

Danish Municipalities Case Study

The government of Denmark relies on 98 Danish municipalities to manage and administer approximately 65% of the total Danish public budget. The services provided by these municipalities are defined by the laws passed by the Danish government, and the government is concerned that the laws are administered in the same manner and with the same efficiency in all the different municipalities.

The Problem

As government services and legislation controlling those services have become more complex, municipalities in Denmark have struggled to create the organizational and managerial structures needed to administer the services. At the same time citizens complain if they find that one municipality administers services in a less efficient or effective manner than another. The Local Governments Denmark (LGDK) is a consortium of municipal governments working together and supports one another. The LGDK seeks, among other things, to help the municipal units to provide more consistent, effective services, while still respecting local traditions.

For several years the LGDK has defined best practices as a way of guiding municipal governments in the provision and administration of a wide variety of public programs. In 2006 the LGDK decided to explore the possibility of defining the processes used by the municipal units to implement laws. It was noted that, in some cases more than 20 different organizational units were involved in trying to solve the same problem, and that coordination across organization unit silos was a key to more efficient and effective service. It was hoped that the definition of common processes would provide the basis for a productive dialog between the municipalities and would ultimately result in significantly improved performance. It was hoped, as well, that well-defined processes would provide the basis for consistent automation of some of the processes.

The project was entitled the Business Process Bank (Arbejdsgangsbanken).

The Approach

The Business Process Bank (BPB) team began by defining some of the basic processes used by the municipalities in conjunction with some of the municipalities. The BPB team placed their initial emphasis on defining processes that conformed with existing legislation. In some cases the legislation defined the order in which tasks should be undertaken and in other cases the legislation defined rules that should be used to determine certain decisions.

At the same time, the BPB team stayed alert for process patterns or generic processes that seemed to occur more than once within the same process or in multiple processes. As these generic subprocesses were identified, they were pulled out and refined separately, to simplify the overall process design, and to provide a basis for standardized training and software services in the future.

In essence the BPB team defined the minimum processes necessary to conform with stated legal requirements, and then went to the municipal governments and asked them to refine and extend the process descriptions and to add best practice information defined by their experts.

From 2006 to 2009 the Business Process Bank team worked with the municipalities to define an initial business process architecture that described all the basic processes that the municipalities had to implement. They did this in cooperation with the municipalities.

The core and generic processes were organized into a process architecture with four layers of processes, as illustrated in Figure 1.

