

The Benefits of Cloud Implementation and Optimization Telework

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SUMMARY:

Given the importance of creating a culture of Telework in companies using best practices ^[1] in the use of ICT ^[2] to improve work processes, these reflections are based on the analysis of a management model / virtual support implemented in the Cloud in Argentina ILVEM International ^[3] educational enterprise.

Is it beneficial to comprehensively manage ICT, allowing better use of the resources of the organization? Does it contribute, labor modality Teleworking and new technologies integrated organizational development? The aforementioned model involves new technologies - web site, CRM, social networks, social media, whatsapp - with the digital marketing, and management online. A group of workers was studied as employees, to observe how the adaptation process performed Telework.

We analyzed how they prepared to meet the challenges of including cloud technologies and ensure proper implementation of the digital virtual support student services, with commercial areas & sales, administration & accounting and digital marketing, interconnected in operational CRM, analytical and collaborative.

A survey to assess the process of adapting to new technologies and telework, courses and other acquired knowledge that facilitated their teleworkable tasks and their views on the current implementation model was performed.

The data provided allowed me to conclude that the ICT management model implemented in the cloud optimizes Telework and contributes to the overall organizational development. The company's future is already possible visionary it with concrete tools and data. The future is today!

Keywords: new technologies, culture, telecommuting, implementation, cloud, business, education.

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1. INTRODUCTION:

According to the contributions obtained in the study "The Influence of Education Implementation and Development of Telework" ^[4], it was demonstrated that:

"The labor market has become rapidly changing and evolving into new forms of work organization helped by the development of ICT.

Then comes a new form of work, telecommuting as a viable alternative; to organize and perform work remotely or virtually calls interacting with information technology and communication, with the loss of reference temporary spaces.

1.1 What is Teleworking?

Considering the Telework as a working distance mode - relatively recent ^[5] -, which uses information technology and communications to achieve their goals, there are different definitions derived especially from the various laws of the various countries. In Argentina we understand the Telework as a "way of organizing work remotely, through the use of information technology and communication that can be done from the home of the worker or another whenever outside the employer" ^[6].

Teleworking is not a profession but a way of developing a task and requires a cultural reorganization for the efficient implementation of this innovation. We can distinguish two types of teleworker: the self, entrepreneur or self-employed ^[7] account and the employee of a company ^[8].

In Argentina, it stands as a kind of independent teleworker, who "work from home partially or completely self"; not being used the term "mobile teleworker" ^[9], although in some cases include alternative options workplace. This is because we do not yet have national legislation that indicate specific criteria and types of teleworkers. "

1.2 What is Cloud Computing or Cloud?

The cloud computing, also known as cloud services, cloud computing, cloud computing or cloud concepts (English cloud computing) is a paradigm that can offer computing services through a network, usually it is Internet. It is a new concept of Internet business also known as "cloud computing."

Cloud computing is a new technology that aims to have all our files and information on the Internet, without worrying about having enough capacity to store information on your computer.

Cloud computing explains how the new possibilities for business, offering services over the Internet, known as e-business - business for Internet-.

All information, processes, data, etc., are located within the Internet network, like a cloud, so everyone can access complete information, without having a great infrastructure.

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The global market for cloud computing continues to grow. In fact, Forrester estimates will reach 2,410 billion in 2020 globally. In Latin America, 44% of organizations have implemented or expanding any cloud solution, while 11% considered their main initiative in 2013, according to IDC, which expects for 2016 an investment of about 1,400 billion in solutions cloud in the region ^[10].

1.2.1 Models of cloud computing for businesses: private cloud, public cloud or hybrid model

For 55% of companies in Latin America, cloud computing is one of the priority technologies implemented in 2014, according to IT Priorities Survey in Latin America 2014 TechTarget. It is also expected that this technology is one of the biggest drivers of revenue for companies in the next three years, according to figures from KPMG ^[11].

