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Presentation of the Content

In the first chapter we present, *Strengthening ICT competencies in Higher Secondary Education teachers to improve teaching practice in the health emergency of Covid 19*, by GÓMEZ-CAMPOS, Sinahí Gabriela, GRANADOS-MAGAÑA, Javier Alejandro, ZEPEDA- MARTÍNEZ, Gabriel and FREGOSO-HERNÁNDEZ, Carlos Baltazar, with adscription in the Universidad Autónoma de Nayarit, as next article we present, *Privacy of Personal Data*, by LÓPEZ, Fabricio, with adscription in the Universidad Iberoamericana, as next article we present, *Data Privacy*, by MIRANDA-SEGUNDO, Carlos Augusto, with adscription in the Universidad Iberoamericana, as last article we present, *Data Privacy*, by VÁZQUEZ-GARCÍA, Dulce Liliana & SOLARES-SOTO, Pedro Fernando, with adscription in the Universidad Iberoamericana.

Content

Strengthening ICT competencies in Higher Secondary Education teachers to improve teaching practice in the health emergency of Covid 19

Fortalecimiento de competencias TIC en profesores de Educación Media Superior para mejorar la práctica docente en la emergencia sanitaria del Covid 19

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Abstract

SARS-CoV-2 has brought enormous challenges and challenges to the global education system. The crisis has demonstrated the vulnerability of current educational models, their rapid and accelerated spread throughout the world has caused an unprecedented impact on the multidimensional development of the population. This brought as a possible solution the implementation and accelerated adaptation of working at a distance with approaches oriented to the use of Information and Communication Technologies (ICT), The project proposed as an objective to evaluate the knowledge and skills management of upper secondary teachers (northern part of the state of Nayarit), before and during the COVID-19 pandemic. The study is a non-experimental descriptive transectional study with a sample of teachers from the three Preparatory Academic Units of the UAN. A non-probability convenience sampling was used using two pre-designed questionnaires through the Google Forms platform, one at the beginning and the other at the end. With this project it was detected that no teacher uses digital tools at the beginning for online classes.

Covid 19, Teacher training, Distance education, Information and Communication Technologies

Resumen

El SARS-CoV-2 ha traído enormes retos y desafíos al sistema educativo mundial. La crisis ha demostrado la vulnerabilidad de los modelos educativos actuales, su rápido y acelerado esparcimiento en todo el mundo ha causado un impacto sin precedentes en el desarrollo multidimensional de la población. Esto trajo como posibilidad de solución la implementación y adaptación acelerada de trabajar a distancia con enfoques orientados al uso de las Tecnologías de la Información y Comunicación (TIC), El proyecto planteó como objetivo evaluar el conocimiento y manejo de competencias de los docentes de media superior (zona norte del estado de Nayarit), antes y durante la pandemia de COVID-19. El estudio es no experimental descriptivo transeccional con una muestra de docentes de las tres Unidades Académicas Preparatorias de la UAN. Se utilizó un muestreo no probabilístico por conveniencia empleando dos cuestionarios prediseñados a través de la plataforma Google Forms, uno al inicio y el otro al final. Con este proyecto se detectó que ningún docente maneja herramientas digitales al inicio para las clases en línea.

Covid 19, Formación de docentes, Educación a distancia, Tecnologías de la Información y Comunicación

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Introduction

The rapid and alarming spread of COVID 19 has had an exceptional impact on the development of education around the world. In the opening reasoning of the Director General of the World Health Organization (WHO) at the press conference on COVID-19 on March 11, 2020, it was noted that it was spreading from person to person in all parts of the world, being considered and declared as a pandemic through the World Health Organization (WHO, 2020).

The consequences that we have seen are that governments will speak out in favor of welcoming and implementing health emergency measures, confinement and social isolation to prevent the spread of the virus nationally and internationally. The effects within education have been devastating in various areas of the lives of students, as well as teachers, also from the field of physical and mental health to economic, cultural and social, according to data from organizations such as the WHO (2020), the Pan American Health Organization (PAHO, 2020), the Economic Commission for Latin America and the Caribbean (ECLAC, 2020) and World Vision International (2020).

As the COVID-19 pandemic moves across the world, it becomes more necessary to understand and address the educational needs of children and youth during this global health crisis. It is precisely on this level that the governments adopted measures to suspend activities of face-to-face classes, complying with the recommendations of the health sector in order to avoid the contagion and spread of the virus. It should be noted that according to UNESCO figures (2020a), nearly 1.2 billion students around the world have been affected by the closure of schools and universities due to the COVID-19 outbreak.

The unexpected breakdown of regular classroom activities brought as the only immediate solution alternative, the implementation of the distance modality in order to give continuity to the teaching-learning process. This has implied the adaptation of approaches oriented to the use of Information and Communication Technologies (ICT). Without a doubt, it has been a great institutional and human effort to participate in this sudden process of modification from one classroom modality to another characterized by the non-presence of the teaching act.

However, questions arise from the teacher's perspective about the preparation and prior knowledge in the use of digital resources and tools to develop a non-face-to-face class, but it is also worth asking how the teaching-learning activity is being developed under the non-face mode. With the evolution of the internet and information and communication technologies in the last decade, new trends have emerged in technology-mediated education. On the other hand, students have grown up with technology around them, which has brought as a consequence that they rely on it to carry out any academic activity.

This has forced the creation of new teaching modalities, in such a way that traditional teaching is no longer the only feasible one; distance education and combined education (b-learning) have been positioned as new teaching alternatives. Likewise, the democratization of information has allowed the appearance of mass free online courses (MOOC), as well as the appearance of Educational Platforms or Learning Management Systems (LMS), in addition to new teaching approaches such as Inverted Learning and its practical application called Flipped Classroom.

