REVISTA ESPACIOS

HOME   Revista ESPACIOS ⌄   ÍNDICES ⌄   A LOS AUTORES ⌄

Value generation through the implementation of the knowledge transfer 2.0 process based on the model of business Social Business

Generación de valor a través de la implementación del proceso de transferencia de conocimiento 2.0 basado en el modelo del Social Business

Lillyana María GIRALDO MARIN 1; Elizabeth Tatiana ARROYAVE CATAÑO 2; Luis JOYANES AGUILAR 3; Erika María LONDOÑO MONTOYA 4; Julián Esteban ZAMARRA LONDOÑO 5

Content

ABSTRACT:
The objective of the article is identify how the intellectual capital (IC) generates value to an organization through Knowledge 2.0 Transfer Process (KTP-2.0) [12] based on the Social Business model [3]. KTP-2.0 allows the display of COOPIN 2.0 [13] that was developed in three phases, initially was to implement workshops and leisure activities with the employees of Colombian Information Technology Company, then KTP-2.0 and the COOPIN 2.0 was displayed, in which the IC was measured through indicators associated that are reflected in the formation of social networks. The participation obtained from contributions of knowledge through different agents; interactivity from the definition of communication protocols and the cooperative work supported on social media. In the results obtained, each one of the IC indicators, allow identifying the value generated to the organization, as a result of the deployment of KTP-2.0 based on the model of business set up by the social business.
Keywords: Knowledge Transfer Process 2.0, Model of Knowledge Transfer 2.0, Social Business, Value Generation, Social network.

RESUMEN:
El objetivo de este artículo es identificar como el Capital Intelectual (CI) genera valor en una organización a través del proceso de transferencia 2.0 (PTC 2.0) [12] basado en el modelo del social business [3]. El PTC 2.0 permite desplegar el COOPIN 2.0 [13] que fue desarrollado en tres fases, inicialmente se implementaron talleres y lúdicas con los empleados de una empresa de tecnologías de información (TI) colombiana, luego se implementó el PTC-2.0, el cual permitió el despliegue del modelo de transferencia de conocimiento COOPIN 2.0, en el cual se midió el CI a través de indicadores asociados la conformación de redes sociales. La participación alcanzada desde los aportes de conocimiento que hacen los distintos actores; la interactividad desde la definición de protocolos de comunicación y el trabajo colaborativo, soportado en las social media. En los resultados obtenidos cada uno de los indicadores del CI permiten identificar el valor generado a la organización, como resultado del despliegue del PTC-2.0, basado en el modelo de negocio que plantea el *social business.*
Palabras clave: Proceso de Transferencia de Conocimiento 2.0, Modelo de Transferencia de Conocimiento 2.0, Social Business; Generación de Valor; Redes Sociales.

1. Introduction

Social Business represents an important opportunity to transform organizations [1][2][3]. Companies that have implemented initiatives contemplated by the *Social Business* as support for different processes and interactions within and among organizations executed by their employees, customers, and partners, have been able to show its value by: creating and recording customers' experiences; increasing efficiency and improving participation of employees in their attempt to fulfill the organizational objectives, improving communication and accelerating the innovation processes, through the participation of employees, customers and partners in resolution of problems and creation of new products and services [4].

In business models described by the Social Business the key factor, as usual, is people. Among other things, social media platforms are useful to connect people, create communities, and generate collaborative intelligence. Today, many tools are available to facilitate such functions and to allow the operation of integral programs of Social Business*,* which reinforce the competitiveness of organizations [5]. In a recent study on *How Companies Succeed in Social Business*, however, authors such as Shawn Santos have affirmed that *social media* are not the most important elements of the Social Business Organization; the most important thing for such organizations is to encourage people to collaboratively work in a network and guide them towards permanent innovation [6]. In this sense, one of the most frequently mistakes made by companies that decide to enlist in this transformation process is to think that the key of success lies on investment that can be made in technologies [7].

This new approach is based on: networks, which comprising the main core of the model, since networks are important tools to observe participation among different players who listen, interpret, generate information, process knowledge, and make proposals "at an international level networks comprised by employees, partners, and customers are the backbone of any Social Business." [3].

The *Social Business* is focused on the principal processes of the business from which it has been promulgated: construction of social networks as structures conformed by employees, partners, and customers; record of tacit knowledge; identification of relevant information sources; rewards for selection, generation, transfer, and reuse of knowledge, among others [4]. Although Social Business, as a business model, contemplates some organizational transformations, it is clear that knowledge is still the most important asset in current organizations. However, knowledge has also evolved from individual to social, where knowledge construction becomes real in scenarios of participation and collaboration; this is commonly known as social knowledge [8].

The social knowledge put at the service of the organization has represented a source of competitive advantages for companies where the so-called Intellectual Capital (IC) has been recognized as a productive factor [9] additional to traditional production factors: land, work, and capital (wealth generators). This capital involves human capital, structural capital, and relational capital of the organization, and generates value in the organizations of the new post-capitalist society [11].

From this perspective, authors present the initiative of a Knowledge Transfer Process 2.0 (hereinafter KTP-2.0) [12] based on the business model proposed by the *Social Business*. This process allows deploying the COOPIN 2.0 Model [13] created to strengthen knowledge transfer dynamics in social organizational scenarios. KTP-2.0 allows defining and recording aspects such as cooperation, Participation, Interactivity, and Collaboration described in the COOPIN 2.0 Model. The objective of this article is to identify the way IC generates value to the organization in relation to the dynamics observed in the KTP-2.0.

