



PICTURE Newsletter

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RUNNING OF THE PICTURE PROJECT

PICTURE project successfully finalized Year 1

The PICTURE consortium consisting of seven research and technology partners as well as five user partners has successfully reached the end of first year of the project. The vision of PICTURE is to enable high quality service delivery to European citizens and businesses by strengthening the ICT diffusion in European Public Administrations. Therefore, PICTURE will develop a web based instrument to support ICT investment strategy development in public administrations. The PICTURE tool consists of two core modules:

- the Process Landscaping Module will be used by process owners and executors to capture the administrative processes of a Public Administration
- the ICT Impact Measurement Module will identify and measure the ICT impact on administrative processes of a Public Administration in a qualitative, quantitative and monetary dimension.

During its first year, the PICTURE consortium has worked on the methodological and technical foundations for the PICTURE tool. The main results are (the related publicly available Deliverables will be published on the project Web site):

- the development of a set of approx. 40 process building blocks that form the basis for capturing the administrative processes
- the definition of approx. 90 ICT functionality groups for which impact on processes in public administrations can be measured

- state-of-the art and requirements analysis for the impact measurement methodology tying the process building blocks and the ICT functionality groups together
- architectural framework for the PICTURE tool considering specific requirements imposed by public administrations.

For the first two results, evaluation workshops with the user partners in the project as well as municipalities outside of the project have been carried out.

In the second year the PICTURE consortium will focus on the development of the process landscaping as well as the impact measurement methodology and the implementation of the PICTURE tool. Again, all tasks will be accompanied by regular evaluation workshops with municipalities. This will also contribute to further refinement of the underlying process building blocks and ICT functionality groups.

For regular updates and collaboration between the partners, consortium meetings as well as workshops dedicated to specific topics were organized. Also, several dissemination activities took place in the first year of the project. Besides others, PICTURE has been presented at the "Impact of eGovernment in Europe" conference in September 2006 in Helsinki and PICTURE partners have contributed to workshops at the IST conference in November 2006, also in Helsinki. Furthermore, several papers on PICTURE were presented at scientific conferences.



SIGNIFICANT STEPS AND RESEARCH PERSPECTIVES

Process building blocks and WP1 results

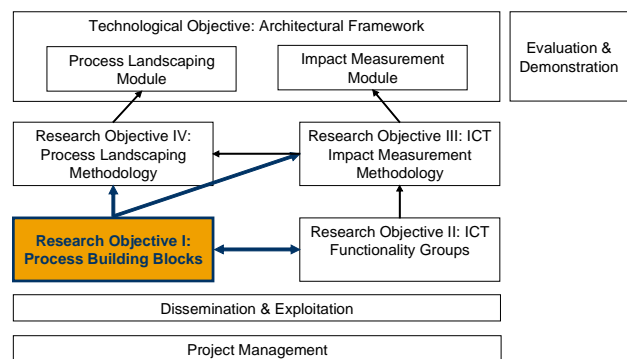
Public Administrations are characterised by a function-oriented organisation, high levels of specialisation and division of labour as well as fragmented, cross-organisational service delivery processes. Under these circumstances, investment decisions for new Information Systems (IS) are difficult because their benefits and values cannot be precisely measured. An important prerequisite to solve this problem is to acquire comprehensive knowledge about internal organisational and procedural structures. However, the public sector does not pay much attention to adopting adequate techniques to model and analyse these structures regarding their potentials of reorganisation and IS support.

By identifying and designing process building blocks within the first year of the PICTURE project, the basis to develop modelling and measurement methodologies has been established. At the beginning of the project a survey on European administrations was initiated asking about diffusion of modelling techniques and tools. The analysis reveals that modelling as a prerequisite of a goal-oriented modernisation of organisational and procedural structures is not yet established in the public sector.

In the following step, further literature research was conducted, in order to analyse the characteristics of process building blocks. Furthermore representative processes of participating municipalities have been selected and documented by process models. The resulting knowledge provides a foundation to define requirements for process building blocks and to identify appropriate activities (as candidates for process building blocks). Thus a great number of process building blocks has been extracted which significantly differed regarding their levels of detail and abstraction as well as their terminology and semantic. In order to reduce number and heterogeneity, the consortium developed an

approach that generalises the individual activities to a higher level of abstraction.

After a first set of process building blocks was identified, this set was evaluated during numerous workshops in different public administrations. By generating concrete process models, process building blocks were analysed regarding comprehensibility, applicability and completeness. Finally, a first specification of process building blocks including their related attributes was completed.



This specification provides the starting point to develop the landscaping and measurement methodologies of PICTURE. Furthermore the defined process building blocks can be assigned to the IT Functionality Groups which are defined in a parallel work package.

The process building blocks can be used at once to support modernising projects in the public sector. Establishing a standardised terminology as well as homogeneous levels of detail and abstraction, process building blocks enable the distributed modelling of processes. Furthermore the inter-organisational comparability of processes is an important advantage of this approach. This allows to develop and transfer common and best practice models.