Against this background, it is therefore essential that companies know what model computer best suited for them cloud private cloud, public cloud or hybrid model. In addition to the size of an organization, other factors that determine the cloud computing model for a company is the level of security you need and the necessary controls as well as the type of industry it belongs to.

Public Cloud: is a set of services, applications, computer networks and infrastructure provided by a supplier via the Internet. Its popularity is due to the configuration is quick and easy, as the hardware, applications and bandwidth are provided by the same supplier. Many companies offer these clouds with the business model of pay per use.

Its main advantage is the economy of scale, since the costs are shared among all users, similar to public services that each customer pays for what it consumes. Another important advantage is the ability to increase computing capacity according to individual needs, and that the process is transparent to the user.

The public cloud is the best choice for a company if: applications are used by many people from different types of devices, for example, email; additional computing capacity to cover demand in times of increased use is required; an environment is needed to develop and evaluate applications quickly; we collaborate on projects with other companies.

Private Cloud: As its name implies, the private cloud replicates the functionality of the public, but for the exclusive use of a single organization. This cloud allows you to store business applications in the cloud, while offering a high level of control and security, but requires greater capital investment. Private clouds can be managed and physically located within the organization, or can be administered by a third party.

It is better to opt for private cloud if: control and security of their applications and data are critical; the business is immersed in an industry with strict safety laws and data privacy, for example, health care; you want to have more control, performance, enjoying the benefits of the cloud; the company has the resources to manage a private cloud efficiently.

Hybrid Cloud: combines two or more clouds (public and private) from multiple vendors that although remain as separate entities together to take advantage of each scheme. For example, in a hybrid cloud can use public cloud resources to increase the processing capacity of its private cloud during peak hours of consumption of bandwidth, without the capital investment that would entail.

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The biggest challenge of these clouds is to unify security, and ensure that all providers can communicate with each other.

Some cases where it makes more sense to choose hybrid clouds are that: the public cloud for external customers IT is offered and private for inmates; the company offers services to different markets. The company can use a public cloud to interact with users, while maintaining their protected in their private cloud data; or if the company needs to increase the capacity of a private cloud without investing too much, or if not available capital for infrastructure. Another case is if you want to use a SaaS application (software as a service), as a service company for a public cloud, but there are concerns about safety. The application vendor can create a private cloud exclusively for the company in its firewall.

It is essential that companies conduct a detailed analysis of your current infrastructure analysis, how it is used and, above all, their present and future requirements. In this way, they can select the type of cloud that optimally meet your needs, and give them the infrastructure and support to achieve the objectives of the organization.

1.3 The importance of ICT for comprehensive business management

The information and communications technology also known as ICT, are a set of technologies developed to manage and send information from one place to another. They are the ones that allow us to access, produce, store, display and transfer information. They cover a very wide range of solutions. They include technologies to store and retrieve information then send and receive information from one place to another, or process information in order to calculate and report results. They are in all areas of our lives, in our social life, work, family and education. Its uses are unlimited and can be handled easily, without being an expert.

Digital marketing is the application of marketing strategies carried out in digital media. All technical world off-line [12], are imitated and translated into a new world, the online world.

Digital marketing has emerged as the new direction for the development of business strategies in the context of globalization, articulated market developments in communications and technology. It lets learn more about customers thanks to new marketing strategies, alliances, online advertising, e-mail marketing, one to one marketing tools loyalty points programs, discounts, etc.

No longer matter as much market share as customer participation. The idea is to business relationships, rather than business transactions, that is part of digital marketing.

That's why ICT has become so important, and its use pacesetter within the business, to success with effective use or to failure with misuse of information technologies and communications in organizations.

Technology has allowed companies closer to their customers, through a database implementation, the names, addresses, sector of interest, your personal tastes, interests, etc.

This allows us to consider that the process of marketing in organizations has been to study and address passive consumers, participants involved.

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In the web 2.0 user happens to be a spectator and consumer of what the Internet offers, to become a creator and generator of content and services. Service platform uses simple, intuitive and easy to use, usually free to design: publishing, participation and communication.

