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Intellectual Assets Management Model

Banu Geanina Silvana^{a,*}

^aProcess Innovation Nucleus S.R.L., 289 Calea Bucuresti Street, Mihailesti, Giurgiu, 085200, Romania

Abstract

Proper and efficient identification, classification and treatment of intangible assets represents an important matter to be handled by organizations especially when undertaking research and development actions. This is more so the case for intellectual property assets which require expertise and specific resource planning. The purpose of the paper is to unfold the intellectual assets management process required for creating and extracting value from intellectual assets. To this end an intellectual assets management model was designed taking into consideration both accounting treatment of intellectual assets and strategic alignment with the general objectives of the organization. The model is designed using a standard notation and a Business Process Modeling (BPM) instrument in order to create a dynamic process flow capable of capturing and preserving value from intellectual assets by documentation, analysis, simulation and evaluation of the management process.

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Keywords: Intellectual assets; process modeling, standard notation.

1. Introduction

Intellectual property assets represent an important category of intangible assets comprising of copyrights, trademarks, patents, trade secrets and all data and knowledge, i.e. know-how, which can be exploited by individuals or organizations. Intangible assets represent the overall knowledge and data owned by an organization [1]. Proper and efficient identification, classification and treatment of intangible assets represents an important matter to be handled by organizations especially when undertaking research and development actions. This is more so the case for intellectual property assets, hereinafter referred to as intellectual assets, which require expertise and specific

* Banu Geanina Silvana, PhD. Tel.:+40-724-384-111.

E-mail address: pin.company.office@gmail.com; geanina.banu@pinucleus.ro

resource planning. The purpose of the paper is to unfold the intellectual assets management process required for creating and extracting value from intellectual assets.

2. Methodology

When approaching intellectual assets management a model comprising of main steps for creating and extracting value is needed. Research methodology focuses on modeling said steps using business process management in order to design a standard methodology within the organization which is to be shared by all stakeholders. Business process modeling and notation BPMN [2] was employed for this purpose while the model was designed with the help of Bizagi Modeler [3] [4], a free Business Process Modeling (BPM) instrument. The model considers both the requirements of the International Accounting Standard (IAS) 38 – Intangible Assets [5] and the relevant body of literature. The purpose of the research is to create a dynamic process flow capable of capturing and preserving value from intellectual assets by documentation, analysis, simulation and evaluation of the intellectual assets management process.

3. Results/main findings and contribution

The research problem is to design an intellectual assets management model taking into consideration both accounting treatment of intellectual assets and strategic alignment with the general objectives of the organization [1], [5], [6], [7], [8]. Intellectual assets management should approach both formal and informal ways for intellectual assets creation and communication. Furthermore, inbound and outbound intellectual assets should be considered and properly managed.

When modeling intellectual assets management, the following steps should be considered, documented and implemented:

- Identifying intellectual assets
- Intellectual assets ownership process
- Protection of intellectual assets
- Storage and reuse of intellectual assets
- Exploitation of intellectual assets

Figure 1 presents the intellectual assets management model comprising the aforementioned steps designed as workflow:

