IbisSoft

Ahead of current thinking

iPB explained
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Short white paper

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1 iPB – a web-based platform with the focus on blue processes

iPB is a web-based platform that allows an organization to map their existing or define new business processes and automatically get a web-based application that would assist employees in running process cases according to their definitions. The main characteristic features of iPB are as follows:

- *Run-time support*. iPB provides run-time support for operation, not just design-time support for drawing process maps

- *Simple but powerful*. iPB is easy to use for all people involved in the process design and operation, yet it is powerful enough to be useful in practice

- *Wide scope*. iPB is able to provide support for the majority of business processes in an organization that do not have any other IT-support except Word-templates, eXcel sheets, and Email. Gathering support under "one roof" minimizes the staff training costs and lead time for introduction of new (changed) processes in operational practice.

- *Agility with stability.* iPB provides with possibility to quickly change a process (definition) whenever the need arises, but do it in a controllable fashion without disturbing operation.

2 Applicability

iPB is a general platform not oriented towards any special vertical market. It can be used in a private enterprise, as well as in a not-for-profit organization, e.g. an interest organization, or local or central government. Nevertheless, iPB has a clearly defined application field that can be explained with the help of the diagram in Fig.1.
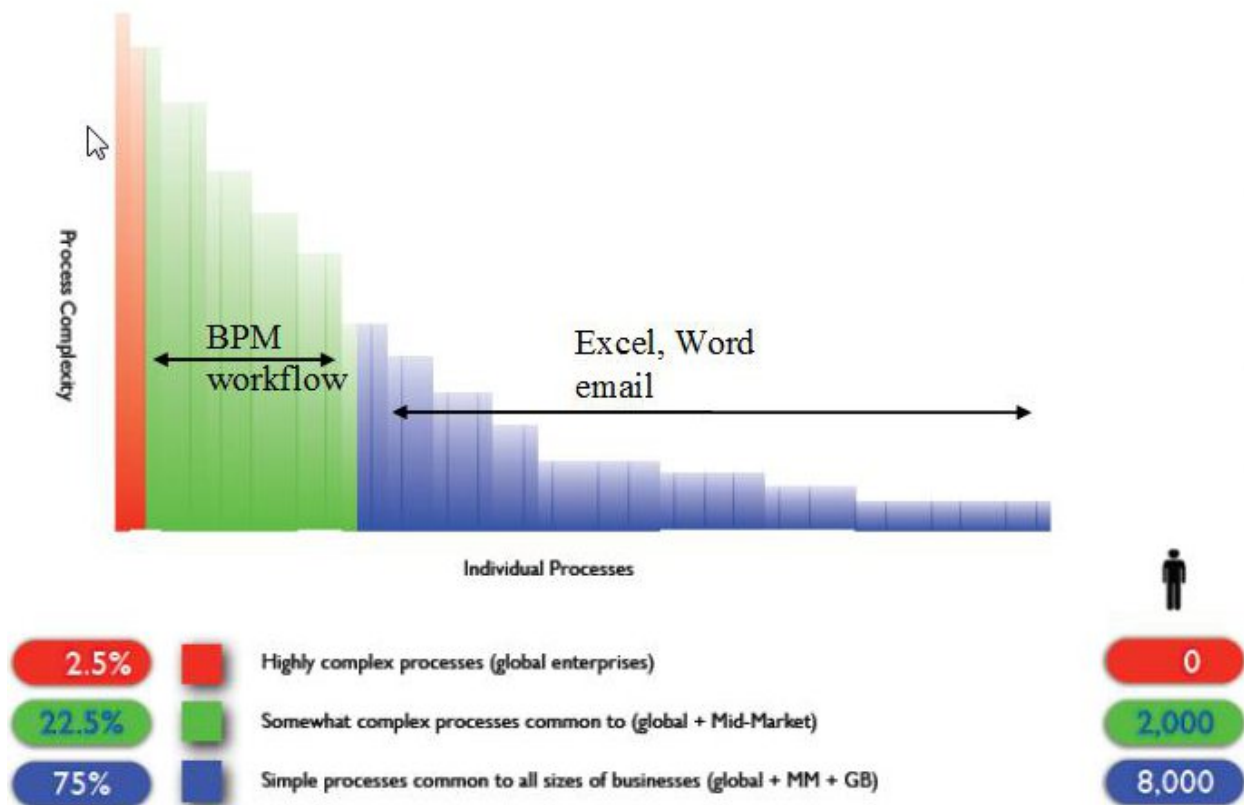

Figure 1: Relationship between complexity and quantity of business processes in a typical organization. Source: Phil Gilbert – keynote presentation at BPM 2010 conference

The diagram in Fig.1 classifies all business processes in a typical organization into three groups:

- Red processes - complex highly automated processes (2.5% of all processes)

- Green processes- somewhat complex partly automated processes in which about a quarter of the organization's staff is involved (22,5% of all process)

- Blue (ad hoc) processes - less complicated manually driven processes in which more or less all people employed in the organization are involved (75% of all processes)

The blue processes represent a problem of which not every manager is aware. They are driven manually, or with the help of general tools like Word templates, Excel sheets, Email. They adhere to departmental standards, or no standards at all, as they are often designed by knowledgeable individuals for their own use. These "ad hoc" driven processes are potential source of waste: lost of time, efforts and important information. For example, who knows in what mailbox the latest version of an important document is to be found?