Web 3.0 and its services are based on the group of the Semantic Web, natural language search, data mining, machine learning and assistance of agents, all techniques known as Artificial Intelligence or Web Intelligence. It is characterized by the successful and provisioned union of Artificial Intelligence and the Web, while some experts have defined it as the next step in the progression of the pipes that make up the Internet.

Social Media is the set of applications, tools, platforms and media, which aim to facilitate relations, activities and interaction, collaboration and distribution of content - text, audio, video, image- between users. Social media is not necessarily social networks.

Social networks are social structures; formed by a group of people connected together with a common purpose, share their interests, knowledge and activities.

The WhatsApp is a chat application for mobile phones last generation, so-called smartphones. It allows sending text messages through its users. Its operation is identical to that of instant messaging programs for most common computer.

The identification of each user's mobile phone number. Simply knowing the number of someone to have it in the contact list. It is imperative that both the sender and recipient have installed this application on your phone. To use whatsapp have to hire a mobile internet service. Messages are sent over the network to the destination telephone.

IP telephony (VoIP or VoIP) telephony is lifelong running over the Internet. If you have Internet access in your home or office you can use fixed through internet with telephony IP telephony service.

IP Telephony is a technology that allows the integration into a single network - based IP - voice communications and data. Often the term converged networks or IP convergence, referring to a slightly wider integration on the same network for all communications (voice, data, video, etc.) concept is used.

The main advantages of IP telephony are simplifying communications infrastructure in the company, the integration of the different offices and mobile workers of the organization as a unified telephone system - with centralized management, free internal calls, integrated numbering plan and optimization of communication lines - mobility and access to advanced features (voicemail, IVR, ACD, CTI, etc.)

Skype is software that allows everyone to communicate. Millions of people and businesses already use Skype to make free calls and individual and group video calls, send instant messages and share files with other people using Skype. You can use Skype on what best suits your needs: on your mobile phone, computer or TV with Skype.

Skype is free to download and is easy to use. And with a little money, you can do much more: phone call, access to a WiFi network and send SMS messages. You can pay as you use it or buy a plan, what you prefer. And in the business world, this means you can bring your whole group of employees, partners and customers to do what you need.

A Web site, therefore, is a virtual space on the Internet. This is a set of web pages that are accessible from the same domain or subdomain on the World Wide Web (WWW). On the Internet we found a variety of types of web sites

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tend to be differentiated primarily by the kind of content they offer or the service they provide to any of the people who are surfing the Net.

1.3.1 What it is CRM and what are their roles in the management of ICT?

The CRM is the acronym "Customer Relationship Management" and "Management of Customer Relations. It is a combination of strategic change and organizational and technical processes by which a company seeks to improve the management of your business, about the behavior of his client.

CRM is a strategic and technological model, which aims to automate and improve business processes associated with managing the company's relationship with customers, mainly in the areas of sales, marketing and customer services; with the ultimate aim of increasing the benefit of businesses, through optimization, customization and differentiation of the relationship with the customer.

Several types of CRM. Mainly we can divide into three: **Operational CRM**, **Analytical CRM** and **Collaborative CRM**. Some focus more on customer interaction and others in the internal management of the company.

Operating in the CRM we can distinguish two parts: The part called "Front Office" which is which principally engages, which is responsible for managing the marketing and sales as well as customer support. And the "Back Office" does not feature in this type of CRM, focusing on accounting and finance functions.

Operational CRM functions are: Interacting with customers, in order to establish trust and to reach a loyalty; manage marketing and sales functions, as well as pay close attention to customer service; information on all available data customers to better understand their needs and to offer a product or adequate service.

Thanks to these features, the company can design and implement a marketing campaign with the highest probability of success. Ultimately the Operational CRM is characterized by the interaction of the company with the customer in order to improve your experience.

Analytical CRM uses the Business Intelligence business model, which is built a data warehouse belonging to the company called Data Warehouse and Data Mining or exploitation of data to understand customer behavior.