The use of ICT in Higher Secondary Education is a topic that has been investigated by several authors; They state that despite the fact that it has been proven that the use of ICT benefits students in various ways such as motivation, availability of materials and activities, increased productivity, and improved understanding; teachers have not been trained and few do, so the impact they cause is low (Bauer and Kenton, 2005; Cuban and Krikpatrick, 2001; Kozma, 2003; Robertson, 2003).

According to documents from the United Nations Organization for Science, Education and Culture (UNESCO), for the year 2016 a strategy of integration of Communication and Information Technologies (ICT) in the teaching-learning process is applied globally; This would allow access to education to be universal, for there to be greater equality for instruction, for teaching to be more effective, and it also promotes the professional development of teachers, among other factors that affect the educational development of a center, a region or a country. (UNESCO, 2016).

Having trained teachers who have knowledge and skills in Educational Technology is important, in order to achieve meaningful learning through Virtual Learning Environments (VLE) that are available to the student anywhere and at any time, materials and learning activities. Said data for the indicated year reflect a reality of inequity of access to a possible distance modality using digital tools. Although the forceful action of the government to make access possible through agreements with mobile phone and internet operating agencies in order to guarantee and facilitate optimal access for the development of teaching activity, one might also wonder if the characteristics of connectivity are those required to use digital tools in the absence of classes.

As a precedent in the region is the report on the conditions of teaching work in the context of social, preventive and compulsory isolation ordered by governments around the world. The objective of this research was to know the way in which the non-face-to-face teaching processes before and during the quarantine impacted teachers in the northern part of the state of Nayarit

In a study on educational responses to the COVID-19 pandemic as a result of the results of a rapid assessment carried out in its member countries, between March 18 and 27, 2020, by the Organization for Economic Cooperation and Development (OECD , 2020) highlights that the majority of responses focus on establishing the challenges in the availability and management of technological infrastructure, some challenges in the lack of support from parents in learning at home and the lack of capacity and will of teachers to apply adaptations to the changes required by the crisis situation.

The study also notes that a significant percentage of respondents see that the unexpected positive educational outcomes of the changes caused by the crisis include the introduction of technologies and other innovative solutions and an increase in the autonomy of students to manage their own learning..

Equally relevant are the recommendations to guarantee the continuity of learning and the application of technologies for the development of virtual activities during the closure of schools in the midst of the pandemic established by UNESCO (2020b).

Among which it is worth highlighting those related to the application of measures to guarantee access for students, the instruments to create links between schools, parents, teachers and students, the creation of orientation sessions for teachers and students. parents for monitoring and accompaniment, the precision of the duration of the learning units based on the self-regulation skills of the students and the determination of a teaching rhythm consistent with the level of self-regulation and metacognitive skills of the students . These guidelines could be adopted by school institutions in order to adapt and develop the distance learning process contextualized to the particular needs of students.

The study's general objective was to analyze the competence performance of teachers in schools in the north of the state, during the COVID-19 pandemic. As specific objectives, it was established to identify the level of prior knowledge about the application of ICT for the development of non-contact classes, define the status of training and prior preparation for the development of non-contact classes and describe the development of non-presence of teaching activity.

Proyect

This project aims to contribute to the development of ICT skills of the teachers of Higher Secondary Education of the Autonomous University of Nayarit, through a training program that involves the use of new technologies such as the transparent board (Crystalboard) for the creation own dynamic video tutorials; the editing and production of audio, sound and video for the creation of multimedia materials; the creation of interactive multimedia activities, such as crosswords, word searches, infographics, timelines, questionnaires, and more; as well as the design of activities and evaluations of the courses they teach with the help of a virtual learning environment.

The project has been planned in 3 stages: a) the first corresponds to a diagnosis to know the ICT skills that teachers have, b) the second corresponds to the training of teachers, and c) the third is about the implementation of resources , materials and strategies in upper secondary education students.

It is important to note that to date only 2 stages have been completed, due to the health contingency the courses had to be taught remotely, which caused most of the teachers not to take the diploma, which had as a consequence that they did not a large enough sample will be considered compared to that of the diagnosis.

Methodology

Stage 1

As part of this stage, an instrument was applied to measure ICT skills in teachers. The criterion for selecting the sample was the total number of participants in the training course of the Higher Secondary Academic Units of the UAN in the northern zone. The instrument applied to the discussion groups consisted of 60 online questions. The type of study was mixed. In this research, the quantitative part is emphasized and contrasted with the qualitative results to achieve a better understanding. In total, 28 teachers participated. Of which, 16 belong to the female sex and 12 to the male.

The quantitative instrument was oriented to the identification of the learning scenarios. It comprises ten areas that focus on reviewing the characteristics of the discussion groups, which covered aspects of personal data, access to technological media, time spent on the Internet and the PC, information management, content management, communication, computer security, resolution problems, collaborative work and perception about ICT. For its part, the qualitative tool used was that of teaching discussion groups, belonging to each of the participating academic units.

Stage 2

At this stage, the results obtained from the surveys were analyzed to identify the strengths and weaknesses in the ICT competencies measured, with the aim of designing the courses to be taught and generating a diploma for registration with the Department of Teacher Development.

The diploma course was organized in 4 modules, each with a duration of 60 hours per module for a total of 240 hours of training, of which 120 would be face-to-face and 120 work on the platform; Due to the Sars Cov 2 health emergency, the planning was modified and it was taught completely remotely.

At the end of the training, an instrument will be applied to know the perception of the teachers regarding the courses. During the teaching of the courses, the high school teachers will carry out various activities to measure the knowledge and skills acquired in each subject taught.

At the end, the data and information obtained will be analyzed to present the results and obtain conclusions regarding the project carried out in the three high schools in the northern area of the State of Nayarit.

Results

The initial instrument (pre-test), applied to the discussion groups, was made up of ten items, covering aspects of personal data, access to technological means, time spent on the Internet and the PC, information management, content management, communication, computer security, problem solving, collaborative work and perception about ICT.