Putting an "order" into the blue process zone requires special consideration. Here, it is practically impossible to apply the same strategy as for the green and red process zones. Firstly, it is not economically feasible to analyze and build computerized support for the blue processes in the same way as for the red and green ones. There are many more blue processes than there are red and green ones, they are locally-based, and appear and disappear dependent on the demand. Secondary, the blue processes involve more or less all employees, and many of them only occasionally participate in each type of the blue processes. Creating specialized computer systems for the blue processes in the way it is done for the green ones will not work as it will be impossible for occasional users to keep in their minds how to work with all these systems. The systems to support the blue processes should be simple and highly visualized.iPB is a platform designed primarily to address the issue of putting an order into the blue process zone. With its help, an organization can define their blue processes and automatically get a computerize support for them. The platform is provided as a web (cloud computing) service and it requires no local installation, just a computer with a modern WEB-browser. Using iPB does not require programming skill; after some training the task of designing processes can be assigned to an internal knowledgeable person. The development is done in the agile manner: "design as little as possible and put it into real operation as soon as possible, then expand and adjust the result based on the experience."

3   Trends that highlight the needs

Two contemporary trends highlight the importance of the blue process zone, and thus a necessity of having a tool like iPB: outsourcing and cloud computing. Both lead to the computer systems that support red and green processes being moved outside a typical organization through outsourcing to external providers, or using standardized services over the Internet. As a result, blue processes become more visible, and more important as they are needed to tie the outsourced processes with the rest of the organization.

Another result of the outsourcing tendency consists of the larger gap between the organization and the system development. In the past, much of the system development had been done in-house by the internal IT-department, which gave a possibility for system developers to have frequent contacts with the future end-users whom they knew personally. With outsourcing, these natural contacts disappear, which requires for an organization to have a better understanding of how they want a new system to look like before transferring control over system development to an outside partner. iPB can help to solve this issue in the following manner. Before ordering a system to support a previously not-automated process (blue zone), the process is defined and tested in operational practice with the help of iPB. After this, system development can be safely transferred outside the organization where the iPB-defined process and iPB-based computer system is used as part of system requirements and a prototype of the system.

4   Suitability for eGovernement

iPB is especially suitable for form-driven routine processes that are typical for public sector. Such a process often starts with an application form received from a client directly or filled by an office worker being in contact with the client. The process goes through a number of steps that review/add information to the initial form, and ends with a decision presented in a different form that is sent back to the client. This internal logic exactly matches the way iPB represents and supports business processes, see an example of a map (not from the governmental sector) in Fig. 2.
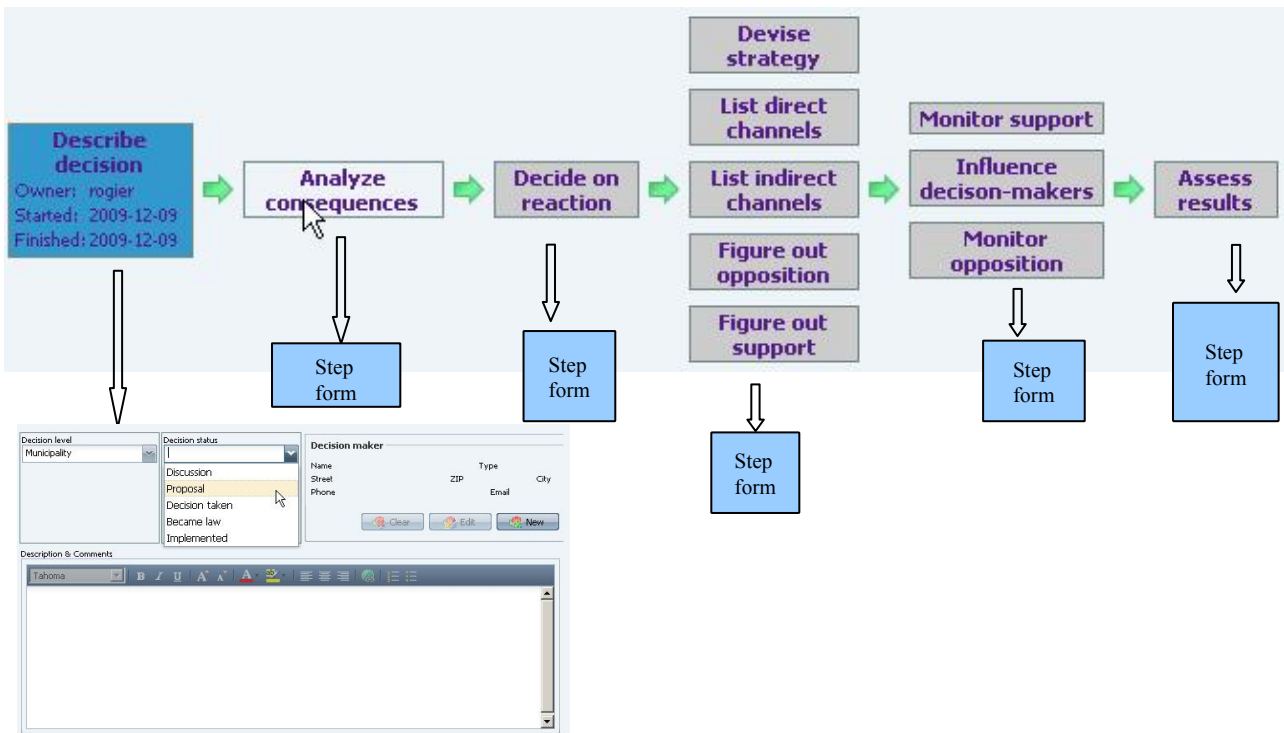

