

A Model and a Portal to Enhance Social Participation through the Integration of Communities of Practice and the Semantic Web: A Comparative Study between Argentina and Brazil

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Abstract: In Argentina, social participation is primarily exercised through draft laws proposed by society and referendums, as seen in the abortion debate, where the majority of the population supported legalization. Despite this engagement, access to education and books—although significantly higher than in Brazil—is not a determining factor in participatory culture. Buenos Aires alone, for instance, has more bookstores than the entirety of Brazil, yet this has not necessarily translated into more effective civic engagement.

In contrast, Brazil lacks a strong tradition of enhancing representative democracy through direct social participation. However, the government has launched several initiatives, such as the “*Dialoga Brasil*” and “*Diálogos Federativos*” programs, hosted on the “*Participa*” portal, aiming to collect and apply collective knowledge. These efforts, however, have largely served as a means to overshadow widespread corruption and maintain governance without leveraging modern management tools like Knowledge Management (KM) and Organizational Intelligence (OI). The result was an overwhelming influx of contributions, which, due to outdated filtering techniques such as data mining, failed to effectively capture and utilize public input.

To address this challenge, this study proposes the development of a Social Participation Portal structured into thematic areas (Communities of Practice) and powered by the Semantic Web, utilizing an ontological architecture to represent, analyze, and interpret diverse societal contributions. In addition to the portal, the study introduces a Knowledge Management (KM) and Organizational Intelligence (OI) model to enhance the principles of the American New Public Service (NPS) approach. The proposed model seeks to transform raw data and information into actionable knowledge, intelligence, and ultimately, wisdom.

As a key intermediate construct, the study highlights the role of culture, recognizing that newly generated knowledge through social participation fosters shifts in beliefs, values, and assumptions, which subsequently impact the application of intelligence. To examine these relationships, the study employs an interview-based methodology conducted at the National University of La Plata (UNLP) in Buenos Aires, Argentina, and the State University of Bahia (UNEB) in Salvador, Brazil. Structural Equation Modeling (SEM) is used to test the interconnections between culture, knowledge, and intelligence.

The findings indicate that the KM-OI model is an effective strategy for improving public policy outcomes and reducing corruption by enhancing the quality of social participation, particularly in knowledge creation (KM) and application (OI) within governmental frameworks. However, fostering an organized, mature, and participatory civil society requires a long-term process of cultural transformation.

Keywords: Corruption, Knowledge Management, New Public Service, Organizational Intelligence, Social Participation.

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Introduction

Through the vote on November 19, 2023, Argentina chose a radical shift in its political and economic direction. In contrast, Brazil, roughly a year earlier, opted to maintain the cultural paradigm described by Sérgio Buarque de Holanda in *Raízes do Brasil* (1936) and *Visão do Paraíso* (1959)—that of the "cordial man" who seeks temporary advantages. This concept has been reaffirmed by other renowned Brazilian scholars, such as Caio Prado Junior in *Formação do Brasil Contemporâneo* (1942) and Gilberto Freyre in *Casa-Grande & Senzala* (1933). The so-called "cordial man," lacking a solid foundation of knowledge, often supports corruption indirectly—whether through social programs or selective social participation. Numerous authors have identified this selective nature of participation in self-proclaimed socialist governments, which, based on key indicators, exhibit characteristics closer to communism. Examples include Brazil and Venezuela, where economic instability manifests through low wages, excessively high food prices, restricted access to education, heavy bureaucracy for immigrants and refugees, rampant deforestation, and violations of human rights, particularly concerning protests against the ruling system. This model ultimately benefits both left- and right-wing parties at the expense of the general population.

Argentina, meanwhile, faces a different cultural challenge—an issue of national identity and humility. The recurring electoral victories of candidates advocating for dollarization reflect a widespread desire among Argentines to align themselves with European economic models, regardless of the strength of domestic institutions. Latin American economies are often reliant on tourism and foreign multinational investments, particularly from countries with a strong entrepreneurial culture like Germany. However, in Argentina, the aspiration to use the U.S. dollar seems more akin to a fleeting pleasure than a long-term economic strategy. This inclination toward short-term gratification also appears in the country's high abortion rates, which were legalized by popular decision.