An analysis was carried out with information obtained through the instrument. that was applied to teachers of the preparatory academic units numbers 2, 9 and 12 of the UAN, 28 teachers participated, 43% were men and 57% women, in this study it is important to mention that 93% of the teachers have a bachelor's degree and the remaining 7% have a master's degree; On the other hand, 46% of the participants have an experience of 10 to 15 years of service in university teaching. The questions that evaluated the knowledge and use of ICT were structured with a 4-level Likert scale, where the lowest level is never, the second from time to time, the third regularly, and the fourth frequently.

Regarding technological means, it was found that 96% of teachers have their own computer and with which they can work their different learning units, 100% of teachers have internet in their homes, which facilitates work at home.

Regarding the time spent on the internet and using the computer, the results indicated that the majority of teachers seek information related to their profession, these responses reflect that 46% of the teachers interviewed seek information related to their work or their matter from 30 to 60 minutes a day and 43% use it for more than 60 minutes.

Speaking of the area of perception about ICT, 90% of teachers think that ICT have come to improve the environment and teaching activity, some consider that it generates a distance with those who do not have access to this type of technology. 100% of the teachers surveyed are willing to make use of ICT in the professional field as part of an update and strategies to carry out their teaching performance. At the same time, they mentioned that a good teacher should consider knowing and mastering ICT to support and teach their learning units.

Regarding the teachers who took the distance diploma, it is necessary that of the 17 teachers who started it, 16 ended it by completing most of the activities, which is equivalent to 94%. In total, 17 activities were carried out by the high school teachers to demonstrate the learning of the tools and applications. However, if compared with the teachers who answered the survey to measure ICT skills, only 27% took it.

Once the diploma course was completed, a questionnaire was applied to them to measure again the degree of knowledge and use, as well as to know their impressions in relation to the themes and the modality. When analyzing the results, it was found that from the Pre-test to the Post-Test, there was a significant improvement, which can be seen in the following table.

	Question	Pre Test (percentage)		Pre Test (percentage)	
		Knowledge	Utilization	Knowledge	Utilization
1	Internet browsing tools and perform basic tasks with them, such as using bookmarks, or retrieving addresses from history, etc.	40.9	27.3	50	50
2	Internet browsers (Chrome, Firefox, Internet Explorer, etc).	50	40.9	50	50
3	Tools to select, organize and classify Internet information.	22.7	13.6	42.9	35.7
4	Storage and management of files and contents.	31.8	22.7	50	50
5	Tools to recover deleted files	13.6	9.1	7.1	57.1
6	Tools for storing files in the cloud.	9.1	9.1	35.7	21.4
7	Didactic Videos	36.4	27.3	50	42.9
8	Infographics and Timelines	9.1	9.1	64.3	57.1
9	Conceptual and / or Mind Maps	40.9	31.8	57.1	57.1
10	Podcast	4.5	4.5	50	35.7
11	Open Educational Resources	13.6	9.1	35.7	42.9
12	Learning Objects	18.2	13.6	64.3	57.1
13	Online Questionnaire and Assessments	27.3	13.6	71.4	71.4
14	Multimedia Presentations	36.4	27.3	50	57.1
15	Email	68.2	68.2	78.6	78.6
16	Forums	45.5	22.7	50	35.7
17	Collaborative Documents	22.7	18.2	35.7	42.9
18	Blog	22.7	18.2	14.3	14.3
19	Wikis	22.7	9.1	14.3	14.3
20	Google Docs	31.8	18.2	64.3	57.1
21	Cloud (Onedrive, Google Drive, Dropbox among others)	31.8	13.6	57.1	42.9
22	Educational Platforms	36.4	18.2	57.1	35.7
23	Agenda (Outlook, Evernote, Calendar, among others)	31.8	13.6	42.9	28.6

Table 1 Table of frequencies of level 4 of the questionnaire applied to high school teachers

When analyzing the results obtained in both questionnaires, a great change is observed in the attitude of teachers regarding the use of ICT in their teaching process, since only in the use of blogs there was a decrease in its application as didactic tools by teachers. This means that 96% effectiveness was achieved in achieving the objectives set for the diploma.

Regarding the general use of navigation tools and Internet browsers, it did not show significant changes, there was a lot of progress in the use of tools for selecting, organizing and classifying information with more than 250%. The most significant changes are observed in the use of applications as didactic support in the teacher's teaching process, such as the use of video with 157% progress, infographics and timelines with 627% progress, the use of concept maps 80% complete, podcast use increased by almost 800%, this being the fastest growing, ODT use increased by more than 400%, use of online questionnaires and evaluations increased more 500% and collaborative documents more than 200%. These advances were the most significant when observing the advantages implied by its use by the teacher.

Among the comments that were collected in the final evaluation to the question of what did you think of the diploma? Are: "Excellent, it was received at the most appropriate time and the panorama for the new normal that is coming. 100% productive", "Excellent!!! The truth is I learned many tools to work online and remotely. Everything we saw in the diploma is 100% applicable to our classes, with this diploma I realized that academically everything is possible, even the classes of experimental sciences "," I think that, due to contingency and real needs, are the appropriate content to develop teaching skills ". And in relation to the question, What did you think of working in Distance mode?, The teachers said: "At first with a bit of uncertainty but later it was comfortable", "Practical, complementary and I think it can be more productive than face-to-face, due to the level of research that requires the student to be able to solve the assignments or activities "," At first it was difficult for me to adapt, but later I realized that working remotely is easy and I liked it because of the comfort in a matter of time, since you get organized and everything becomes easier ","" In general, a pleasant experience and above all, that the tools and knowledge acquired are put into practice and are very useful.

However, I think having a teacher personally gives us a sense of more human warmth and security. ".