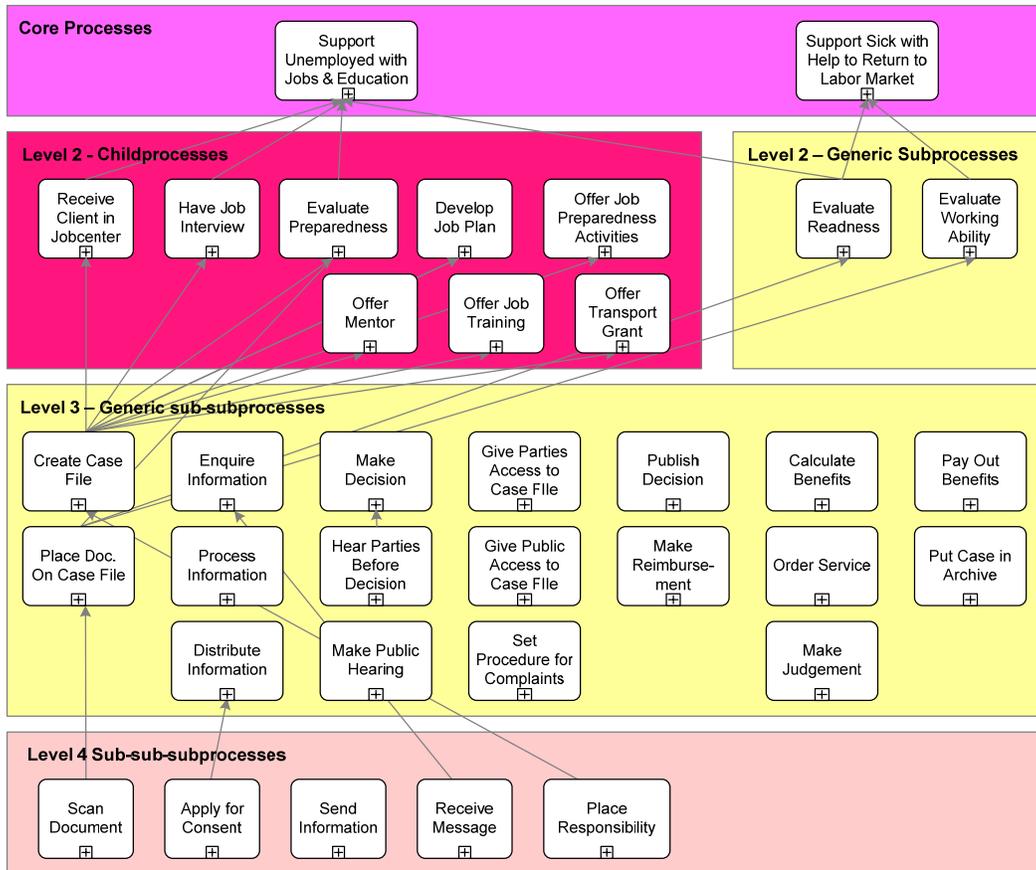


Figure 1. A portion of the overall architecture, showing only some of the linkages, but illustrating the four layers and core, unique and generic subprocesses.

At the highest level, each process is defined in terms of its input and its valued output. Thus, for example, the process: Support Unemployed with Job and Education, (shown in Figure 1) has as its input, a citizen who needs work and as an output a citizen with a job, or a citizen taking part in an educational program to prepare for a job.

These processes are now stored in a process repository and are available to all participating municipalities. The emphasis is now shifting, and the government is encouraging the municipalities to use BPM consultants to help implement the processes and to report ways in which the existing processes can be improved to make them more efficient or effective. As changes are suggested and then confirmed by other municipalities and experts the core and generic processes will be updated to capture the best way of implementing each process.

Many processes that are defined on Levels 2 or 3 are, in fact, almost entirely composed of generic subprocesses. Figure 2 illustrates a single activity that is almost entirely composed of generic subprocesses. Note that early in the project, the team decided to standardize on BPMN as the notation and uses if for all diagrams. The team originally used another tool, but eventually switched to Qualiware's Qualiware Product Suite and are satisfied that it provides a better way of managing their process models while providing better reporting.

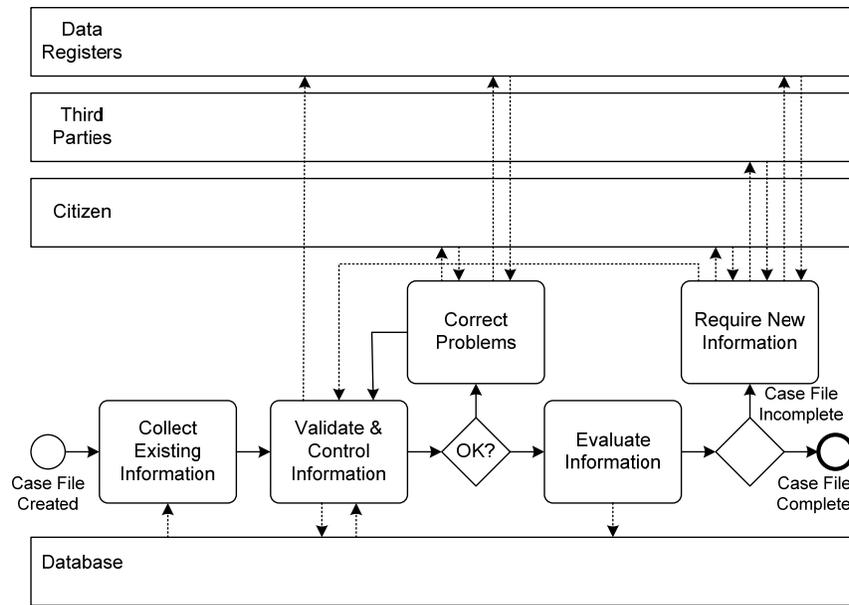


Figure 2. A subprocess that is made up of generic sub-subprocesses.

When the BPB team first began, it thought that most municipal processes could be defined by combining a set of some 100 generic subprocesses. They referred to this approach as a Lego Block approach. It has not proved as easy as they initially imagined, but the team is still impressed with the fact that certain common patterns or generic subprocesses are very widely used with only slight variations in most of the municipal processes and that assembling major processes from generic subprocesses can save quite a bit of effort.

Given the nature of government work, many of the processes rely on government legislation, which often imposes rules that must be used in making decisions. This is the case in determining eligibility, or example, or determining if plans meet requirements. Thus, an important part of the process effort is to determine where specific rules are used and in which activities.