Analytical CRM functions are: to analyze customer behavior to provide better service; segmented design commercial activities; evaluate and measure marketing campaigns and their effectiveness; structure in databases all information from customers.

In short, CRM analytics, tries to exploit and analyze all the information contained in the databases on customers, to meet them and provide appropriate business solutions to their needs.

Collaborative CRM is characterized in that it is responsible for interaction through various communication channels between the company and the customer.

In this way, the company can establish a link with their customers by offering services or products that fit their needs leveraging the multitude of channels offering a CRM thanks to new technologies.

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Some of these channels are the e-mail, chat, telephone, etc., which, today, can go from any device, anywhere. Thus, the company is able to centralize and organize all the information and data provided by the customer through CRM.

Collaborative CRM has two key features: set up a multi-channel communication between all departments of the company and interact with customers; and improve the relationship with customers of the organization. In the study to analyze "The Benefits of Cloud Implementation and Optimization Telework" a group of teleworkers was taken - as employees - the company ILVEM Argentina International, with the aim of contributing to the contribution data valid for assessing the benefits of global management technologies in the cloud, and their contribution to the optimization of Telecommuting - with virtual teams of colleagues and students in the country and externally; promoting the comprehensive organizational development.

2 - MATERIAL AND METHODS

In other locations where training is conducted and / or in other offices of the - for the analysis a group of dependent workers who telecommute interacting with students, and virtual teams that are in the country and abroad took companies in other countries -.

The analysis group works at the headquarters of ILVEM Argentina, located in Buenos Aires. The quantitative method ^[13] no experimental ^[14] used was an online survey, generated by an automatic generation of surveys, Survio.

The call to participate in the research study was conducted from the area of student services that interact through ICT with commercial areas & sales, administration & accounting and digital marketing.

Tools they use to manage their daily tasks, the process of adaptation to new technologies in the cloud, the process of adapting to teleworking, foreground that allow you to perform at: As part of the structure of the survey aspects such as addressed its functions - courses, certifications and other knowledge acquired which facilitate their tasks- today, level of satisfaction with the current implementation - involving virtual support new digital marketing technologies and management on line-, and suggestions for Continuous improvement.

3- CONCLUSIONS

The analysis of the contributions made by the teleworkers as employees of the headquarters of Argentina ILVEM highlights that:

1) The profile of participants is as follows:

Residents in the City of Buenos Aires and Greater Buenos Aires Workers of Argentina

