Digital skills as a vehicle for university organizational culture

Las competencias digitales como vehículo de la cultura organizacional universitaria

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ABSTRACT

The constant digitalization of society and therefore of organizations has meant a redefinition of communication processes. These changes have eagerly penetrated the management of internal communication, causing the redefinition of the *vehiculization* of organizational culture. In a changing environment, the management of organizations means implementing new communication strategies that combine globalization and new technologies (Wichels, 2014). In this line, we have analyzed the value of the use of digital competencies as an element of translation of the organizational culture in the university environment. The study was carried out based on the case study method taking four public and private universities belonging to Spain and Mexico under the premise of convenience. They have been analyzed in the case of Spain: the University of Malaga and ESERP Business & Law School; and in Mexico the Autonomous University of Tamaulipas and the University of the Valley of Mexico. To contrast the penetration of organizational culture symmetrically in the public and private university model in the Latin American landscape. The study techniques used have been based on direct nonparticipant observation, application of internal public surveys (employees), conducting in-depth interviews with those responsible for communicative management, and analysis of digital resources used in internal communication. As an advance of results, you can see the application of two different models with clear continental influences. The instrumentalization of the organizational culture in the universities studied is focused differently depending on their public or private origin, being more effective in their penetration and therefore, in their identification in the case of private entities. The challenge of organizational culture in the university field lies in the need to increase identity value through a real and collective ideology that is lived and embodied in everyday management.

KEYWORDS: Organizational culture; digital skills; identity; University; Mexico; Spain.

RESUMEN

La constante digitalización de la sociedad y por ende de las organizaciones ha supuesto una redefinición de los procesos comunicativos. Estos cambios han penetrado con avidez en la gestión de la comunicación interna, provocando la redefinición de la vehiculización de la cultura organizacional. En un entorno cambiante la gestión de las organizaciones supone implementar nuevas estrategias de comunicación que aúnen la globalización y las nuevas tecnologías (Wichels, 2014). En esta línea, hemos analizado el valor del uso de las competencias digitales como elemento de traslación de la cultura organizacional en el ámbito universitario. El estudio se ha realizado a partir del método de estudio de caso tomando bajo la premisa de conveniencia cuatro universidades del ámbito público y privado pertenecientes a España y México. Se han analizado en el caso de España: la Universidad de Málaga y ESERP Business & Law School y en México la Universidad Autónoma de Tamaulipas y la Universidad del Valle de México. Con el fin de contrastar la penetración de cultura organizacional de forma simétrica en el modelo universitario público y privado en el panorama Iberoamericano. Las técnicas de estudio utilizadas se han basado en la observación directa no participante, aplicación de encuestas a público interno (empleados), realización de entrevistas en profundidad a los responsables de la gestión comunicativa y análisis de los recursos digitales utilizados en la comunicación interna. Como avance de resultados se puede apreciar la aplicación de dos modelos diferentes con claras influencias continentales. La instrumentalización de la cultura organizacional en las universidades estudiadas está enfocada de forma diferente en función de su origen público o privado, siendo más efectiva en su penetración y por lo tanto, en su identificación en el caso de entes privados. El desafío de la cultura organizacional en el ámbito universitario radica en la necesidad de acrecentar el valor identitario a través de un ideario real y colectivo que se viva y plasme en la gestión cotidiana.

PALABRAS CLAVE: Cultura organizacional; competencias digitales; identidad; universidad; México; España.

Translation by Paula González (Universidad Católica Andrés Bello, Venezuela)

1. Introduction

The digitization of organizations has meant not only a modification in work processes but also communication structures within entities. Technological development encompasses all organizational dynamics and thus enhances the implementation and development of what we know as digital skills. In the study that arises, the implementation of digital skills has been interrelated with organizational culture, since the skills of the digital field are an instrument for the transmission of cultural and identity values in each organization.

The starting point has been the a priori existence of a vision of organizational identity, and its transmission through the internal communication strategy and its instruments.

The organizational model that is addressed in this research is the university one. Public and private university centers are analyzed to obtain a joint vision of the communication processes and the organizational culture.

The university is an organization that, due to its structural and operating characteristics, must adopt new goals and flexible mechanisms for its evolution and acceptance by the environment (Ginés-Mora, 2004). This organizational vision places on the university staff the responsibility of leadership management from a human perspective, the generation of change processes that are adapted through the organizational culture, and a clear strategy that fosters the changes demanded by society as a whole (Montañez-García, 2017).

Internal communication, from a broad perspective, has always been considered a complex organizational construction with high difficulties, as has been pointed out by Del Pozo (1997), Barth (2004), Andrade (2005), Fernández (2007), Rodríguez (2007), Pizzolante (2009), among others.