Broadly speaking, the processes flow from left to right. Rules flow from top to bottom. Data is made available, a rule is applied and new data is created. The JBPM team diagrammed these situations as shown in Figure 3. Ultimately the business rules and the data definitions are stored in separate databases and accessed from the process repository as needed. (In many cases the same data definitions and rules are used in multiple subprocesses and need to be easily available, as legislative changes are most likely to result in changes in specific business rules.)

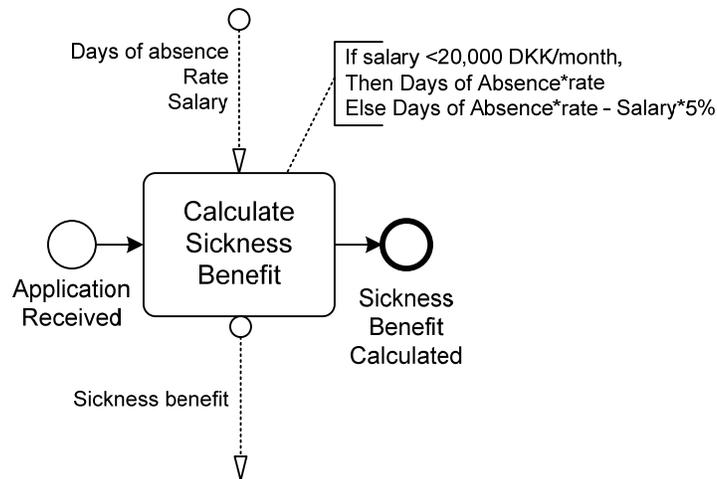


Figure 3. A subprocess that uses a rule.

The actual repository created by Joint Business Process Bank team is shown in Figure 4. The processes are stored in a repository managed by Qualiware BPM product. Data definitions and business rules are stored in separate databases.

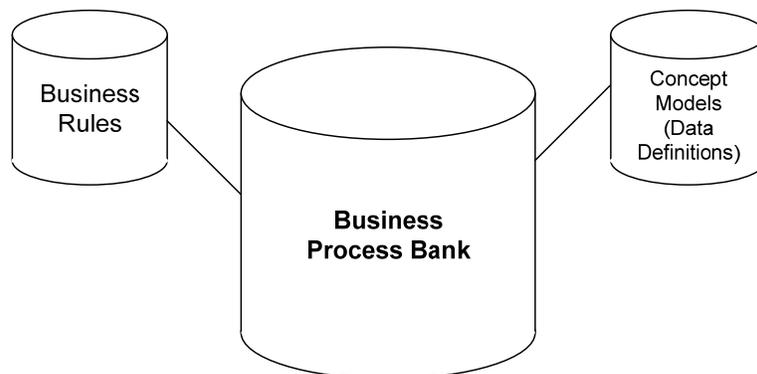


Figure 4. Overall organization of the Repository

In essence, the Local Governments Denmark have done three things: 1) Developed an overall process for improving their performance, 2) Developed specific processes, and 3) Established a repository to maintain all the information they have gathered.

The Results

About 55% of the municipal governments in Denmark elected to take part in the BPB effort. By 2010 the LGDK Joint Business Process Bank includes 250 core processes and 50 generic processes. At the same time, some 100 examples of good, better, or best practices were associated with the different core and generic processes and everyone seems to believe that the process framework provides a better way to organize business practice information. All of the processes were documented in BPMN and stored in a repository that Municipal governments can access.

The LGDK have 5 full time consultant working on the models. But they have through the three years educated and trained around 600 business process consultants in the Municipal governments. Most of these business process consultants are only working with business processes part time – as a side task to their core tasks.

It has established a goal of having some 2000 business process consultants working together by the end of 2010. These consultants will work inside the municipalities using and developing the process models currently developed, and then to proceed to look for opportunities to improve the processes. This year the LGDK will be making a more extensive effort to reach out to lower level municipal managers and provide them with more information about the processes that have been documented and to encourage their participation in ongoing efforts.

In effect LGDK has put in place a nationwide system that will be constantly working on maintaining the existing processes while simultaneously exploring new options and capturing improvements which will then be stored in the repository to make them available to the other government units. At the same time, of course, the government of Denmark will continue to create new laws and change existing requirements and the LGDK and municipal teams will continue to expand their processes to reflect the current work the municipalities are being asked to perform.

This article is based on a presentation made by Kaare Pedersen, Project Manager, The Business Process Bank, LGDK (Local Governments Denmark) at the BPM Europe 2009 Conference. For more information, check www.lgdk.dk/English/ or contact Mr. Kaare Pedersen at kaa@kl.dk.

For more information on the Qualiware BPMS product, check www2.qualiware.com