The KTP-2.0 was developed in three stages; initially, an exercise was performed to implement workshops and entertainment activities with employees of the Colombian information technology (IT) company, which allow having a change of organizational culture towards work in a network; then, the KTP-2.0 was implemented and it allowed deploying the knowledge transfer model COOPIN 2.0; the intention was to measure value generation from Intellectual Capital measured through indicators associated to principles such as cooperation, Participation, Interactivity, and collaboration which reflect on the creation of social networks; the participation reached from the contribution of knowledge by several players in a KTP-2.0; interactivity from the definition of communication protocols among the participants of the KTP-2.0 and the collaborative work supported by social media. Results obtained include each indicator of the IC which allows identifying the value generated for the organization after the deployment of the KTP-2.0, based on the business model described by the *Social Business*.

Initially, this article shows the preliminary concepts that will be used for a theoretical contextualization of the definition of KTP-2.0, in second place, the method employed during the investigation is described, in the third part the KTP-2.0 will be shown, and in the fourth headland the study case will be described. In fifth place, the article further shows the execution of the KTP-2.0 from the study case and finally, the article shows the results obtained from the IC indicators that allow identifying the value generated for the organization, and the conclusions.

1.1. Preliminary concepts.

1.1.1. Social Business

Social Business is understood as the way companies use different networks of people that can be formed inside and outside the organization in the search for the development of the organization and extending its operational range for the effective development of its activities. The *Social Business* embraces networks of people to generate business value [5] [3] [14] [15]. Currently, people feel comfortable exchanging data, information, knowledge, and opinions through social scenarios [16]. *Social Business* is an activity that uses social media, social software, and social networks to achieve more efficient and effective connections among people, as well as information and resources. These connections can promote business decisions, actions, and results in different areas of the company [17] [18].

Information technology and communication have promoted the spread of service provision, globalization, and the emergence of knowledge creation, as well as their disclosing, conservation, and use for obtaining economic benefits. It has been associated to a structural change in the organizations that have focused their interest in intellectual assets, including research and development (R+D), patents, software, human talent, and new organizational structures. These assets then become important strategic factors to generate value in companies, increase productivity and efficiency, and innovate in areas of business processes and products [19].

1.1.2. COOPIN 2.0

COOPIN 2.0 [13] is an organizational, iterative, and incremental Knowledge Transfer Model 2.0 that leads to innovation, focused on the framework that proposes the business model known as *Social Business*. The **COOPIN 2.0** Model has been defined from the unified model known as **SECI and Ba** [19] which improves the knowledge transfer process in social environments. **COOPIN 2.0** is developed from the following principles: Collaboration, Cooperation, Participation, and Interactivity.

- **The Collaboration Model**, based on principles, technologies, and services provided by *social media*, defines the technological platforms that support the KTP-2.0, with the purpose of allowing mutual connections among participating players of knowledge transfer, providing scenarios that allow and promote collaboration, participation, and interactivity among employees, customers, and partners, and record of knowledge.
- **The Cooperation Model**, based on the concept of *Social Networks* comprised by groups of employees within organizational scenarios under a common objective; the purpose is to promote conformation of networks within the organization in order to enhance knowledge transfer within and among organizations.
- **The Participation Model,** based on the importance of contribution of knowledge performed by several participating players of the KTP-2.0. The objective is to evaluate the importance and impact of the contribution of knowledge to the receiving area in the KTP-2.0.
- **The Interactivity Model**, based on the principle of reciprocity in communication, so that KTP-2.0 can be started. The purpose is to define communication protocols among the participating players of the KTP-2.0 according to the knowledge transfer stages contemplated by the COOPIN 2.0 Model (socialization, externalization, combination, and internalization).

1.1.3. Social Networks

Social networks are structures comprising several work teams within an organization through processes of cooperation and team work [1] [20]. A social network is a set of relations established by a specific group of players [21]. The analysis of social networks (ASN) is the mapping and measurement of relations and flows among people, groups, organizations or other information and knowledge processing entities [22]. The ASN is a method used to view people who comprise the network and their connection power; this can be used by organizations to identify the best way of interacting in order to transfer and sharing knowledge. This method allows identifying the relationships among people to record them in a map that facilitates the identification of knowledge flow. An ASN allows visualizing informal links and knowledge managers can more easily understand several relationships that can facilitate or impede the creation and transfer of knowledge.

The ASN is used for the COOPIN 2.0 Model (Cooperation Model 2.0). Cooperation in COOPIN 2.0 Model facilitates the creation or activation of social networks as basic structures to perform knowledge transfer within or among organizations. The Cooperation process has been defined from the Nodes of a network and the established Relationships that will be determined by the transfer dynamic set during the execution of the **SECI and Ba** Model [23] [24] [25].

Cooperation involves sharing work or a task. Cooperation offers a possibility for individuals, networks, and organizations to set relationships based on confidence. In this manner, cooperation relationships should be boosted from the interest of cooperating players within a knowledge transfer process, defined from

cooperation agreements as formal contracts where intellectual property over results of transfer process knowledge within the framework of a cooperation project can be clearly identified. In this sense, the Cooperation project becomes an instrument that allows setting such relationships.

From the concept of ASN, a better analysis of the KTP-2.0 can be performed. Measures of cohesion, centrality, closeness, reciprocity, importance, among others, allow identifying the relationships within and among organizations, facilitating the identification and location of knowledge sources, identifying and improving the knowledge flow, accelerating the information and knowledge flow, and improving the effectiveness of formal and informal communication channels.