Despite their differences, Brazil and Argentina share a common position—ranking 94th in the Corruption Perception Index (CPI), alongside Ethiopia, Morocco, and Tanzania. This index, produced by Transparency International since 1995, evaluates 180 countries and assigns scores from 0 to 100, with higher scores indicating greater perceived integrity. Brazil and Argentina both received a score of 38, highlighting persistent governance issues.

In Brazil, corruption is further exacerbated by poor internet access, even in regional capitals, and frequent power outages that affect entire cities. The government capitalizes on a culture driven by emotion and a general lack of access to public policy information, leveraging these conditions to manipulate narratives in the media and even in academic publications. This contributes to the perception of widespread corruption as a barrier to economic development.

Ethical social participation, when genuinely facilitated by the government, can significantly reduce corruption by embedding social oversight into both the planning and execution phases of public projects. However, a persistent challenge remains: the government's inability to systematically collect, analyze, and apply the collective knowledge generated through participatory processes.

To address this, Section 3 of this article explores the integration of

Knowledge Management (KM)—focused on knowledge creation—and Organizational Intelligence (OI)—focused on knowledge application. Given the entrenched nature of corruption, particularly in Brazil, which is internationally recognized as one of the most corrupt nations (alongside Mexico, as noted by de Vries and Solaz, 2017), this study dedicates two special sections to key mechanisms for countering these issues. Section 2 examines Communities of Practice (CoPs), the primary practice within Knowledge Management, while Section 3 discusses the Semantic Web, the main tool for Organizational Intelligence.

The dynamics of social participation resemble a game of chess: when public pressure is exerted on leadership (the "king"), space for participation emerges. However, for meaningful change to occur, society must overcome deeply rooted challenges, including egocentrism, individualism, lack of reading habits, and limited interest in the public good. Argentina, with greater access to knowledge and a government less reliant on social programs as a means of political manipulation (as seen in the current Brazilian model), has a stronger likelihood of achieving cultural transformation. This shift may become even more probable as the country faces inevitable disillusionment with dollarization and certain privatization efforts.

The Transformation of Tacit Knowledge into Explicit Knowledge

The importance of sharing tacit knowledge plays a crucial role in reducing illiteracy. Understanding how socialization facilitates the search for tacit knowledge is essential, particularly through the lens of Knowledge Management (KM) activities (Schatzi et al., 2001).

Gubbins and Dooley (2021) argue that social capital—particularly its relational aspect—is a key factor in promoting tacit knowledge sharing, which in turn strengthens an organization's ability to innovate. However, current research lacks empirical evidence on the connection between interpersonal trust and knowledge acquisition (Palacios, 2022).

Tacit knowledge is inherently personal and challenging to articulate, imitate, or replace (Barney, 1991). However, it can still be shared through social relationships, provided that certain factors are met:

The nature of relationships shapes the flow of information and learning within networks (Borgatti & Cross, 2003).

Knowledge transfer depends heavily on trust (Wijk, Jansen & Lyles, 2008). Therefore, understanding which types of trust enhance interpersonal knowledge transfer is critical (Alexopoulos & Buckley, 2013). However, research in this area remains inconclusive (Gubbins & Dooley, 2021).

Knowledge exchange involves pre-exchange phases, such as the search for knowledge, which is fundamental to initiating the exchange process (Hansen, 2005; Gubbins & Dooley, 2021).

Gubbins and Dooley (2021) found that social identity fosters psychological safety in knowledge-seeking behaviors, sometimes even more effectively than trust. Creating environments where individuals feel safe to share and seek knowledge is therefore crucial. However, a major challenge in transforming tacit knowledge into explicit knowledge is individuals' fear of sharing what they know—especially in times of uncertainty, such as during pandemics or conflicts, or out of fear of job insecurity.

Duan et al. (2022) emphasize the need for further research into the reasons and consequences of knowledge hiding. Singh (2019) and Shrivastava et al. (2021) suggest that future studies should explore how different dimensions of knowledge hiding—both explicit and tacit—impact organizational performance. The effects of hiding knowledge on a firm's innovation remain largely unexplored, yet this is particularly relevant for education, a field filled with challenges.

Park et al. (2022) highlight that explicit knowledge transfer significantly impacts innovation. The codification of knowledge through formal mechanisms, such as manuals and written guides, facilitates its transfer. However, tacit knowledge transfer has not been shown to have a direct impact on innovation.