The challenge of internal communication increases when we confine ourselves to the university environment. The university is an entity that by its nature requires an exercise of high social responsibility, which offers responses to society with a constant adaptation of its work processes and mechanisms. This organizational genesis potentially increases the difficulty of its management in internal communication, as different research carried out by Aguirre et al. (2012), Ginés-Mora (2004 and 2014), Imbernón (2008), Lau (2009), Llano (2003), Pena-Vega (2009), Aristizábal and Hernández (2014), among others have pointed out. All these previous analyzes observe the communicative processes within the university from different perspectives with a common nexus: the difficulty of integrating the members under a unique cultural sequence. At the same time, all these studies agree on the need to build a university vision that is strengthened from within through the integration of its internal public, with special attention to its permanent members, that is, the staff.

2. Objectives

Organizational culture is "the lens with which we must look at the possibilities of change in higher education institutions" (Montañez-García, 2017, p. 55). University culture is therefore the response to organizational behaviors and developments, which are integrated into organizational life, generating models of behavior and shared experiences that allow inclusion and acceptance (Rifkin, 2000).

In our study, we will define organizational culture as "a complex pattern of norms, attitudes, beliefs, values, ceremonies, traditions, and myths that are deeply integrated within the organization" (Barth, 2004, p. 160).

Digital skills are a key instrument in organizational management, and in the case of the university, they are a cornerstone in the present and future of social organization. Their role as generators of knowledge obliges these entities to adapt all of their processes to a digital vision. It is important to note that skills are generically defined as "the ability to successfully perform functions and roles in a field" (De la Orden Hoz, 2011, p. 47). Specifically, digital skills are defined as "the critical and safe use of Information Society Technologies for work, free time, and communication; relying on skills such as the use of computers to retrieve, evaluate, store, produce, present, and exchange information, and to communicate and participate in collaborative networks through the Internet" (DOL394, 2006).

Previous studies that focus on the analysis of digital skills in the university only address the role of skills in the field of teacher training and development (García-Valcárcel et al, 2010), (Páez and Carlo, 2012), (Arias, Torres, and Yáñez, 2014). Regarding internal communication and organizational culture at the university, there are different analysis studies in the Ibero-American sphere (Aristizábal and Hernández, 2014), (Montañez-García, 2017), (Fernández Beltrán, 2016), (Martínez, 2018) that

highlight the complexity in the layout of internal communication in a university reality that has not always considered internal communication as an organizational management force.

Based on a profuse bibliographic review, this research combines two elements so far not related to each other: digital skills and organizational culture. These pieces are key for the articulation of an endogenous effort that will lead the universities towards a more agile management model to face the changes and challenges that society demands (Montañez-García, 2017).

3. Methodology

A study is presented that aims to determine the value of the use of digital skills as a transmitter of organizational culture in the university. The analysis of this scenario stems from the fact that the implementation of digital skills has become a rising value in organizations, especially those oriented to higher education.

Using digital skills as a transmitting element of internal communication positions universities. At present, these organizations are not only valued for their production processes but also their communication processes. Therefore, the digitization of their communication facilitates the instrumentalization of their internal growth.

Derived from this central objective, it is intended to know the penetration degree of the organizational culture in university employees to determine the level of identification with the organization.

Digital skills have been formed from those indicated by the International Society for Technology in Education (ISTE) in its document NETS for Teachers (2008), and are combined with the digital skills present in the organizational management analyses proposed by Prensky (2001) and the European Commission (2018) in the professional management of the educational field. These skills are arranged into three groups: ICT (Information and Communication Technologies), LKT (Learning and Knowledge Technologies), and EPT (Empowerment and Participation Technologies), depending on whether they are functional, educational, or participatory.

The digital skills valued in this study are: Digital knowledge, Information management, Digital communication, Networking, Strategic vision, and Organizational orientation. Their selection responds to the same organizational functionalist criteria of the chosen sample.

To bring together the elements that make up the culture in the university, the bush model proposed by Rodríguez (2007) has been used. In the aforementioned model, the leaves of the tree are those elements of the culture that are visible, such as behaviors, ceremonies, language, facilities, history, symbols, and slogans. The roots will suppose the aspects not visible to the naked eye that would be made up of values, beliefs, and organizational norms.

The study, of a mixed nature, has been prepared from a descriptive and explanatory perspective, based on the case study method, taking four universities from the public and private sectors belonging to Spain and Mexico under the premise of convenience.

In the Spanish case, the University of Malaga and ESERP Business & Law School, the latter a private university with a presence in Madrid, Barcelona, and Palma de Mallorca, have been analyzed. In Mexico, the selection was made up of the Autonomous University of Tamaulipas and the private entity University of the Valley of Mexico with a presence in 18 of the 31 states that make up Mexico. The bifocality of the organizational nature is based on the purpose of contrasting symmetrically and comparatively the public and private university model in the Ibero-American panorama.