Age: 37 to 60 years

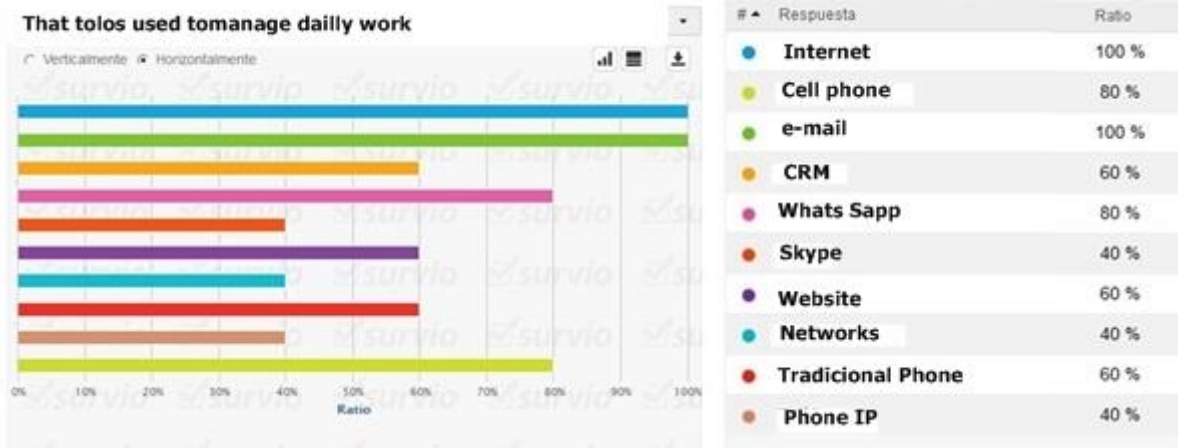
60% women

40% men

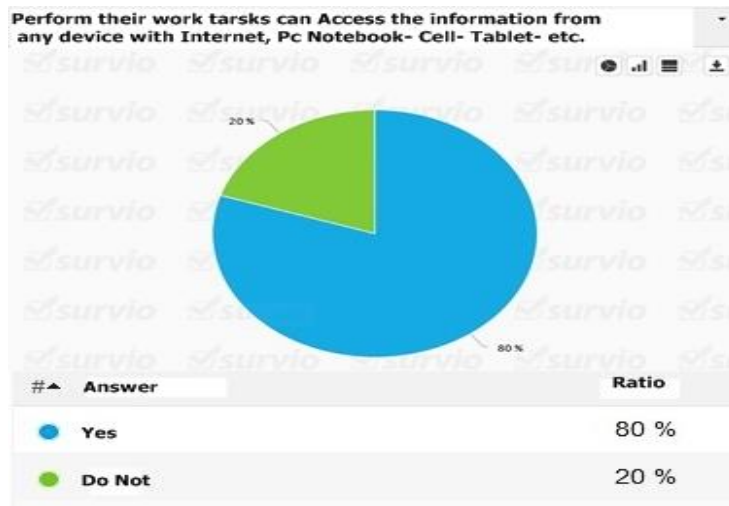
Full tertiary education (40%), incomplete university (40%),
completed university (20%)

2) To arrange the tools used daily work:

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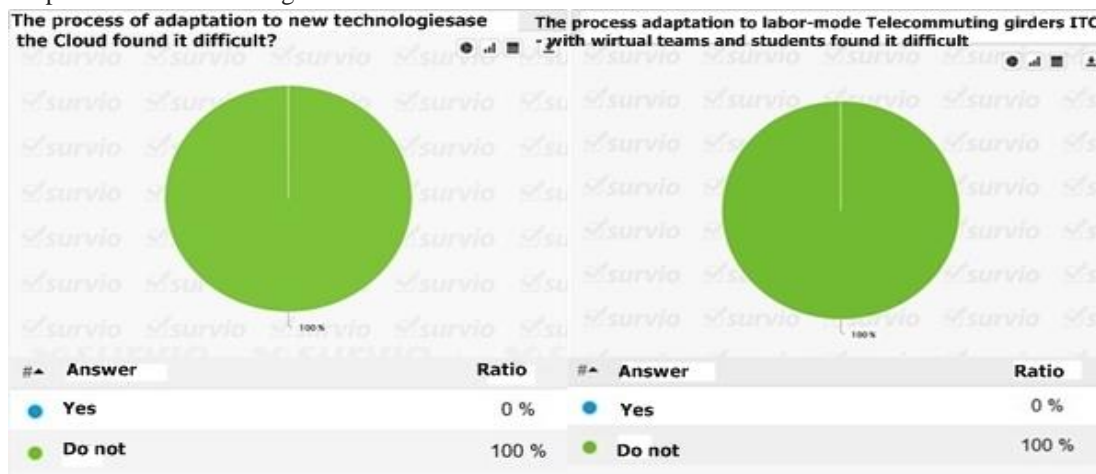


3) You can access information from any device with internet access - PC, notebook, cell phone, etc. 80%



