PICTURE - How to develop a successful ICT investment strategy

Soumi Papadopoulou

PLANET S.A.

PICTURE at a glance

PICTURE: An instrument that supports successful ICT investment strategies for European Public Administrations

- ► **STREP project, funded by European Commission under FP6**
- ► **Duration: 3 years**
- ► **Start: February 2006**

Partners:

Technology

Research

Users

Why PICTURE?

- Introduction of ICT in Public Administrations (PA) offers large potential to reorganize and improve back-office processes
  - Supports high quality service delivery to citizens and businesses

However:

- Current focus of PAs: improvement of single processes
- Potential impact of ICT on overall "Process Landscape" cannot be measured

As a result:

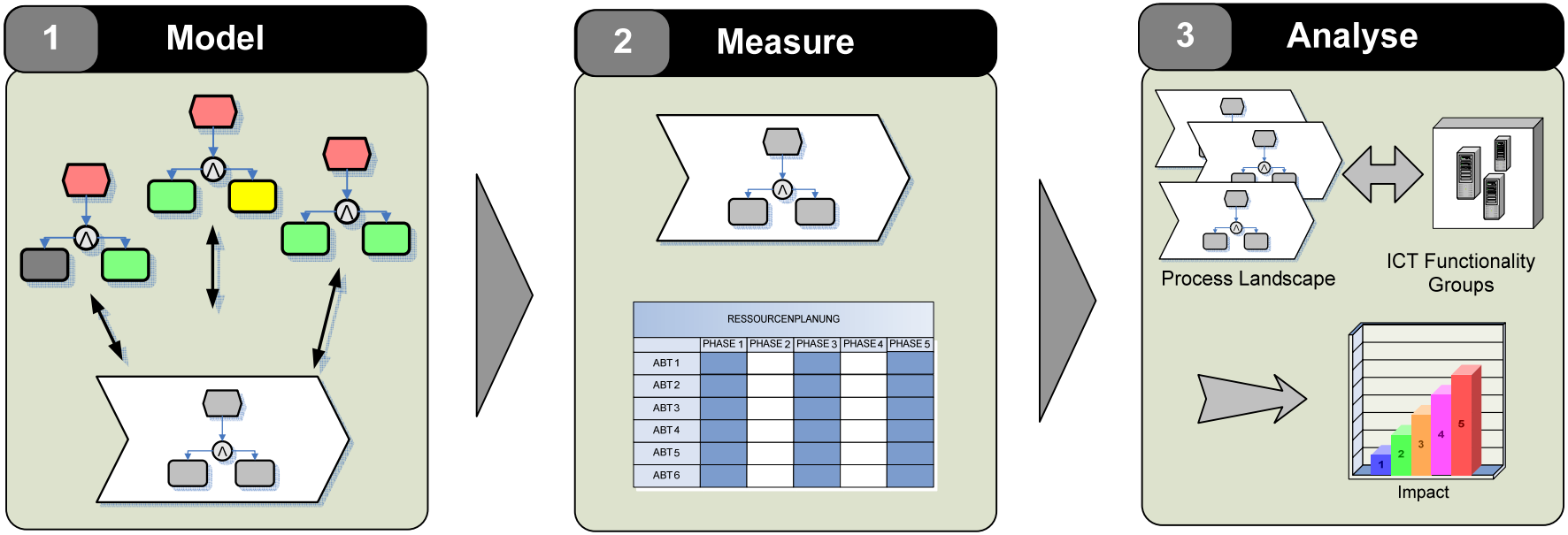
- It is a challenge to justify large ICT investments toward the political leadership and the public
- Decision makers hesitate to invest in ICTs

How does PICTURE address this challenge?

PICTURE aims to:

- ► develop, validate, and disseminate a web-based tool that
- ► enables an efficient measurement of ICT impact on the overall process landscape of PAs,
- ► providing key information for the development of a sound ICT investment strategy

How will PICTURE work?



