INDEPENDENT JOURNAL OF MANAGEMENT & PRODUCTION (IJM&P)
http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

UNLIMITED: BLURRED LIMITS IN A BORDERLESS WORLD

Leandro Adolfo Viltard
Pontificia Universidad Católica y Universidad de Palermo, Bs. As.,
Universidad Nacional del Comahue,
Universidad Nacional de La Pampa, Argentina
Emeritus Professor at Universidad del Pacífico, Ecuador
E-mail: lviltard@yahoo.com.ar

Submission: 17/12/2015
Accept: 02/01/2016

ABSTRACT

This study explores the difficulties of the unlimited, a world which everyday is more connected to imprecise limits, instability and unclear visibility. The unlimited is the realm of the vague and blurred. The objective of this paper is to analyze the driving forces that are dramatically transforming the business environment and proposing consequences on how value is created, and show their huge impact on actual firm's industrial sectors, business models, and products/services. It is made a reference to the disrupting technologies that are known today and are abruptly changing the future and the executive's role. It states that traditional strategic and analytical tools are diminishing their impact and effectiveness, and that old paradigms must be revised. New factors as money, global cities and speed are having tremendous consequences on businesses and society. Technology and digitalization propose instant interactions, data analysis and hyper scaling, and also new optimized lives, complex tasks resolution and decision-making improvements through opening and interconnecting new fields. Innovation creates new wealth, advancement and growth, and it is the basis for new generation products which referrer to modularity, platforms, global resources and one-consumer-experience-at-a-time for interactive and collaborative experiences, services, processes and business models.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

The study was exploratory and descriptive, and a qualitative methodology was used. Its design was not experimental and transversal, as the information was collected at a given moment in time.

Keywords: *Unlimited; Business Models; Digitalization; 3D Printing; Globalization; Disrupting Technologies; Operations; Business Analysis*

1. INTRODUCTION

Senior executives and political levels are required to understand the business and social environment. The old limited world is living space to an unlimited one in which new visions, abilities and parameters are required. The unlimited is connected with the lost of limits, the blurred and the unknown. In this volatile and fast world, imprecise and unpredicted factors usually abound.

Driving forces as globalization, connectivity, digital technologies, convergence of technologies and social networks (PRAHALAD, 2010) are transforming abruptly the business landscape and the way value is created but it is seen that most of the decisions are made considering the old paradigms of the limited world. In this sense, traditional strategic and analytical tools are diminishing their impact and effectiveness, and considerations on money, global cities and speed must be taken into account in accordance of their tremendous impact on businesses and society.

The world moves fast thanks to Internet, digital technologies and digitalization. Instant interactions, data analysis and hyper scaling are proposing decision-making improvements, new optimized lives and complex tasks resolution through opening and interconnecting new fields. 3D printing and other disrupting technologies are transforming firm's industrial sectors, business models, products and services. Rules are being changed at an unprecedented speed.

Innovation, an important additional driving force, is proposed as the way to create new wealth, advancement and growth, and it is referred to products and services which include novel interactive and collaborative experiences, processes and business models.

This study takes the basis of the 5 five driving forces stated by Prahalad (2010) and expands and updates on some considerations that must be made in order to acquire an adequate perspective on the actual moments that we are living. It also

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

addresses some impacts on society and businesses as a way to understand the tremendous challenge that senior executives and politics have today.

The ultimate goal is to see the unlimited as a vague and blurred realm in which qualitative approaches and measures are more adapted than quantitative ones.

1.1 Objective of this investigation

To analyze the driving forces that are dramatically transforming the business environment and how value is created, showing their huge impact on actual firm's industrial sectors, business models, and products/services.

In addition, to refer to the disrupting technologies that are known today and will abruptly change the future and the executive's role.

1.2 Research Methodology

The study was exploratory and descriptive, and a qualitative methodology was used. Its design was not experimental and transversal, as the information was collected at a given moment in time.

The unit of analysis was mainly related to business organizations. It has tried to make every effort in order to assure that prior knowledge did not hinder the analysis that was done.

The research is based on the work of well known specialists on the field and related articles. In addtion, it helped our own experience on the matter.

This investigation was conducted in Buenos Aires, Argentina in the period Jul. 2015-Dec. 2015.

1.3 Research Limitations/Clarifications

It was referred relevant information from important secondary sources. As a result, it was not used an empirical study.

The conclusions and opinions that are expressed are strictly based on the information obtained from the analyzed data.

As a qualitative investigation, the results that are shown cannot be generalized, although they are useful for decision-making purposes. The objective is

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

to enhance the knowledge on the matter and improve the decision-making process with novel perspectives.

1.4 Findings

The unlimited proposes qualitative approaches over the quantitative ones, novel measures and a different way to manage organizations. Money, global cities, speed and new considerations on technology and digitalization are blurring the old limits we were used to.

Talent is increasingly more specialized on digital technologies and new sciences. Business leaders are confronting daily with uncertainty and ambiguity and the improvement of decision-making processes are subject to hyper scaling and huge data analysis. New paradigms emerge in a rebellious world to the past. That is why this paper highlights the special differences observed between the limited and unlimited worlds.

1.5 Originality and Value

This research has been an attempt to explore the old paradigms belonged to the limited world and the new ones applied to the unlimited. Novel visions on society and businesses are emerging as new sciences and technologies are shaping an unimagined landscape. Traditional tools and ways of thinking are losing space in confront of blurred and imprecise limits.

As a result, the unlimited is shown as a contribution when launching novel businesses/products and to a better understanding of those phenomenon that are making their step in a tumultuous and unprecedented landscape.

2. FIVE DRIVING FORCES AND SOME CONSIDERATIONS

The business environment is going through a profound transformation. Prahalad (2010) understands that the following five driving forces are changing it dramatically and proposing new ways on how value is created:

1. *Globalization:* As it was stated in a prior work, it represents a combination of processes, which transcend national characteristics and controls, declining differences and having economic, political, social and cultural implications. Regions, countries, companies, individuals and their relationships are subject to endless boundaries, and economic and/or political powers are not related to

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

the limits of a map or the size of the country or region. As a result, globalization should be seen as a complex, multidimensional and paradoxical phenomenon that is configuring new limits and spaces.

2. *Connectivity:* +3 billion people are connected all over the world, changing the way companies operate.
3. *Digital technologies:* are becoming extremely inexpensive. The cellular phone is a starting point as it is possible to get one for 30 dollars and many gigabits of memory in a USB. Costs are going down dramatically, what it means that technology is not anymore a differentiator between the rich and the poor; everybody can have the same technology.
4. *Convergence of technologies*: a cell phone is much more than a phone; is a camera, a computer, a map, a watch; technologies are coming together.
5. *Social networks:* they are becoming extremely important, as MySpace or Facebook.