1.1.4. Value Generation

Cooperation, Participation, Interactivity, and Collaboration are principles that support value generation through the IC. By employing the definition of Good, the IC has been defined as "the accumulation of knowledge that creates value or cognitive wealth possessed by an organization and comprised by a set of intangible assets or resources and capacities based on knowledge, able to produce goods and services and generate competitive advantages or essential competences in the market for the organization, when put into operation -according to a specific strategy- in conjunction with the physical or tangible assets." [26].

The generally accepted classification of the IC involves human capital, structural capital and relational capital. Accordingly, the human capital includes employees and their aptitudes, attitudes, skills, and capacities useful for the organization and acquired throughout life, formally or informally, intended for the construction or development of new knowledge. The structural capital incorporates information and communication systems, technology, processes, and culture represented in an explicit, structured, systematized, and institutionalized manner to achieve the proper management and transfer of useful knowledge for the organization. Finally, the relational capital accounts for the number of internal and external relationships of the organization, intended to interact with participants and to facilitate transfer of relevant knowledge for the business. Within the COOPIN 2.0 Model, these components have been incorporated to the principles, as shown in Table 1.

The IC has been deemed as an intangible non-identifiable asset; that is, it keeps hidden at an accounting standpoint [10]. However, despite its exclusion from the financial statements of an organization (just as any intangible asset), it becomes an important strategic factor for the creation of value in companies; it also increases productivity and efficiency and innovates in relation to business processes and products [24]. These competitive advantages, associated to intangible assets, have allowed obtaining financial evidence that companies with a higher degree of unrecognized intangibles finally gain better profits [27].

It could be affirmed that the IC is the knowledge put at the service of an organization to create value. In this sense, most models used to measure IC employ performance indicators (Skandia, Intellect, etc.) to explain the evolution of the behavior of an aspect of interest, in such a way that a control process can be executed on the efforts made during the IC Management process. The *Social Business*, as a business model, boosts the management of knowledge according to the COOPIN 2.0 principles and contemplates several elements that can have an influence on the creation of IC. See Figure 1.

Figure 1
COOPIN 2.0 Principles and Intellectual Capital
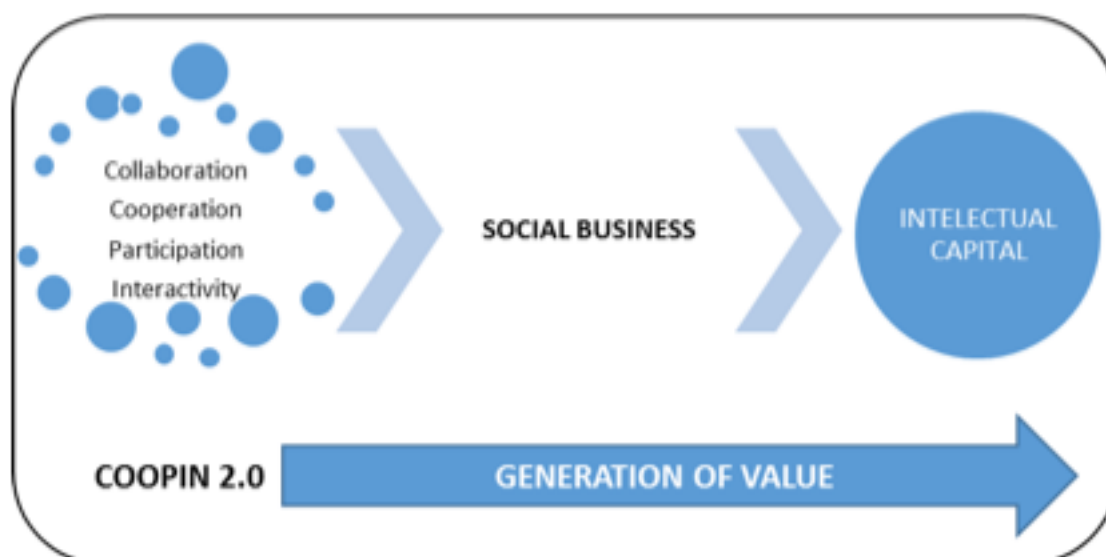
The relationship shown in Figure 1 above is complemented with Table 1 that shows the characteristics of *Social Business* and its relationship to the IC, in such a way that it can be associated to the indicators created for this study.

Table 1

Characteristics of Social Business and its Relationship to the Intellectual Capital

Characteristics of Social Business	COOPIN 2.0 Principles	IC Component	Indicators
People training. Active participation of employees in the organization projects. Linguistic standardization. Identification of leaders within the organization.	• Cooperation • Participation • Collaboration	Human Capital	# employees who provided conferences within the organization
			# employees with internal recognition.
			# employees with external recognition.
			# employees who documented good practices and lessons learned
			# employees who received training on the KTP-2.0
			# internal experts identified.
Implementation of technological tools that allow having a better interaction among individuals. Implementation of technological tools that allow having a record of information and knowledge. Development of standardized processes. Development of physical and virtual spaces that allow the meeting of individuals. Development of an organizational culture oriented to network.	Interactivity Collaboration	Structural Capital	# documented procedures.
			# good documented practices.
			# documented lessons learned.
			# videoconferences documented.
			# social technologies used.
			# physical spaces adjusted to the KTP-2.0.
			Availability of servers for the KTP-2.0.
			# departments comprising the organizational structure.
			# positions within the structure.
Development of alliances and cooperation agreements with other organizations or institutions. Development of communication strategies. Collaboration and strategic alliances with suppliers and competitors. Proper communication among all the areas of the organization.	Cooperation; Participation; Interactivity; and Collaboration	Relational Capital	# interactions in content managers.
			# new formal social networks formed.
			# external recognition received by the organization.

