SERIOUS PLAY: THE BPI GAME

Juan Sebastián Zapata-Tamayo Universidad EAFIT jzapat60@eafit.edu.co

Carlos Mario Zapata-Jaramillo Universidad Nacional de Colombia cmzapata@unal.edu.co

Miguel Esteban Betín-Montes Universidad Nacional de Colombia mebetinm@unal.edu.co

ABSTRACT

BPI (Business Process Improvement) game is a simulation of a method for improving business processes. Business analysts—the target practitioners of the game—are encouraged to follow ten steps for improving processes by using a game similar to MonopolyTM. The game is cyclical, since processes can be improved once and again. Such improvement is reflected on increments of the key performance indicators to be tested and implemented.

DESCRIPTION OF THE GAME

One of the key factors to increase organizational competitiveness is related to the improvement of processes. In fact, some methods like Total Quality Management, Six Sigma, and Capability Maturity Model Integration are promoted as change drivers inside organizations—a way to deal with competitors in a real environment.

Even though games have been used for teaching managerial competencies, business process improvement—the final phase of business management—is still outside the topics covered by managerial games. BPI game is an answer to such drawback. BPI game is based on the well-known game MonopolyTM and it is intended to practice a 10-step method of BPI as follows:

- First step: Develop the process inventory. This step is simulated in the game by using a pre-defined list of business processes. In this case, we defined the following processes related to the Power and Energy management: (i) settle power exchange transactions; (ii) record wholesale energy market contracts; (iii) calculate reference energy; (iv) verify firm energy; (v) calculate fees of the national transmission system usage; (vi) calculate indexes of connection usage.
- Second step: Establish the foundation. When the business analyst advances to this step, she can select one of the following cells: context, goals, and problems.
- Third step: Draw the process map. When the business analyst reaches this step, she can select the process map cell, while the context cell is selected.
- Four step: Estimate cost and time. In this step, the

- information of the foundation—context, goals, and problems—and the process map are used for calculating cost and schedule of the business process.
- Fifth step: Verify the process map. This step is simulated in the game by using the same cell we use in step 3.
- Sixth step: Apply improvement techniques. This step is simulated in the game by using a button with the name of the step. When the business analyst has calculated cost and schedule of the process to be improved, she can calculate the key performance indicators of the process. The way to use the button is preceded by the advance towards a cell named "apply improvement technique." Five techniques can be applied: automate processes, eliminate duplication, eliminate bureaucracy, generate added value, and simplify processes.
- Seventh step: Create internal controls, tools, and metrics. This step is simulated jointly with the sixth step, since the KPIs are also useful for controlling the processes.
- Eighth step: Test and Rework. The business analyst can select the cell "tests" if she advances to the proper cell in the board.
- Ninth step: Implement the change. The business analyst can select the cell "implementation" when she advances to this step in the board.
- Tenth step: Drive continuous improvement. This step is represented in the game by repeating the steps sixth to tenth in order to improve the KPI, test and implement the improved process.

BPI game also have a cell called "select step," a cell intended to simulate some help in developing some of the steps we have in the BPI method.

BPI game can be practiced by undergraduate and graduate students, as well as real practitioners coming from industry. In this sense, the game can be used in courses of business management, quality management and productivity, and project management. Also, the BPI game can be used in companies for training change management employees and people related to process improvement. Players of the BPI game are intended to practice the 10-step method for business process improvement by recognizing the work products needed for each step and the BPI sequence. BPI game is self-contained, since players need

no previous information for playing the game. Also, the BPI game can be played in any classroom with a personal computer and a LCD projector, since the interface is programmed in ExcelTM and you need no other materials for playing the game. Players can be either individuals or groups, so you can customize the game to your audience, ranging from 2 to 24 people.

AKNOWLEDGEMENT

This work has been developed under the research Project number 833569148209 entitled "Sistema para la administración del mercado de energía eléctrica en Colombia (Fase II)," funded by COLCIENCIAS and XM.