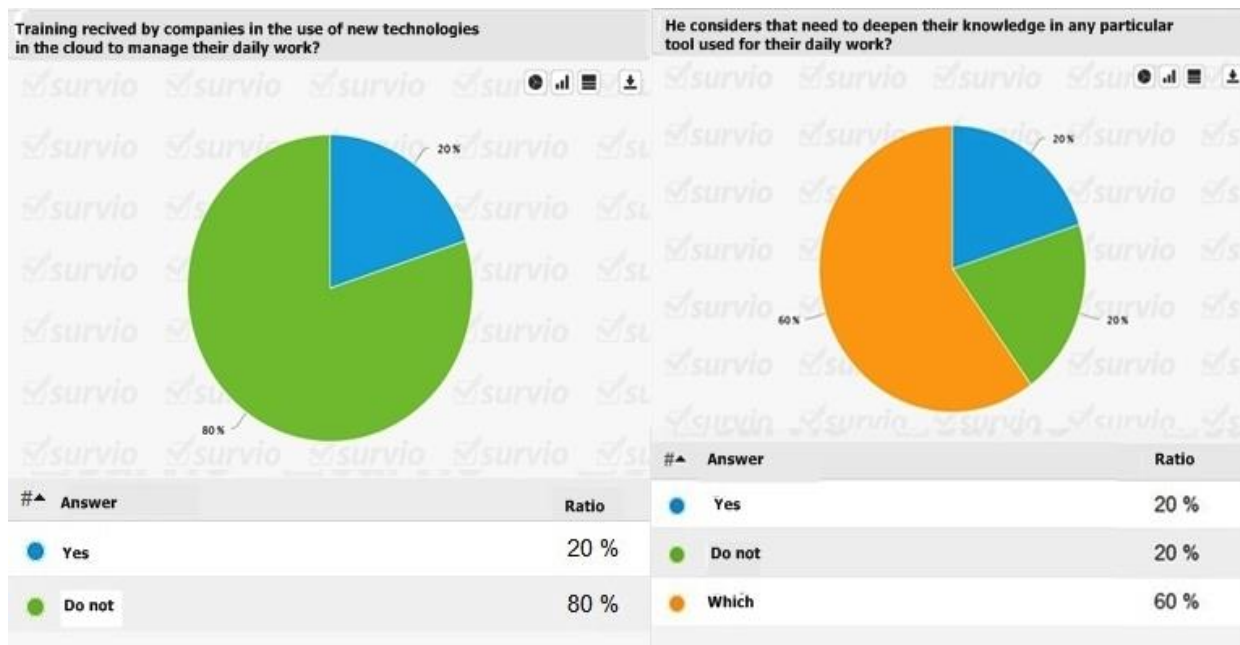
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4) 100% of respondents felt that the process of adaptation to new technologies in the cloud; and the process of adaptation Telecommuting was not difficult.