With these five driving forces the business landscape is having a difficult present and an unknown future. Transparency, creativity and instant products and services will be based on constant and evolved peoples' interrelationships. New ways of doing things are about to come from unimaginable sources.

In reference to the first driving force, money, global cities and speed combined with globalization are giving a difficult time to business activities and to society, in general, as follows:

2.1 Money and global cities: the basis for growth and advancements

Money is going beyond the limits of countries and regions, imposing new rules to growth and advancements. In fact, in an article of Mercado.com (2015) Sassen asserts that:

- Money is a new way to see development and progress.
- Global high finances, which move billons dollars, became the engine of global development, not necessarily technology and digitalization, which are only necessary infrastructure.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

- Global cities[1] represent not only the last refuge for people without power resisting to the destructive capacity of high finance, but also concentration centers of economic power where worldwide economy control is exercised. In this sense, suggests that the traditional bank sells money for an interest rate but high finances sell something that they don't have, having the ability to convince everybody that they can finance everything, from elemental things to complex ones.

- In the last 10 years, there were 71 crises and corporations used them to polish their terrain and to go forward. However, during the 2008 crisis, while the US Congress struggled to assist the most affected people, the US Central Bank transferred 7.3 trillion dollars to European banks to rescue the global banking.

As a result, money represents an extraordinary power and global cities become the new centers of power concentration and economy control. Unspoken and harsh rules are taking place in an always-surprising world.

2.2 Speed as an asset

Speed has become an invaluable asset for many industries and companies. It is not only referred to time-to-market, but also to the interaction with consumers and building brands, and to the velocity in which some strategic and analytic tools are being questioned in their ability and usefulness.

In fact, time-to-market is one of the new words for successful competition in difficult markets. Dyer (1998) explains that in 1980s Chrysler had a difficult time: in 18 months (1988-1989) closed 3 manufacturing plants and in the 4Q/89 reported an historic loss of $664 million dollars.

The revamp included good faith partnership with vendors and new processes and procedures which among other reduced costs by 20-40%, accounting for $1700 million dollars of savings. In addition, it was reduced the time spent to design and develop new vehicles (from 234 to 160 weeks), introducing new successful products

[1] Some authors reduce the quantity of global cities to three: London being the largest financial market in the world in terms of transactions, a crucial airport node and the economic backbone that crosses Europe; New York to be the main recipient of capital flows and exporter of services; and Tokyo as the largest lender of capital and seat of the most important banks in the world, and an international service center in economics, education, advertising and design.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

and increasing the profit per product to the best in USA. Many firms rush their processes with the purpose of surprising their customers and competitors.

But speed is not only needed to launch a product to the market; it is necessary also to interact with consumers and build brands. Real-time marketing (known as *newsjacking*) is a new way of connecting brands with consumers. In accordance with Revista Mercado (2015) brands like Prime, Toddy and Rexona are taking advantage of attractive brand messages related to events and news which are happening in that precise moment.

The objective is to generate impact and virality in the online and in the traditional media. As an example, it is said that the fans of the famous band One Direction invaded the network asking brands to advertise their new video clip. Many firms discarded the request but Toddy, an Argentinean firm, did just the opposite converting the campaign in a Twitter global trending topic. Viralization and real-time are invading the business arena allowing new alternatives to connect brands and products with consumers.

Moreover, velocity is raising questions on the ability of some strategic and analytic tools and concepts like Porter's five competitive forces, SWOT analysis, positioning, target market and segmentation. In addition, some authors indicate that these tools are becoming static in front of high-speed market and strategic changes. In this scenery, customers and employees will have a fundamental role when intervening over processes and the 4 marketing Ps[2] should be reconsidered as new customers and partners' experiences are put in interaction (VILTARD, 2015).

Summarizing, flexibility, agility and speed are needed abilities to stay within the competitive landscape.

The other four driving forces (connectivity, digital technologies, convergence of technologies and social networks) are much more related to understanding technologies and digitalization. The following paragraphs include some considerations in this respect:

2.3 Technology trajectory

[2] The 4Ps of marketing are: Product, Price, Place and Promotions.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

The future trajectory of technologies is unpredictable and unimaginable because of their exponential trajectory. Bilinkis (2014) says that technologies that everybody are accustomed to use daily, progress linearly and slowly; airplanes and cars are an example as there were no significant changes in these products during the last 50 years. In this way, the “future of the past” seems disappointing, as the imagined changes have not shown up yet. May be we imagined that cars or skates were going to fly and nothing of that is happening today.

Nevertheless, the “future of the present” has a different trajectory as it responds to an exponential curve, not a linear one. That is why many influential people erred seeing the future as our minds respond linearly and not exponentially. The fact is that technology has the ability to change our lives but nothing really has changed as it could. For example, we are using potent mobile phones only to play games and listen to music, not to do more things that are complex.

Finally, the “future of the future” is unpredictable as many technologies converge in novel and unexpected ways.

As a result, to go beyond our actual linear mind capability is the difficult challenge that is post to us. None of the things that we are seeing in the future is the ones that will happen, but we should be prepared to struggle in that context.

2.4 Digitalization’s new fields

Digitalization is entering in many new fields that were unimaginable some time ago. Apple Computers will offer DNA analysis from their mobile devises (INFOBAE.COM, 2015) and life will be optimized by computers offering entertainments, friendship, sex, or what somebody could do in his/her weekends (Heffeman, 2015).

Today, computers can refine and process uncountable data no matter the size of the devise. As an example, Heffeman cites the Apple Watch, launched on March, 9, 2015, as the smallest computer with some prodigies of optimization, like tracking of physical activity (measures and records physiological data in order to get one note and change their habits of disorder and gluttony). Anybody could follow closely the data produced by his/her body, knowing how much eats, how long sleeps, how much exercise it being done and the percentage of achievement in each variable. This

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

technology, if it is used wisely and following closely the numbers, could give the opportunity to achieve minimum food consumption with a maximum labor production.

As a result, opportunities will be at the side of firms that can manage medical data at an unprecedented scale. This is true for many companies like Google, Apple and Alibaba, which are managing millions of transactions a day.

Moreover, Chui and Manyika (2015) assure that hyper scaling will probably touch more areas as cheaper computer power, sensors, and communications accelerate the pace at which businesses adopt digital technologies, giving some examples: China Mobile has +760 million subscribers in digital and voice services, Visa process billions of transactions and thanks to Internet of Things which creates plenty of machine-to-machine interactions, hyper scale segments are emerging (For example, the GE twin-jet engines on a Boeing 787 Dreamliner generate a terabyte of information a day).

However, hyper scale is not the only variable to be considered. Chui and Manyika (2015) say that complexity that challenge managerial conventions, is important, too as digitalization is changing industries by lowering the costs of entering markets and allowing enterprises to scale up quickly. Additionally, interactions are being enhanced among suppliers, customers, employees and stakeholders by mixing media, adapting messages for context, adding social connectivity, improving management decisions and helping in the resolution of disputes. The authors understand that there is a huge opportunity to reposition firms for a new era of competition.

