVDi
Ginga -NCL-LUA
Ginga-J
Voice
VoiceXML
Printed Media

3rd POC

- X-Model
- X-Content interface
- X-Id
- X-URL
- Usability studies

MANAGEMENT ISSUES

X-Gov Team

The Core Research Team

- Flavio Miyamaru (Ms Student, EPUSP, MSR–Fapesp)
- André Quintela Bertuzzi (UG student, EPUSP, MSR-Fapesp)
- Leonardo Alexandre Ferreira Leite (UG Student, EPUSP, MSR–Fapesp)

Associated Researchers

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- Stefan Martins (Ms Student, EPUSP)
- Heitor Ganzelli (UG Student, EPUSP)
- Rodrigo Salinas (UG Student, Anhembi-Morumbi)
- Luciano Ribeiro (UG Student, Anhembi-Morumbi)
- Bruno Paschoalato (UG Student, UNIFIEO)

Coordinator : Lucia Filgueiras (EPUSP)

Benefits

- Providing citizens with a better alternative of interaction with government services

- Software
- Publications

- Technology appropriation
- Human resources

Costs

Spent ~20% of budget granted

BCWS=R$40,000.00

BCWP=R$25,000.00

ACWP=R$20,000.00

SPI=0.63

CPI=1.25

Thank you!

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