This underscores the need to transform teachers' tacit knowledge into explicit knowledge to enhance pedagogical practices, particularly for students with disabilities. Encouraging collaborative networks, fostering knowledge exchange platforms, and integrating Knowledge Management with Organizational Intelligence practices can drive improvements in education.

Generating innovation from tacit knowledge is challenging (Chesbrough & Teece, 1996) due to its low accessibility and lack of codification. Organizational culture plays a critical role in this transformation. Lee and Han (2024) emphasize that a learning-oriented culture helps develop social capital within an organization. By fostering continuous learning, organizations can encourage adaptability, innovation, and resilience (Coleman, 1994; Pasupuleti & Bommali, 2023). A strong learning culture enhances trust, collaboration, and knowledge sharing (Manuti et al., 2017), with social capital acting as a mediator in the process (Lee & Han, 2024).

Neethu Mohammed and Kamalanabhan (2022) note that tacit knowledge—embedded in individuals' work-related experiences and expertise—is difficult to codify and communicate. However, promoting shared responsibility and social interactions can improve tacit knowledge exchange. Many organizations are investing in collaborative virtual platforms to facilitate specialized knowledge sharing (Buunk et al., 2018).

Van Houten (2022) emphasizes that while personal knowledge is difficult to convey accurately, it can be effectively shared through reflection and storytelling. Using metaphors and contextual examples allows individuals to transfer knowledge meaningfully. This process enhances learning and professional development, ultimately improving communication and workplace performance. Interactive and reflective sharing of experiences, stories, and analyses is key to fostering knowledge exchange in professional settings.

Social Participation in Brazil

The Brasil Participativo platform (<https://brasilparticipativo.presidencia.gov.br>) offers four mechanisms for social participation: public consultations, town hall meetings, conferences, and cross-government processes. This digital space allows citizens to present ideas, discuss, and vote on proposals they deem most relevant for improving Brazil.

However, the platform's approach to data collection and participation lacks Knowledge Management (KM) practices for knowledge creation and Organizational Intelligence (OI) applications for structured decision-making.

For example, under the "Plans" section, users can participate in initiatives like the New National Culture Plan (active from October 17, 2024, to December 31, 2024). The participation process is structured similarly to a government election—users cast votes on statements rather than engaging in open discussions. When clicking "Participate," they encounter pre-set questions with only three response options: Agree, Disagree, or Skip the Question.

For instance, one question states:

"Indigenous and Afro-Brazilian cultures are essential to our diversity and must be prioritized in government investments."

Despite providing a voting mechanism, the platform lacks spaces for opinion-sharing, discussion, or deliberation among participants. Additionally, there is no transparent presentation of the plan's purpose, objectives, goals, indicators, or financial planning. These omissions hinder meaningful public participation.

Integrating Knowledge Management and Organizational Intelligence. A Communities of Practice (CoPs) model would enhance structured discussions and prevent the information overload often found in social networks. CoPs facilitate topic-based discussions, enabling participants to exchange knowledge more effectively.

Additionally, the expert analysis tool from Organizational Intelligence could significantly improve participation:

Community leaders—experts in their fields—would guide discussions, synthesize key points, and channel insights to decision-makers.

CoPs allow for the integration of explicit knowledge (academic expertise) and tacit knowledge (real-life experiences). For example, in a discussion on poverty, both a homeless individual and a Ph.D. researcher on poverty could contribute valuable yet different perspectives.

Sindermann (2024) analyzed the Fridays for Future (FFF) movement and found a positive correlation between group identification and political participation. However, identification within FFF was low, likely due to the low-trust environment of social media, where superficial interactions and anonymous profiles weaken engagement. Trust and knowledge-sharing thrive in collaborative projects requiring joint research and long-term interaction.

Fritsche et al. (2018) developed the Social Identity Model for Pro-Environmental Action (SIMPEA), which explains how social identity influences behaviors during environmental crises. Sindermann (2024) also found that different levels of group engagement on social networks impact political participation. Individuals who merely follow discussions participate differently from those who actively contribute to debates and projects.

A New Approach to Public Participation

To improve citizen engagement, the Brazilian government should collaborate with organized neighborhood-based civil society groups in project implementation. This approach has several advantages:

Local communities are the primary beneficiaries and thus best suited to provide meaningful input. Neighborhood organizations are self-selected and well-connected, facilitating smoother communication and decision-making. They can monitor project

execution and suggest continuous improvements.