In addtion, Revista Mercado.com (2015) asserts that new benefits are applicable to firms as digitalization helps with cost reductions and more productivity. Also, technology is growing continuously and brings new opportunities to firms as they propose new business logics which will help in efficiencies and profits. As a result, employers must identify and embrace digital opportunities and guide the activities of its companies to them.

It is said that the challenge is to invest in intangible assets (software, for instance), not only in tangible ones (like buildings and machinery). The common mistake is not to see technology as a possibility to reduce unnecessary expenses and maintain budgets under control. Some examples of technology at low costs and

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

accessible include freemium services, open source codes and cloud computing. Technology generates value added to the business that should be quantified.

Consequently, money, speed, technology and digitalization are deepening society's course of action. Everything, including strategic and analytic tools, is being questioned and abilities are more connected with soft and not hard skills. In the innovation era strategic, business and operational processes are losing their effectiveness.

Innovation is the new organizational blood, which connected with technology and digitalization, are proposing unprecedented changes. That is why the next paragraph is dedicated to a better understanding of what it implies to succeed in this environment.

2.5 Innovation to succeed in the unknown space

The world is not as it was before; innovation has profoundly changed it at rapid speed. Inside the organizations, the strategic, business and operational processes are losing their effectiveness as many more companies are mastering them, causing a lost of differentiation. New boundaries to actual competitive frontiers are being developed.

Difficult to replicate abilities and capacities are needed, and science convergence (in scale, biology, materials, among others) and IT are reshaping and increasing the innovation flow. Technology replaces workers and gives innovation speed; it covers the way work is done, educational areas, processes and business models.

As a result, new management approaches and defying the status quo are needed in order to capture opportunities. In addition, resources allocation should be based on the future and not on the past while the future is immense and borderless.

In a prior study it is said that:

- The speed of change makes knowledge become futile in short periods of time, eroding competitive advantages and suddenly migrating value inside and outside industries. As a result, business models and strategies must be reviewed not to lose pace in the actual hyper competitive markets.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

- Internet increased productivity in USA (and we may add, all over the world). New start ups like Facebook, Apple and Google were established disrupting many traditional businesses like newspapers, books and universities[3].
- Innovation is the new route to growth and new wealth of nations, organizations and individuals. This process should be understood as a value chain with associated metrics for better management and monitoring. That is why, the objective is to contribute to the improvement of the innovation process and consequently to the wealth of organizations.
- Innovation includes products, services, processes and business models, requiring new insights and investments. In this sense, organizations and countries must approach innovation as new ideas and knowledge, and adequate infrastructure (I&D and talent, among others).
- Companies fracture, opening opportunities to focalized specialists. Consequently, activities disaggregate and modularity invades different industries for new and nimble firms. Creativity, speed and flexibility are the new basis to compete in the business arena.
- Products and services include interactive and collaborative experiences, and Internet and the telecommunications are connecting +4 billion people all over the world.
- The future will be on open/distributed innovation or co-creation, losing organizational boundaries, and new businesses may begin with little capital and certain advantages over the established one.
- Knowledge expansion in each individual and organization will contribute to open up new opportunities' development. Consequently, innovation should be considered as a powerful intangible asset.

[3] For more details see the books: Viltard, L. A. (2014) *Universidad Corporativa: Implementación, experiencias y las necesarias colaboraciones para ser eficaz.* B. S. Lab, Italia: Avellino (*). ISBN: 1-4996-9431-8 and Viltard, L. A. (2013) *Universidad Corporativa: Origen, configuración del mercado de capacitación corporativa y beneficios de su creación.* B.S. Lab, Italia: Avellino (*). ISBN: 1-4943-3067-9.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

As a result, innovation is the basic process that produces new wealth and growth. Innovative individuals and organizations are the ones that will succeed in the unknown space. That is why it should be considered the 6th driving force.

In the following Table 1 it is shown a summary of what it was referred in this section:

Table 1: Five considerations

1st. Driving force (Globalization)	**Money** • Imposes new rules on growth and advancements. • Global cities are the centers of power concentration and economy control.
	Speed • Time-to-market. • Interactions are needed with consumers and to build brands. • Strategic and analytic tools are being questioned. • The abilities required: flexibility, agility and speed.
2nd to 5th driving force (Connectivity, Digital technologies, convergence of technologies and social networks)	**Technology** • Future technology's trajectory responds to an exponential curve. • Our minds work in a linear way. That is why the future is difficult to be predicted.
	Digitalization • Offers cost reductions and increases in productivity. It is needed to invest in intangible assets and there are new business logics for firms and customers. • What's happening? DNA analysis from mobile devises (Apple) and tracking of physical activity (iWatch).Life will be optimized by computers offering entertainments, friendship, sex, or what somebody could do in his/her weekends. • Hyper scaling will probably touch more areas, and complexity, digitalization and interactions will transform the business landscape. There is an unprecedented opportunity to reposition firms.
6th driving force (Innovation)	**Innovation** • The strategic, business and operational processes are losing their effectiveness as innovation takes place. • It is an intangible asset and the route for growth and new wealth of nations, organizations and individuals. Includes products, services, processes and business models. Products and services include interactive and collaborative experiences. • It is speed up by: Difficult to replicate abilities and capacities, science convergence, IT and new management processes. • Knowledge becomes futile in short periods of time, Internet increases productivity. • The future will be for co-creators and focalized specialists.

Source: Own

3. IMPACT AND CONSEQUENCES

As it was stated, the six driving forces analyzed in the prior section are transforming society and the business world.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

In the following paragraphs there are shown some astonishing impacts and consequences that are seen today and that producing blurred results on industrial sectors, business models and products/services, as follows:

3.1. The borderless firm's industrial sector

To influence in the market context means not to stay in a unique industrial sector anymore. Just to give an example, Apple Computers Inc. is not only a technological firm; it invaded industries like music, media, health, entertainment and education. In accordance with Clarin.com (2015) the company of Cupertino is also one year ahead of its electric car which is not totally autonomous. There are other companies like Google and Mercedes that are working on autonomous vehicles, but for companies like Apple and Google, some time ago vehicles were not intended industrial sectors.

Additionally, Google the firm of the research engine, launched a tablet (Pixel C) which is totally designed by them (LANACIÓN.COM, 2015); has Chromecast, a media streaming device that plugs on a TV, simply using a mobile device and a TV to cast favorite TV shows, movies, music, sports, games and more. In addition, they are running a self-driving electric car program (THE VERGE, 2015).