Strategies proposed by the *Social Business* have allowed seeing several achievements at the organizations that have implemented this business model. All around the world, there are successful cases that prove how this model allowed the organizations to resolve problems or reach an organizational goal, and this became a competitive advantage. In this respect, Santos [6] presents the success cases in the implementation of the Social Business of companies such as Zappos, Service Source, Fiskars, CISCO, ADOBE, UNYSIS, etc. (See Table2)

Table 2
Success cases on the implementation of the social business [6].

Name of Company	Need for Social Business	Solution from Social Business	Achievements
Zappos	To improve experience of customers	Implementation of Facebook, Twitter, Youtube, and blogs as media for 7/24 service for customers, connecting with then in a significant manner through the solution of their needs and creating spaces for their free expression.	To humanize the service experience for customers. Change of business mentality. Acquisition of the company's defenders at the level of customers and employees. Frequent opportunities of promotion. Union: More committed employees. To work for a bigger thing; that is, beyond the benefits and focused on the company's values and concern about its staff.
Service Source	Change of mentality in order to improve efficiency of employees and labor conditions	Office strategy at home for employees, and socialization through campaigns on media.	Conversion of employees into defenders of the company. To show passion and care in each interaction with customer, by employees defending the company.
Fiskars	Drop of the brand loyalty indicator; low emotional connection among products and customers	Creation of a community person to person among its customers in order to share activities that can be executed with scissors (product offered by the company), creating a sense of joint ownership that favors both purpose and reporting.	Easy manner to apply mechanisms to identify tendencies. Reduction of the on-line/off-line gap for customer service.

2. Methodology

Having a study case conducted in a knowledge transfer project within a Colombian Information Technology (IT) Company as the starting point, it was found that value generation was real through the creation of Social Networks as structures by means of which knowledge and information is transferred, having the Cooperation Model 2.0 as the main core.

Research on the COOPIN 2.0 Model was based on a process that included observation, experimentation, and analysis of events [28], which allows contemplating the hypothesis of value generation in an organization from Social Business strategies within the KTP-2.0. For effects of this article, the methodology of the model above is taken again with the purpose of analyzing and identifying value generation.

Observation: During the observation process, work teams that made part of the transfer need defined in

the organization were defined. Within these work teams, inquiries, workshops, and meetings were held with the purpose of establishing contacts with issuers and receivers to start relationships based on confidence as the essential principle for the creation of Social Networks. The execution of these activities allowed completing an exploration process that resulted in the identification of tendencies of the participants of the KTP-2.0 towards the possibility of establishing relationships with the others, domains of knowledge, experience, and individual and collective characteristics. Besides, it was possible to detect informal Social Networks set in advance in the participants' labor dynamics.

Experimentation: From observation activities performed and results obtained, a number of characteristics of nodes (emitters and receivers) were determined in relation to the concept of Cooperation 2.0 defined in COOPIN 2.0 Model (nodes importance, intermediation, concentration of knowledge, distance and closeness, among others). Such characteristics were detected through the method of Social Network Analysis (SNA) [13].

Analysis of Events: Having observation and experimentation processes as the starting point, a study case was defined to develop several executions of the COOPIN 2.0 and KTP-2.0 Models, which allowed guiding the Social Network Analysis method as structures to support the KTP-2.0.

2.1. Knowledge Transfer Process 2.0.

The KTP-2.0 allows deploying the COOPIN 2.0 Model. This is an iterative and incremental process due to the nature of COOPIN 2.0; each repetition corresponds to an execution cycle of the model. In this manner, a transfer could need several iterations until completing the required transfer.

The record of the procedure performed in each task of the process should be done by recording the information on several templates located at a repository.

Figure 2 shows a general view of the KTP-2.0 which is proposed as a formal instrument of work to support the deployment of the COOPIN 2.0 Model within an organization. The set of participants, activities or tasks, connectors, and events that compose the model, establishes a coordinated and collaborative work style inspired on the business model proposed by the *Social Business*. Through such model, the organization can fulfill several cooperation and interaction needs within and among organizations, supported on the use of information and communication technologies among the people and entities involved. In this way, the KTP-2.0 has been designed from the management methodology of business processes or BPM, which objective is to improve the performance (efficiency and efficacy) of the organization.