In the selection of the sample, the classification of the internal public of the universities has been previously determined from the Model of the publics of universities and cultural institutions of Noguero (1982). From this stratification, the group of personnel (teaching and administrative) has been selected. This implies that the sample has been oriented to the personnel of university organizations, including managers, administration/services personnel, and teachers/researchers. The organizational employee has been delimited within the internal public, excluding students, since the orientation of the study focuses on the constituent members of the organization. That is, those who carry out the activities that make it possible to function. Furthermore, it is considered that there already is a large body of studies that have determined the identity and digital development of universities based on a sample made up exclusively of students. Therefore, the sample selection presented in this analysis establishes a new and complementary perspective to the existing ones.

The sample has been made up of a total of 301 members from the 4 universities. Taking into account the parity percentage of men and women in each of the higher education centers. The analysis sample distribution is made up of 77 members in the case of the University of Malaga, 77 participants in the case of ESERP Business & Law School, 77 members of the Autonomous University of Tamaulipas, and 70 staff members of the University of the Valley of Mexico. The age of the members has not been taken as a relevant factor and all those employees who had a relationship of more than 1 year have participated in the study, regardless of their indefinite or temporary permanence in the organization. The latter because the contractual variability of the link does not exempt the need to shape the organizational identity or the use of digital skills for its integration.

The study techniques used have been based on non-participant direct observation, application of surveys to personnel, conducting in-depth interviews with those responsible for communicative management at each university, and descriptive analysis of the digital resources used in internal communication.

The application of surveys has been carried out with a total of 297 members of the 4 universities; those responsible for internal communication of each university have been eliminated from the initial sample for having a structuring vision on the object of study.

The survey was made up of 19 questions divided into three differentiated blocks: knowledge of the organizational identity, internal communication and construction of the organizational culture through digital skills, and assessment of shared identity. For the preparation of the survey, it was based on an adaptation derived from the internal university communication analysis questionnaire by Fernández Beltrán (2016), generating a mixed model composed of responses based on descriptive options of the communicative action and Likert's measurement scale responses.

Direct non-participant observation was carried out in the four universities with the entire sample, being recorded in a field notes diary. Characterizing the instrument by a structured implementation based on the limitation of the object of study and the implementation of measurable aspects in the observation. The presence of the researcher was open; therefore, the organizational members were aware of the research. Finally, the generation was natural since no created scenario was promoted, but was analyzed in the everyday reality of each university.

Four in-depth interviews were conducted with those responsible for internal communication from each participating university. In-depth interviews present a broad map of reasoned responses from which detailed information is obtained about aspects such as motivations, values, and experiences of the interviewee (Wimmer and Dominick, 1996).

The in-depth interview (Grinnelll, 1997) was structured based on a questionnaire of 60 questions divided into four blocks: identification of the interviewee and organizational functions, creation and development of internal communication plans, analysis of the generation of organizational culture, and use of digital skills as vehicles of organizational culture.

Finally, an analysis of the digital resources used by the four studied universities was carried out. For this, a table for the analysis of digital communication elements was established (Arango, 2013), composed of 15 descriptive aspects aimed at determining their usability, visual transmission of identity, and reflection of the organizational mission-vision.

The use of the four study techniques presented achieves a triangulation of data of different nature and sources. Therefore, the research findings presented, support the conclusions provided by this study with greater certainty (Hernández Sampieri et al., 2006).

4. Results

Initially, it is relevant to mention that the results of the present research have not been presented until the complete study and conclusive results have been obtained. Therefore, partial publications of any segment of the research have been avoided.

The application of the surveys to the personnel of the four participating universities was carried out randomly and intentionally. The premises sought were that members with a link greater than one year would participate, gender parity of the total sum of respondents, representation of the management sector in each organization, representation of teaching/research staff, and representation of administration/services staff members.

For the selection of the sample, the dissemination of the university campuses of the four universities was taken into account. The four universities have a very uneven number of campuses. Therefore, to determine in which campus the research would be implemented, it was sought to establish a common criterion applicable to each university center. Therefore, the choice of campuses was established based on a ratio greater than 50% of the headquarters of each university, the selected ones being those that responded to the greatest number of employees and their strategic importance in university development plans. This criterion determined a correlation between units of analysis and existing units, always looking for an average above 50% in each case.

