

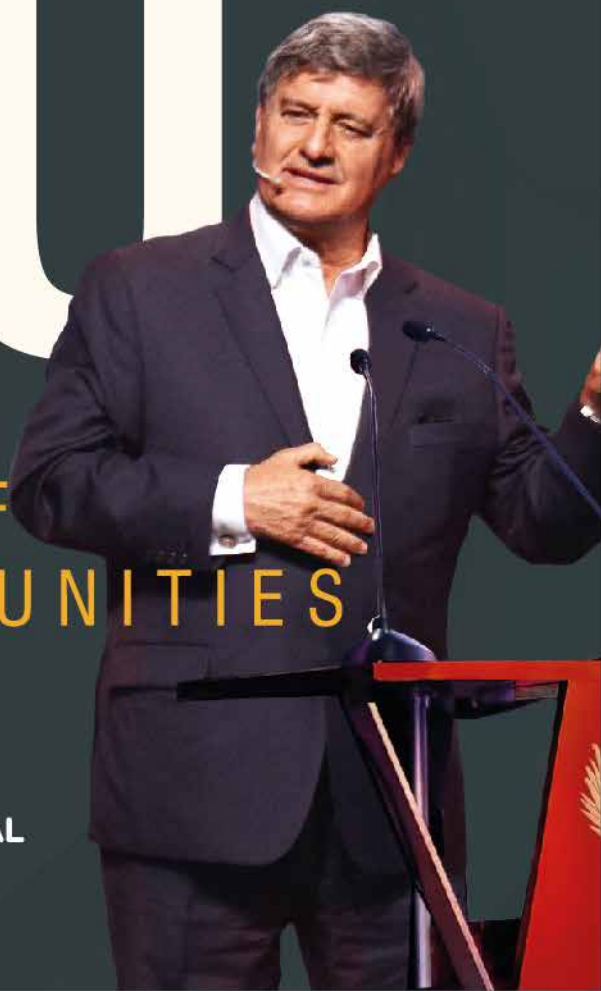
Raúl Díez Canseco Terry

# PERU

LAND OF  
OPPORTUNITIES



FONDO  
EDITORIAL



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OPPORTUNITIES

Raúl Díez Canseco Terry

# PERU

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First edition: January 2020

© of this edition  
San Ignacio de Loyola University  
Fondo Editorial  
Calle Toulon 330, La Molina  
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Hecho el Depósito Legal en la Biblioteca Nacional del Perú  
N° 2020-01640

The photographs were downloaded from <https://unsplash.com/>.

## PRINTING

Publicaciones USIL  
Av. Paul Poblet Lind s/n, Sub Lote B, Parcela 1, Fundo Carolina,  
Pachacámac.

February 2020

500 copies of this book were printed.

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## PROLOGUE

The end of the first decade of the new twenty-first century shakes the world with accelerated and complex changes, in which the trade war between world powers pales in comparison to the first glimpses of the technological war by the end of 2019: a war of drones, an asymmetrical one, in which the powers of the world are realigned. A war that no one wants and that everyone fears.

Latin America, without much participation on the world stage of this war, is going through its own skirmishes of low or medium intensity. Shaken by social phenomena, the region turns on a warning light with outraged, connected and violent citizens in countries such as Chile, Ecuador, Bolivia, and Colombia, our neighbors.

The gap between economic growth for some, on one hand, and economic and social inequality and inequity for others, on the other hand, was the element that triggered the social conflicts. As observed by Tocqueville, the peoples rise up in rebellion because of those who demand more than they were given, and less due to a feeling of extreme injustice.

Until not too long ago, Latin America was the region where the middle class, which is a product of more than 30 years of tax adjustment programs and financial discipline, had grown the most. Every one welcomed this new middle class that widened the service industry and the commerce, but that lived and still lives off credit, that has to use transport services with a modern infrastructure but with a pre-modern service, that have a precarious job and bills to pay at the end of the month that threaten their economic and emotional tranquility.

Soon, these new middle classes got tired of living on the edge and went out on the streets to shout their discontent in different tones. Not all can be explained through an economic point of view. In countries such as Venezuela and Bolivia, it was politics that failed. Warlord-like presidents forced their hold on power by any means they could. One of them still remains in his bubble of illusion.

We grew, we voted, but not all of us in the same proportion. In this scenario, one of change, bad blood and modernity, of both technologic and social connectivity, both private companies and governments, particularly in our region, are obliged to be efficient and effective. The inefficiency of the public sector creates an economic backwardness and social dissatisfaction. These two elements, when together, cause discouragement, discontent and, in extreme cases, distrust. This is the worst that could happen to us both as a region and as a country.

In the long run, the phenomena of discontent and distrust affect the democratic system. This is why I permanently

bet on looking at things from a different perspective. We can find a silver lining in every crisis. This is what happened when we were affected by the El Niño phenomenon in '97 – '98. Uncontrollable downpours caused rivers to overflow and wiped out farmlands. However, they created huge lakes where there were fish that people could consume, and as these new lakes dried, the humid soil allowed them to sow new crops. Nothing lasts forever.

This book is, in that sense, an optimistic outlook on the complicated world we have to live in. A time period that anthropologists are starting to call Anthropocene, an age in which the Earth and its life conditions change due to the actions (and lack thereof) of mankind: global warming, environmental imbalance, the deglaciation of our mountains, the scarcity of water, the precarious biodiversity, the disappearance of many species. At the same time, there have never been larger advances in science and technology: in robotics and artificial intelligence, in biotechnology and human genome.

This is the new world of the new generations of Peruvians. We must give them a better place than the one in which we have had to live. That must be our main responsibility, both in our private life and in the life we, circumstantially, lead in the public sector.

For the past 30 years, poverty has decreased in our country. We need to continue to do this; if we don't, we will be putting the new generations at risk, generations that year after year see their desire to insert themselves in the labor market frustrated. Three hundred thousand new

young people join the ranks of the economically active population every year. How are we going to absorb them?

The first task of the pilot who governs the ship we call Peru must, therefore, abandon the autopilot and actually make the decisions that the emergency situation demands. Peru's economic growth must be seen through a multidimensional approach, with indicators that are aligned to social and institutional goals, which improvement is vital for maintaining a healthy, sustainable country growth. This is what happens if we establish clear goals for the health, education and infrastructure areas.