PICTURE NEWS AND EVENTS

Overview on dissemination activities

The first year of the PICTURE project has come to an end and in retrospective it must be noted that the dissemination activities to a great extent have promoted the spreading and revitalising of the PICTURE ideas at a European level. This has been achieved with the various efforts and contributions made by the Consortium partners and part of the project objectives is to ensure an active promotion strategy, using diversified approaches to reach the European audience.

As the PICTURE project started almost a year ago the initial dissemination activities were concentrated on "spreading the word" of the PICTURE idea, but as for now and as the project proceeds, the dissemination is gradually shifting to a more result- and technology directed dissemination. The first activities therefore concerned publishing papers, contacts with the media as well as activities related to creating and designing the main promotional material, such as the PICTURE Website, newsletter, poster and brochures. After the first year, the Website statistics show that there is a continuous interest for the homepage with a stable access quota and a good diversity of users.

Besides the more subtle dissemination activities such as interaction "on the job" with colleagues and experts, a wide range of dissemination activities have taken place covering various local, regional and national events. Provided below is a sample of the conferences attended to reach the objectives mainly of Workpackage 7:

- **IRIS 2006, Austria**
- **CEBIT 2006, Germany**
- **MEMO 2006, Germany** (participation is also planned for this year)
- **BALTIC DYNAMICS 2006, Lithuania**
- **eGovernment Fair, Belgium (EC)**
- **PACIS 2006, Malaysia**
- **Impact of eGovernment in Europe, Finland**
- **DEXA 2006, Poland**

- **e-Łódź, Poland**
- **IST conference, Finland:** PICTURE was presented in the sessions on Future eGovernment Research and on From Barriers to Benefits: Efficiency and Effectiveness of eGovernment
- **Open Days – European Week of Regions and Cities, Belgium.**

In addition to these activities, the forthcoming PICTURE Workshop will take place in a few weeks time. Specifically the aim of the workshop will be challenging the idea of PICTURE as follows:

- Involving administration end-users, decision makers, researchers and eGovernment consultants
- focusing on Process modeling based on Building Blocks and/or ICT Value Measurement
- gaining valuable input from ICT investment strategies of the participants.

Moreover the participants will be able to present their own experiences and have a chance to explore and actively contribute to the new value impact measurement approach developed in PICTURE.

As the PICTURE project evolves and the different project activities continue, new results and new knowledge will be presented and thus create opportunities to make new information available for the public. As a part of a "Next Steps" approach more activities are already planned to take place during 2007 and will promote the PICTURE project, attracting further attention.

Further activities planned for 2007:

- **Eurocities conference 2007, Spain, March**
- **TED conference, Switzerland, April**
- **MEMO 2007, Germany, May**
- **ERCIS conference, Switzerland, June.**

WORK IN PROGRESS: FOCUS ON WP3

ICT Impact Measurement Methodology

One of the main results of the PICTURE project is the development of an ICT Impact Measurement Methodology that measures the impact of Information and Communication Technologies (ICTs) on Public Administration processes. The main logic of the Impact Measurement Methodology is illustrated in the next figure.

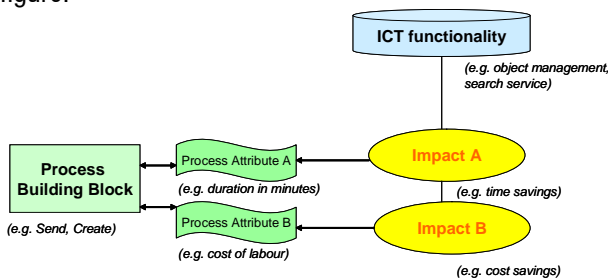


Figure 1 – Elaborated logic of ICT Impact Measurement Methodology

ICTs are separated in ICT functionalities (the main outcome of WP2), whereas Processes are divided in Process Building Blocks (the main outcome of WP1). In order to measure the impact of ICT functionalities on Process Building Blocks (PBBs), measurable process attributes need to be defined. Process attributes are characteristics of a process building block that provide needed information in order to assess the impact.

For example, the Process Building Block “Print” is analysed further in Figure 2. Assuming that the current process is supported by some form of printing involving human interaction with the support of a printer, it is envisaged that a process improvement can be achieved by supporting this PBB with the ICT functionality “Publishing Services” coupled with “System Integration Services” that enables an electronic document to be printed in real-time or batched. (Note that if the original format of the

document is not electronic, this PBB could be linked to the PBB “Scan”).