Figure 2: Form driven process in iPB

5   Competitive advantages

5.1   Run-time support

iPB takes an organization father than just creation of "static" process map (definitions) that are useful for process design and training new staff. iPB makes a process map useful during so-called run-time – i.e. the time when people actually run their process cases. To be useful at this stage, the process map should not only represent the general process description but also show where we are in each particular process case. This, in turn, requires that the employees working with a particular case can mark their progress directly in the process map. iPB supports this mode of working in the following manner:

- As soon as a new case starts – iPB makes a copy of the process map that will be unique for this particular case (see Fig.2) while the case is running. This case map represents the progress achieved in the case by setting different colors on the process steps: blue represents finished steps, green represents started steps, white represents steps ready to start, gray represents steps that cannot be yet started according to business rules.

- Details of the progress in each step are represented in a step form (see Fig. 2) that is available for viewing and editing. iPB presents this form (and information previously inputted in it) to the end-user as soon as the latter clicks on the step rectangle with his/her mouse.

Roles assigned to different employees are interpreted in the run-time by allowing/prohibiting certain actions. All people engaged in a process case see the same process map. This, however, does not mean that all of them can enter,edit, start or finished each process step. The rights for these actions are defined in their user profiles.

5.2   Simplicity

iPB is a simple tool in three respects:

1. It is easy for the end-users both to understand iPB-based process definitions, and to use iPB at run-time

2. It is easy for the process developers to understand how to use iPB when mapping existing or developing new processes

3. It is easy to change an existing process definition (hence the iPB-application that supports it) whenever the needs arrive

While being easy to use, iPB is a powerful tool for expressing details of business processes. Simplicity is achieved by using different means for expressing different properties of business processes for different users. For example, a general process flow is defined as a map, the strict constraints on the flow are defined separately as business rules, details of what to be done at each step are defined as web forms. Another example, business rules are defined by the process developer in a matrix form, but they are presented to the end-user with the help of map coloring.

5.3   Process maturity enabler

Due to its run-time support, iPB is an excellent tool for achieving process maturity inside an organization. When people actually work with process maps in their daily work and see the progress of their cases in a visual form, their understanding of the processes grows.

5.4   Agility with stability

In his keynote talk at BMP 2010, Phil Gilbert differentiated three main epochs in using IT-tools for supporting businesses:

- Mainframe era (past): Stability without agility. All programs were thoroughly designed by specialists and run by trained staff. The systems where stable but rigid, as programming efforts were required to make any change

- Excel era (now): Agility without stability. The main tools are Word, eXcel, and Email. Everything is changeable on the fly by anybody participating in the business, and to the full surprise to the others

- BPM era (future): Agility with stability: easy to change but in a control fashion
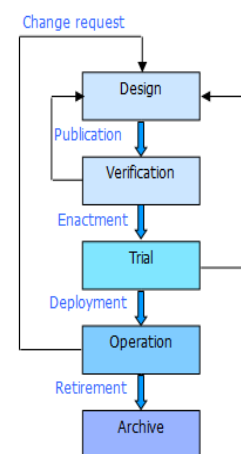

Figure 3: Process development with iPB

iPB helps to enter the new era by providing a quick loop in the process development cycle, see fig. 3. Changes in a process can be quickly made by a locally assigned process owner, and tested in a controlled fashion before making them available to everybody. A change becomes effective only for new started process instances, the already started ones are not disturbed by a change in the middle of their execution.

6   Business model

iPB is delivered as a service. No installation on the client machines is required except having a modern Internet browser and Internet connection. There are two types of licenses: a development license and run-time license. The first one allows to develop new processes or change the already running ones; the fee is based on the number of process developers (one is usually enough for a middle-size organization). The second type of licenses allows the end-users (process participants) to use an iPB-based system when running their business processes. The fee for the run-time depends on the computing power required, and the number of users.