Figure 2
Knowledge Transfer Process 2.0 [13]
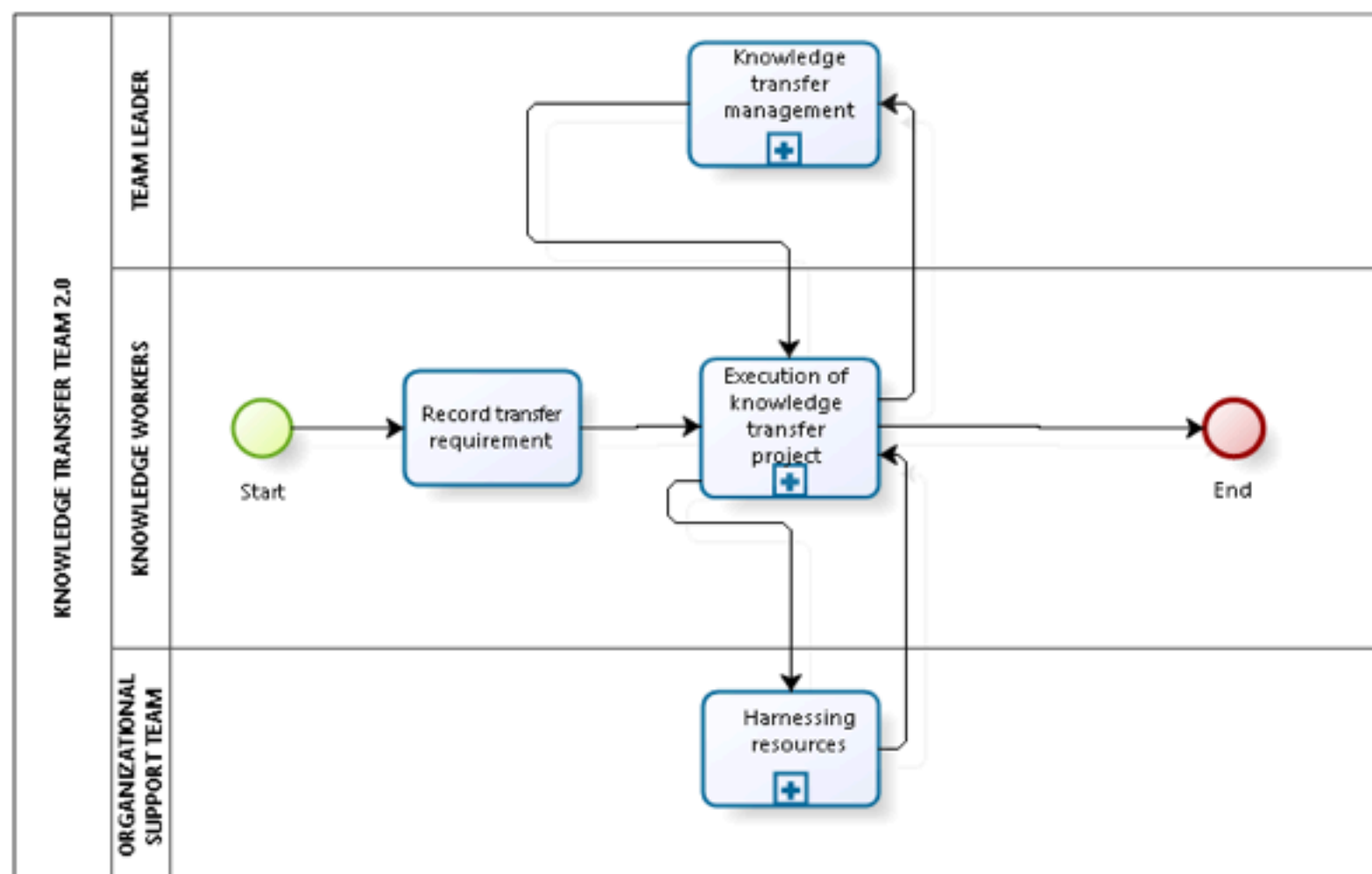
In this way, three aspects derived from the Social Business have characterized the KTP-2.0: Commitment, Barriers removal, and Improvements on Response Times:

Commitment: The KTP-2.0 model requires that all collaborators, regardless of the position held, can be able to cooperate with the growth of the organization. From this basis, innovation is given a clear way since the process is not only dependent on experts but any employee (from their own experience and knowledge) can be able to promote new ideas that, in the future, will be used to improve products, services, processes or structures; that is, common spaces of creativity, construction, and transfer are opened.

Barriers removal: The KTP-2.0 Model contemplates that strengthening and progress of the organization need an organization that can establish inter- and intra-organizational relationships based on Social Networks and the organization should understand that there is a complete universe of sources of knowledge that can be integrated to the needs for knowledge of the organization; such sources are a contribution to the setting of strategies, processes and models.

Improvement of Response Times: The KTP-2.0 Model improves response times to events and helps with the decision-making process in relation to such events in order to find an effective solution, since there is a real-time interaction among the people involved, information and knowledge generated in each moment (collectively and individually) can be used through defined or emerging channels.

2.2. Participants.

The KTP-2.0 consists of three major teams of participants (Management Team, Knowledge Employees, and Organizational Supporting Team), as shown in the Table below:

Table 3
Participants of the Knowledge Transfer Process 2.0

WORK TEAMS	ROLES	RESPONSIBILITIES
Management Team	KMO (Knowledge Management Officer)	Transfer Project Management
	BROKER	Support to the KMO and Knowledge Employees
	Knowledge Transfer Leader (KTL)	Knowledge Employee leading the knowledge transfer project of the organization
Knowledge Employees	Issuing Knowledge Employee (IKE)	Sets and defines the knowledge to be transferred
	Receiving Knowledge Employee (RKE)	Defines the need for knowledge transfer
Organizational Supporting Team	Information Technology Manager (ITM)	Supports and provides the Information Technology strategy required by the transfer process
	Human Talent Manager (HTM)	Supports and defines the participants of work teams for the knowledge transfer project

2.3. The Process Flow

The KTP-2.0 starts when the RKE reports a gap of knowledge in his work area. This need should be recorded on a portal of knowledge addressed to the KMO and the BROKER, who will evaluate such request and assign a work team and a budget. Once the Knowledge Transfer Project has been approved, the execution should be run. Then, the KTL and the IKE make plans and establish the knowledge transfer based on the COOPIN 2.0 Model, defining the following: types of knowledge; sources of knowledge; knowledge networks; transfer strategies; human resources, information technologies; among others. Finally, the knowledge transfer performed is evaluated based on the degree of satisfaction of the RKE, assessing transformations on individual and organizational knowledge bases obtained in receiving areas, according to the organizational objectives.