Discussion

Based on the results obtained, it is important to point out that teachers know many of the ICTs that are applied to education, however, when asked about their use, the percentage decreases considerably. Whether they are asked about information management, content management, the use of applications and ICT resources, the majority have answered that they do not use them, they only know them.

An interesting fact that has come to light is the fact that the vast majority have a computer and internet at home, which represents a great opportunity to take advantage of ICT in the classroom and in teaching. Regarding the use they make of the computer connected to the internet at home, they have answered that they use it to search for information, watch videos and read academic topics, which is important so that once they know new tools and applications, they acquire ICT skills that allows them to improve the use of the PC and the internet for the benefit of students.

The questions that were asked in relation to communication, in the pre-test and post-test, show that teachers currently make constant use of synchronous and asynchronous communication applications, such as WhatsApp, Facebook Messenger and Email Electronic. However, the use of forums, blogs and wikis is not a common practice of upper secondary teachers.

One of the categories that have attracted the most attention is that of applications and resources for collaborative work. Their knowledge and use of them is very low, which reflects the lack of ICT skills in this regard, and which leads to the lack of creation of collaborative activities with students. To a certain extent it is understandable, because the modality of the surveyed high schools is face-to-face, and therefore, the use of collaborative tools is not essential, since these activities are carried out in the classroom. However, once they were trained, they used them constantly.

Conclusions

From the 2 completed stages of the project, it can be affirmed that ICT applied to education is currently important in order to offer diversity and versatility in classes. In this sense, the teachers who took the online diploma course have stated that they have liked the content covered in the course, and that they are willing to continue training in the use and application of educational technology tools.

For the work team it has been a very enriching experience, because the distance modality was approached without planning it with the teachers who took the diploma. The fact of not being prepared for the Distance mode resulted in more work being done than expected in order to adapt the activities to the new mode. The health contingency that is experienced has resulted in teachers being encouraged to train in educational technology in order to use an educational platform as the axis in the organization and administration of the content to be taught. Likewise, it is important to recognize the professors who took the diploma, as they unexpectedly prepared for the health contingency.

It is expected that in the near future the project to measure learning and to know the perception and motivation of students when using technological tools and applications in their learning process can be concluded. To evaluate the results, it is necessary to train more teachers and apply what they have learned to carry out an information gathering with the students.

Finally, it can be concluded that the training of teachers in educational technology is increasingly necessary to be prepared for any situation that arises and forces them to teach at a distance. In this sense, it can be said that knowledge in educational technology and the development of ICT skills in teachers has become essential, now more than ever, and it is not known what the future holds, so it is better to be prepared.

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Privacy of Personal Data

Privacidad de Datos Personales

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Abstract

The Protection of Personal Data has its beginnings in the year 1980, through the Organization for Economic Cooperation and Development in the search to guarantee the fundamental human right of privacy. The standards have been set to establish a balance between the level of protection of the privacy of individuals and the free transmission of personal data in systems and applications of services, several studies of the limits have been created in which there is a personal data It must be stored and treated by a third party. Financial institutions, governments and services that require a high level of protection in their transactions, handling of confidential information, credit card data, customer information, among other things. The use of information technologies in general our environment requires that you deposit large amounts of information and personal data, that can store or transmit in an inappropriate manner, expose the privacy of a person, as well as compromise their integrity and financial reputation and even physics. The consent on the part of the people, for the treatment of their data, is the fundamental principle that leads the norms, directives and values that have been developed at a global level.The boundaries and borders of nations also have an impact on the extent to which personal data, a clear example in the European Union, where companies that use data from citizens of this community, but deliver their services outside of this, they are bound to these personal data in the same guidelines that define the European Union and its territory. Similarly, in Mexico there is a Federal Law on Data Protection in the Position of Individuals, regulating legitimate, controlled and informed treatment, guaranteeing privacy and the right to information self-determination of people.

Privacy, Self-determination, GDPR, LFPDPP, Personal Data

Resumen

La Protección de Datos Personales tiene sus inicios en el año 1980, a través de la Organización para la Cooperación y el Desarrollo Económicos en la búsqueda de garantizar el derecho humano fundamental a la privacidad. Los estándares se han fijado para establecer un equilibrio entre el nivel de protección de la privacidad de las personas y la libre transmisión de datos personales en sistemas y aplicaciones de servicios, se han creado varios estudios de los límites en los que hay un dato personal debe ser almacenado y tratado por un tercero. Instituciones financieras, gobiernos y servicios que requieren un alto nivel de protección en sus transacciones, manejo de información confidencial, datos de tarjetas de crédito, información de clientes, entre otras cosas. El uso de las tecnologías de la información en general nuestro entorno requiere que deposite grandes cantidades de información y datos personales, que pueden almacenar o transmitir de manera inapropiada, exponer la privacidad de una persona, así como comprometer su integridad y reputación financiera e incluso física. . El consentimiento por parte de las personas, para el tratamiento de sus datos, es el principio fundamental que rige las normas, directrices y valores que se han desarrollado a nivel global.Las fronteras y fronteras de las naciones también inciden en la extensión a qué datos personales, un claro ejemplo en la Unión Europea, donde las empresas que utilizan datos de ciudadanos de esta comunidad, pero prestan sus servicios fuera de esta, están vinculadas a estos datos personales en las mismas pautas que definen la Unión Europea y sus territorio. Asimismo, en México existe una Ley Federal de Protección de Datos en el Cargo de las Particulares, que regula el tratamiento legítimo, controlado e informado, garantizando la privacidad y el derecho a la autodeterminación de la información de las personas.

Privacidad, autodeterminación, GDPR, LFPDPP, datos personales

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Introduction

In March of the year 2018 the illegal use of personal information of more than 50 million users of the Facebook platform by the company Cambridge Analytica . was published, in order to create advertising campaigns and messages to influence the decisions of certain sectors of people, making this a clear example of how the privacy of personal data is a key element in the development of services, products and ideologies.