We have many opportunities to continue growing. Mining contributes to national development. Agriculture, in its agro-export version, has become a job generating opportunity. Both sectors are not irreconcilable. Our agro-biodiversity makes us a world pantry and laboratory, with one of the most valuable natural and cultural patrimonies. Cultural and ethnic diversity gives us valuable ancient knowledge about the appropriate uses and properties of the genetic resources and species of both flora and fauna.

This very rich ecosystem, genetic and biological patrimony opens a window of opportunities for new economic fields, such as eco-innovation, bio-commerce eco-tourism, cuisine and the powerful cultural and entertainment industry.

In order to highlight all that economic potential, we need several things: from the restructuration of our educational model, developing a critical and productive thinking in our children, to the purposeful investment in research and development policies, from both the public and the private

sector. Managing this new scientific knowledge will allow, at the same time, the development of research centers and new market niches that will not only aim for the internal market, but also for every region in the world.

During my travels around Peru, I have seen the direct effects caused by the El Niño phenomenon and the impossibility of our authorities – local, regional and national – to face them. We talk a lot about reconstruction, and we offer alternatives to mitigate the devastating effects El Niño on the infrastructure, on the agriculture, but we do not talk about making decisions that will decrease its negative effects in the future.

The weather phenomenon – the rivers swelling, the downpours, the floods – are a cyclic, recurrent reality. We know that, in some years, we will have these weather anomalies again, and that they will become more and more frequent. What we need, then, is to have a climate change authority; a high-ranking official with power who does not only work on reconstructing, but also on preventing.

We are a very diverse country; one of the 12 countries in the world with 70% of the planet's biodiversity. We can produce virtually anything during the whole year, while, in other places, due to climate related reasons, they cannot. These climate characteristics put us in an advantageous situation compared to Europe, North America, China, Russia and other regions of the world.

Our Amazon rainforest is a living laboratory in which we can install research and development facilities, placing ourselves at the forefront of biotechnology and genetic

engineering. We can transform the natural resources and give them an added value; create and chain specialized and highly productive clusters through production and development centers and technological institutes in different regions of the country.

The tool that will best allow us to walk through the path of success, of growth with innovation, is education. Humanity has achieved things that, not too long ago, seemed unthinkable. Little by little, science fiction is becoming just science. Our lives have become easier and more prosperous thanks to a large amount of small feats of crucial importance. During the last two centuries, there has been an expansion of “productive knowledge”, meaning the knowledge that is used to make the products that we use. However, this expansion was not an individual phenomenon: it was a collective one.

The most efficient way in which a modern society can accumulate large amounts of productive knowledge is through the distribution of its fragments between its many members. Nevertheless, in order to be used, this knowledge has to be reintegrated to the organizations. Modern societies are wiser and they thrive not because their citizens are individually brilliant, but because these societies altogether unite diverse types of knowledge that can also be combined to create better, more intelligent products.

Accumulating productive knowledge is hard. It is, for the most part, not available in books or online. It is engrained in the brain and in some of its more abstract processes. Thanks to the interaction with digital technology, today we are able to stimulate mental processes that, before,

were not activated that easily, and that can also make the creation of productive knowledge easier.

Peruvian education in the year 2050 must allow as many Peruvians as possible to generate productive, complex and sophisticated knowledge so they can create a better quality of life for themselves and for our country. This is what I call entrepreneurial education.

According to UN data, half of the world population is under 30 years old, and 26% is under 15 years old. This generation was born after 1986 in a new world: the world of Facebook, of cellphones and of the internet. For these boys and girls, the access to education may signify a bridge to the future, but not having such access may also become a great obstacle.

In Peru, 27% of the population is young. They are facing an educational system that we must change, replacing repetition with creativity and innovation. Every country now needs smart individuals who can think critically and are able to use technology.

However, there are some barriers. The student census shows that, when young people are asked about what they will do with their lives, only 35% answers that they intend to pursue a higher education, which means that the remaining 65%, due to different reasons, will only access secondary education (MINEDU, 2016).

The facts that only 14% of high school students understands what they read and that barely 12% can solve math problems are also worrisome. In spite of those

problems, the labor world continues to quickly change and transform, and young people are facing the Fourth Industrial Revolution, which mixes the physical, the digital and the biological.

The Fourth Industrial Revolution gives unlimited possibilities to millions of people connected to cellphones with processing power, storing capability and access to knowledge. These possibilities will be multiplied by flares of emergent technology in fields such as artificial intelligence, robotics, the internet of things, autonomous vehicles, 3D printing, nanotechnology, biotechnology, science materials, energy storing, and quantum computation.

We must shape young people for work but, fundamentally, for life. It is in everyday life where the way we are and the way we relate to others resides. Work dignifies human beings, but the human dimension is based, besides work, on values, trust and knowledge. To sum up, education must serve the empowerment of the individual and their transformation into an agent of change.

Why not think about a dual education, as they do in Germany, in which two thirds of all young people who graduate high school choose the type of higher education that prepares them for a technical career. Besides being prepared for work and receiving health insurance, they also take complementary language or social sciences lessons.

We have to learn how to see the world from a different perspective, using our resources and highlighting them, like Costa Rica, which produces almost 93% of its electricity

with renewable resources - hydroelectric, wind, solar and geothermal energy, biomass – and has 30% of its territory protected as a natural terrain. Seeing biodiversity as a resource associated to research, but also to tourism. We have to go beyond historic and archeologic tourism and open new paths towards culinary, adventure, natural life, medical, entertainment and great show tourism.

The time of the future is today, and its speed is exponential. There is no time to waste. Dreaming with a more prosperous society entails calling the most capable people, with no political or any other type of distinction. Because Peru is not just a problem; it is also an opportunity.

**Raúl Diez Canseco Terry**

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TODAY'S WORLD

The beginning of the twenty-first century was the peak of the golden age of modern globalization, carefully constructed throughout the twentieth century, overcoming the Great Depression and the Second World War. In spite of the Asian crisis of 1997-1998, and of other financial crisis in emergent countries, globalization intensified so strongly in the '90 that for Fukuyama it meant the end of history.

The decade that preceded the great crisis of 2008-2009 was, in many ways, a golden age of contemporary economy. The commerce of goods and services and the flows of capital across borders grew to reach unprecedented levels. Also, it was the start of a process of economic convergence between developed, emergent and developing economies.