In this case, the following set of measurable process attributes can be identified, corresponding to relevant areas of desired impact:

- cost of consumables (at present vs. with new ICT) → cost savings
- duration of printing (at present vs. with new ICT) → time savings
- addressee data protection/privacy (at present vs. with new ICT) → enhanced privacy
- necessity (at present vs. with new ICT) → freed up labour and/or reduced media breaks

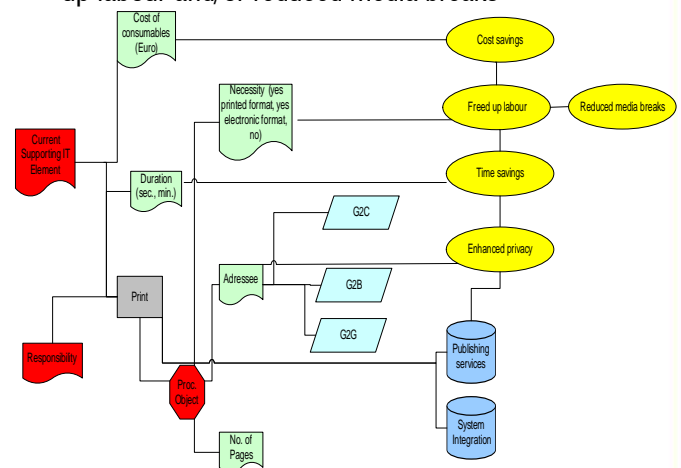


Figure 2 – Example of ICT Impact on PBB “Print”

The process attributes will be identified *vis a vis* 3 key dimension areas: **time**, **resources** and **quality**. Moreover, the impact will be identified primarily from an internal Public Administration point of view. However, where an ICT has direct impact on end-users (citizens and businesses interacting with the PA), they will be acknowledged, since end-user satisfaction is a key driver of PA performance.

The next table indicates the targeted impact areas and



indicative performance indicators for each dimension of impact.

Dimension of impact	Targeted Impact Area	Indicative Performance Indicators
Time	Faster processes	<ul style="list-style-type: none"> - Execution time (minutes) [i.e. the total time required to produce a defined output within a process] - ICT supported execution time (minutes) [i.e. the time required to execute ICT supported tasks. This is a part of the total execution time] - Idle time (minutes) [i.e. the waiting time in between two tasks] - Delivery time (minutes) [i.e. the time required for the delivery of a result within the PA or to an end-user] - Physical transport time (minutes) [i.e. the time required for a person to get to a different location, if the presence of a PA employee at a certain place is necessary].
Resources	Reduced labour costs	<ul style="list-style-type: none"> - Average employee hour rate (Euro/hour)
	Reduced telecommunication costs	<ul style="list-style-type: none"> - Average telecommunication cost per month (telephone & internet)
	Reduced consumable costs	<ul style="list-style-type: none"> - Average paper handling costs per month - Average ink costs - Average other consumable costs (e.g. folders, pens, notepads)
	Reduced storage space & cost	<ul style="list-style-type: none"> - Physical storage space (in square M) - Average storage filing costs per month e.g. folders, boxes, separators
	Benefits due to replacement of old system/ICT [if applicable]	<ul style="list-style-type: none"> - Once-off cost savings [from the avoidance of maintenance of the old system]
Quality	Easier/Better processes	<ul style="list-style-type: none"> - Number of steps eliminated - Number of steps automated - Number of media breaks removed - PA employee job satisfaction - End-user service satisfaction - Easier accessibility of processes - Standardisation of processes - Improved external image of PA
	More accurate processes	<ul style="list-style-type: none"> - Number of errors reduced - Automated quality checks introduced
	More transparent processes, accountability and monitoring	<ul style="list-style-type: none"> - Visibility of process steps and responsibility/ownership - Visibility of process status/audit trail - Visibility of public spending investments/enhanced accountability - End-user service satisfaction - Availability of statistics for monitoring process execution and performance - Availability of information for decision-makers within PA
	Enhanced data protection & privacy	<ul style="list-style-type: none"> - Compliance with data protection regulations - End-user service satisfaction

Table 1 – Dimensions of impact in the PICTURE Impact Measurement Methodology



During the impact measurement process it is envisaged that measures should be given for the current situation, the targeted improvement (in the to-be situation) and the expected impact (which is based on the difference between the targeted improvement and the current situation). It should be noted, that the expected impact

may be positive, indifferent or negative. The overall impact assessment should be based on outweighing the positive and negative impact in the current and to-be situation.

A “filled-in” example of the first indicator “execution time” is shown in table 2.

Dimension of impact	Targeted Impact Area	Performance Indicators	Current situation (without ICT or with baseline ICT)	Targeted Improvement (with new ICT)	Expected Impact
Time	Faster process	Execution time (minutes)	60 minutes to produce result	10 minutes to produce results	The expected time saved is 50 minutes, or 83% time saving

Table 2 – Measurement example for the indicator “Execution time”

The next task is to design in detail the ICT Impact Measurement Methodology. The design of the methodology will be based on the user and technical requirements that have been identified as well as relevant best practices identified from a state-of-art analysis

carried out in the initial phase of the project. During the design phase, process attributes will be identified for all process building blocks based on the three impact dimensions (time, resources, quality) and indicative performance indicators identified above.

PICTURE – An Instrument to Provide Successful ICT Investment Strategies for European Public Administrations.

PICTURE project started on the 1st February 2006, it will end on 31st January 2009 and has been co-financed by 6th Framework Programme of European Commission

The PICTURE Newsletter is a free quarterly issue, published by the PICTURE Consortium to promote PICTURE methodology and instruments, and disseminating information on achieved goals and results.

More information about the project, and a digital version of this newsletter, can be found on the official Website: www.picture-eu.org

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