An explanatory table for the choice of campuses is presented:

UNIVERSITY	NUMBER	CAMPUS/LOCATION NAME	SELECTED	RATIO
	OF CAMPUSES	(a)	SAMPLE (b)	
University of Malaga	2	Teatinos (Malaga) El Ejido (Malaga)	Teatinos El Ejido	2:2
Eserp Business & Law School	3	Barcelona Madrid Palma de Mallorca	Barcelona Madrid	2:3
Autonomous University of Tamaulipas	8	Cd. Victoria (Tamaulipas) Mante (Tamaulipas) Tampico (Tamaulipas) Reynosa (Tamaulipas)	Cd. Victoria Tampico Reynosa Matamoros	5:8

Table 1.	Campus	number	by	University.
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University of the 36 Valley of Mexico	Chapultepec (Mexico state) Coyoacan Roma (Mexico state) San Rafael (Mexico state) Centro Santa Fe (Mexico state) Centro Marina (Mexico state) Hispano (Mexico state) Lago Gudalupe (Mexico state) Lomas Verdes (Mexico state) Textcoco (Mexico state) Toluca (Mexico state)	Chapultepec Coyoacan Roma San Rafael Centro Santa Fe Lomas Verdes Toluca Tlalpan Aguascalientes Mexicali Guadalajara Sur Guadalajara	21:36
	Tlalpan (Mexico state)Aguascalientes(Aguascalientes)Mexicali (Baja California)Tuxtla (Chiapas)Chihuahua (Chihuahua)Saltillo (Coahuila)Torreon (Coahuila)Guadalajara Sur (Jalisco)Guadalajara Sur (Jalisco)Guadalajara Vapopan(Jalisco)Cuernava (Morelos)Monterrey Cumbres (NuevoLeón)Puebla (Puebla)Queretaro (Querétaro)San Luis Potosí (San LuisPotosí)Hermosillo (Sonora)Centro Hermosillo (Sonora)Nogales (Sonora)Villahermosa (Tabasco)Cd. Victoria (Tamaulipas)Reynosa (Tamaulipas)Tampico (Tamaulipas)Veracruz (Veracruz)Mérida (Yucatán)	Zapopan Cuernava Mty. Cumbres Mty. Norte Queretaro Villahermosa Cd. Victoria Reynosa Tampico Veracruz	

RLCS, Revista Latina de Comunicación Social, 79, 17-33 [Research] 10.4185/RLCS-2021-1495| ISSN 1138-5820 | Año 2021

The survey was presented through a Google forms format, previously explaining the characteristics and the purpose of the study. Likewise, the anonymity of the participants was guaranteed as well as a free space for the realization of assessments by the respondents.

The period of application of the surveys was, in the case of the University of Malaga, during November 2019, at the Autonomous University of Tamaulipas in December 2019, at ESERP Business & Law School and the University of the Valley of Mexico during the first days of January 2020.

The results were processed through the statistical analysis program SPSS 20.0 for Mac (IBM inc.), in the week after the application of each group of surveys, and finally, a cross-over of results from the four universities was carried out in the third week of January.

Non-participant direct observation was considered a fundamental instrument in fieldwork because it provides an analysis of organizational behavior characteristics. It is a basic research starting point to observe a set of subjects that develop under specific types of behaviors that respond to different degrees of organizational structuring (Fernández, 1995). The observation was carried out in a structured way with a diary of field notes in which the study objectives, the field of action, and the observation guide were identified. The observation group in each university was made up of 16 members of each organization in which there was gender parity, positions at different hierarchical levels, and professional profile. The observational exercise and data collection were carried out in October and November 2019 in the 4 participating universities.

In-depth interviews were conducted based on a 60-question questionnaire, giving the possibility of expanding and deriving the answer from the interviewee. In the application of this instrument, it was sought to determine the organizational strategic vision regarding the development of internal communication and culture in each university. Linking the application of digital skills to the organizational map as a cultural vehicle of the university entity.

The interviews were carried out through an in-person interview and sent by email, to allow the interviewees to reflect on the presented questions. As well as on some questions asked, collect data to support their answers. The technique was applied during December 2019 and the first days of January 2020 to the four universities that are part of the study.

Finally, a descriptive analysis of the digital resources used by the staff of each university organization was carried out. The determination of these resources was made from those obtained in the non-participant direct observation and the application of the surveys to university personnel. It is important to determine that the premise was established that, to be considered digital resources, they should be identified as such by the members of each university, as well as be used by them in their daily activities before conducting this study. Finally, the list of analyzed elements was crossed with the ones that those responsible for communication offered as digital communication tools from the point of view of strategic management. The evaluated parameters were its usability, visual transmission of identity, and reflection of the organizational mission-vision through an analysis template. The data collection and analysis were carried out in the 4 universities during December 2019 and the first days of January 2020.

It is important to point out that the methodological process is an exercise that poses constant reflection to the researcher, as well as sometimes allows a redefinition of the instruments used in fieldwork. In this research, an empirical process was proposed that was evolving and becoming more nuanced during its implementation. These instrumental redefinitions were carried out to ensure the strategic development and the achievement of the study objectives. In this sense, direct observation offered the possibility of redefining elements raised a priori in the survey to university personnel, as well as clarifying questions elaborated for the in-depth interview with those responsible for internal communication of the participating universities.