For over 100 years, the group of developed countries – led by United States, Western Europe and Japan – had consistently generated 60% of the world production. It seemed as if the large contributions these groups of nations

made would forever be. Their economic superiority was not affected by the industrialization of the Soviet Union or by the upturn of some Asian countries.

In 1950, the contribution of advanced countries to the world GDP was 62% in terms of purchase power parity and 22% in terms of world population. Four decades later, that contribution to the global production was the same, even as the population of those territories had dropped and become only a 15% of the entire world's population. In fact, the countries that represented the majority of the world's population seemed doomed to a minimal contribution to the global GDP.

There is no doubt that this was the century of the United States. The strongest economy and the communication revolution changed forever the habits of humankind. The colossus of the north invented the phone and mass entertainment. The radio and then the television invaded the homes. Advertising and consumerism appeared.

By the end of the last century, according to Fortune Magazine, a publication that specializes in the analysis of business corporations' performance, the largest and most admired one could be found: Walmart, which yearly sales were 240 billion dollars and which business dynamism employed 300 thousand people. The richest man in the world was also in Uncle Sam's country. According to Forbes – a publication which measures personal wealth –, Bill Gates, the chairman of Microsoft, is the magnate who's patrimony was estimated at almost 41 billion dollars by the end of 2003 (today he is worth 110 billion). On top of

that, 47% of the richest people in the world were in the United States, with 222 moguls.

In the beginning of the twenty-first century, the United States consolidated its place as a world leader, although Japan, in spite of the financial difficulties it had in the previous decade, was challenging its might, and China was quickly making its way up. However, this country was still a mystery because its population – approximately 1.3 billion people – longed for a change in the political system. For many, what they did or didn't do would determine the future of humanity.

As computing and telecommunications became cheaper and more powerful, like the already low costs for transportation and the decrease of obstacles for commerce across borders, the dispersion of production in internationalized supply chains became economically attractive and, in many cases, it ended up becoming the only way to remain competitive.

This geographical segmentation of production, based on incessant flows of investment, technologies, finances and transports, personal experience, high efficiency information and logistical services, was possible thanks to the speed and reliability and profitability of the information technologies (IT).

The consequences of this transformation in the internal division of labor have been diverse. On one hand, companies from developed countries can now combine their most advanced technologies with a low cost work

force in order to increase their competitiveness. On the other, developing countries that are entering the supply chain can become industrialized more quickly, although they lack the strong industrial foundation that used to be necessary.

The dynamic of these economies drives, for example, Nike – the giant that sells sports items – to not have a physical plant anywhere in the world. This company doesn't pay the workers directly either. Their designers in the United States send the models to workshops in Asia, to whom they buy their production with all the commercial advantages that this implies. Furthermore, during the last few years, Nike stopped working with factories in countries where the wages had increased and moved their orders to other places in Asia such as China, Indonesia and Thailand, where the value of work is lower, and workers' rights are flexible.

Another case is Disney. Some of the action figures associated to their movies, with which kids play, are made in countries such as Haiti, where the average wage is 2 dollars a day. We conclude that the cost factor is decisive when focalizing the production of a good and competing.

The new organization of production – boosted by the internet and other IT tools – is not the exclusive domain of great corporations. Internet has been boosting transformations that encompass every value chain in almost every sector and in companies of almost every type. In fact, its impact has been more significant in micro and small businesses and in startups. Currently, a small company can have a global reach from its creation.

On the international trade front, the comparative advantage of the countries is less and less linked to the finished products or the raw materials, and more and more linked to the specific tasks that form the industrial, commercial and financial processes that are necessary to manufacture and distribute the goods that the consumers demand. What is interesting is that the services or tasks that take place before or after the manufacturing itself are today an important part of the value. This is called the smile curve.

Every product sold at the end of a supply chain is the result of a conjunction of capital, work force, technology, infrastructure, finances and commercial transactions of many countries. This has led to a deep transformation in the way we see, study and measure the evolution of global economy.

Technological progress has not only produced a fundamental change in the production and marketing patterns, but also a redistribution of the economic power all over the world. The same happened already during the Industrial Revolution. In only a few decades there was a great displacement and a concentration of economic power in a few countries, and those who knew how to better navigate the new rules of the game became advanced in the nineteenth century and even in the twentieth century.

In the current economic rearrangement, many developing countries have reached an economic growth rate that is higher than that of a rich country, but the case of China stands out. Thanks to the elevation of the average growth rate of its GDP for more than two decades, it has been





The G-20 summit in Buenos Aires was the thirteenth meeting of the highest level of representation of the G-20, which corresponds to the heads of state. The final document was signed by all the members on December 1 under the title "Building Consensus for Fair and Sustainable Development" and includes thirty-one items regarding international trade, climate change and the protection of the environment, technological change and the fight against corruption, as well as educational, health, gender equality and work protection goals.

ten years since China became the second largest world economy when, in 1990, it was the tenth.

Now, since the first decade of this century, emerging or developing countries are responsible for more than half of the world production. In spite of the fact that the per capita income is still substantially higher in rich countries, that historical gap has decreased significantly.

There are two evidences explaining the closing of this gap. On one hand, the group of rich countries has registered a slower growth and, on the other, the acceleration of the growth of developing countries has increased. This acceleration has been boosted by the countries that, after being closed economies for many decades, started making efforts during the '80s to become part of the global economy.

Thus, in less than a quarter of a century, a group of developing countries – that have more than 55% of the world's population – doubled their GDP and opened themselves to foreign direct investments (FDI), with which they managed to increase their GDP per capita twice as fast as rich countries'. The most important part is that, in spite of demographic growth, both the number and the proportion of inhabitants living in extreme poverty decreased.

These countries managed to accelerate their industrialization inserting their productive capacities into the global supply chains issued from the IT revolution. Before this revolution, industrialization depended on scale economies, vertical integration, clustering of the production

processes in a small number of countries. For its part, international trade consisted in the sale of goods produced in one country to clients that were in another country: this means that it was, in practice, bilateral commerce.

Already in the eve of the financial crisis of 2007 and 2008, China was the second largest world importer of goods, the third importer of commercial services with the biggest growth, and the main receptor of the largest flows of foreign direct investments (FDI), even surpassing the net flows that enter the United States. China's growth accelerated the new production pattern and international trade, thus creating unprecedented opportunities for other developing countries, which also allowed developed nations to have new and wider trade channels for their products, investments and technologies.