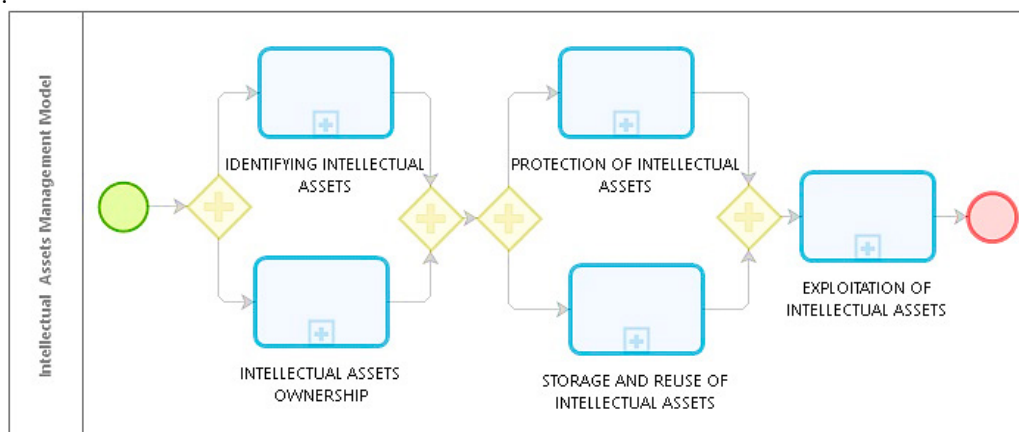


Fig. 1. Intellectual assets management model.

The five sub-processes of the model are unfolded bellow comprising of fundamental tasks in proper intellectual assets management.

Treatment of intellectual assets first requires a critical step of correctly identifying intellectual assets. Figure 2 presets the related subprocess.

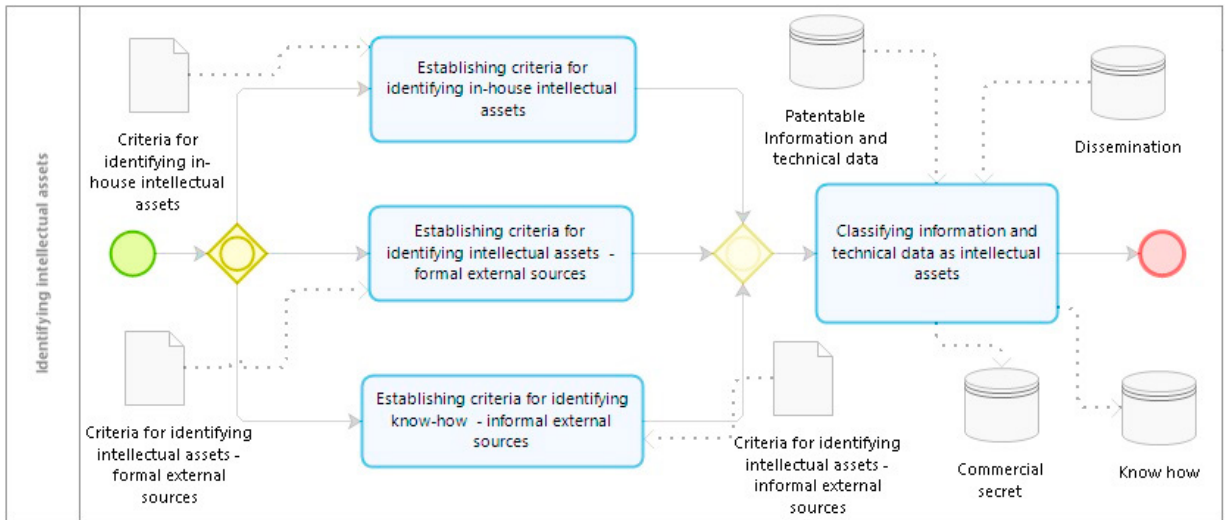


Fig. 2. The subprocess of Identifying intellectual assets.

Following the step of identifying intellectual assets, an organization should approach intellectual assets ownership process, as depicted in figure 3.