Personal Data is information related to a natural person, used to directly or indirectly identify the person, including in these data, names, photos, email addresses, bank references, medical information, political preferences, etc.

The Sensitive Personal Data has an effect on the person in a more intimate way, and its use can cause discrimination or a serious risk to its owner. The Owner on his part is the natural person to whom the personal data correspond.

Every data deposited in a computer system must be correctly stored, processed and transmitted, and in turn must be guarded by a responsible person who determines the purposes, conditions and means of processing, guaranteeing that the use of the information will be limited in access to the system or people.

Context

GDPR – General Regulation of Data Protection of the European Union

The advance in terms of security and data protection developed by the European Union (EU), unlike countries in Latin America, has led these countries to base their laws and directives on the definitions that have been developed in the European community. frame of reference that allows the development and adaptation of regulations, processes and requirements that must be met by organizations, individuals or companies that make use of this type of information.

GDPR gives EU citizens control over their personal data and extends the range of EU data protection to foreign companies that process data of EU citizens, making it easier for non-European companies to comply with the rules.

This regulation is generated with the idea of giving much more control to people about how their personal data are used, having as a basis what has been done by companies such as Google and Facebook that exchange access to people's data for the use of their services.

The current legislation (95/46 / EC) was developed long before the development of technologies such as the internet or cloud services that created new ways of exploiting data in a digital economy, like the one we have today.

The figure of the Data Controller indicates how and why the personal data is processed, while the Data Processor is the part that performs the actual processing of the data. In this way, the Controller could be any organization, from a for-profit company to a charity or a government and a Processor could be an Information Technology company that performs data processing in a real way. An important point in the regulation is that even if the controllers and processors are outside the EU, the regulation will continue to be applied on the condition that the personal data belong to EU citizens.

The extension in the type of information that the regulation considers dictates that IP addresses or ONLINE identifiers are personal data, including publications in social networks, economic, cultural or mental health information.

GDPR was approved and adopted by the EU Parliament in April 2016, coming into force as of May 2018. Failure to comply with the regulation can result in fines of up to 4% of the annual global turnover or a maximum fine of up to 20%. millions of euros.

The long illegible legal terms can no longer be used to give consent to the use of personal data, now the consent must be given using a clear and simple language, specifying the purpose of data processing in an implicit way. The withdrawal of this consent should be as clear and easy as it was to grant it.

Another important element is that GDPR is a regulation that must be fully complied with, compared to the previous legislation (95/46 / EC), which is a directive and where each country decides how it complies. In turn, the rights of the holder are defined in a better way:

–   Notification of non-compliance
–   Right of access
–   Right to be forgotten
–   Data portability
–   Privacy by design
–   Data protection officers

Federal Law on Data Protection in Possession of Individuals (LFPDPP)

Based on the efforts to grant guarantees to the privacy rights of people in Mexico, the LFPDPP was made official on July 5 of the year 2010 in the Official Gazette of the Federation. Five months later, on December 21 of the same year, the regulations were published. and 10 months later on October 30, 2012, the recommendations, considering the following definitions:

–   Personal Data - Any information concerning an identified or identifiable natural person.
–   Sensitive Personal Data - Personal data that affect the most intimate sphere of the owner, or whose use may give rise to discrimination or serious risk
–   Database - An ordered set of personal data referring to an identified or identifiable person.
–   Privacy Notice - Physical or electronic document generated by the person responsible and which is made available to the owner prior to the processing of their personal data.
–   Owner - Individual to whom the personal data correspond.
–   Responsible - Individual or physical, national or foreign private nature that decides on the processing of personal data
–   Responsible - Individual or legal entity that alone or together with others treat personal data on behalf of the person in charge.

In the same way, the holders are given ARCO rights, which allow them to have control over how their information is used and to whom it can be shared:

–   Access
–   Rectification
–   Cancellation
–   Opposition

The purpose of the law was to enable the commitment of companies and organizations to safeguard the personal data of their customers, suppliers and collaborators, based on data that may be considered sensitive and that may lead to a serious risk, discrimination or affect Its most intimate sphere, seeking to reform the principle that no one can be bothered in his person, family, home, papers or possessions, unless it is with his consent, a court order or a legal procedure.

The effort consists of granting certainty to the owners that the information and personal data granted under consent are used only and exclusively for the purposes that each person authorizes. Within the life cycle of personal data are considered principles and duties that legalize the processing of personal data, these are:

–   Principles
–   Lawfulness
–   Consent
–   Information
–   Quality
–   Purpose
–   Loyalty
–   Proportionality
–   Responsibility
–   Duty
–   Confidentiality
–   Security

As in the EU GDPR regulation, the consent to the use of personal data must be tacit and published through a privacy notice, which must also establish the mechanisms and procedures for the revocation of consent.

The privacy notice must have data of the responsible, the purpose of data processing, options and means to limit the use and disclosure of data, means that can be used by the holders to exercise their ARCO rights, if applicable transfers of data that are made, the procedures and means by which the responsible communicated to the owner the changes of the privacy notice.

The elements that are integrated into the law (regulations and recommendations), allow to define the scope, the attenuation of sanctions, the security functions, as well as to determine the security measures based on the number of owners, the inherent risk of the type of personal data, the sensitivity of personal data, among others.

And in this way to be able to configure the security actions for the personal data (to elaborate inventory, to determine functions and obligations, to establish applicable security measures, personnel training, etc).

Situations such as privacy not aligned with the requirements of the regulation, use or transfer personal data without the owner's consent, not having data privacy policies, have generated institutions such as INAI (National Institute of Transparency, Access to Information and Protection of Personal Data) responsible for enforcing these provisions, fines organizations and companies for over 90 million pesos.