The expansion of the economy helped millions of people to overcome extreme poverty. Even though Latin America registered the highest rates of growth in history, the region remains the most unequal in the world according to the United Nations Economic Commission for Latin America and the Caribbean. That growth allowed the expansion of the global savings reserves and contributed to the loosening of financial restrictions, particularly for the United States. Paradoxically, this aspect of Chinese success was, in part, what led to the financial crisis, caused by the recklessness of private financial institutions – specially American ones, but also European-, the world macro-economic imbalances and the permissive tax and monetary policies that favored the insatiable absorption capacity the United States had

of the vast foreign savings reserves. These circumstances caused a massive economic disaster.

Just as many observing people had warned us, it was just a matter of time for the global macro-economic imbalances to cause trouble, and that was indeed the case. Although the crisis originated in and extended from the financial markets of the United States, it soon became obvious that all the economies of a certain size were suffering from it and that they were not fully innocent, since they had allowed the roots of the crisis to grow so deeply.

The world is not and will not be the same after another Black Monday: September 15, 2008. In the first place, the Great Crisis did not only generate significant production falls during the years of its acute phase; it also had a negative impact on the world production trajectory, which turned out to be permanent. The persistent deceleration of global growth is today a part of the new reality. We live through a period – and it will probably last for a long time – of reduced or disappointed expectations.

Failure when increasing the multilateral liberalization and the rising protectionism were already detrimental for global growth, but an even worse landscape has arisen because of the trade wars. This horizon was unthinkable until now, but it seems to be materializing.

The fluctuations in the tariff war and the negotiations between China and the United States, as well as a future front with the European Union, focus the international organizations' doubts on the future of global economy. The last meetings of 2019 managed to reconcile the points of

view of both giants, but it is feared that, as it has happened before, they will end up in nothing or with new rounds of tariffs and vetoes to Asian businesses.

This uncertainty and lack of clarity has caused a loss of trust and the reaction of the markets. In a trade war, everybody loses. According to the calculations of the International Monetary Fund (IMF), the losses caused by the trade war would reach 700 billion dollars in 2020 only.

For now, the impact of the trade war has been limited to the commercial changes themselves, which growth has practically been paralyzed, but there is a huge risk that the services and consumption will soon be affected worldwide if the situation extends. As if the trade front was not enough, there are other events that come into play, such as Brexit and the geopolitical tensions in the Middle East, with the following increase in the oil price.

In another front of the trade war, the IMF has criticized the attack of the United States against Huawei and the Chinese technology companies that may, according to them, put at risk their national security. The veto they approved against the Asian company could force the governments and companies to choose between one “side” or the other; a “digital Berlin Wall” that would force countries to choose between technological systems.

The future of globalization and global growth should not be the only worry. Just as worrisome, if no more, is the adoption of nationalistic and populist stances at the expense of multilateral diplomacy, when dealing with great geopolitical issues, an approach that – it is not

farfetched to assume – might lead to belligerent situations with devastating consequences for world economy.

In the range of risks, not everything is a trade war. In such a scenario, deposits have no profitability, bonds have negative rates and even companies have to pay to save their money. Investors risk more every time to get a good return of investment, and thus reach the performance they have fixed as a goal.

The alternatives for investors also include looking for opportunities in emerging countries, but the golden age in which they were the motor of their regions and dreamed of fighting the hegemonic economies for the power has been left behind. The exponents, grouped under the acronym BRICS (Brazil, Russia, India, China, South Africa) no longer cause such admiration and capacity to push as they used to. In China, growth is gradually decreasing in comparison to the quick pace it had for many years and, in South America, many economies are suffering, such as Argentina and Venezuela.

It is obvious that the forecast for most of the economies, even at the sight of the most relatively benign numbers of the production growth of 2017 -2018, is very different from the forecast from only one decade ago. Even though the list of factors that are suspected to contribute to the erosion of economic growth perspectives is extensive, we must pay special attention to the matter of the possibility for globalization – an important growth motor – to have already reached its maximum growth and could even be in danger of reversing.





II

IS GLOBALIZATION THE  
MOTHER OF ALL WOES?

The collapse of the subprime mortgage market during the summer of 2007 in the United States, which became a crisis when Lehman Brothers fell in the early morning of September 15th 2008 did not only mark the end of the so called “Great Moderation”, but it also meant the beginning of an age of instability and distrust.

The world crisis and its economic and political consequences have exacerbated a problem that has always come with globalization: it is blamed for things that have gone wrong in the world and its benefits have been downplayed. The anti-globalization reaction seems to be reaching historically high levels in many places.

This way, the beginning of the twenty-first century surprises us amidst the gestation of a new society. For emergent countries, from an economic point of view, all habits have fallen. However, others have not, such as the commercial walls that stop a quick insertion in the current times.

These are the barriers that give birth to anti-globalization movements and social convulsions expressed around the



world forums during the last years of the past century. Due to its strong vindicatory tone, protests create a back to the past sensation or, in any case, they show that exclusion is the risk of globalization.

Economic historians relate that, in 1926, when a general strike hovered above England, John Maynard Keynes wrote the ending of *Laissez Faire*, one of the polemic booklets of the twentieth centuries. There, it explained how the free game of the market forces had not been able to establish harmony between both of its goals, efficiency and justice and, instead, it had given way to an age of economic uncertainty and growing political conflicts. Keynes made a case for a political agenda that would tackle the issues of misery and poverty, as well as the institutional means to carry it out. This appreciation is still proclaimed around the world.

Many social happenings have created confusion in our society. For example, given the loss of autonomy in many states and governments due to world financial and political powers, decisions that are major for all citizens are made in caucuses, disregarding local influence and other old procedures. This was revealed at world conferences during the last decade of the past century: Rio de Janeiro in 1992 (environment), Vienna in 1993 (human rights), Cairo in 1994 (demography), Copenhagen in 1995 (poverty and social development), Pekin in 1995 (women) and Istanbul in 1977 (urban growth).

In those times, globalization was not on the world agenda. It was, however, in the Millennium Summit, organized by



The presidents and representatives of the 19 countries of the Rio Group celebrated their seventeenth Summit (2003) in the city of Cusco, where they signed the document "Consensus of Cusco" in front of the giant rocks of the Inca fortress of Sacsayhuaman. Its goal is to encourage the strengthening of democracy and an economic development that is compatible with the reduction of poverty.