After the interviews carried out with the communication managers of the analyzed universities, it can be established that communication planning is assumed by each of the managers. In the case of the studied public universities, the said person in charge also assumes the management of internal communication in an integrated manner. In the case of the University of the Valley of Mexico and Eserp Business & Law School, both private, the design of internal communication is shared with the human resources department. Despite this double-headedness, the greatest competencies in decision-making and strategy design are taken under the communication department. The communication managers of the four universities have a suitable profile for the development of their skills, all of them have studies in communication. Although in the case of the University of Malaga, the person in charge of communication belongs to the journalism branch, and in the Eserp Business & Law School, he is more linked to marketing. These professional profiles affect the subsequent application of communication planning as well as the use of elements for the transmission of the organizational culture.

The applied interviews allow the extraction of information about an organizational vision that establishes the existence of digital skills that reinforce the transmission of the organizational being as well as the construction of a joint culture. From the communication department of the four universities, it is estimated that there is sufficient stimulus for there to be a common feeling among the university staff. Likewise, those responsible for communication agree that under the temporal logic, those members who are permanent share a greater sense of belonging and, therefore, decisively contribute to the growth and transmission of the organizational culture.

In the interviews carried out with the communication managers of the University of Malaga and Eserp Business & Law School, the vision is reflected that the fundamental digital skills that are present in the transmission of the organizational culture are digital knowledge, information management, digital communication, networking, strategic vision, and organizational orientation. These skills, as derived from the two interviews, are reflected through the use of digital resources present in the two universities.

In the case of the Autonomous University of Tamaulipas and the University of the Valley of Mexico, digital skills are naturally integrated into communication since they design digital content from a clear communicative perspective, taking the ideology of the organization as the axis of construction of each digital element. In both Mexican universities, the organizational culture is a living and constant aspect that is reviewed in each communication plan and is enriched through feedback from the university staff. In direct non-participant observation, clear differences were established according to the countries of the study case. In Mexican universities, the Autonomous University of Tamaulipas and the University of the Valley of Mexico, organizational values are present in the daily life of the staff. The managers interact with the rest of the members using the premises that identify the *Being* of the University both from the visual point of view and in culturally constitudinal aspects. There is an institutional action based on the exemplification of the direction towards the rest of positions and hierarchical groups. A group vision is shared among the teachers and, therefore, an identity that is reinforced by the elements contained in digital skills. The use of digital skills is observed through common actions, the usual skills are digital knowledge, information management, digital communication, networking, strategic vision, as well as the predominance of actions targeted to organizational objectives.

In the case of Ésera Business & Law School, there is a comprehensive vision of the work processes in which the use of digital skills is promoted, which in turn contain the cultural essence of the organization. There is a constant effort on the part of managers to maintain actions that reinforce and refer to the use of digital skills.

In the case of the University of Malaga, there is some confusion in the use of digital skills depending on the age range and level of belonging to the organization. Although age was not considered as an important trait in instrumental design, in this case, a correlation between age-skills-organizational culture was demonstrated. The youngest members, without a difference in the hierarchical level, in a permanent relationship or not, and in the organizational role (manager, teacher/researcher, and administration/services), develop a daily work integrated by digital skills, in which the cultural thread that communicates the organizational vision and mission with their daily activity is clearly identified. Therefore, in this specific case, the organizational culture is transmitted efficiently and constantly among the younger members of the staff of the University of Malaga.

The surveys carried out, maintain a clear correlation with non-participant direct observation and a variable coincidence with in-depth interviews with those responsible for organizational communication at each university. The analysis derived from the surveys shows, in the first instance, that the organizational culture at the University of Malaga is not an element that is symmetrically observed by the staff, and there are certain disagreements regarding the intention of those responsible for communication.

Do you know the organizational	Yes	No
culture of your university?		
Organizational culture is		
understood as the set of values,		
norms, and behaviors that		
unify the behaviors of		
employees and that help to		
work in the same direction.		
ESERP	100%	0%
UMA	67%	33%
UVM	93%	7%
UAT	75%	25%

 Table 2. Organizational Culture Results

Source: Self-made

Regarding the degree of identification of cultural values in the studied universities, there are certain variations concerning the claims of internal communication strategists.

If so, do you share it?	Yes	No	
ESERP	100%	0%	
UMA	90%	10%	
UVM	85%	15%	
UAT	95%	5%	

 Table 3. Organizational Culture Results

Source: Self-made

Among the staff of the four universities, there is a different vision of the implementation of digital skills linked to organizational culture.

Do you think that digital skills are present in the organizational culture of your university and that they offer extra value to internal communication?	Yes	No
ESERP	100%	0%
UMA	74%	26%
UVM	87%	13%
UAT	100%	0%

Table 4. Results of Organizational Culture-Digital Skills

Source: Self-made

Regarding the use of digital skills in the case of the Autonomous University of Tamaulipas, 65% of those surveyed determine that they are essential for institutional development. 15% of the staff assume digital skills as important in institutional action, and 10% consider the implementation of digital skills not very relevant, and finally, 10% consider it irrelevant, and 0% completely irrelevant.