Chui and Manyika (2015) asserts that digital powerhouses are moving from search and social networking into new sectors, like banking and retailing. As it was said before, Apple and Google are good examples of firms that do not stay in a unique industrial sector and evolve, based on refining their competencies.

Moreover, knowledge roles will be invaded by digitalization within organizations. In this sense, Chui and Manyika (2015) argue that software is replacing labor in digital businesses and computers are performing complex tasks as well; even in knowledge-intensive areas. For example, in oncology diagnostics, as computers have the ability to scan and store enormous amounts of medical research and patients' MRI results, IBM's Watson computer diagnoses cancer with much higher levels of speed and accuracy than skilled physicians do.

In this environment, the authors say that firms can quickly experiment on a massive scale as they can test different new products, new marketing approaches and customer's demand is requiring a unified experience in B2B and B2C domains. That is why big data has become in a new asset class, as companies can understand

ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

much more about their customers out of analyzing their click streams. They conclude that hyper scale businesses are part of the daily life of many users, reshaping the business ecosystems.

In addition, industrial sectors are influenced by other sectors blurring their old limits. Sissons (2011) refers that the “UK mfg. industry has moved beyond just making things. It is a complex industry that engages with customers and other businesses in a range of ways”. As firms combine manufacturing and services in packages selling solutions, outcomes and experiences, it is adverted a new industrial sector that the author calls “Manu-services”.

Manu-services involve complicated activities that require firms to coordinate a highly skilled workforce and a strong service sector with excellent universities and research institutions. That is why there are developed countries that are behind others (for example, UK is behind France, Japan and Germany) and some emerging economies are catching up at an alarming rate. To conclude, asserts that Manu-services are not a new idea, but a new type of innovation as it represents a vast area of soft non-technological innovation which offers new options for growth.

Because of what it was said in this section, unique industrial sectors are embarrassing for firms´ development as new sectors’ invasion and knowledge roles replacement are gaining momentum.

As companies strictly dedicated to manufacturing need to join the services domain, digital businesses and computers are increasingly performing complex tasks with precision and speed, even in knowledge intensive areas. Big data analysis, processing and smart utilization became a new asset for companies and part of many users’ daily life. That is why, different hyper scale experiments can be done and customers may be analyzed out of their click stream. In this order of ideas, the business ecosystem is being reshaped as digital interrelations evolve.

Finally, firms and industrial sectors are constantly evolving, and losing their old shapes and limits. In the near future, it is expected that more firms will deal with various blurred industrial sectors as the way to interact with different marketplaces and geographies. That is why it will be very difficult to assert in which one and with which competitors the firm competes.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

3.2. The borderless business models

For most firms, business is not as it was before; their business models and strategies need to be adapted and changed to stay in the market terrain. There are many examples of firms that produced these kinds of transformations; IBM, Apple and Amazon represent some cases.

Chui and Manyika (2015) indicate that business models are networked and flexible because of minimum marginal costs and huge operating advantage coming from hyper scale businesses which fuel companies into adjacent spaces. As an example, it is referred that through digitizing the book business Amazon could enter into new retail categories and probably into Web services via the cloud in the future.

In accordance with the authors, the main characteristics of these new firms are connected to:

- New business opportunities, coming through immense Webs of interrelated users, devices, and organizations.
- Massive volumes of user's data that flow to social-media players' sites, allowing advertisers and marketers to be charged for access the data that is collected on user preferences and spending patterns.
- Highly global ecosystems. For example, 97% of eBay's commercial sellers export goods to customers in foreign countries.

They argue that technologies are invading the business arena, changing the overall strategic context as they are altering the competition structure, the way businesses are being done and the performance across different industries. They conclude that under these circumstances leaders must challenge their assumptions and test constantly their strategies.

In accordance with the authors, digitalization offers the following additional benefits:

- Lowers entry barriers as many firms can approach markets without having to build distribution networks.
- Disaggregate value chains because of the "plug and play" nature of digital assets, creating small and fast-moving competitors.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

- Allow entrants to scale up rapidly at lower costs as more customers join the network.
- Enable new businesses and operating models, like peer-to-peer product innovation or customer service. Also, disintermediation through 3D printing and selling directly to Amazon represent key issues for rethinking new businesses and operating models.
- Can change competitors, redirecting industry contexts when some capabilities may be at threat.

Bughin et al. (2013) add that business models become transparent and innovative thanks to real-time information, instant price discovery and quick problem resolution, and that digitalization is constantly elevating people's expectations. That is why, rapid responsiveness should be considered as a core competency and business models should be rethought for rapid responsiveness and transparency.

Finally, business models must progress. Chui and Manyika (2015) propose that thanks to digitalization they evolve at high speed. For example, music evolved from selling tapes, CDs and MP3s to a subscription model like Spotify and transportation did it to a non-ownership model, combining sensors in cars, data in the cloud and mobile apps like Zipcar, where their members pay for the use of vehicles by hours or days.

As a result, networked and flexible business models are possible thanks to low marginal costs and high operating leverage, and adjacent spaces are more possible for many companies.

New age firms are oriented to profit from new business opportunities coming from immense Webs, massive volume of user's data flow and highly global ecosystems as new technologies are changing the strategic and business environment. Assumptions are meant for short periods.

Finally, low entry barriers, disaggregation of value chains, scaling up quickly, disintermediation, peer-to-peer product innovation or customer services, rapid responsiveness and new capabilities' development are an important part of the actual business context in which peoples' expectations are elevated thanks to transparency and innovation. Business models and strategies must progress in order to stay attune with the changing business realities.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

3.3. The borderless product/service

Product and services are having a difficult time. They are also being blurred as modularity, global resources and consumer experiences are shaping new realities. These matters are central in this section but it will be also analyzed why products/services are entering in a new era, why platforms must be built and the importance of digital and physical experiences' integration.

3.3.1. The age of modularity with global resources and one consumer experience at a time

Products/services are not designed and produced within the limits of one company anymore; capacities and abilities are spread all over the world and, to be competitive, companies must find them wherever they are. Prahalad (2010) refers that Ford Model T was totally integrated within the limits of the firm: it was put iron in one side, getting a car in the other side. At that time, all the resources needed to create and produce the product were found within the company, and the consumer base was undifferentiated. That is why the famous aphorism: "any color car is okay as long it is black". However, companies do not operate that way today.

That is why he invites to analyze the other extreme: it is possible to manage hundred millions of consumers and each consumer's experience at a time (what the author calls: n=1). As an example, anybody can construct his/her own page (through iGoogle) conducting one personalized experience at a time.

Additionally, none of the contents of Google are produced by the firm; contents come from outsiders who aggregate value and give it to Google (r=g, meaning that resources are global). Complementing what the author says, Baldwin and Clark referrer that Howard Stevenson (HBS) said that entrepreneurship is "pursuing opportunities beyond the resources currently controlled". As a result, resources may come from all over the world, what is very different from Model T workflow.