World Summit of small and medium businesses' leaders that took place in Guangzhou, China (2013).

the United Nations in New York in the year 2000. It was the first time that an event such as this one generated as much expectation or convoked as many heads of state: a total of 180 who, in spite of having different ways of thinking, opposite interests and different cultures, defined poverty, unemployment and the environment as the issues that caused the social conflicts with which humanity entered the new millennium.

In the end, the real expectations of millions of men and women were let down by a declaration qualified as a “song of good intentions”: the summit informed that the globalizing process sets the tone and defines today’s world issues, and that we will live in a complex, controversial world.

There are circumstances that should be reasons for deep concern. One of them is the fact that multilateral efforts for liberalizing commerce have failed miserably for many years, as shown by the example of the Doha Development Round, which no longer exists today in spite of the G20’s efforts for making it last after the crisis. Another one is the increase of protectionism that had existed discretely for several years, once again despite the solemn intentions of the G20.

Up until the first five years of the current century, economic globalization had been successful, especially for the United States and rich or industrialized nations that saw –some more than others- their economies grow steadily. However, on the flip side, poverty has not decreased in many other regions. It is paradoxical that, in an age when humans know the genetic code of life and can

communicate in a matter of second with any corner on the planet, there are still millions of people who live in extreme poverty, away from the benefits of science and wealth that those technological advances create.

A four year old document by the World Bank regarding world development called “The differences between the rich and the poor are not only made of money”, showed a sign: “the arithmetic of the matter is brutally simple. If less than 100 people control the same amount of wealth as the 3.5 billion poorest people on the planet, the result can be expressed with only one word: inequality. Our world is characterized by great poverty amidst abundance. We also have to take into account that the gap is not only defined by those who have more and those who have less, but also by the access that people have to water, education, health, and other basic services.

Is globalization the origin of this situation that seems to create chaos and anarchy, opulence and misery? For some, the answer is yes. Others have the opposite opinion: they claim that globalization is a source of opportunities for small countries and we must continue to bet on it.

After becoming a part of the World Trade Organization (WTO), China stated that, even though joining the global village had both costs and benefits, the first surpass the latter. The country with the largest population in the world ended decades of isolation in the ‘80s under Deng Xiaoping’s leadership. India, with a population of 1339 million, started its reforms after China. Today, thanks to it’s preference for science and open commerce, it stands

out in the IT field. Its engineers and business people are in demand in the world market with state of the art software. According to a report by the international consulting company PwC, India will become the second largest economy in the world after China, surpassing the US, in only two decades.

A survey made by Gallup Argentina, published in La Nación journal in June 2001, showed the perception people had of emergent nations. Back then, half of the Argentinian population thought that globalization was “bad”, and 23% said it was “something good”. The poorest and least educated sectors were afraid of globalization because they perceived it as a source of unemployment and instability for businesses. Only 23% of the population thought that it offered new markets and better opportunities for their products. This perception was pretty much the same in all Latin American countries.

In many countries, the consequences of free trade, such as a more unfair distribution of profit, wage stagnation and the marginalization of a large part of society from the benefits of globalization, are situations that have caused people to protest.

The year 2019 has been the year of protests. Whether it was in Chile, Hong Kong, Algeria, Lebanon or France, citizens full of rage and with no leaders went out to the streets, resuming the fight of the Indignados movement that took place at the beginning of the decade against a political system, the elites and inequality. Wearing make up like in the film Joker, a character that feels



Amity University was founded on March 24 2005 through the 2005 Uttar Pradesh University. In September 2015, it signed an agreement with the BSE, a subsidiary of the Bombay Stock Exchange, in order to begin a long-distance 2-year MBA program in the world financial markets, open to students and working professionals. Amity University is classified as one of the best in pharmaceuticals, management and engineering according to the Times Higher Education World University Ranking.



marginalized, or wearing the mask from the movie *V for Vendetta*, thousands of people denounced similar problems in Bagdad, Beirut or La Paz, causing the fall of five heads of state or governments. From one corner of the world to another, all kinds of rebellions are rumbling. These protests have in common the fact that they arose horizontally and with no leaders, with no organization or structure at first. What triggered the mobilizations may be relatively abstract, such as the extradition law in Hong Kong or, more pragmatic, such as the rise in the subway ticket in Santiago, Chile, or a new fee for Whatsapp calls in Lebanon.

Even though 2019 seems to be a very important year when it comes to mobilizations, this is not unheard of or exceptional. Let us remember that, in the end of 2011, Time Magazine choose “the protester” as person of the year. Outraged protesters expressed their rejection to the economic dysfunctions revealed by the 2008 crisis that were transferred from the elites to the less powerful through austerity, unemployment and citizen insecurity.

Today, revolts have the internet and the amount of websurfers has more than doubled it 10 years, reaching 45 billion people. In Hong Kong or Barcelona, protesters share instructions through secure messaging systems, and even with applications that need a QR code to be downloaded. Even though the weight of the net is not dominant, it necessarily attracts those who are more connected – meaning, young people –, but the percentage they have in these mobilizations is not systematically verified.

The French Yellow vests are often older people; the Chilean movement includes many retired people, the protesters in Barcelona or in Bolivia are people of all ages. The experts claim that these revolts are inspired on the movements that took place at the beginning of the decade: the Arab Spring, which started in the end of 2010 in Tunisia, and Occupy Wall Street, in September 2011, against austerity and the abuse of financial capitalism.

In democratic regimes, the belief in the capability of democracy to change life is inevitably eroded. The people then think that their salvation is in mobilizing, meaning in the overthrow of the people in power. They are revolutions for dignity. In only a few weeks, these movements triggered the exit of Abdelaziz Bouteflika, who stopped running for office for the fifth time in Algeria. It also triggered Omar Al Bashir’s exit, overthrown in April after 30 years in power in Sudan, or even the resignation of Bolivian president Evo Morales, the Lebanese first minister Saad Hariri and his Iraqi counterpart, Adel Abdel Mahdi. In Hong Kong, the extradition law that the protesters were criticizing was removed, and China announced it would “improve” the chief of the executive power designation process, two of the demands of the mobilization for democracy. Repression, however, was atrocious in some places, such as Iran, where, according to Amnesty International, at least 208 people died in the mid-November protests in 2019.