In the case of the University of the Valley of Mexico, 76% of the respondents agree that digital skills are essential for institutional development, 18% of the surveyed staff consider them important, 6% of the staff think that digital skills are not very relevant, finally, none of those surveyed finds them irrelevant and completely irrelevant.

In the surveys carried out at Eserp Business & Law School, 86% consider digital skills fundamental for institutional development, 14% consider them important. Leaving the irrelevant and completely irrelevant options empty.

At the University of Malaga, 55% consider digital skills to be essential for institutional development, 25% determine that digital skills are important, 17% view them as irrelevant, and 3% completely irrelevant.

Regarding the digital resources that are used by the surveyed personnel of the 4 analyzed universities, we have the following results:

In my	Intranet	Public	email	Social	Virtual	Digital	WhatsApp
organization,		web		Networ	Campus	boards	groups
internal digital				ks			
communication							
is applied							
through							
(check all that							
apply)							
ESERP	Х	Х	Х	X	Х		
UMA	Х	Х	Х		Х	Х	
UVM	Х		Х	Х	Х		
UAT	Х	Х	Х	Х	Х	Х	

Table 5. Results of Organizational Culture-Digital skills

Source: Self-made

The analysis of digital resources confirms that there is constant and adequate usability, visual transmission of identity, and reflection of the organizational mission-vision. In this sense, it is necessary to clarify that in the interviews with those responsible for internal communication, the number of digital resources declared was higher than those that the staff uses and declares as existing. It is worth mentioning since, as indicated in the methodological section, only those digital resources that are recognized and used by university personnel have been considered for this analytical study.

5. Conclusions and discussion

In the analyzed universities, from the communication department, there is a clear awareness that internal communication is vital for organizations. There is also a general coincidence in observing culture as a living and vital element for organizational health. As well as the unquestionable support that digital skills suppose for the transmission of this shared culture. In the design and the organizational intentions, the guidelines are clear, but in the transaction to everyday life, this concatenation of elements is lost.

First of all, in Mexican universities, there is a high sense of institutional belonging, which is directly linked to the shared knowledge of culture in each of the universities. In the Spanish case, there is a notable difference between public and private universities. In the case of the University of Malaga, organizational identity is not fully recognized and, therefore, culture is not a highly shared element. In contrast, at Eserp Business & Law School, organizational identity is present in most members of the university and organizational culture is an area shared almost by all. This difference manifests, in the Spanish case, that the level of penetration of internal communication and its strategic plans among the personnel of the public university compared to the private one is highly variable. There is, therefore, an instrumentalization of organizational culture with marked differences in the eyes of university personnel. In the case of Spain, the model of penetration of organizational identity and, consequently, of culture is more effective in private entities than in public entities.

Organizational culture is presented as an element of construction and constant growth in all the analyzed cases, but there are wide differences in nuances and acceptance. In the case of Mexican universities, it is evident that culture is part of the daily activities of the organization. University managers are involved with their daily example in the translation of the values that identify them, and in turn, they are recognized and implemented by the rest of the members of each university.

In the Spanish case, the private university is predisposed to daily exercise those values that differentiate it from other organizations, in a high percentage, the penetration in the workforce is effective. Since it does not find resistance to the search for shared culture, mainly due to the perception that they are part of a business model. In the public university, there is a marked difference in the ability to accept a shared culture by the staff. Younger members are permeable to cultural values while older members are reluctant to understand the importance of this organizational element. Based on the fact that there is no truly recognized institutional culture in the university organizations of the public chalice.

Digital skills are observed almost entirely as necessary elements in the transmission of organizational culture. This is demonstrated by the identification and use of digital resources in universities. Although from the vision of the internal communication plan, there are more resources not identified by the members of the universities. Which highlights the need to implement a specific action plan in the promotion and use of these wasted resources.

Consequently, digital skills do represent an effective vehicle for organizational culture. Although it is necessary to increase the organizational identity in Spanish public universities. There is a negative

inheritance that is superimposed on the communicative work and that weighs down the organizational culture, distorting it. Being recognized as an ideal concept and not really materialized in the organizational development.

It is necessary to face the challenge of organizational culture in the university environment, seeking to increase the value of shared identity through an ideology that is recognized and shared by all members of the organization.