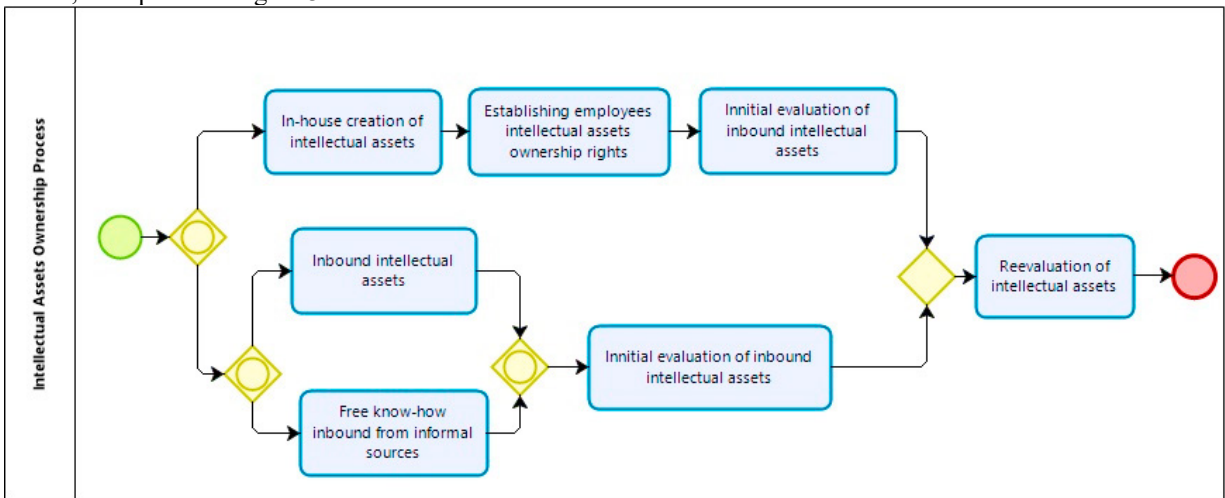


Fig. 3. The subprocess of Intellectual assets ownership process.

Protection of intellectual assets represents a subprocess which should be implemented using professional assistance and instruments. Figure 4 presents the step of protecting the intellectual assets comprising the related tasks.

The fourth critical step in treatment of intellectual assets is storage and reuse of intellectual assets which represents a task unfolding in parallel with the previous one. Figure 5 depicts the subprocess of storage and reuse of intellectual assets.

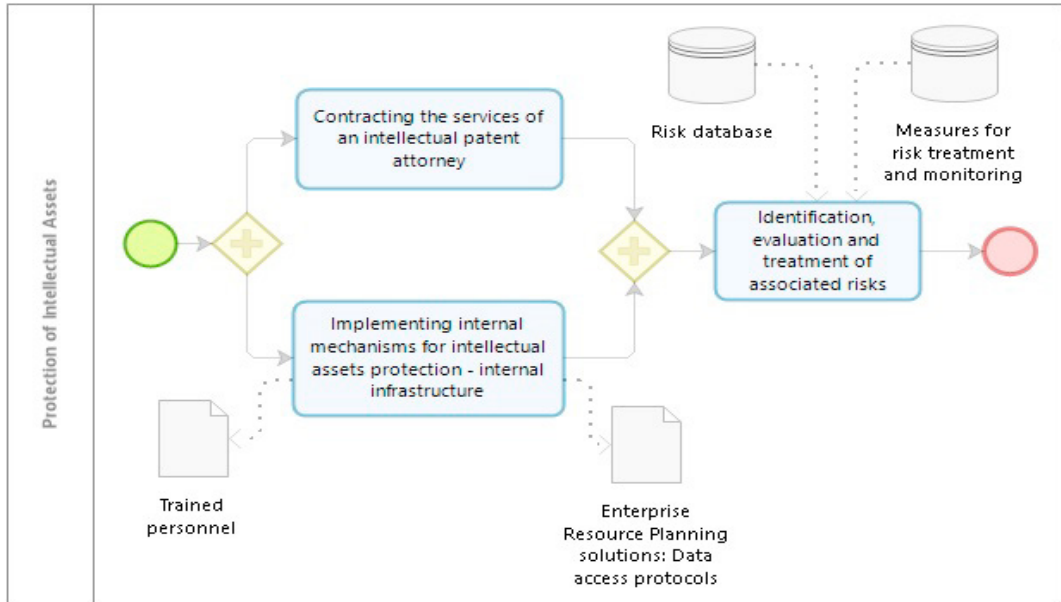


Fig. 4. The subprocess of Protection of intellectual assets.