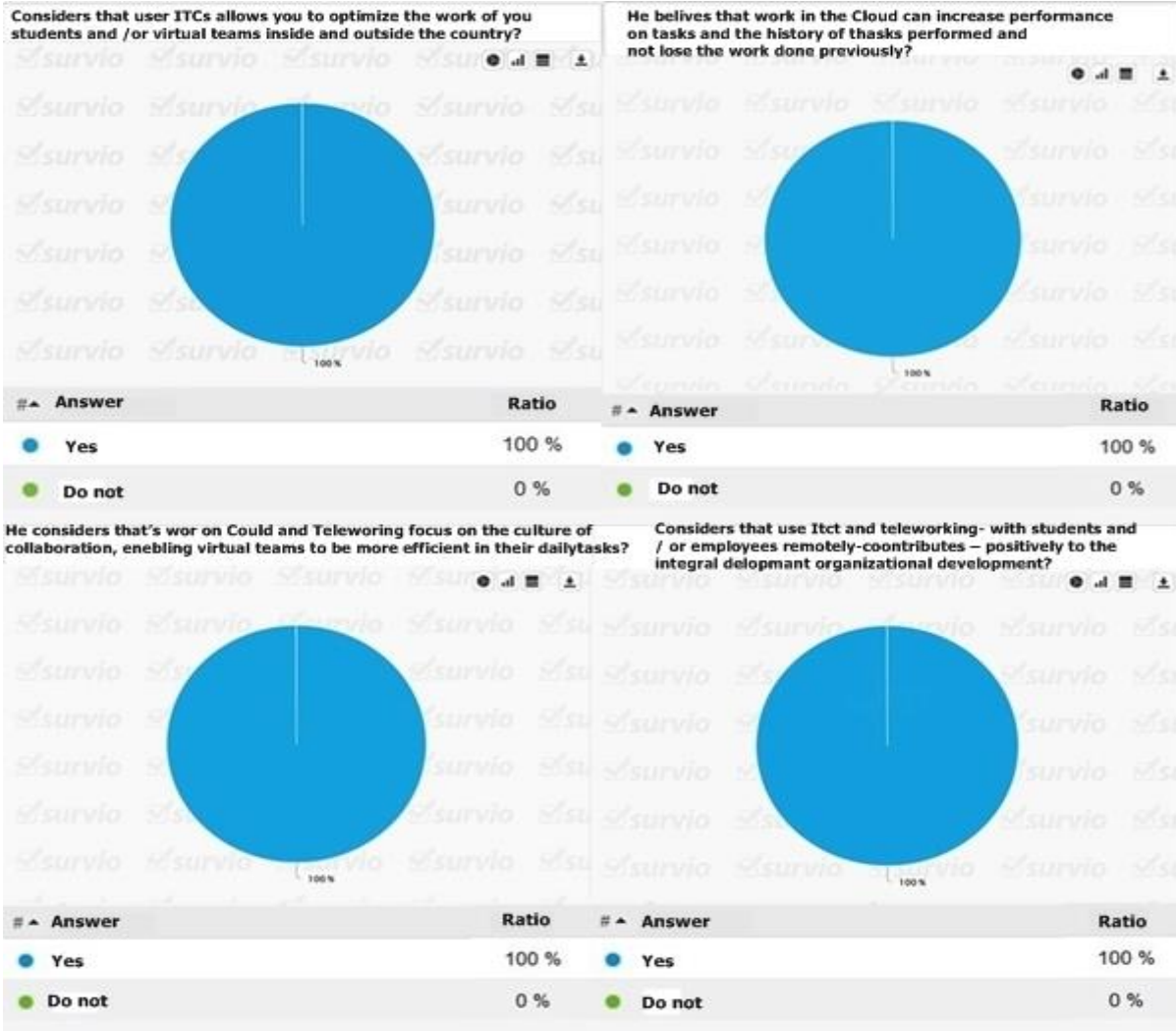
5) The 20% of respondents mentioned receive training in the use of new technologies by the company, highlighting the daily practice with basic instructions - when most tools available to any user of Internet-. 60% of respondents believe that needs to deepen their knowledge in the management of CRM and Social Media. Knowledge they have acquired the participants conducted their own that make it easy today their daily tasks are: Community Manager, Google Drive, Google Cloud, sales, communication, human relations, negotiation, management of windows operating system management application software - office, macromedia MX, knowledge of software maintenance, repair pc, web design, social media management.

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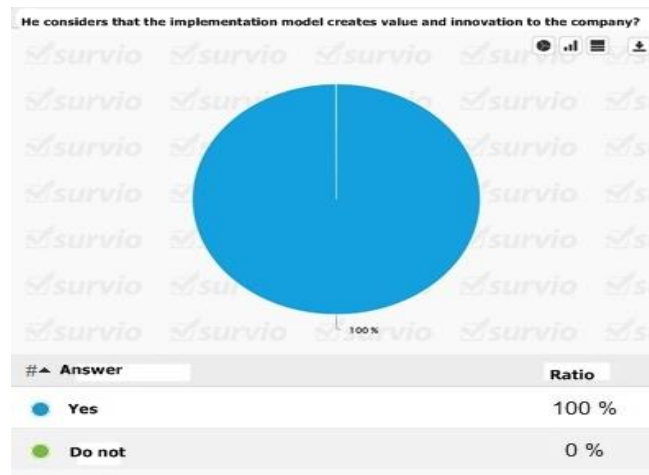


6) 100% of respondents believe that using ICT allows them to optimize the work with students and / or virtual teams inside and outside the country; to work in the cloud can increase labor productivity - shorten time performance on all tasks-to be automatically saved in the history of tasks performed and not lose the work done previously. The entire sample claims to work in the cloud, and Teleworking focus on the culture of collaboration, providing virtual machines become more efficient in their daily tasks, and contribute positively to the overall organizational development.