Step 1- Model:

PA staff model all core administrational processes using pre-defined process building blocks

<u>Outcome</u>: modelled process landscape

Step 2 - Measure:

PA chief information officer measures impact of ICT components on the process landscape

<u>Outcome</u>: qualitative & quantitative impact data ICTs on the process landscape

Step 3 - Analyse:

PA decision makers analyse the results and derive appropriate ICT investment decisions

<u>Outcome</u>: assessment of impact measurement (performed by PA)

Modelling PA processes

- **PICTURE enables the PA to model its processes using pre-defined Process Building Blocks (PBBs)**
- **PBBs describe the activities a user performs in a process, non-context specific.**
- **Processes consist of re-occurring Process Building Blocks**
- **Each PBB has process attributes:**
  - **That capture information needed for the impact measurement**

Receive	Start a record	Check signature	Assign responsibility	Send
Attributes: source, channel, medium, target, need for signature, ...	Attributes: retention period, method, taxonomy, ...	Attributes: electronically, personally, ...	Attributes: automatic, manual, target, ...	Attributes: source, channel, confidentiality, ...

ICT Components

- PICTURE focuses on basic ICT systems (non-vendor specific) that support back-office administrational processes
- Basic ICT components support particular types of activities that occur in many back-office processes
- Examples of Basic ICT components:
  - Workflow management, document management, digital archive, eSignature, web content management
- No broad diffusion of ICTs in Public Administrations so far according to survey carried out within project
- Each ICT component has a number of functionalities, which are grouped according to similarities.

Measuring ICT impact

The PICTURE Impact Measurement Methodology will:

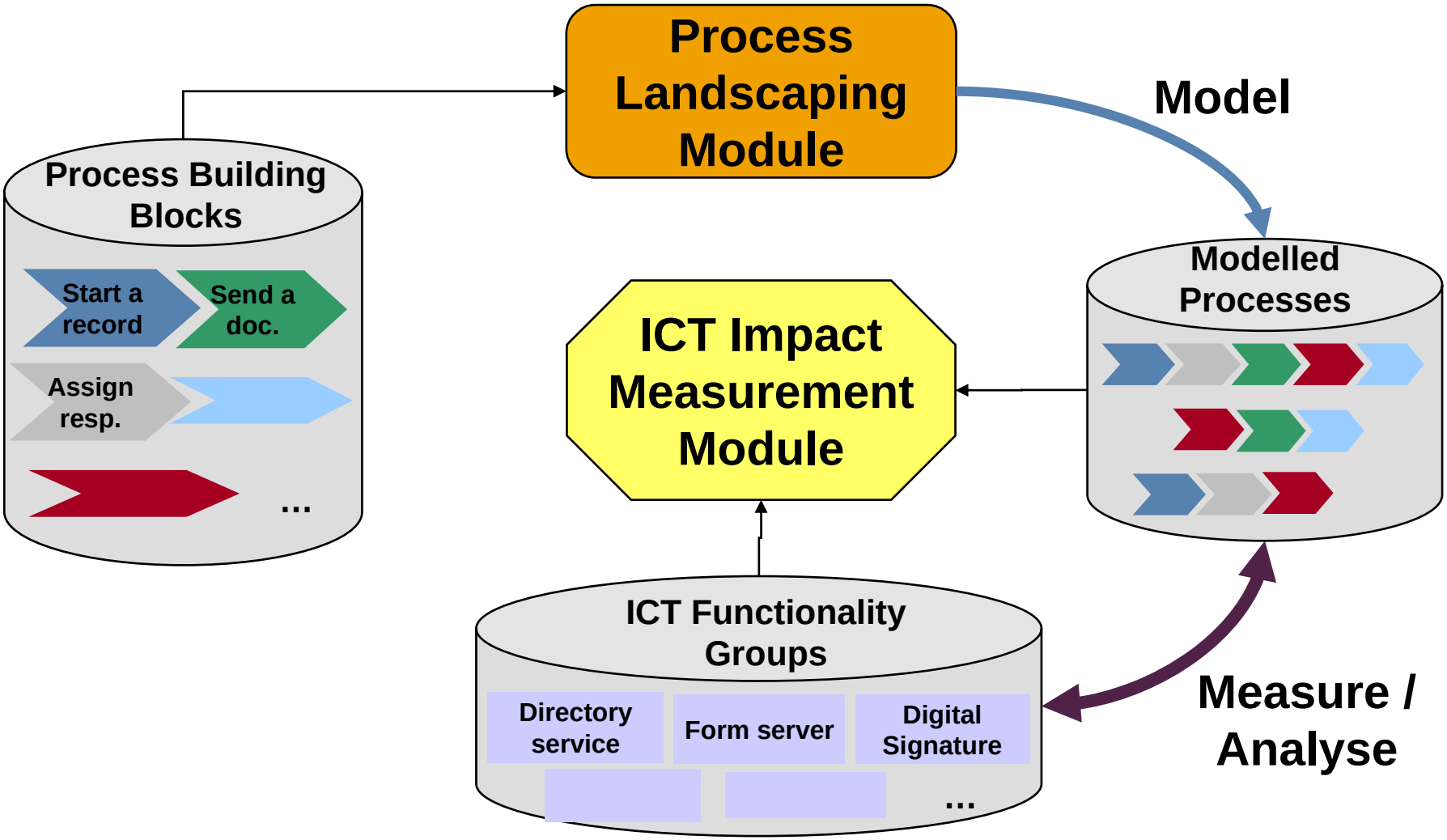
- **enable PAs to map ICT components (e.g. document management) to their processes. The PA will know which ICTs can support a process and in what way.**
- **measure the impact of ICTs on PA processes, in a qualitative, quantitative and monetary dimension e.g.**
  - **time savings**
  - **cost savings (paper handling costs)**
  - **# errors eliminated / reduced**
  - **# manual steps that are eliminated**
- **identify areas of process re-organisation through the introduction of ICTs (based on similar patterns of ICTs and their impact on process building blocks).**