Conclusions

It requires a comprehensive view of the treatment of personal data (classification, life cycle) to identify risks and security measures to be implemented, whether administrative (governance structure), physical and technical (controls and monitoring).

The success of a privacy program in organizations depends to a large extent on the awareness of their employees, for which training programs can be implemented that promote and strengthen the culture of privacy within.

The advance and update in terms of security and extension of data that can be considered as personal within the GDPR regulation, is an element that allows a better monitoring of compliance with the use of this type of information by organizations or companies that generate digital commerce. . The reduction of legal terms and the facilitation of the methods to grant consent and withdraw this consent should be an area of opportunity that can resume our Federal Data Law in Possession of Individuals, thus allowing the holders to have greater control and power over your information.

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Data Privacy

Data protection

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Abstract

Due to the worldwide increase in the circulation of personal data through various electronic and digital media, the exchange of information between companies and governments and the interest in maintaining the confidentiality of personal information; the mainly developed countries have been making efforts in terms of local legislation to protect the personal data of their citizens and fortunately Mexico has risen to the wave with the enactment of the LFPDPPPP and its respective regulation (RLFPDPPP).

Data protection, Data privacy, Sensitive data, LFPDPPP, GDPR

Resumen

Debido al aumento mundial de la circulación de datos personales a través de diversos medios electrónicos y digitales, el intercambio de información entre empresas y gobiernos y el interés en mantener la confidencialidad de la información personal; Los países mayoritariamente desarrollados han venido realizando esfuerzos en materia de legislación local para proteger los datos personales de sus ciudadanos y afortunadamente México se ha puesto a la altura con la promulgación de la LFPDPPPP y su respectivo reglamento (RLFPDPPP).

Protección de datos, Privacidad de datos, Datos sensibles, LFPDPPP, GDPR

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Introduction

Protection of personal data is located within the field of study of Computer Law. Furthermore Computer Law encompasses all of the laws that relate to the transfer, use and storage of electronic information. Basically, it's any law that has to do with computers and other electronic devices that store information. Computer law includes a wide range of topics including security, private property rights and even constitutional law.

On the other hand, Data Protection, also known sometimes as Information Privacy, is a field where Information Technology (IT) and Compliance departments that together address the capability of an organization to protect the personal data it handles with the purpose of guaranteeing the privacy of the owners.

Now, data protection has its origin in a set of even older principles that are still valid today. These principles were proposed by the OECD in 1980 together with a series of guidelines on the protection of privacy and cross-border flows of personal data, which was a set of recommendations endorsed by the EU and the USA for the purpose of protecting personal and social data and the fundamental human right of Privacy.

Here are the eight principles for the processing of personal data:

1. Collection Limitation Principle

There should be limits to the collection of personal data, data should be obtained by lawful and fair means, and where appropriate, with the knowledge or consent of the data subject.

2. Data Quality Principle

Personal data should be relevant to the purposes for which they are to be used, and, to the extent necessary for those purposes, should be accurate, complete and kept up-to-date.

3. Purpose Specification Principle

The purpose for the collection of data should be specified at the time of collection and data should not be used for anything other than its original intention without again notifying the data subject.

4. Use Limitation Principle

Personal data should not be used for purposes outside of the original intended and specified purpose, except with the consent of the data subject or the authority of the law.

5. Security Safeguards Principle

Personal data should be protected by reasonable security safeguards against such risks as loss or unauthorised access, destruction, use, modification or disclosure of data.

6. Openness Principle

There should be a general policy of openness about developments, practices and policies with respect to personal data. Individuals should have easy access to information about their personal data, who is holding it, and what they are using it for.

7. Individual Participation Principle

An individual should have the right to know if a controller has data about him/her and to have access to that data in an intelligible form for a charge, if any, that is not excessive. An individual should also have the right to challenge a controller for refusing to grant access to his/her data, as well as challenging the accuracy of the data. Should such data be found to be inaccurate, the data should be erased or rectified.

8. Accountability Principle

Data controllers should be accountable for complying with the measures detailed above.

These guidelines were the basis of many national laws regarding data privacy, however, they were non-binding and the levels of data protection varied greatly even amongst different EU member states.

But ¿what is a personal data y what a sensitive personal data is? Any information related to an identified or identifiable data subject (natural person) and a sensitive data is a personal data that affect the most intimate sphere of the owner, or whose use may give rise to discrimination or serious risk.

Well, once showed the eight principles for the processing of personal data, now a brief summary of the most representative legislations worldwide, including Mexican regulation known as LFPDPPPP.

Directive 95/46/EC

The Data Protection Directive 95/46/EC of 24 October 1995 was the European Union's answer to the division of privacy regulations across the EU. It's major goals included the harmonization of data protection laws and the transfer of personal data to "third countries" outside of the Union. It established independent public authorities called Data Protection Authorities (DPAs) in each member state in order to supervise the application of this directive and serve as the regulatory body for interactions with businesses and citizens. It also provided for the allowance of transfers of personal data to third countries, on the condition that said countries were authorized as having adequate levels of protection for the data that would be guaranteed to be comparable to those protections within the EU. Overall, the directive stays true to the original recommendation of the OECD and the core concepts of privacy as a fundamental human right.

American Legislation

In the United States, legislation on data protection has been enacted sectorally, which means that each law or regulation of compliance has been created in response to the needs of an industry or sector of the population in particular. Examples include:

– The Children's Internet Privacy Protection Act (COPPA) - gives parents control over what information their children's websites can collect.
– Health Insurance Portability and Accountability Act (HIPAA) - guarantees patient confidentiality for all data related to health care.
– Fair and Accurate Credit Transaction Act (FACTA) - designed to help protect consumers' credit information from the risks associated with data theft.
– Electronic Communications Privacy Act (ECPA) - extends government restrictions on telephone intervention to include electronic data transmissions.