2.4. Study Case.

The KTP-2.0 was validated in an Information Technology organization located in Medellin City (Colombia). The company offers the maximum degree of CMMI. This company consists of 440 employees mainly located in Medellin City, remaining employees are located in Brazil, Costa Rica and Ecuador. This company provides services in the following areas: Software Engineering and Business Analytics, based on international quality standards. The company defined a Knowledge Transfer Project attached to the Software Engineering Area, for the execution of the KTP-2.0.

2.5. Design of the Study Case.

The IT company, as a strategy to improve knowledge of its employees, decides to educate the group of knowledge employees from the Software Engineering Area on agile development methodologies. When the transfer need is identified, the IT organization makes a search on its yellow pages to look for an expert on agile methodologies. After the search, it is found that the expert is not within the organization; for this reason, external staff is hired. Due to the geographic distance of employees, training program requires a collaborative work strategy based on the Collaboration 2.0 Model [2] [13] [17] intended to minimize time and geographic risk differences of the work team to be trained.

2.6. Execution of the Study Case.

Starting Event: When the RKE defines the transfer need, the deployment of the KTP-2.0 is started. The Table below shows an example of knowledge repository for the record of the need and transfer project. See Table 4.

Sub-Process: Knowledge Transfer Management: The KMO and the Broker formally process the request from a Knowledge Transfer Project, as shown in Table 4 below.

Table 4
Record of the Transfer Need and Knowledge Transfer Project.

Identification of Requester (RKE): Carolina Restrepo	**Request No.: 002**
Department: Software Engineering – Development Group.	
Date of request: June 12th, 2016.	
Knowledge Transfer Need: Identified as the knowledge transfer need for the training of employees on agile software development methodologies. This training should be executed by an external expert.	
Record ID of the Knowledge Transfer Project: Agile Methodologies Development Group.	
Transfer Objective: Training on agile development methodologies for employees of the Development Team in order to improve knowledge bases and increase productivity.	
Process or activity on which a Knowledge Transfer will be performed: Software Development.	
Knowledge Transfer Cycle 1: An external expert on agile development methodologies will train the employees from the development team.	

Project Planning: (See Document IDMAD-001)	**Resources assigned to the project: (See Document IDMAD-002)**	**Project Control: (See Document IDCP-003)**

Sub-Process: Approval of Resources: The KMO, the Broker, and the KTL request the Organizational Supporting Team all resources needed for the execution of the project, as shown in Table 5.

Table 5
Record of Human Talent Request and the Information

Identification of Requester (KTL): Ricardo Gallego				**Request No.: 002**
Human Talent Requirements				
Position	**Degree of Knowledge**	**Degree of Motivation**	**Degree of Confidence**	**Competences (from implicit and explicit knowledge)**
Software Architect	Superior	High	Medium	- Proactiveness. - Team work. - Standardization of explicit knowledge. - Internalization of explicit knowledge.
Information and Communication Technology Requirements				
SECI Stage	**Ba Moment**	**Technology Requested**	**Type of Collaboration**	**Remarks on Special Requirements**
Combination	Combination	- Videoconferences. - Blogs and wiki. - Repositories of Knowledge. - Collaborative Platform.	Professional-Type Vertical Social Network	Participants are located at different geographic sites

Sub-Process: Execution of Knowledge Transfer: This is a sub-process by means of which planning of the Knowledge Transfer Project is performed. It becomes the cornerstone of transfer since this is the stage where human resources, social networks (formal and informal), information technologies, transfer strategies, among others, are set. Table 6 below shows the record of this sub-process.

Table 6
Record of the Knowledge Transfer Sub-Process

Identification of TCLT : Ricardo Gallego			**Request No.: 002**
Identification of RKE: Carolina Restrepo			
Identification of IKE: Valentina Jaramillo			
Iteration: 1			
Topic	**Transfer**		**Model**
Concept on agile methodologies	Explicit – Explicit		INTERACTIVENESS
Socialization	**Exteriorization**	**Combination**	**Internalization**
Feedback	Mutual Speech	Sensitive Speech	Monologue
Topic	**Transfer**		**Model**

Agile Development Methodologies	Tacit-Explicit			COLLABORATION
	Face-to-Face Interaction	**Continued Task**	**Communication and Coordination**	**Virtual Interactions**
Transfer Technique	Meetings. Dialogues.	Lecture. Dialogue.	Practice communities. Dialogues. Lessons learned.	Simulators. Workshops. Guided visits. Practices. Learning techniques.
Space: Physical. Virtual. Hybrid.	Meeting Rooms. Training Rooms.	Work place	Work place and collaborative virtual platform	Work place and collaborative virtual platform
Time	Synchronic	Asynchronous	Asynchronous	Synchronic
Collaborative Technology	Journals. Notebook.	E-mail. MI. Shared route. File server. Tools. Office. SharePoint.	SharePoint. Blog. Wiki. Tools. Office.	SharePoint. Blog. Wiki. Simulators. Digital libraries. On-lie databases. Knowledge repositories.

Another important activity executed during this sub-process involves the definition of formal Social Networks and the discovery of informal Social Networks that will support the knowledge transfer project according to the defined need. These Networks should be recorded on the knowledge portal shown as an example in Table 7 below.