By fostering trust-based, knowledge-driven participation, Brazil can move beyond simple voting mechanisms and create a more inclusive and effective model for democratic engagement.

The Most Important Knowledge Management Practice for Social Participation: Communities of Practice

Shaw et al. (2022) describe Communities of Practice (CoPs) as virtual organizational systems built on a non-hegemonic foundation. These communities reject universality, hierarchy, and coercion, instead fostering empowerment through social-political capabilities, ethical and moral commitments, and collaborative learning.

One of the greatest challenges within a CoP is the development of both intellectual capacities (such as knowledge and intelligence about a given topic) and spiritual capacities (such as humility and patience). Additionally, motivating and empowering participants remains a significant hurdle.

Regarding empowerment in CoPs, Picolli et al. (2023) conducted interviews revealing that the very process of community building is often exhausting, primarily due to discontinuity in participation:

"Well, maybe they don't really believe in this so much. But in my opinion, the idea is good, but we all have to believe in it" (Interview No. 3, 2019).

"There was no direction given to the project and no regular review of the problems encountered with the producers" (Questionnaire No. 23, 2018).

"In fact, I don't know who the other co-operators were. So how can we say we are a group?" (Interview No. 6, 2019).

These responses highlight how the process of building a community requires both time and significant personal investment, particularly in fostering critical awareness, active participation, and a sense of responsibility (Vincent, 2014). Many participants perceive the effort required as overwhelming:

"It seems that for many of them, the process of creating a community requires more time and energy than they are willing to put into it" (Questionnaire No. 20, 2018).

Moreover, Picolli et al. (2023) found that some individuals engage in CoPs merely to acquire specific strategies rather than to contribute meaningfully to the community. The study concluded:

"Not everyone is negative about this relational dimension, which nevertheless still seems to remain at a preliminary, individual, and organizational level, but not yet at the level of a true community."

Other interviews reinforce this notion:

"I saw that most of them came, yes, also because we make the best tomatoes in the world, but they come to have a chat" (Interview No. 9, 2019).

Despite these challenges, research suggests that successful CoPs can foster empowerment by strengthening trust, social exchange, reciprocity, cooperation, and learning (Picolli et al., 2023).

Empowerment and Social Participation

The concept of empowerment in CoPs has been widely studied. Di Monaco (2014) argues that bi- and multi-directional social relationships generate behavioral effects, increasing intentional

actions and fostering empowerment by enhancing competencies and autonomous decision-making. Similarly, the Participatory Guarantee System (PGS) has demonstrated how CoPs can strengthen human relationships, leading to deeper social and commercial collaborations, even in competitive economic systems.

Rappaport (1987) defines empowerment as a process through which individuals, organizations, and communities gain greater control over issues crucial to them. This concept has since been applied across multiple disciplines, including political science, education, management, psychology, and community development (Amerio, 2000; Converso & Piccardo, 2003; Griffin, 1991; McWhirter, 1991; Thomas & Velthouse, 1990).

The most widely recognized framework for empowerment is that of Marc Zimmerman (2000), which operates at three levels:

Individual Level – Personal empowerment through knowledge and self-efficacy.

Organizational Level – Mobilization of resources to facilitate participation.

Community Level – Structural and political engagement to drive social change.

Three key elements underpin this model: control (the ability to influence decisions), critical awareness (understanding power structures), and participation (engagement at both individual and group levels). These components align closely with Wenger's (1998) definition of CoPs as learning spaces where knowledge is shaped through shared experience and strong relational interactions (Lave & Wenger, 2006; Lipari, 2010).

When integrated with the CoP framework, empowerment emerges as a transformative process—one in which members gain awareness of their ability to enact meaningful change.

The Technology-Centered Pitfall in CoPs

Despite their potential, many CoP initiatives remain overly focused on technology rather than people or processes. Efforts to enhance service quality often prioritize investment in advanced technologies, neglecting the development of human relationships within the community. Picolli et al. (2023) observed that while most participants learned something new and expanded their knowledge by interacting with individuals from different regions, the deeper goal of community-building remained elusive.

A particularly important aspect of CoPs is Cultural Knowledge—the interplay between tacit and explicit knowledge, which is shaped by participants' beliefs, assumptions, and values. Without acknowledging and integrating these cultural dimensions, CoPs risk remaining superficial, failing to achieve their transformative potential.