Politicians of every ideology hurried and pointed an accusing finger at external forces, in the first place, and, specially, at free trade as causes of adversity, instead of

analyzing and assessing the internal policies mistakes or omissions that lie in such evils. Governments prefer blaming the different dimensions of globalization – commerce, finances and immigration – for phenomena such as the insufficient growth of the GDP, wage stagnation, inequality and unemployment before admitting failure when passing regulatory laws. Open markets, defended in times of abundance as the quick way to prosperity, are now to blame for every evil when things get economically and politically difficult.

The most extreme cases of this position are populist politicians. The populist politician has a strong tendency to blame other for their problems and failures more than any other. Foreign companies that invest, export or migrate to a country are their preferred target and the cause of all national evils. This is why criticism to free trade, to investments and to immigration are an essential part of the political ammunition of the populist. For example, in Latin America there have been lasting populisms, as is the case of Venezuela, but the damages it caused have been limited to the countries that had it. Unfortunately, the exception to this rule may be the United States today, because neo mercantilism may have terrible repercussions on globalization, economic growth – including its own – and international peace and security.

American neo mercantilism has the potential to cause huge damages to the global economic interdependency built during almost three quarters of a century. But, even optimistically speaking, in the following years we will have to tackle other issues if we want to avoid the decline

of contemporary globalization and make sure it remains a powerful motor of prosperity, peace, and international security as a whole.

Part of an explanation for these protests can be the simple fact that the growth of world GDP and the growth of nominal wages remain under those of more advanced countries and, also, in emergent countries during the five years prior to the 2008-2009 crisis. Other causes are the increase in profit inequality and the phenomenon of the “squeezed” middle class in rich countries, as well as the worry caused by automation. It is expected for the latter to affect the structure of their labor markets.

The twenty-first century has not brought hope for most nations, but globalization is the fastest way to access technologic modernization and higher standards of living. Capital, knowledge and technology are the reasons why countries choose this process.

Even though the economic dimension of globalization acquires a spectacular manifestation, we have to understand and judge it through its political, social and cultural consequences. In these three fields, humanity shows dramatic and irreversible changes. The universalization of democracy, the primacy of human rights, the defense of the environment and transculturalization are aspects that defined the face of the world.

On the other hand, from the moment the streams of knowledge start flowing at the same time in all seven continents through the virtual speedways, we become

participants of the same events, we become protagonists of similar lifestyles, we adopt similar behavioral patterns and we value our behaviors, even from the same ethical codes.

Thus, global interdependence creates new agents, comprehensive economic interactions, new political relations and complex juridical implications. In fact, during the global process, many of the political issues traditionally considered of “exclusive jurisdiction” are now discussed in multilateral forums. Some concepts, particularly the fundamentalist ones, are now relegated to the old trunk of memories, and the institutions that were supportive for many years are no longer adequate. It is necessary to replace or adapt them to the new trends shaping the future. A prove of that is the creation of the International Criminal Tribunal and the World Trade Organization, which developed from the General Agreement of Tariffs and Trade, and worked until 1994.

The certainty that commerce is a driver for growth – particularly in poor nations – and that it must be considered in the international trade rules is now accepted by the international community, and it could not be in any other way. Antidumping rules, the exemption from industrial tariffs and e-commerce, among others, must be included in a global approach.

Another adaptation process is taking place in the World Bank (WB) and the International Monetary Fund (IMF). In their latest assemblies they urged rich countries to increase their assistance levels and to open their markets

to products (agricultural and textile, basically) coming from poor nations. They also agreed to create a work division that will allow the WB to design policies towards the improvement of the quality of life and poverty reduction, and the IMF to promote financial strengthening oriented towards economic growth.

According to specialists, if industrialized countries would completely open their markets with no subsidies, developing countries could export billions of dollars a year. Reality shows that countries do not only use tariffs, but also quotas and antidumping penalties in order to avoid that third world country manufactured products enter their markets.

President of the World Bank James Wolfensohn (1995-2005), referred to the necessary change of approach of the IMF so that numbers “would not dominate” humanity. “If we don’t achieve more equity and social justice, there will be no political stability and, with no political stability, no financial contribution will grant us stability”, he said. The mistakes that caused the crisis in South East Asia, in Russia and in Argentina, and in some other countries, where the IMF was accused of making the situation worse with its adjustment recommendations, have led to the redefinition of its role.

Instant communication is the brain of the global revolution. The news of American President Abraham Lincoln’s assassination, which took place in 1865, took 13 days to reach Europe. The Hong Kong Stock Exchange crash, in 1997, which caused South East Asian finances to



plummet, took no more than 13 seconds before causing panic in the world financial centers. At the beginning of this century, the world watched –live– the worst terrorist attack in modern history: on that terrible Tuesday September 11, 2001, two planes crashed into the Twin Towers in New York, and another one into the Pentagon, in Washington, resulting in thousands of deaths and the loss of millions of dollars.

Television, digital platforms and high-speed transmission reach every corner of the world, to global audiences. According to data of the audience of the official FIFA World Cup in 2018, 3,572 billion spectators – more than half the population over 4 years old – watched the soccer competition. Technology reduced the planet to the size of a village.

New communications have destroyed distances, and cell and satellite phones have made people accessible from any place. The microchip, invented in the US, accelerated the course of the communication revolution, and the software modified the behavior of people. With microcomputers, email, personal computers, computer games and internet, the world transformed, and it is no longer the world our grandparents had. These issues, as well as economic, political and social global movements, are constantly affecting human relations and, no doubt, they create a new way of social organization in which we cannot survive isolated, because the economies are intertwined and the multi-cultural approach will force us to work, trade, think and feel together.



Ban Ki-moon is a South Korean diplomat who, from January 3rd 2007 until December 31st 2016 was the eight general secretary of the United Nations. His main legacy is the 2030 Agenda for Sustainable Development, in which fighting poverty is included.

Also, the cultural aspect has a new presence in many world issues. Common languages and cultures are keys that open great spaces of mobility and interdependence to citizens. We feel that we are a part of a community with the same cultural roots that wants to strengthen its bonds, dreams and ideals, in search of a post-modern identity which will allow us to relate to others.

For the first time in history, the world is multi-cultural. Most of us listen to and watch the same thing at the same time or we communicate at the speed of light with any corner of the world, while hundreds of satellites – installed in outer space – distribute the information and clear images that are received by over 5 billion unique cellphone users on Earth.