6. References

- Aguirre, R., De Pelekais, C. & Paz, A. (2012). Responsabilidad social: Compromiso u obligación universitaria. *Telos*, 14(1), 11-20. ISSN 1317-0570.
- Andrade, H. (2005). Comunicación organizacional interna: proceso, disciplina y técnica. Madrid: Netbiblio.
- Arango-Forero, G. (2013). Comunicación digital: una propuesta de análisis desde el pensamiento complejo. *Palabra Clave 16* (3), 673-697. <u>https://www.redalyc.org/pdf/649/64930924002.pdf</u>
- Arias Oliva, M., Torres Coronas, T., & Yáñez Luna, J-C. (2014). El desarrollo de competencias digitales en la educación superior. *Revista Historia y comunicación social*, nº Especial, (19), 355-366. <u>https://doi.org/10.5209/rev_HICS.2014.v19.44963</u>
- Aristizábal Giraldo, M. E. & Hernández García, D. (2014). Estudio comparativo de la gestión de la comunicación interna en universidades públicas con acreditación de alta calidad en Antioquía. *Revista Folios, 31, 91-106.* https://aprendeenlinea.udea.edu.co/revistas/index.php/folios/article/view/326293
- Barth, R. S. (2004). *Culture in question*. En Jossey-Bass Publishers (Ed.), The Jossey-Bass Reader on educational leadership (2da. e159-168). San Francisco.
- Bello van der Ree, M. E. y Morales Lozano, J. A. (2019). Competencias claves de los estudiantes universitarios para el uso de las TIC. *Revista de Comunicación de la SEECI*, 50, 43-72. <u>https://doi.org/10.15198/seeci.2019.50.43-72</u>
- Blanco Alfonso, I., García Galera, C. y Tejedor Calvo, S. (2019). El impacto de las fake news en la investigación en Ciencias Sociales. Revisión bibliográfica sistematizada. *Historia y Comunicación Social*, 24(2), 449-469. <u>https://doi.org/10.5209/hics.66290</u>
- Blasco Magraner, J. S. y Botella Nicolás, A. M. (2020). Aprendizaje por proyectos en la clase de bachillerato: la opereta La Corte del Faraón. *Revista de Comunicación de la SEECI*, 51, 1-15. <u>http://doi.org/10.15198/seeci.2020.51.1-15</u>
- CA: John Wiley & Sons. *Comisión Europea. Nuevas medidas para impulsar las competencias clave, las capacidades digitales y la dimensión europea de la educación.* 2018. <u>http://europa.eu/rapid/press-release IP-18-102_es.pdf</u>.
- De La Orden Hoz, A. (2011). El problema de las competencias en la educación general. *Bordón, 63*, (1),47-61. <u>https://recyt.fecyt.es/index.php/BORDON/article/view/28904</u>

Del Pozo, M. (1997). Cultura empresarial y comunicación interna. Madrid: Fragua.

- DO, Diario Oficial de las Comunidades Europeas, L394 (2006). *Recomendación del Parlamento Europeo y del Consejo de 18 de diciembre de 2006 sobre las Competencias Clave para el Aprendizaje Permanente.* <u>http://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32006H0962&from=ES</u>
- Feijoo Fernández, B. y Guerrero, J. J. (2018). La investigación de mercados en redes sociales: conocetu consumidor por lo que publica en Facebook y Twitter. Análisis de caso de ADT Security Services en Chile. Vivat Academia, Revista de Comunicación. 144, 19-35. <u>http://doi.org/10.15178/va.2018.144.19-35</u>
- Fernández Ríos, M. (1995). *Análisis y descripción de puestos de trabajo. Teoría, métodos y ejercicios.* Madrid: Ediciones Díaz de Santos.
- Fernández, F. (2007). La gestión de la nueva comunicación interna. Análisis de la aplicación de las tecnologías de la información en los procesos de comunicación interna de las universidades de la Comunidad Valenciana. EBSCO. <u>http://tesisenred.net/handle/10803/10464</u>
- Ginés-Mora, J. (2004). La necesidad del cambio educativo para la sociedad del conocimiento. *Revista Iberoamericana de Educación, 35*, 13-37. <u>https://doi.org/10.35362/rie350874</u>_
- Ginés-Mora, J. (2014). *La Universidad: Un futuro incierto*. Conferencia Magistral ofrecida en la Universidad de Puerto Rico, Recinto de Río Piedras, en la celebración del 50ta aniversario del Departamento de Estudios Graduados de la Facultad de Educación, el 31 de marzo de 2014.
- Grinnell, R. M. (1997). Social work research & evaluation: Quantitative and qualitative approaches. Itaca: E. E. Peacock Publishers.
- González-Gascón, E. (2017). El trabajo colaborativo como herramienta para el desarrollo personal. Una experiencia en una asignatura de marketing. *Revista de Ciencias de la Comunicación e Información*, 22(2), 75-88. <u>http://doi.org/10.35742/rcci.2017.22(2).75-88</u>
- Hernández Sampieri, R., Fernández Collado, C. & Baptista Lucio, P. (2006). *Metodología de la investigación*. México: McGraw Hill.
- Imbernón, F. (2008). *Los retos de la universidad del futuro*. Recuperado de <u>http://univnova.org/documentos/6.pdf</u> recuperado (10/12/2019).
- Llano, A. (2003). *Repensar la universidad: La universidad ante lo nuevo*. Pamplona, Madrid: Ediciones Internacionales Universitarias. <u>http://www.univforum.org/sites/default/files/RepensarUniversidad_es.pdf</u>
- Lau, R. (2009). Características ideales de la Universidad futura. *Reencuentro*, 56, 130-133. https://reencuentro.xoc.uam.mx/index.php/reencuentro/article/view/731
- Marta-Lazo, C., Rodríguez Rodríguez, J. M. y Peñalva, S. (2020). Competencias digitales en periodismo. Revisión sistemática de la literatura científica sobre nuevos perfiles profesionales del

periodista. Revista Latina de Comunicación Social, 75, 53-68. <u>http://doi.org/10.4185/RLCS-2020-1416</u>