Methodology

Snyder (2019) emphasizes that literature review as a research method is more relevant than ever. Traditional literature reviews often suffer from a lack of rigor, with many being conducted ad hoc rather than following a structured methodology. This paper adopts a systematic approach to literature review, ensuring a thorough and methodologically sound analysis of existing research.

To strengthen the theoretical and practical contributions of this study, it is crucial to clarify what constitutes a literature review,

how it can be effectively utilized, and the criteria for evaluating its quality. Various guidelines exist for conducting literature reviews, each suggesting different types of reviews, such as:

Narrative and Integrative Reviews – These focus on synthesizing existing research to provide a broad understanding of a topic (Baumeister & Leary, 1997; Wong et al., 2013).

Systematic Reviews and Meta-Analysis – These involve a structured process of collecting, analyzing, and synthesizing empirical studies to draw evidence-based conclusions (Davis et al., 2014; Liberati et al., 2009; Moher et al., 2009).

Integrative Reviews – Aimed at summarizing and reconciling diverse research perspectives (Torraco, 2005).

Business and Management-Oriented Guidelines – Some methodologies have been specifically developed for business and management research (Palmatier et al., 2018; Tranfield et al., 2003).

This study follows a structured literature review methodology, drawing on established frameworks to ensure a comprehensive and systematic analysis. By adopting this approach, the research aims to provide meaningful insights and contribute to the academic discourse on social participation, knowledge management, and organizational intelligence.

Data collection

Following an extensive review of theoretical and empirical research, as well as survey methodologies, this study utilized a web-based survey to collect input from targeted respondents and achieve the research objectives. The use of key informants from organizations as a data collection method is widely recognized in various research contexts (Huber & Power, 1985).

This study draws on research conducted at the National University of La Plata (UNLP) in Buenos Aires, Argentina, and the State University of Bahia (UNEB) in Salvador, Brazil. Structural Equation Modeling (SEM) is used to test the interconnections between culture, knowledge, and intelligence. Data was gathered through semi-structured interviews comprising 27 questions across three key dimensions: Culture, Knowledge, and Intelligence. In total, 12 online interviews were conducted with students.

The Culture-Knowledge-Intelligence (CKI) model is illustrated in Figure 3, and the full survey can be found in Appendix 1.

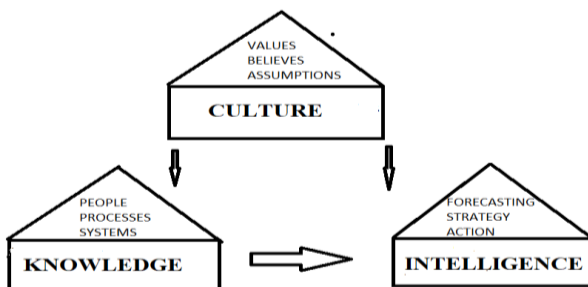


Figure4. The CKI model (own elaboration)

The CKI model shows that Cultural impacts Knowledge and Intelligence. Furthermore, Knowledge impacts Intelligence.

Data analysis

The evaluation of the reflective measurement model includes the following key elements:

Internal Consistency Reliability: Composite reliability should exceed 0.701, though in exploratory research, values between 0.60 and 0.70 are considered acceptable.

Convergent Validity: The average variance extracted (AVE) should be greater than 0.50 (Chin, 1998; Hair et al., 2005).

Discriminant Validity: Indicators with high loadings (≥ 0.7) in their respective latent variables (LVs) and low cross-loadings in other LVs indicate discriminant validity (Chin, 1998). Additionally, correlations between latent variables should be smaller than the square root of AVE (Fornell & Larcker, 1981).

Table III presents the composite reliability and Cronbach’s alpha values for the three dimensions of the Culture-Knowledge-Intelligence (CKI) model.

Internal consistency is a measure of reliability that assesses how well items designed to measure the same construct produce consistent results (Struwig, M., Struwig, F.W., & Stead, G.B., 2001).

John and Benet-Martinez (2000) explain that convergent validity and discriminant validity are essential for establishing construct validity in a measurement procedure. Discriminant validity ensures that a given construct (e.g., anger) is distinct from other constructs that might be present in the study (e.g., depression).

Cronbach’s alpha is a widely used method for assessing reliability by examining the covariance among items in an instrument relative to the overall variance. A reliable instrument should exhibit high covariance among items, indicating internal consistency (Collins, 2007).