City of Muenster STADT MÜNSTER

Process: Application for Accomodation Allowance **Amount of Cases p.a.:** 5000

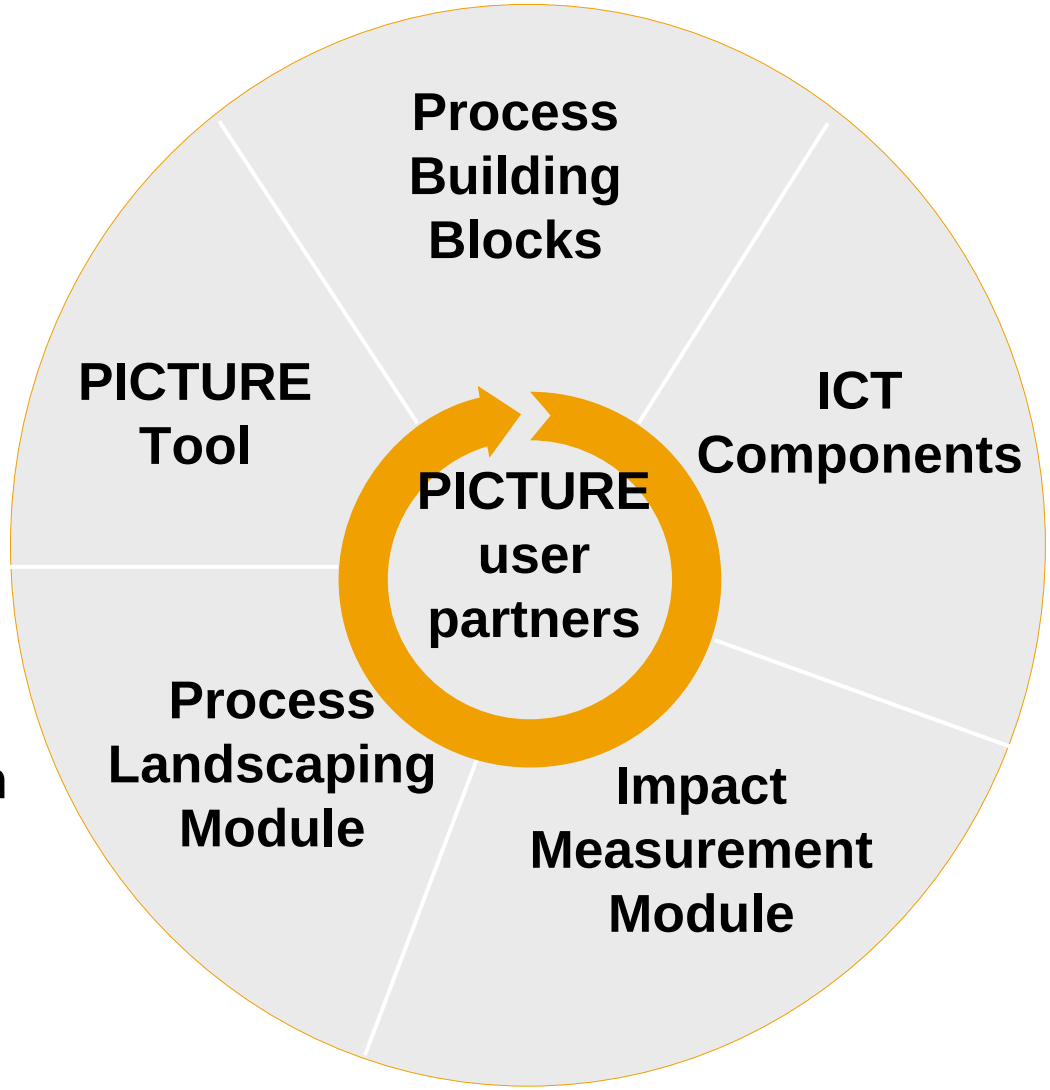
Model			Measure						
Process Building Blocks	Building Block Attributes	Attribute values	Functionality group	Estimated usage rate	Qualitative Impact: Faster execution	Qualitative Impact: Error avoidance	Qualitative Impact: Trans-parency	Qualitative Impact: Customer satisfaction	Monetary Impact
Incoming Application	Channel? Filling in form necessary? Signature neccessary? Name of incoming document	Mail y y Accomodation Allowance Claim	Web-Interface Digital Signature	5%	0	1250	0	2250	
Record and Index	Using IT-System? Duration in minutes	y 2							
Enter Data to IT	Name of Source Target-System Duration in minutes	Accomodation Allowance Claim MESO 4	Web-Interface Digital Signature	5%	2500	2250	0	0	700,00 €
			Digitise Document	95%	33250	33250	0	0	
Formal Check of Data	Type of check Duration in minutes Using IT-System?	Consistency 5 y							
Create Document	Using Office-Application? Filling in form necessary? Duration in minutes	y n 5							
Send Document	Channel? Number of Letters Postal charges Signature necessary? Filling in Form necessary?	Mail 1 0.55 n n							
Receive Document	Channel? Filling in form necessary? Signature neccessary? Name of incoming document	Mail n n Accomodation Allowance Approval							
Enter Data to IT	Name of Source Target-System Duration in minutes	Accomodation Allowance Approval MESO 5	Web-Interface	5%	2500	2250	0	0	875,00 €