- Martín-Antoranz, P., Cabezuelo-Lorenzo, F. y Bartolomé-Muñoz-de-Luna, A. (2019). Competencias y formación ética de los profesionales de la comunicación corporativa en contextos interculturales. *Revista de Ciencias de la Comunicación e Información*, 24(1), 59-72. <u>http://doi.org/10.35742/rcci.2019.24(1)59-72</u>
- Martínez Arellano, N. A., (2018). Gestión de la comunicación interna en la Universidad Pública. El caso de la Facultad de Ciencias Administrativas y Sociales de la UABC. Diagnóstico y plan de intervención. *Revista Razón y Palabra, 100,* (22), 837-855. <u>https://archivos.revistarazonypalabra.org/index.php/ryp/article/view/1138</u>
- Mayoral, J., Parratt, S. y Morata, M. (2019). Desinformación, manipulación y credibilidad periodísticas: una perspectiva histórica. *Historia y Comunicación Social*, 24(2), 395-409. <u>https://doi.org/10.5209/hics.66267</u>
- Montañez-García, A. (2017). Liderazgo, cultura organizacional y cambio en la universidad. *Cuadernos de investigación en la educación*, 32, 51-62. <u>http://cie.uprrp.edu/cuaderno/2018/01/18/liderazgo-cultura-organizacional-y-cambio-en-la-universidad/</u>
- NETS for Teachers (2008). https://people.umass.edu/pelliott/reflections/netst.html
- Niño González, J. I. y Linares Herrera, M. P. (2020). Investigar: Acción impostergable. *Bibliotecas*. *Anales de Investigación*, 16(1), 5-6. <u>http://www.bnjm.cu/revista-anales/Revista%20Anales%20Vol%2016%20No.1%202020/01-Vol-16-N-1-2020-Editorial.pdf</u>
- Noguero, A. (1982). Relaciones Públicas e industria de la persuasión: análisis gnoseológico y situacional. Madrid: Eunibar.
- Páez, R. & Carlo, S. (2012). Aproximación docimológica a la evaluación de competencias digitales y didácticas de profesores universitarios. *Revista Iberoamericana de Evaluación Educativa*, 5, (1), 284-288. <u>http://hdl.handle.net/10486/661710</u>
- Pena-Vega, A. (2009). El porvenir de la universidad: Consideraciones sobre el futuro en un contexto mundial. *Reencuentro*, 54, 21-26. <u>https://reencuentro.xoc.uam.mx/index.php/reencuentro/article/view/685</u>
- Pizzolante, I. (2009). El desafío de modelar. *Comunicación estratégica para el fortalecimiento institucional*. <u>http://www.venamcham.org/demo/eventos/perspectivas_soc/italo_pizzolante.pdf</u>
- Prensky, M. (2001). Digital natives, digital immigrants. On the horizon. MCB University Press, 9, 1-6
- Rifkin, J. (2000). La era del acceso: La revolución de la nueva economía. Barcelona: Paidós.
- Rodríguez, A. (2007). Propuesta de modelos culturales orientados a la gerencia del cambio. *Acimed*, 15(4). <u>http://scielo.sld.cu/pdf/aci/v15n4/aci05407.pdf</u>

- Schena, J., Besalú, R. y Singla Casellas, C. (2018). Valoraciones actualizadas de las competencias profesionales en la práctica laboral de los periodistas españoles. *Revista Latina de Comunicación Social*, 73, 531-555. <u>http://doi.org/10.4185/RLCS-2018-1268</u>
- Vaquerizo Domínguez, E. (2019). Medios étnicos, adaptación al ecosistema digital y usos de la diáspora migrante. *Vivat Academia, Revista de Comunicación*. 149, 127-151. <u>http://doi.org/10.15178/va.2019.149.127-151</u>
- Wichels, S. (2014). Nuevos desafíos en Relaciones Públicas 2.0: La creciente influencia de las plataformas de online review en Turismo. *Revista Internacional de Relaciones Públicas*, 7, (IV), 197-216. <u>http://dx.doi.org/10.5783/RIRP-7-2014-12-197-216</u>
- Wimmer, R. y Dominick, J. (1996). La investigación científica de los medios de comunicación. Barcelona: Bosch.

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