In other words, what is boosting business and innovation today is n=1 (one personalized experience at a time) produced by r=g (infinite global resources). For example, Apple allows anybody to create his/her own music portfolio, but the firm does not create the content, neither Apple produces the devise as it is manufactured

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

by different vendors and countries, and assembled in China (Foxconn). Only Apple owns the design and the software. All this is happening in what Prahalad calls the new age companies (like Apple, Netflix and Google), and additionally in old age companies of industrial sectors like tires, insurance, automotive and health care.

At this point, the modularity concept, which is speeded up by technology, becomes remarkable as it can be viewed as a strategy to efficiently organize complex products and processes. Baldwin and Clark (1997) refer that this principle is familiar to the computer industry as it allows managing complex technological subjects. The firms that produce independent modules obey to certain design rules, but all the modules function only as an integrated whole. This concept extends beyond manufacturing to product and service design, increasing the quantity of possible innovations. The authors suggest that, under the modularity domain, vendors will have two alternatives to compete:

1. Taking responsibilities over the design rules and competing through the specification of dominant design rules: being the architects of the whole product and should attract designers for each module, like Microsoft, or
2. Producing modules: being the designer and dominating superior execution and non visible rules, like Quantum with PC disks.

In this environment, leaders will control less and will need more specific knowledge.

The geography of products/services is a changing game with evolving capacities and abilities required to succeed. Modularity and n=1 / r=g are the rules that any company should understand and implement. Technology is the vehicle that allows connectivity at individual or team levels.

3.3.2. The product/service's new era

Products and services are going through a novel phase of development. Chui and Manyika (2015) suggest that:

- Pressure is on prices and margins, as digital technologies create transparency and vendors' switching. Also, it is easy the comparison of product performance, service levels and prices.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

- Products/services can commoditize because consumers require comparable features and simplicity for easy purchase on mobile devises.
- Products/services are digital in the B2B and B2C realms. Music, movies and digital services are being commercialized all over the world, and digitalization is transforming through global collaboration even physical flows and digital design files for 3D printing to make product to be produced where it is going to be consumed.
- Online platforms are created, bringing cross-border exchanges, efficiencies and speeds to production. E-commerce platforms allow faster flow of goods and services around the globe, expanding global trade and new online markets, facilitating innovation and the creation of physical goods through 3D printers.

Additionally, the product itself may be conceived in new ways as 3D printing is modifying not only how they are manufactured, but also the possibilities of replicating old products and reducing their prices to unimaginable levels, as it is described in the following cases:

- *Local Motors (LM) - The melted vehicle*

  3D printing is a reality. Clarin.com (11/20/15) says that the firm LM manufactures vehicles with an attractive and original idea for customers: melt their old printed pattern, recycle them and create another car that may suit their actual preferences. The firm located in Arizona -USA is planning to offer the opportunity of melting its “Swirl”, creating a new vehicle in a few hours. Actually, any other manufacturer does not give this possibility. In addition and in the last Detroit Saloon, in front of everybody’s views, they printed a vehicle called “Strati” in only 44 minutes.

  LM uses plastic, a material that can be melted and reutilized, proposing a total product is recycling in the automotive industry. Thanks to 3D printing, it is possible to have a car in some hours.

  However, it is not a new technique in the automotive industry, as BMW has used it for +25 years for concept cars and tools manufacturing. What seems incredible is to think that a car may not be manufactured in a plant, but in a

ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

printer. The challenge for LM is to build new plants and to substantially reduce the printing time from 40 to 12 hours in order to conquer new markets.

- *Audi/Auto Union (AU) – Scale 3D printing in the automotive industry*

  3D printing is used only for unique objects but, in accordance with Clarín.com (2015), Audi is using scale 3D printing to replicate a racing car AU Type C 1936, well known as Silver Arrow (Flecha de Plata).

  A special laser melts metallic powder, process that allows the manufacturing of complex structures that cannot be produced by conventional methods. Audi is improving this technique to use materials like aluminum and steel, and the challenge is to increase productivity at scale.

- *Sports electric car for 5,000 dollars*

  Productivity enhancements and price reductions are ways to increase market presence in every industry. Clarin.com (2015) indicates that a Chinese young boy of 27 years old manufactured a super sports electric car with a 3D printer. It was exhibited in the International Saloon of Hainan 2015 after manufacture it in his garage, in only 6 months and spending 5,000 dollars. Today, the only inconvenience is that this vehicle can reach 60 km/h at maximum speed.

In the near future, it seems that we will own materials, not products, that will take different shapes and that a product will be produced with a 3D printer in the place of consumption at reasonable prices is not far from reality. Things are changing at an alarming speed.

3.3.3. Building platforms, not products

A platform is the technology behind services, products and solutions, and it has the ability that can be extended. It is a solution to meet customer's requirements but it is not a product itself. In other words, a platform offers different alternatives that the customer may choose which to use for his/her benefit, building products on-demand.

Android is a platform for mobile devises. A more complex example of a platform may include diverse tools/modules like research, assessments, recruitment, e-learning, classroom trainings, different content, content management,

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

communication management, social networking, blogs, business intelligence, publishing, production, CRM, manufacturing, program management, among others.

A platform may evolve or integrate to other segments and solutions, connecting new nodes in the same or different industries. For example, it is possible to integrate ERP, Mobile and CRM for new user requirements to screen mass level hiring and, with the help of an assessment platform, it could be predicted who is going to be selected for a position. Thanks to platform's capabilities, solutions are tailored for customers in accordance with their requirements, but a product will not have this possibility.

As a result, platforms and products have differences, as follows:

- It is possible to build extensions around an existing product, but in a platform it is possible to build a whole new product or solution without using an existing product but with a lot of reusable components, technologies and standards. In this order of ideas, the product gives only one approach to resolve a problem; platforms transform customers to next levels.
- As a platform is not a product, it can be shown a product's demo on the spot, but a platform's demo can only be shown in connection to a specific requirement, as it has to be aligned according to the customer's request. It is needed to have an accurate requirement to get the desired solution. That is why, a platform can be customized, configured, applied to specific purposes and have special workflows. Therefore, there is no need to grow a platform to every function or feature.
- Customers and/or partners can use a platform. Cloud-based software will propose many more interactions and possibilities for new developments.
- In a product, it is impossible to have your brand on it, but in the platform, this is possible, no matter who developed it.
- For products, it is not possible to integrate all those that may be required, but in platforms, it is possible to do it for specific segments.
- Under a product, it is not possible to empower others to be technology providers; it is the opposite in platforms, helping for partnerships.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

- In platforms, global integration is possible and it can empower and transform industry segments. Problems are seen as opportunities and implementations can be of any degree. Everything that somebody may imagine can be built, depending on the investments that are made.
- Products may have the ability to extend as well. Extendibility is dependent on capabilities at different levels, but from a certain level, it can be understood as a platform. Therefore, platforms have to be products as others build on it, but products are not platforms.
- Building a platform is a hard and long way. If products were built on platforms, they probably would have the ability to last longer. There are specialists who think that products not built on platforms will die due to: a) version controls, b) Inability to change with major advances in technology, c) Lack of productivity as things become more complex, and d) ability to scale across the board.
- There are two types of platforms: the ones that are built around a product (like iOS or Facebook) or the ones that are built around users, customers and/or developers (like Android or Ning, called open platforms). The future will tell us about the winners of this race, but what it is possible to say today is that open platforms are beyond the imagination of their creators and offer many more possibilities.