Print Document	Number of pages Name of document	10 Accomodation Allowance Approval							
	Channel?	Mail	Flow control Digital Signature	100%	50000	10000	40000	0	4.200,00 €

The PICTURE Tool



Evaluation of PICTURE

- PICTURE tool elements and methodologies and are evaluated iteratively by the 5 user partners (PAs) throughout the project lifecycle
- PAs outside the PICTURE consortium are also contributing to the evaluation (with NDAs)



Project Timeline

Phase I (Q3 & Q4 / 2006)

- ►Definition and evaluation of Process Building Blocks and ICT Functionality Groups (completed)

Phase II (Q4/2006 – Q4/2007)

- ►Mapping of ICTs to Process Building Blocks *(in progress)*
- ► Development of ICT Impact Measurement Methodology *(in progress)*
- ►Development of Process Landscaping Methodology

Phase III (Q4/2007 – Q1 2009)

- ►Development and evaluation of the PICTURE tool
- ►PICTURE Exploitation Plan and broad dissemination

Summary

- PICTURE makes ICT impact on back-office processes measurable
  - Supports process reorganization
- Supports decision makers to justify ICT investment decisions
  - Highest impact achieved by combination of basic ICT components
  - Improved service quality and efficiency
- Contributes to good practice exchange
  - Supports collection and consolidation of processes across European Public Administration
  - Supports grouping of ICTs from a vendor-independent perspective

Thank you for your attention

For more information on PICTURE please visit:

http://www.picture-eu.org