– Video Privacy Protection Law - prevents the improper disclosure of personal identification information of an individual derived from their rental or purchase of audiovisual material.
– Gramm-Leach-Bliley Act - mandates how financial institutions must deal with the private information of individuals.

Unlike the European Union, which has fairly strict data privacy guidelines (GDPR), the United States has relatively weak data protection laws. Data protection laws are intended to protect the personal information of an individual from outside access. Information that may be subject to protection in the United States includes health records and credit information.

GDPR (General Data Protection Regulation)

Although Directive 95/46/EC was meant to bring together the laws of different member states, it was still a directive, which left some room for interpretation during the transposition into individual national law. This fact, along with today's rapidly changing data landscape, has led to the necessity for another update to the regulatory environment of the EU. The incoming GDPR is a much larger piece of legislation. Most importantly, due to is a regulation and not a directive, it will become immediately enforceable law in all member states.

The main principles on privacy are still true to form with both the previous directive and the OECD guidelines, however, social media and cloud storage were not a reality in 1995 as only about 1% of the European population was using the internet. With modern technology, we are creating more personal data than ever before, and the processing of that data has become ubiquitous. The GDPR is meant to update the standards to fit today's technology while remaining general to simply protect the fundamental rights of individuals throughout future waves of innovation.

LFPDPPP (Ley Federal de Protección de Datos Personales en Posesión de los Particulares)

It was published on July 5, 2010, and is aligned with the original precepts that other nations, mainly European, printed in their respective data protection laws: respect for human rights and individual freedoms.

LFPDPPP is of public order and general observance throughout the Republic and its purpose is the protection of personal data held by individuals to regulate their legitimate, informed and controlled treatment in order to guarantee privacy and the right to self-determination of information of people. Based mainly on the European model, the LFPDPPP is composed of 69 articles, grouped into 11 chapters, covering between others the following topics:

−   ARCO rights. Guarantees and procedures must be granted to any person to access, ratify, correct and / or oppose the existence of records with sensitive or non-confidential information.

−   Notice of Privacy. The obtaining of data must be done through legal means and not fraudulent. In the event that it is necessary to collect information classified as "sensitive", there must be the express written consent of the owner of the data with autograph signature; in case there is no sensitive data an authorization by any printed or electronic means will suffice. In addition, the privacy notice must specify the purpose of the data collection, identity and address of the party collecting, potential transfers of data to third parties (outsourcing companies or the same group, national or foreign).

−   Data treatment. The processing of the data requires the authorization of the owner of the same (privacy notice) and these can only be used for the purpose for which they were collected. The treatment of the data must contemplate its protection against damage, loss, alteration, destruction, access or unauthorized use. Likewise, the person directly responsible for the processing of the data, or third parties that intervene in any phase, must keep confidentiality regarding them even after finalizing relations with the owner or person in charge of the privacy notice.

−   Non-compliance. Verification of compliance with the LFPDPPP is the responsibility of the INAI, and can be initiated via ex officio or by the request of a party. Any breach of security that affects the economic or moral rights of a person (s) must be informed immediately to the owner(s) of the data. Failure to comply with the law can generate economic infractions or criminal penalties. The fines vary from $ 5,700 pesos to $ 18,380,000 pesos. The penalties for crime can range from three months to five years in prison, and in the event that in breach of the law are involved "sensitive" data both sanctions will be doubled.

Conclusions

According to the last symposium about Data Privacy, experts mentioned that the LFPDPPP is a modern and holistic regulation unlike to American legislation. In fact, experts also said that Mexican privacy law served as reference model to the GDRP. Furthermore, contrary to popular belief, LFPDPPP is a regulation of the first world and over time has shown its robustness.

With this it is clear that Mexico has the necessary channels to minimize the backlog in terms of data protection, and even better, enrich with the different perspectives of international organizations. For example, the Organization for Economic Cooperation and Development (OECD), of which Mexico is a member, has a Privacy Policy and Principles. Another example is the International Standards Organization (ISO), which is a prolific participant in the creation of guidelines and standards based on best practices, in addition to the recently published National Cybersecurity Strategy. Finally, like everything else, Mexican regulation must be in a process of continuous improvement, however I can conclude that Mexico has a good level of protection of personal data.

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Data Privacy

Privacidad de Datos

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Abstract

The responsibility to protect the confidentiality of personal data ("any information concerning an identified or identifiable natural person"), the identify the sensitive personal data, composed of those who belongs to "the most intimate sphere of the holder", or whose "misuse" can cause "discrimination or entail serious risk" for the individual, it has turned into a challenge for the organizations in Mexico, which in accordance with studies show that Mexico occupies. 8th place worldwide for identity theft. 67% of cases is due to loss of documents. 63% for theft of portfolios and portfolios. 53% For information taken directly from a bank card.

Resumen

La responsabilidad de proteger la confidencialidad de los datos personales ("cualquier información relativa a una persona física identificada o identificable"), la identificación de los datos personales sensibles, integrados por aquellos que pertenecen a "la esfera más íntima del titular", o cuyo "mal uso "Puede causar" discriminación o entrañar un riesgo grave "para el individuo, se ha convertido en un desafío para las organizaciones en México, que de acuerdo con estudios muestran que México ocupa. 8vo lugar mundial por robo de identidad. El 67% de los casos se debe a la pérdida de documentos. 63% por robo de carteras y carteras. 53% Para información extraída directamente de una tarjeta bancaria.

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In 2010, Mexico published the Federal Law on the protection of personal data in possession of private individuals (LFPDPPP) and its regulations to regulate the legitimate, controlled and informed treatment of personal data. In order to guarantee the right not to be disturbed in your person, family, domicile, documents, etc.

The study of "privacy in Mexico 2016", elaborated by the consultancy PwC, showed that the companies in the country do not have the adequate knowledge to manage personal data of clients, suppliers and/or workers, that does not train its personnel for such Procedure and that it does not plan to invest in such issues.