Table 7
Record of Social Networks Involved in the Knowledge Transfer

Social Network of Agile Methodologies Transfer			
Social Network Name	**Type of Network**	**Members**	**Knowledge**
Software Development	Internal Informal	Juan Carlos Ochoa, Luis Javier Jaramillo, Armando Salazar	**Explicit Knowledge:** Experience on agile methodology projects. Knowledge repositories. Blog. **Tacit Knowledge:** • Software Development Methodology. • Quality Model. • Software Architecture. • Development Cycle.

Development Methodologies	External Formal	William Trebol Carmen Sanchez	Explicit Knowledge: Knowledge portal on Software Development Methodologies.	
Project Plan: (See Document TKWP-001)			Resources assigned to project: (See Document TKWP-002)	Project Control: (See Document TKWP-003)

3. Results

Implementation of the COOPIN 2.0 Model through the KTP-2.0 under the approach that contemplates the *Social Business* allowed identifying (through the application of IC indicators prepared based on the principles of collaboration, participation, interactivity, and cooperation) the value generated by the organization in its different capitals, as follows:

Human Capital: The deployment of COOPIN 2.0 Model through the KTP-2.0 generates value for the organization through its human capital, clearly seen in new practices such as: training on the KTP-2.0 for people of the area; participation of employees to document good practices; internal and external recognition to employees; 200% growth of expert recognition within the organization; and increase of the number of employees who provided conferences internally. Therefore, the company experiences aspects inherent to an effective Social Business model reflected on the implementation of the COOPIN 2.0, such as people training, active participation of employees in projects of the organization, and identification of leaders within the organization.

Structural Capital: Deployment of COOPIN 2.0 Model through the KTP-2.0 generated value for the organization through its structural capital; this is clearly seen through the following: 17% growth of the number of documented procedures as well as documentation of videoconferences, good practices, and lessons learned in the organization. Besides, the use of social technologies for the KTP-2.0 increased 250%; new physical spaces and servers were created and adjusted for the process and changes of structure and departments comprising the organization occurred, with an average increase of 12%. These indicators, which reflect the application of principles (interactivity and collaboration) of the COOPIN 2.0 Model, account for the characteristics that allow adding value through the *Social Business*, such as the implementation of technological tools to achieve a better interaction among individuals, the record of information and knowledge generated within the organization, the development of standardized processes and physical and virtual spaces that allow the meeting of individuals within an organizational culture focused on network.

Relational Capital: Deployment of the COOPIN 2.0 Model through the KTP-2.0 allowed generating value to the organization through the elements comprising this capital, clearly seen in the number of interactions between employees and customers in content managers, which amounted to 2,300 visits; it also allowed the creation of new social networks and the award of two external recognitions by the community to the organization. These indicators account for the effectiveness of the *Social Business* model, which allows an effective application of principles such as interactivity, collaboration, cooperation, and participation, representative of the COOPIN 2.0 Model. This allowed the development of alliances and collaboration agreements with other organizations or institutions, as well as effective communication strategies, collaboration, and strategic alliances with suppliers and competitors, and a proper communication among all areas of the organization (these aspects created value for the company).

4. Conclusions

Deployment of the KTP-2.0, based on the business model proposed by the *Social Business* is a hard process to be implemented due to the social consequences involved (collaboration, solidarity, participation, cooperation, handling of Information Technologies, among others). However, it becomes a successful implementation as a strategy to generate value for the organization; this can be clearly seen with intangible assets resulting from the execution of the KTP-2.0, such as those contemplated below, according to the classification of intangible assets defined by Nonaka [24].

Experimental Knowledge Assets: Understood as tacit knowledge through common experiences such as access to other knowledge sources, establishment of strong bonds with members of its network and other networks, valuation of individual participation, among others.

Conceptual Knowledge Assets: Understood as explicit social knowledge articulated with images, symbols, and language, such as social knowledge, practice communities, social networks, brand value, acquisition of social competences, performance on collaboration scenarios, among others.

Procedural Knowledge Assets: Understood as the tacit knowledge with routine actions and practices, such as creation, innovation, and improvement of business processes, record of better practices and lessons learned, efficient handling of collaborative platforms for transfer of knowledge, record of knowledge, record of patents and new software, among others.

Systemic Knowledge Assets: Understood as explicit and packaged knowledge such as: improvement of processes, good practices, correct knowledge on customers and their needs associated to processes, creation of networks, recognition of experts, among others

Implementation of the business model proposed by the *Social Business* offers competitive advantages for organizations since it allows identifying IC variables that generate organization value within a process (such as the transfer of knowledge with the support of social technologies).

Determination of principles in the COOPIN 2.0 model facilitates the identification and classification of the elements involved in the knowledge transfer process, allowing design of indicators associated to each principle; this can be used to measure the impact on value generation resulting from different activities performed during the process.

Activities described as generators of value for organization during the implementation of the knowledge transfer process are associated to effective results from the implementation of the business model proposed by the *Social Business* and reported in literature.

Bibliographic references

Bughin, Jaques; Chui, Michael. "Evolution of the networked enterprise: McKinsey Global Survey results", McKinsey Quarterly, Marzo, (2013).

IBM, Corporation. "IBM CEO Study: Command & Control Meets Collaboration". IBM Global Services. (2012).

IBM, Corporation. "The Social Business Advent of a new age". IBM Global Services - Sitio web IBM. (2011).