	Culture Knowledge Intelligence		
Composite reliability	0,76	0,79	0,74
Cronbach’s alpha	0,82	0,83	0,68

Table III. Composite reliability and alpha in the CKI model

All latent variables (LVs), both first and second order, demonstrated AVE values greater than 50%, meeting the criteria set by Chin (1998) and Hair et al. (2005) for convergent validity.

The second criterion specifies that the loading of an indicator on its corresponding latent construct should exceed its loadings on all other constructs (i.e., cross-loadings). Indicators with high loadings (greater than 0.7) on their respective latent variables and low loadings on other latent variables (cross-loadings) indicate discriminant validity (Chin, 1998). The cross-loadings are shown in Table IV.

	Culture (C)	Knowledge (K)	Intelligence (I)
C1	0,879	0,298	0,270
C2	0,839	0,335	0,320
C3	0,798	0,339	0,580
C4	0,754	0,279	0,421
C5	0,767	0,267	0,342
C6	0,876	0,345	0,342
C7	0,679	0,323	0,452
C8	0,799	0,435	0,234
C9	0,871	0,213	0,245
K1	0,373	0,710	0,509

K2	0,523	0,783	0,489
K3	0,390	0,690	0,348
K4	0,432	0,891	0,360
K5	0,422	0,789	0,512
K6	0,522	0,830	0,232
K7	0,443	0,759	0,349
K8	0,343	0,738	0,580
K9	0,235	0,876	0,467
O1	0,475	0,331	0,987
O2	0,551	0,445	0,691
O3	0,329	0,255	0,788
O4	0,441	0,387	0,783
O5	0,325	0,378	0,708
O6	0,298	0,398	0,734
O7	0,349	0,589	0,933
O8	0,319	0,439	0,788
O9	0,456	0,256	0,876

Table IV- Cross Loadings

The discriminant validity analysis showed that most indicators exhibit sufficient discriminant validity, suggesting that respondents perceive the concepts as distinct and representing different aspects of the phenomenon.

Figures 5 and 6 display the relationships between the model's constructs (path coefficients) for Brazil and the Argentina, respectively.

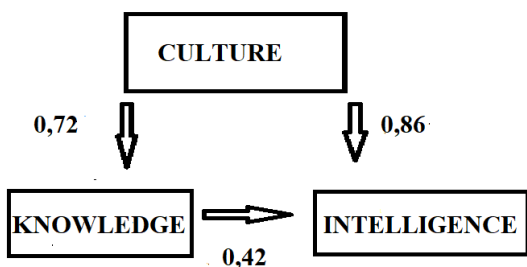


Figure 5 – Path Coefficients for Brazil

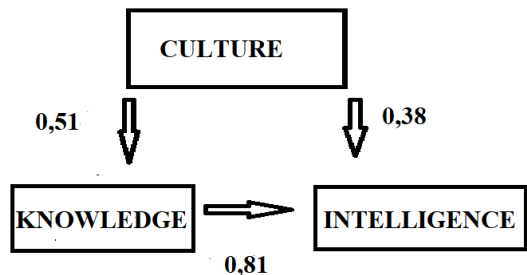


Figure 6 – Path coefficients for Argentina

By analyzing Figures 5 and 6 (Brazil - BR) and Figure 4 (Argentina - AR), we can conclude the following:

In both Brazil and the Argentina, Culture has a positive influence on Knowledge (BR = 0.72, AR = 0.51) and Intelligence (BR =

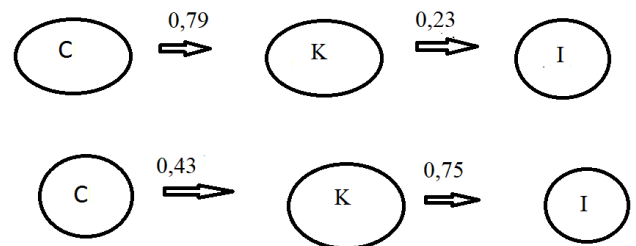
0.86, AR = 0.38).

Knowledge also positively influences Intelligence (BR = 0.42, AR = 0.81).

Culture plays a crucial role in explaining changes in both Knowledge (R² Brazil = 0.71, R² Argentina = 0.45) and Intelligence (R² Brazil = 0.76, R² Argentina = 0.38).