3.3.4. Integration of digital and physical experiences

Customers are not in search of products but of experiences. That is why customer experience, digital products and channel management are important today.

Bughin et al. (2013) assert that the integration of digital and physical experiences creates new ways for customer's interactions and digital information augments each experience. Products are becoming free, intuitive and user oriented, and the digital commerce reduces entry barriers and opens new areas of revenue.

Governments, education and health care are pointed as huge areas of improvement when adopting digital technologies. Productivity gains may help aging populations to do more with less, improve health care of every citizen and produce savings never obtained before.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

Out of what it was said in this section, products are conceived as a convergence of technologies (different products are found in one product), if constructed as platforms offer more possibilities (allowing each user to utilize it as he/she wants, making vendors to lose control of what the customer does with the product) and are built as interactive experiences with novel and recyclable materials (suggesting new pleasurable sensations when it is used).

3.4. The borderless science: disruptive technologies that will change the future and executive's role.

Science is unlimited, too. Manyika et al. (2013) say that new technologies are defying the business and social realms, but not every emerging technology will alter them, as only some will have the potential to disrupt the status quo, changing the way people live and work. Surely, new values will emerge.

The authors analyze twelve technologies that will drive massive transformations in the coming years, with their benefits and challenges. These technologies will impact, for example, on better products, lower prices, cleaner environment and better health. It is not the objective of this paper to explain each of those technologies, but to name them: advanced robotics, next generation genomics, energy storage, mobile Internet, automation of knowledge work, Internet of things, cloud computing, autonomous or near autonomous vehicles, 3D printing, advanced materials, advanced oil and gas exploration and recovery, and renewable electricity (solar and wind).

They conclude that business leaders and policy makers should work on these technologies' advancements to profit from their benefits, as follows:

- For business leaders, technologies are important to improve internal performance, to update organizational strategies and business models, and to shift value among producers and consumers. Scenario planning is not dependent on risks and competition as it was before, and up-to-date employees' skills are needed in order to balance the potential benefits of emerging technologies with their risks.
- For policy makers, technologies can solve their own operational challenges (as an example, Internet of Things may improve infrastructure management). As the nature of work will continue to change, it will be required better

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

education and retraining programs. In addition, mobile Internet may help in solving educational and public services gaps. Thanks to technology, new and more precise metrics must be considered in order to reshape economies and lives.

Complementing what it was said before, Bughin et al. (2013) suggest that there are additional dramatic business trends in the 21st century, as follows:

- Big data and advanced analytics, which enable management to better understand markets and make intelligent business decisions.
- Social technologies, which build a better organizational infrastructure, linking and engaging stakeholders as never before. The organizational focus in this area should be on information and communication technologies.
- The progressive automation of knowledge work, promising new steps in corporate productivity.
- Up to 3 million consumers, most of emerging countries will become digital players thanks to mobile technologies.

Nevertheless, it is very difficult to be an effective executive in this environment. Dewhurst and Willmot (2014) point out that the historic manager gave orders and set the criteria to the computers, which made no decisions. Now and thanks to artificial intelligence, computers are not stupid tools anymore; they are replacing skilled people in fields such as architecture, aviation, the law, medicine, and petroleum geology, changing the nature of work. The authors refer that Deep Knowledge Ventures, a Hong Kong venture-capital firm, has gone so far as to appoint a decision-making algorithm to its board of directors.

In this context, they insist that the contribution of senior leaders should be directed to create worthy data sets in intelligent machines and increase decision-making potential. The role of the senior leaders should evolve giving a human touch to brilliant machines, which should include deep questioning, attack of exceptional circumstances and deepening what machines can't do. Their capacity for self-renewal will include tolerating ambiguity and focusing on the softer side of management.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

In addition, they suggest that better and less polluted analysis, and fewer unnecessary debates will take place if organizations approach higher quality inputs and processes for improved decision-making in tactical and strategic areas. The senior managers' challenge reside on building customized dashboards full of metadata, synthesizing important information around the company and controlling if actual data goes in the desired direction. For example, machines may adjust prices or produce sales data in real time, or monitor risks, but executives must determine the parameters. More than ever, executives will need to be near technology to get better views on reality and encourage democratization of information for improved decision-making.

Finally, the authors argue if brilliant machines can take decisions that leaders take today. As a result, what will be left for top management is:

- Asking the right questions to the right people at the right times, and interpreting the outputs.
- Attacking problematic exceptions which will probably come out in data-intensive areas, like pricing, credit departments and call centers, or in strategic areas like competitive analysis innovation or talent management.
- Tolerating ambiguity, as computers seem to be prepared to answer small questions, but for human problem solving will be needed the bigger and broader the inquiry. In addition, companies increasingly proceed not knowing exactly where they are going and struggling with uncertainty, which holds new possibilities for the emergence of new insights.
- Giving a human touch to the organization through employing soft skills. That is, for instance, inspire employees, empathizing with customers and developing talent. It is cited that it would be very difficult for an executive to say, "We're doing this because an algorithm told us to". In the era of brilliant machines, the human dimension will be a top ability for executives.

Because of this study, different impacts and consequences are observed and are changing the social and business environments, as follows:

- Globalization must be considered when doing business: it is a complex, multidimensional and paradoxical phenomenon. Economic, political, social

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

and cultural implications propose endless and imprecise boundaries, which are not related to the size of a region or country, or to the limits of a map.

- Technology and digitalization are creating new industrial sectors, threatening many of the existing ones. In addition, they also offer high speed to the development and fall of players in an industrial sector. The cloud, Internet of things, robotic, social networks and virtual reality are just some examples of technologies that will change how we do things today.
- Innovation is for every firm and everybody, and should be considered as the new blood for wealth creation.
- Uncertainty and intuition are an important part of decision-making. The definitions are narrow and do not support what it is known; it seems that everything is possible and applicable.
- The business vision is relevant, but it is not available with accuracies.
- Firms should focus on abilities' development, not necessary on products and services.
- Talent and other resources may be found everywhere and are required new ways to manage them.
- Is key how resources are assigned and savings are utilized. In addition, how customers are reached.