Young people wear the same jean brand or listen to the trendy rock or rap music. They get excited about Burger King, Pizza Hut, KFC products, or about Netflix, Fox or HBO movies, for sneakers or polo shirts. Homogeneity somehow imposes itself; values renovate, permute or transfer from one place to another, embedding in other cultures, breaking grounds and old family molds, changing ways of life and tastes. The world cultural current will not stop and it will continue to impose new rules, trends, behavioral changes, etc.

There is, however, in the middle of this turmoil, a difference that consolidates itself: freedom. The century started with the reaffirmation of this value as a source that generates wealth –both moral and physical– and as a driving force of the organizational structures. The recurrent question is: does freedom entail the loss of our identity? Indubitably,

it is affected by globalization but, among some negative issues it may transmit, there are also some positive ones. Based on its integrating effects, the outcome will be positive.

When all nations are economically integrated, local-national markets disappear and goods and services appear at a global scale. This is how the element that characterizes globalization emerges: competition. This will be a determining factor in scale economies.

Encouraging more effort and promoting different approaches in scientific challenges, competition stimulates new discoveries, which did not happen in previous commercial expansions. Globalization supposes the assumption of new challenges amidst fierce competition. Today, economies globalized under the “competitive advantage” principle widen the production process around the world. In this dynamic, companies use every possible strategy in order to stay one step ahead of their competition, because consumers are constantly bombarded by international brands’ products and services through media. For example, everybody can now see the concept of not having a boss, working from home, from a café, from the car, in a collaborative economy. This is also called a gig economy.

No company represents this change in work life better than Uber, which is part of a wave of platforms that offer new ways of purchasing, selling, renting and temporarily hiring others: instead of salaried employees, independent workers are paid by consumers to perform a specific task. Ultimately, economies are market networks formed by

producers, service providers, merchants and consumers. The base of the globalization process is that, on one hand, there are businesses where there are markets and, on the other hand, there is the capability to manage a company using the opportunities and resources in order to obtain more profit at a lower cost.

Unlike before, when goods were manufactured according to the taste of business people, now they must adapt to consumers' taste, and the right way to do that is by offering quality products and services at a competitive price. The price factor is decisive in the global market. Facing this challenge requires having an efficient line of work with differentiating elements so the products and services are acquired by global consumers.

According to Brazilian economist Eduardo Gianetti, globality can be explained from, at least, three elements: first, the fourth revolution, which includes search technologies, processing, diffusion and transmission of information, artificial intelligence, and genetic engineering. Second, the formation of integrated free trade areas (economic blocs). Third, the growing link and independence of financial markets on a world scale. Globalization is one of the essential budgets of the twenty-first century entrepreneurs' strategic thinking. This does not mean that other local and regional phenomena and social realities must be ignored.

If globalization means competition, what makes it work? The reason is simple: the process is more than just changes and transformations. It goes intrinsically together

with creativity, a fundamental value of modernity and an essential value of technological capitalism. However, betting on globalization does not mean accepting the "law of the jungle" or anarchy, or renouncing the human capability to govern the world we live in. It is exactly the opposite: world governance, the possibility to channel it and manage it so its impact will not deepen the gap between the rich and the poor, between opulent and pauperized nations. Therefore, it is about creating conditions to humanize globalization and put it at the majorities' service.



Blockchain  
making  
transactions  
safer and faster



REWRITE TOMORROW



III

DIGITAL ECONOMY

Twenty years ago, Thelmy sent an e-mail to a North American company based in New York, United States, asking for a back support for his mother, who had a problem in her spine. Within seconds, the main office confirmed –also via e-mail – that they had the product, asked for his credit card number to charge the corresponding amount (50 dollars) in order to receive the product in Lima the following day.

Silvia, a 17-year-old girl, writes and laughs in front of a personal computer in a public pay computer place. She has become friends with a Spanish boy her age and they “chat” once a week: they talk about their favorite singers, their walks, the movies, their studies, etc.

The president, who has breakfast with very poor children one day in October, is pleasantly surprised because, in spite of their mothers’ extreme poverty, the kids have cellphones, and he uses them to tell the mothers not to worry, that their children are with him...and in the Governmental Palace.

Juan Carlos, a high school student, has been using some educational portals online as a bibliographical source for the past two years. This is why he frequently uses a public pay computer around the block so he can do his school homework at a low cost and at a high speed.

Although it may seem obvious, after seeing these cases we have to ask: why should we thank the geniuses of telephony and Bill Gates and Andy Grove, respectively from Microsoft and Intel? The answer would be: for showing us the way to the future, a way with an unsuspected reach and, because, putting their contributions on other levels, both of them became hegemonic exploiting key points of IT architecture: the operative system and the microprocessor which, in a little over two decades, changed the history of economic development.

The practical application of these components brought the IT and communications revolution, and this revolution changed many aspects of social dynamics, specially the economy. In this process, electronic trade and markets have substantially modified the productive processes, distribution channels and the way we do business.

The internet is the star of this very new way of doing things (e-commerce, entertainment, educational help, technological information, etc.). It is a net formed by thousands of little nets interconnected through computers, telephone lines and other communication devices that help keep them united. We can see its impact thanks to two facts. The net was the star of the spectacular and sustained growth of American economy during the '90s, and in 2002

it became the most important communicational instrument of all times.

Starting 2001, about 5 million emails were sent every minute; every hour, 35 million voice messages were delivered; every day, 40 million users connected to the internet; and every 100 days, the traffic on the web would duplicate. Starting 2003, there was even more movement.

### **Today: 2020**

Up until 2018, 187 million e-mails and 38 million Whatsapp messages were sent every minute, and 481000 Twitter messages were exchanged.

Google and Apple are working on self-driving cars. Tesla has them already available and they work very well. We could say that self-driving vehicles are no longer a sci-fi movie kind of thing and have become a reality that is available for everyone to have.

We have seen the evolution of drones for several years. Those flying objects have already come into play in several wars (for example, the case of the Iranian General Qasem Soleimani's death in Teheran), and we can purchase them in any electronics store in all of its domestic versions. However, Amazon wants to go one step further: they want to do deliveries of the items that can be bought on their website.

Cellphones are able to recognize us by simply scanning our eye. Fingerprints are moving into the background, and

soon we will be able to unblock our cellphones by just looking at the screen.