The INAI, National Institute of Transparency, access to information and protection of personal data plays an important role, since it makes revisions to institutions to verify the fulfillment of the law, in case of finding deviations or breach, the INAI is empowered to impose fines on organizations in different sectors.

Before de showed resulted, it is important that companies that use personal data comply with the obligations of the law in terms of providing certainty of the protection and security of the data of individuals. For this, it is necessary to aware about and sensitize the organizations and employees of the importance of this topic.

Introduction

We live in a world in which the use of technology and social networks have become usual means of everyday use, where through these are simplified activities and streamlines the interaction between organizations and users or final consumers, as well as certain applications fulfill the purposes of convenience for those who download these to give a personal use, suggesting that the increase to be using these platforms faces the possibility of suffering more attacks, so we must be to concern the security of personal data which are stored.

To access certain sites or companies, as well as to download applications, must provide many personal or sensitive data and often the notice of privacy is not read or conditions and terms are not clear, so that could compromise the data provided.

The companies were concerned about giving a product or service but it was not their main concern to secure the data of their customers or users to protect these, hence the importance of this issue that has been presented in recent years. In response to the concern to see that the vulnerabilities have allowed that to be stolen information of many users or clients and that these somehow sometimes have not realized, until there comes a massive bulletin that it salts in the news.

Exchanging information through technological platforms is always going to be susceptible of having vulnerabilities and want to be attacked, giving risks to companies, by what is required to be prepared and aware that you can lose more by not investing in the protection of personal data as to take any action and that is part of the organizational strategy in which one of its objectives is to get certification, through organizations such as the NYCE that allow:

– Adherence to international standards and standards.
– Demonstration of compliance with the authority.
  Mitigation of penalties
– Confidence on the part of consumers of products or services.
  Prestige to submit a certification with international validity.

It is important to have a management system at the level of government structure, where they contemplate:

– Personal data management policy
– Designate responsible
– Identify processes and lifecycle of personal data
– Mechanism for care of applications ARCO
– Develop privacy Notice
– Risk Analysis
– Security measures
– Conduct internal and external audits
– Train Staff responsible

Conclusion

Companies as part of their organizational strategy must consider the fulfillment of the LFPDPPP, creating a value to the user or customer to whom they provide security and legal certainty regarding.

A culture of privacy should be created and promoted at the organizational level and a framework and mechanisms to develop standards and policies, which together with monitoring and control achieve continuous improvement, identify areas of opportunity to maintain and give a correct treatment of personal and sensitive data, through the life cycle, the privacy of their data.

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Abstract (In English, 150-200 words)

Objectives
Methodology
Contribution

Keywords (In English)

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Abstract (In Spanish, 150-200 words)

Objectives
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* Correspondence to Author (example@example.org)
† Researcher contributing as first author.

Instructions for Scientific, Technological and Innovation Publication

Introduction

Text in Times New Roman No.12, single space.

General explanation of the subject and explain why it is important.

What is your added value with respect to other techniques?

Clearly focus each of its features

Clearly explain the problem to be solved and the central hypothesis.

Explanation of sections Article.

## Development of headings and subheadings of the article with subsequent numbers

[Title No.12 in Times New Roman, single spaced and bold]

Products in development No.12 Times New Roman, single spaced.

Including graphs, figures and tables-Editable

In the article content any graphic, table and figure should be editable formats that can change size, type and number of letter, for the purposes of edition, these must be high quality, not pixelated and should be noticeable even reducing image scale.

[Indicating the title at the bottom with No.10 and Times New Roman Bold]
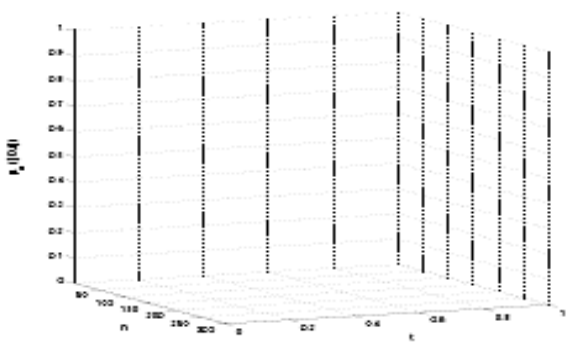
Graphic 1 Title and *Source (in italics)*

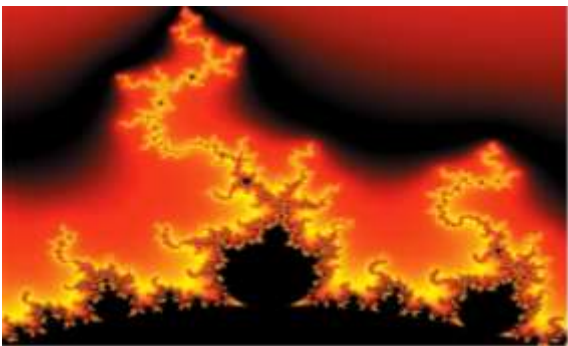Should not be images-everything must be editable.

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Each article shall present separately in **3 folders**: a) Figures, b) Charts and c) Tables in .JPG format, indicating the number and sequential Bold Title.

For the use of equations, noted as follows:

$$Y_{ij} = \alpha + \sum_{h=1}^{r} \beta_h X_{hij} + u_j + e_{ij}$$

$$(1)$$

Must be editable and number aligned on the right side.

Methodology

Develop give the meaning of the variables in linear writing and important is the comparison of the used criteria.

Results

The results shall be by section of the article.

Annexes

Tables and adequate sources

Thanks

Indicate if they were financed by any institution, University or company.

Conclusions

Explain clearly the results and possibilities of improvement.

References

Use APA system. Should not be numbered, nor with bullets, however if necessary numbering will be because reference or mention is made somewhere in the Article.

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