4. CONCLUSIONS

The unlimited world is coming out at unprecedented pace; it is referred to the borderless and to the unknown. In this imprecise context, old paradigms are becoming arguable.

New courses of action are proposed by money, speed, innovation, technology and digitalization.

Money has an enormous power and global cities became the new centers of power concentration and economy control. Speed is needed to launch products to the market, to interact with consumers and to build brands, but also is raising questions on the ability of some strategic analytic tools as they become static in front of high-velocity changes and transformations. Customers and employees are having

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

fundamental roles when intervening on processes and on experiences. Agility, flexibility and speed are new abilities for a globalized and unforeseen world.

Unpredictability is the arena where technologies converge in novel and unexpected ways. If we would like to be prepared for the future, it is needed to go beyond our actual linear mind capacity as future technology's trajectory responds to an exponential curve.

Globalization, connectivity, digital technologies, convergence of technologies and social networks are the five driving forces that are transforming the business world and how value is created.

Digitalization, which is not only transforming industries by lowering costs, improving productivity and making firms to scale up quickly, but also enhancing interactions, proposing new optimized lives and performing complex tasks, is opening up many new fields and interconnecting them. As computers are refining and processing hyper scale data to improve decision-making, big data analysis, processes and their smart utilization are becoming the new organizational intangible assets. That is why opportunities and firms' repositioning will be on the side of the ones that can manage complexity and hyper scaling at high velocity. A new era of competition is being born.

Innovation is the new word for advancement, growth and wealth; it suggests the unknown and a difficult gambling. The strategic, business and operational processes became part of the organizational infrastructure and of what it is needed to operate.

Technology and digitalization in connection to innovation are leading unprecedented changes. Innovation is on products and services which include interactive and collaborative experiences, processes and business models. Only innovative firms and individuals will succeed in the unlimited. As a result, innovation should be considered the 6th driving force.

In the unlimited, everything is being questioned and abilities are more connected with soft and not hard skills. That is why investments in intangible assets, like innovation and new knowledge are the new logic of the unlimited.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

Impacts on firms' industrial sectors, business models and products/services are about to come as science and disrupting technologies are gaining momentum. Unique industrial sectors and manufacturing or services only activities are not advisable anymore.

By the way, business models must be flexible and networked to capture value in adjacent or transformational spaces; immense Webs, massive volume of user's data flow and highly global ecosystems are changing the strategic and business environment. Additionally, assumptions should not be made for short periods of time.

The new business context includes low entry barriers, disaggregation of value chains, scaling up quickly, disintermediation, peer-to-peer product innovation or customer services, rapid responsiveness and new capabilities' development.

Peoples' expectations are elevated thanks to transparency and innovation, and business models and strategies must evolve in order to stay attune with business realities.

In terms of products and services, modularity, online platforms, convergence of technologies, global resources (r=g) and one-consumer-experience-at-a-time (n=1) are reshaping realities as digital and physical experiences' integration are connecting many more individuals and organizations. 3D printing is changing the rules of manufacturing and the way customers are reached with reusable materials and scaled up cheaper products. The product/service's actual context proposes leaders the possibility to control less and have more specific knowledge.

Business and social realities are also defied by technology and science. New values are emerging throughout advanced robotics, energy storage, mobile Internet, automation of knowledge work, Internet of things, cloud computing, autonomous cars, 3D printing, big data, social technologies, and the like. These technologies will impact, for example, on better products, lower prices, cleaner environment and better health. Business leaders and policy makers will have to catch up with the novel situations that are about to come.

It is not easy to be an effective executive in this environment. Giving orders and dealing with computers that made no decisions correspond to the historic manager. Now artificial intelligence and smart computers are replacing skilled people in many advanced fields. There are cases of organizations in which decision-making

ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

algorithms are replacing Board of Directors. As the executives' role is changing and they should tolerate ambiguity and focused on the softer management side, their contribution should be connected to deep questioning, attacking exceptional circumstances and deepening what machines cannot do, improving decision-making in tactical and strategic areas with customized dashboards and flexible parameters.

The game is still in its early innings. Organizations and individuals must excel the power of imagination as unwritten and harsh rules are taking place in an always surprising world. Known frontiers are being challenged by digitalization, new technologies and new sciences as their boundaries are continuously under definition.

Hyper scale competitors disrupt traditional businesses at unprecedented speed and with a tremendous operating and financial leverage. Digitalization helps minimizing costs of transporting, replicating and storing data, and creating networks effects. Computing power is reducing its costs and helping in its adoption and evolution. As a result, investments must be oriented to building online platforms, which can reach massive scale, up sell and cross-sell products and services without human intervention.

Key management challenges should be directed to:

- The wise relocation of savings from automation to the talent that could help the digital business.
- Understand that human talent is scarce and mobile and traditional universities cannot provide the training that organizations require: That is why corporate universities[4] and special trainings should complement them.
- Forging flexible organizational structures based on the Internet's model and values, which include connectivity, decentralization, changing relationships and nonhierarchical interactions.
- Understand that today the unknown is part of the nature of things and it is needed to tolerate tension and ambiguity.

[4] For a better clarification on Corporate Universities are recommended the following books: a) Viltard, L. A (2013) *Universidad Corporativa: Origen, configuración del mercado de capacitación corporativa y beneficios de su creación*. B.S. Lab, Avellino, y b) Viltard, L. A (2014) *Universidad Corporativa: Implementación, experiencias y las necesarias colaboraciones para ser eficaz*. B. S. Lab, Avellino.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

The global economy proposes discontinuity, volatility and stress. Success becomes insecure in front of emerging markets, technological change and high speed. The only possible approach in this environment is the one that applies to a specific circumstance; “global and coherent” approaches are not applicable anymore.

Competitiveness and growth depends on innovation, which should be considered in public and private policies. Collaborative contexts are necessary to resolve actual global challenges as energy consumption, deforestation, carbon footprint and the like. New paradigms should take place as the old ones become quickly obsolete.

The limited and the unlimited worlds are coexisting today, but the future is the realm of the unlimited.

As a conclusion, a comparisson of both worlds is shown in the following table which shows that firms, individuals and society, in general are gradually exposed to the unlimited, which is connected with not precise limits, instability, uncertainty and unclear visibility. The unlimited is the realm of the vague and blurred; that is why, nowadays qualitative approaches and measures are more adapted than quantitative ones.