When the influence of Culture on Intelligence is removed, we can further analyze Figures 7 (Brazil) and 8 (Argentina), which reveal:

In Brazil, Culture (C) accounts for 79% of the changes in Knowledge (K), while Knowledge (K) explains 23% of the changes in Intelligence (I). In Argentina, Culture (C) accounts for 43% of the changes in Knowledge (K), and Knowledge (K) explains 75% of the changes in Intelligence (I).



Figures 7 and 8- Path coefficients without the influence of Culture on Intelligence (Brazil and Argentina respectively).

Results and Discussion

The results show the impact of culture on knowledge and intelligence in two countries belonging to the same continent, known for the difficulty of access to knowledge from Operation Condor that began the dictatorship in South America¹. At that time the United States controlled the political system in a military manner, which occurs most recently through the price of agricultural commodities.

Argentina despite the difficulty of adopting the dollar, which does not happen for example in Ecuador, also from South America, and not even in the case of French Guiana, whose currency is the euro, has greater reading habit than Brazil, which makes the impact of knowledge on intelligence, greater than the impact of culture on intelligence.

This is due to the fact that Argentina is first information not to have as much value as in Brazil, a country with great difficulty with the theme knowledge.

According to IBGE (2020) there are around 30 million functional illiterates in Brazil and the Northeast illiteracy rate (14.2%) remains twice the national average (7.0%), and among the federation units, the three largest full illiteracy rates were observed in Piauí (14.8%), in Alagoas (14.4%) and Paraíba (13.6%) Federal, the capital (1.9%).

To get an idea, 52.6% of Brazilians over 25 years old have not finished high school. The information is from the National Continuous Household Sample Survey (PNADC) of 2018, from the Brazilian Institute of Geography and Statistics (IBGE). Only 21% of young Brazilians, between 25 and 34 years old, completed

1 https://en.wikipedia.org/wiki/Operation_Condor

higher education, according to the survey 'Education at Glance', prepared by the Organization of Economic Cooperation and Development (OECD), published in late 2021.

A model and Portal based on Communities of Practice and Web Semantic

Garcia-Barrios and González-Espinoza (2017) conducted an insightful study on the collection of collective knowledge. Among the wide range of positions generated through debates on objectives, there seems to be a consensus: the idea that the participation of the majority of stakeholders is not only desirable but essential in research/action aimed at governing socio-ecological processes (Fortmann, 2008).

In the context of participatory ecological forestry and agroforestry research in neotropical mountainous peasant territories, the potential participation of the local population is conceived and practiced in various ways, with differing perspectives and levels of commitment. This includes multidisciplinary scientific monitoring of long-term processes led by empowered peasants, who are the primary actors and decision-makers in managing resources and territories. Additionally, it considers changes in their community's ways of life and culture.

However, implementing and sustaining these initiatives in the long term is becoming increasingly difficult, especially in rural areas facing severe social and environmental challenges. These difficulties can be better understood by analyzing the dynamics shaped by prevailing economic and societal models, as well as the

research and development agendas implicitly or explicitly proposed by government institutions and civil society for forestry and agroforestry exploration (Garcia-Barrios & González-Espinoza, 2017).

Agriculture serves as a key motivator for the formation of communities of practice, given that farmers depend on specialized knowledge about techniques like fertilization and irrigation, which are often concentrated in public research institutes. For example, modern fertilization methods such as soil remineralization using rock dust mixed with cattle manure are only known to a minority of farmers. In this context, communities of practice could play a crucial role in agricultural policies, provided there is awareness within public administration of their potential.

Communities of practice in Knowledge Management are particularly valuable for discussing various agricultural themes. However, they can produce an overwhelming amount of information if not properly managed, especially without experts in each virtual community and the necessary ontologies to help computers understand the meaning of concepts.

This knowledge-sharing process fosters mutual growth and drives cultural change, even affecting the organizational climate due to the collaborative environment that communities of practice create. This is clearly demonstrated in the Knowledge Management model (KM), Organizational Intelligence (IO), and Cultural Change framework (KMCOI model) below.