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7) All of the respondents agree that the implementation model generates value and innovation to the company.



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The data provide allowed me to conclude that the ITC management Model implemented in the Cloud, optimizes telecommuting and contributes to the overall organizational development. The company's future is already possible to view to tooling and concrete data. The future is today!!!

4- POSTS:

Is it beneficial to comprehensively manage ICT, allowing better use of the resources of the organization? Does it contribute, work mode and new technologies integrated organizational development?

According to data from the most important benefits of using cloud technologies in the implementation and optimization of telecommuting they are:

- Allows access to information from any device with internet access - PC, netbook, notebook, tablet, Iphone-, etc.
- Allow optimize work with students and / or virtual teams inside and outside the country.
- Allow increase labor productivity - shorten time performance in the more homework, to get everything automatically saved in the history of tasks performed and not lose the work done previously.
- They focus - working in the cloud, and Teleworking - in the culture of collaboration, providing virtual machines become more efficient in their daily tasks.
- Contribute positively to the overall organizational development.
- The process of adaptation to new technologies and working mode Telecommuting was not difficult to adapt. , Allowing the implementation of an innovative model and easily replicated for local and international representatives of the educational enterprise.

Being trained in the tools that labor negotiations are conducted, can meet the challenges of including cloud technologies and ensure proper implementation of the digital virtual support student services, with commercial areas & sales, administration daily & accounting and marketing digital, interconnected in operational, analytical and collaborative CRM; suggesting more training for continuous improvement in the use of CRM and social networks.

The management model implemented in the cloud, helps optimize Telework - virtual teams with colleagues and students in the country and externally; and enhances the overall organizational development of the company. The deployment to local and international franchises is still a challenge for the company in the process of restructuring adaptive to new technologies and work Teleworking mode.

Given that the process has been held in Argentina from just over 3 years, but 3 months implementation extended to all areas of the company, the average satisfaction level of the sample indicates a predisposition to follow advancing the continuous improvement of processes to achieve a model of implementation be standardized and easily replicated.

I am convinced that the path is correct, for the vision of a company for the future!!!

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The ILVEM system enhances the interaction between the new methodologies of learning and effective use of personal skills. Thirty years of research made accessible to people today the technology to start the road to success in the study and at work.
- [4] Scientific Paper by the Internal Auditor in Quality; Valeria Gudiño, for Telework 2014 (Made in August 2014 at the University of Magdalena, Santa Marta - Colombia)
- [5] arises in the sixties with Robert Weiner and his Teleworking later in 1976, the physical Jakes Nilles introduces the term of telecommuting, later emerging networking, homeworking, telehomeworking, and teletravail in France. The idea of this was to "bring the work to the worker and not the worker to work", however since in principle technological development was not prepared for telework, it took years to go positioning in the US and Europe - in principle.
- [6] According to the MTEySS: Ministry of Labour Employment and Social Security of the Nation Argentina.
- [7] Also called independent teleworker.
- [8] Teleworker as employees with the company.
- [9] Teleworkers whose business requires frequent travel and can telecommute wherever they are, from a hotel, from home, from a customer offices or even while traveling.
- [10] Posted by Tech Target; a network of sites Information Technology that provides access to industry experts, content on current topics and independent analysis.
- [11] The consultant KPMG; It is a global network of professional services firms providing audit, tax and financial advice and business in 156 countries. It is one of the four largest firms in the world of professional services, Big4, along with PwC, Deloitte and Ernst & Young.
- [12] Given that the off-line telecommunications (offline) are used to designate a computer or operating system that is not, is off or no network access.
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