Table 2: Limited and Unlimited worlds’ comparisson

	Limited	**Unlimited**
Referred to	Calm pace and the known.	Velocity and unknown.
Globalization	Not visible	Represents the way to see social interactions and businesses.
Decision making	Tools are needed.	Intuition is needed.
Resources and knowledge	Owned by each firm and workforce.	• Dispersed in partners and developers. • Knowledge becomes futile in short periods of time. Internet increases productivity.
Strategic and analytic tools	More adapted.	Inefficient and questionable.
Workforce and talent	Do repetitive tasks.	• High skilled workforce. • Difficult to replicate abilities and capacities, science convergence, IT and new management processes.
Technology	Limited to each industry.	• Comes from other industries and creates new industrial sectors. • Importance of digitalization.
Speed and money	Relative importance.	Very important.
Innovation	Relative importance.	Is a must.
Future	More predictable.	• Unpredictable.

ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

		• The future will be for co-creators and focalized specialists.
Investments in	Tangible assets.	Intangible assets (new knowledge, software, etc.).
Industrial sectors	Precise boundaries.	Blurred boundaries.
Business Models	More stable.	Unstable, transparent and innovative.
Product and services	Precise and more stable.	• Modularity and r=g; n=1. • Quickly comoditize. • Online platforms, and 3D printing modifies mfg, prices and how people access to them.
Science: Disrupting technologies	Not visible and stable.	Extremely visible and create unestability.
Management	Gave orders and set up criterias to the computers, which made no decisions.	Artificial intelligence is replacing skilled people in different fields.
Senior leaders' contribution	Vision, mission and strategy.	• Create worthy data sets and decision-making potential • Ask the right questions • Attack exceptions and tolerates ambiguity • Give a human touch to organizations.

Source: Own

REFERENCES

BALDWIN, C. Y.; CLARK, K. B. (1997) Managing in an age of Modularity, **Harvard Business Review**. Boston: USA.

BILINKIS, S. (2014) **El futuro del futuro**, Dissertation, Available: https://www.youtube.com/watch?v=3ONKA5zG1ng, Access: 12/06/2015.

BUGHIN, J.; CHUI, M.; MANYIKA, J. (May 2013) Ten IT-enabled business trends for the decade ahead, **McKinsey Quarterly.**

CHUI, M.; MANYIKA, J. (March, 2015) Competition at the digital edge: Hyper scale businesses, **McKinsey Quarterly**.

CLARIN.COM (2015a) **Apple adelanta un año la presentación de su auto eléctrico**, Available: http://next.clarin.com/innovacion/Apple-adelanta-presentacion-auto-electrico_0_1435656612.html, Access: 12/01/2015.

CLARIN.COM (2015b) **Crean una réplica de un Auto Union con una impresora 3D**, Available: http://www.clarin.com/deautos/a-fondo/Auto-Union-replica-3D_0_1465053794.html, Access: 11/30/2015.

CLARÍN.COM (2015c) **El sueño de tener un auto nuevo todo el tiempo**, Available: http://www.clarin.com/deautos/tecnologia/autos-impresion-3D-, Access: 20/20/2015.

CLARÍN.COM (2015d) **¿Es posible tener un superdeportivo por sólo 5 mil dólares?** Available: http://www.clarin.com/deautos/a-fondo/deportivo-5-mil-dolares_0_1454254815.html, Access: 10/23/2015.

DEWHURST, M.; WILLMOT, P. (September 2014). Manager and machine: The new leadership equation, **McKinsey Quarterly.**

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

DYER, J. H. (1998) How Chrysler created an American Keiretsu, **Harvard Business Review**, USA: Boston.

HEFFEMAN, V. (2015) Una vida optimizada por las computadoras, **La Nación Tecnología**, Available: http://www.lanacion.com.ar/1784932-una-vida-optimizada-por-las-computadoras, Access: 05/19/2015.

INFOBAE.COM (2015a) Ap**ple ofrecerá análisis de ADN desde sus dispositivos móviles**, Available: http://www.infobae.com/2015/05/07/1727157-apple-ofrecera-analisis-adn-sus-dispositivos-moviles, Access: 11/25/2015.

INFOBAE.COM (2015b) **El nuevo Apple TV, el tesoro oculto de la nueva presentación Apple**, Available: http://www.infobae.com/2015/09/10/1754383-el-nuevo-apple-tv-el-tesoro-oculto-la-ultima-presentacion-apple, Access: 10/10/2015.

LANACION.COM (2015a) **Google presentó Pixel C, una tableta con Android y teclado desmontable**, Available: http://www.lanacion.com.ar/1832191-google-presento-pixel-c-una-tableta-con-android-y-teclado-desmontable, Access: 10/29/2015.

LANACION.COM (2015b) **ExpoInternetLA 2015**, las últimas tendencias, Available: http://www.lanacion.com.ar/1826001-expointernetla-2015-las-ultimas-tendencias, Access: 09/08/2015.

MANYIKA, J.; CHU, M.; BUGHIN, J.; DOBBS, R.; BISSON, P.; MARS, A. (May 2013). Disruptive technologies: Advances that will transform life, business, and the global economy, **McKinsey Global Institute**.

O'KANE, S. (08/03/2015) Google has its own car Company called "Google Auto", **The Verge**, Available: http://www.theverge.com/2015/8/3/9089899/google-self-driving-car-google-auto, Access: 11/25/2015.

PRAHALAD, C. K. (2010) **The legacy of a great strategic thinker**, Dissertation, Available: https://www.youtube.com/watch?v=FP8kRjyfCAw, Access: 11/28/2015.

REVISTA MERCADO.COM (2015a) **Digital**: menos costos y más productividad, Available: http://www.mercado.com.ar/notas/tecnologa/8019952/digital-menos-costos-y-ms-productividad-, Access: 11/26/2015.

REVISTA MERCADO.COM (2015b) **¿Qué es el marketing en tiempo real?**

SASSEN, S. (2015) **La gran ciudad vuelve a ser estratégica para las corporaciones**, Dissertation, Mercado.com**,** Available: http://www.mercado.com.ar/notas/mercados-y-finanzas/8019912/la-gran-ciudad-vuelve-a-ser-estratgica-para-las-corporaciones, Access: 11/20/2015.

SISSONS, A. (March, 2011). More than making things, a new future for manufacturing in a service economy, **The Work Fundation**, Lancaster University, London.

VILTARD, L. A. (2015) **Innovación organizacional: su comprensión, puesta en marcha como proceso y medición**, Italia: Avellino, B. S. Lab. ISBN: 13-978-1511575553

VILTARD, L. A. (2015) The death of the business plan, More than ever Learning Plans and not Business Plans ae meant to analyze most of business growth alternatives, **Independient Journal of Management and Production (IJM&P**), v. 6, n. 4, Oct-Dec. 2015. DOI: 10.14807/ijmp.v6i4.361.

http://www.ijmp.jor.br v. 7, n. 2, April - June 2016
ISSN: 2236-269X
DOI: 10.14807/ijmp.v7i2.417

VILTARD, L. A. (2013) **Globalización: Entender el nuevo ámbito mundial y tomar decisiones**. Italia: Avellino, B. S. Lab. ISBN: 13-978-1490454870