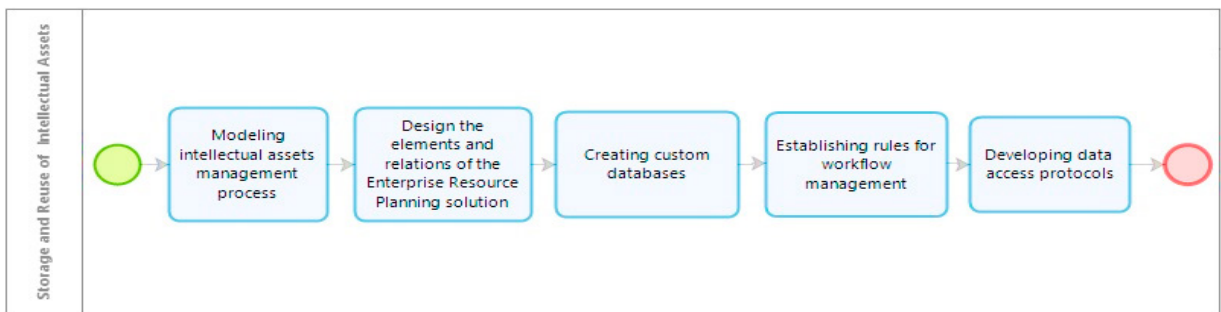


Fig. 5. The subprocess of Storage and reuse of intellectual assets.

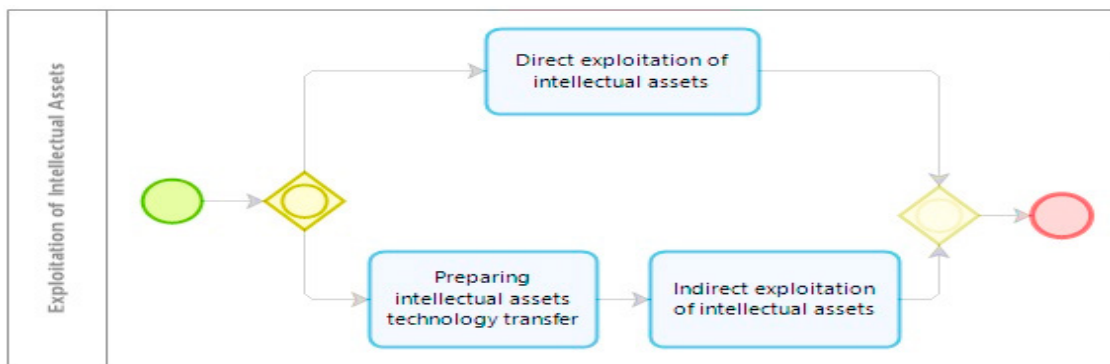


Fig. 6. The subprocess of Exploitation of intellectual assets.

Final critical step in treatment of intellectual assets is their exploitation, as detailed in figure 6.

The proposed model and its related steps represent an instrument for documenting and managing the intellectual creation taking place inside and outside the organization. The proposed model aims at creating a dynamic process

flow capable of capturing and preserving value from intellectual assets. Its implementation requires custom solutions and system infrastructure in order for the organisation to properly manage and document its intellectual resources.

4. Conclusions

Intellectual assets management should comprise of an automated business process integrating all specific assets, stakeholders, relationships, process rules and process owners. It requires a transparent and documented approach while mapping detailed steps for creating and extracting value from intellectual assets. Strategic alignment with the general objectives of the organization can be achieved when modeling the intellectual assets management with the help of business process management instruments.

The use of a Business Process Modeling (BPM) instrument allows for documentation, process validation, time analysis, resource analysis and calendar analysis of the process while the ideas for its improvement are proposed and considered. As such “what if” scenarios can be created and tested in order to ensure proper resources utilisation within the organization. Furthermore, training time for employees can be reduced as a standard process is provided for efficient process implementation and outcome. The use of *Information Systems Technology* specific infrastructure to support intangible assets management allows organisations to provide a platform for developing, managing and exploiting said assets in a standardized and transparent manner.

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