Cortada, J., Lesser, E., & Kors, P. (2012). The business of Social Business. What works and how it's done. NY: IBM Global Services. Recuperado el octubre de 2016, de https://www.ibm.com/midmarket/common/att/pdf/IBV_2012_The_business_of_social_business.pdf

Fuetterer, Stephan. Social Business. Cómo la tecnología social y las personas contribuyen. Edita Best Relations S.L, ISBN 978-84-695-8148, (2013).

Santos, Chawn. How Companies Succeed in Social Business CASE STUDIES AND LESSONS FROM ADOBE, CISCO, UNISYS, AND 18 MORE BRANDS. ISBN-10: 0-13-403648-4. Person, (2015).

 Daugherty, P., Biltz, M., & Kurth, S. (2013). Accenture Technology Vision 2013 Every Business Is a Digital Business. Accenture Technology .

CASTRO, J., ROCCA , L., & IBARRA , . "Transferencia recursiva del Conocimiento para la Innovación: Caso de las Empresas del País Vasco – España". Clm. Economía: Revista económica de Castilla-La Mancha 16, p.199-231 (2010).

Dean, A., & Kretschmer, M. (2007). Can Ideas be Capital? Factors of Production in the Postindustrial Economy: A Review and Critique. Academy of Management Review, 573-594.

Cohen, J. (2005). Intangible Assets: Valuation and Economic Benefit. New Jersey: John Wiley & Sons.

Drucker, P. F. (2004). La sociedad post capitalista. Bogota: Grupo Editorial Norma.

Giraldo, L. M., Joyanes, L. & Tabares, M. S. Towards a Knowledge Transfer 2.0 Process with an Impact on a Companies of Social Business. Lecture Notes in Business Information Processing, Volumen 185, pp. 243-254. (2014).

Giraldo, L. Modelo de Transferencia de Conocimiento 2.0, Madrid: s.n, (2013).

IBM, Corporation. Social Business From Liking to leading Obtenido en: http://www.ibm.com/social-business/us/en/customers.html

IBM, Obtenido de Applying Social Business: The repeatable patterns that improve business processes and provide return: www.ibm.com

Harrysson, M., Metayer, E., & Sarrazin, H. (2012). How 'social intelligence' can guide decisions, McKinsey Quarterly http://www.mckinsey.com/insights/high_tech_telecoms_internet/how_social_intelligence_can_guide_decisions

Boughzala, Imed; Dudezert, Aurelie. "Knowledge Management 2.0: Organizational Models and Strategies", United States of America: IGI Global, (2012).

Kiron, David; Palmer, Doug; Nguyen, Anh; Berkman , Robert. Findings from the 2013 Social Business global executive study and research project, Social Business: Shifting Out of First Gear, MITSLOAN MANAGEMENT REVIEW Research Report 2013 in collaboration Delotte University Press, (2013).

Nonaka, Toyama, Ryoko; Konno, Noboru. SECI, Ba and Leadership: a Unified Model of Dynamic Knowledge Creation. Long Range Planning , 33 , 5-34, (2000).

Bughin, Jaques; Chui, Michael. "The rise of the networked enterprise: Web 2.0 finds its payday", McKinsey Quarterly, December (2010).

Kaplan Andreas; Haenlein Michael. Users of the world, unite! The challenges and opportunities of Social Media. Business Horizons, 53, 59-68, (2010).

Krebs, Valdis, "Uncloaking Terrorist Networks", (2002).

Laudon, Kenneth; Laudon, Jane. Management Information Systems, Decima segunda edición, PEARSON, México, (2012).

Nonaka, I., Toyama , R. & Konno, N. SECI, Ba and Leadership: a Unified Model of Dynamic Knowledge Creation. Long Range Planning, Volumen 33, pp. 5-34. (2000).

Nonaka, Ikujiro; konno, Noburo. "The concept of "Ba": building a foundation for knowledge creation", California, Management Review, vol. 40, nº 3, Spring, pp. 40-54, (1998).

BUENO, E., SALMADOR, M., & MERINO, C. (2008). Génesis, concepto y desarrollo del capital intelectual en la economía del conocimiento: Una reflexión sobre el Modelo Intellectus y sus aplicaciones. Estudios de Economía Aplicada, 43-63.

Iñigez Sanchez, R., & López Espinosa, G. (2005). Valoración de activos intangibles en el mercado de capitales español. Revista Española de Financiación y Contabilidad, 459-499.

Yin, Robert. Case study research: design and methods, 2nd edition. Thousand Oaks, CA: Sage, (1994).

1. Program of Systems Engineering, School of Engineering, University of Medellín-Address: Carrera 87 N° 30 - 65 Medellín-Colombia. lmgiraldo@udem.edu.co

2. Program of Financial Engineering, School of Engineering, University of Medellín-Address: Carrera 87 N° 30 - 65 Medellín-Colombia. etarroyave@udem.edu.co

3. School of Engineering and Architecture   Pontificial University of Salamanca- Paseo Juan XXIII, 3-28040-Madrid-Spain. joyanes@gmail.com

4. PhD. student in Administration, University of Medellin. CEO Research Group, Universidad San Buenaventura - Adress: Carrera 56C N° 51 - 110 Medellín - Colombia. elondono77@hotmail.com

5. Facultad de Contaduría, Departamento de Ciencias económicas y administrativas, Universidad de Antioquia, Medellín-Colombia. julian.zamarra@udea.edu.co

[Index]

[In case you find any errors on this site, please send e-mail to webmaster]