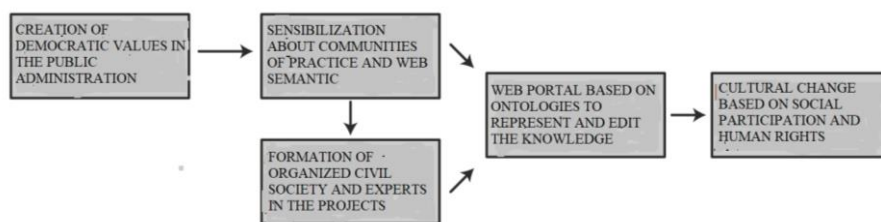


Figure 1 – Model KMCOI (own elaboration).

The analysis of the KMCOI model is done below.

The Impact of Democratic Values on the Creation of Communities of Practice

UNESCO (2023) emphasizes that dialogues should be based on reflection and research concerning democratic norms, values, and principles, especially in relation to key global issues such as globalization and development. Pogrebinschi and Samuels (2014) argue that participatory practices have the potential to deepen existing democratic regimes by opening avenues for civil society to exert greater influence over national governance.

The Impact of Communities of Practice on Organized Civil Society and Knowledge Management

Zboralski (2005) highlights that the concept of communities of practice (CoPs) has garnered significant attention as a central mechanism for implementing knowledge management (KM). Mohajan (2017) contends that CoPs play a crucial role in knowledge sharing, creating value for both their members and the organizations they belong to.

The Impact of Knowledge Management on Organizational Intelligence, particularly the Semantic Web

Abusweilem and ShadiHabis (2019) assert that organizations must shift their focus to knowledge management processes, including the creation, transformation, dissemination, participation, storage, selection, and processing of knowledge, to enhance performance. According to Obeidat et al. (2017), organizational performance depends not only on tangible resources but also on intangible assets such as the effective management of knowledge, technological advancements, and the adoption of sophisticated data collection and analysis systems. Abusweilem and ShadiHabis (2019) developed an integration platform for various rules sources and formats, enabling more precise searches for knowledge by using conditional statements and machine-processable descriptions of tabular and graphic-based resources. This platform also allows for the composition of various knowledge sources to tackle complex, rare tasks.

The Impact of Knowledge Management on National Culture

Current KM research highlights the inseparable link between KM and Organizational Culture (OC), recognizing that an accurate cultural foundation is essential for effective KM practices (Davenport & Prusak, 2000; Nonaka & Takeuchi, 1995; Gold et al., 2001; Janz & Prasarnphanic, 2003; Lee & Choi, 2003; Donate

& Guadamillas, 2010). OC serves as a theoretical framework explaining how an organization achieves its objectives (Schein, 2004). Newman and Nollen (1996) discuss how differing National Cultures (NCs) necessitate variations in management practices, while Ang and Massingham (2007) suggest that the influence of NC may be observed at the process level of KM practices, offering greater flexibility and manageability.

The Impact of Knowledge Management on Cultural Change

McLeland (2005) argues that two significant changes—the advent of the Semantic Web and evolving perceptions of Knowledge Management—demand educational reforms aimed at moving beyond the acquisition of declarative knowledge. These reforms should focus on cultivating skills such as analysis, critical thinking, communication, and creativity. Anantamula (2010) found that different cultures interpret knowledge and its value in distinct ways. This presents a challenge for developing KM processes to capture and share knowledge in global projects, where cultural diversity is the norm.

Conclusions

Many governments, including Brazil, create popular participation initiatives that often mask a high level of corruption. This is evident both in the way collective knowledge is collected and applied, as well as through the manipulation of certain interest groups selected by the government, who provide the “space” for such “democratic” practices. In Argentina, which had a government similar to Brazil’s, a comparable approach was followed when the "Observatorio Nacional Argentina contra el Hambre" was created in 2019. This initiative, consisting of universities and study centers, was responsible for monitoring and evaluating a plan that promoted the application of science and technology to improve food and nutritional quality while providing interdisciplinary training to Food and Nutrition Security Promoters.

Unfortunately, populist governments that leverage social programs and participatory initiatives are often the most corrupt, manipulating the public in various ways. Given this, a process of cultural change is crucial, starting with the creation of a Social Participation Portal that utilizes modern Knowledge Management tools such as Communities of Practice and Organizational Intelligence practices like the Semantic Web (ontologies). This will facilitate the exchange of knowledge and experiences, contributing to an improved organizational climate. This shift in organizational culture could be a vital first step toward improving public policies in both Argentina and Brazil.

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