The power to disappear is a recurring element in science fiction. It might not yet be possible to turn a human being invisible, but it is possible to wear invisible clothes thanks to a laser – the laser is in the clothes – that can reflect light and create an invisibility effect for the naked eye.

There are sunglasses that can show colors to people with color blindness, but let's go even further: they are working on glasses – they go directly connected to the brain – that can make blind people see. We also have smart glasses that can measure different blood levels, such as glucose, when we wear them, which is very useful for diabetic people.

Soon we will control every electronic device with our thoughts through another device implanted in our head that can interpret our brain waves and translate them so the devices will do what we want them to.

Finally, The Internet of Things (IoT). Who would have guessed that we would end up having every device in our home connected the internet? The fridge that does our grocery shopping, the lights that turn themselves on, the curtains that lower themselves when we are not home, the garage door that opens when we arrive. This is already happening.

We live in a world that is interconnected through complex networks, an electronic cobweb world where

knowledge flows and new ideas become democratic and grow. A world in which, through new technologies, jobs and businesses are reinvented, and constant, virtuous renovation processes are generated. Thus, people notice that not only can they perform better at their work, they can also cooperate with their employers; they can innovate in their jobs and not only receive orders.

Definitely, after electrical and industrial revolutions, “the web revolution” is another landmark, and it is nothing but the IT and communications technology setting the tone for the modern person's life. This revolution transformed the world social map, in which now there are new movements. These, along with other factors, are giving rise to a network-organized society.

The Industrial Revolution happened within 30 years; the network revolution, in 5. This means it stopped being a scientific reality to change our life habits and become a door opening tool towards a world of surprises and possibilities, as well as to a new business generation. At the same time, the “global technological shock” has generated what economists call “Digital Economy”, which is the empire of the internet as the engine of countries' growth.

The inhabitants of developing nations can improve their quality of life by building technological infrastructure and preparing their human resources to use the internet. The United Nations Development Program (UNDP) and other international organizations encourage underdeveloped peoples to adapt programs that have been successful





In 2018, the highest robot-per-worker level was registered in Germany, Korea and Singapore. However, in this country the employment rate is still high. Photo: Institute of Technical Education, Ang Mo Kio, Singapore.



in other countries and that use IT to create jobs, attract investments and sell high technology products in the global market.

In his book *The Information Age*, Spanish sociologist Manuel Castells says that this century is characterized by a revolution focusing on the extraordinary IT advancements, which modify the material base of society and transform the social landscape of human life at a very quick pace. According to Castells, a professor at the University of California at Berkeley, United States, three interdependent processes are creating a new society: 1) the crisis and restructuring of capitalism during the last 20 years; 2) the IT revolution, with the birth of a network society; and 3) the rise of new social and cultural movements. These changes have fundamentally altered the way we learn, work, and have fun. They have affected the way we live.

This way, production, consumption, circulation and their components (capital, work force, raw materials, management, markets and others) became organized through a network characterized by the integration of the media (oral, written and audiovisual), by the possibility of interaction between users, and by the facilitation of access to all social groups, opening new participation ways through social networks (Facebook, Whatsapp, Instagram, YouTube and others) with no distinction whatsoever.

This link network between economic agents and consumers leads to a global integration of financial capital, commercialization and distribution. This integration also generates a fierce world competition, where knowledge

and speed are the decisive factors for differentiating successful people or businesses from those who fail.

In the age of IT or the web, information itself and its creative process increase both. Creativity is specific to humankind. So, unlike the industrial era, in which energy and machines were the raw materials, in the digital area, they are information and knowledge.

Some distinguishing signs that complement this era are video calls, video phone, the access to high speed internet, file exchange, the cloud, private networks backups, taking multiple calls at the same time, internal networks, remote access and point-to-point connection, just to mention a few.

### **A new paradigm**

The primacy of IT and communications creates the new so-called Digital Economy, whose pillars are knowledge, ideas and innovation. This is different from the old economy, which favored the concepts of capital, work and land. Of course, both natural resources and machines will continue to be important, but the planning changes.

This new paradigm also entails speed, quality, flexibility and networks. In this process, commerce, markets and electronic relations generate a substantial change in the way we create and do things. It is the remarkable confluence of structural changes, technological innovation, financial and business dynamism and more and more flexible labor markets. Essentially, it is about the application of knowledge and new ways to do and manage businesses

on a wide range of global products and services. Nor accumulated experience nor capital are advantages any more.

With the value of the web and with knowledge as the guiding thread of the New Economy, universities and research institutes play a decisive role in the countries' economic development.

The new Digital Economy changes the paradigm that moved economic activities and places the web as the engine of development today and for the next few decades. Up until a few years ago, only big companies or transnational businesses could offer their products all over the globe. With the web, the middle man, frontiers and commercial barriers are over, giving growing opportunities to everyone. However, we need to know how to use the doors that are opening to us, research our field of action and determine how to buy, how to proceed, how to sell and what is the businesses' management style. In these times, we must understand that competition is in a portal, in a network, meaning on the internet. Why? Because the client "forgets" – at least in industrialized countries – the traditional way to buy. Soon, purchases will be massive online. In 2018, 862283 dollars a minute were spent online, which is a clear sign that the internet has definitely changed the intermediation map. This demands efficiency, particularly to small and medium companies.

One's own IT infrastructure is not necessary to be online. If I want to sell a good or service, it will suffice to reach out to the people who offer internet services and connections

and ask for a website for my company, and there! When the client searches what is offered online in my line of business, as if it were the old yellow pages, my product will pop up. This way we will be a part of the New Economy. This is a comparative advantage for the company, and it will be so while others stay behind, because the client demands speed. The client also demands to be treated as a person and not as a consumption object to which we offer what we are selling, the way it used to be before. The times when mass production turned the client into a consumption object have been left behind; today, the client assesses their options and chooses through a click. Just that; a click.

The internet is a very quick and massive information exchange vehicle. It is the key technology of modernity. It is, by nature, versatile, and it allows traditional information technology to expand to previously discrete industries, such as telecommunications, electronics, consumption. Internet has had a larger impact on the world than steam, electricity or the car had in their moments. The internet is growing at a vertiginous speed, invading every corner of human activity. It has revolutionized businesses, the media, politics, religion, health, education and the way we make money. It has also destroyed institutions and created new ones. It is the most powerful agent of change humankind has had in a long time.

The internet is not just websites; e-mail and other tools such as chats are also a part of it. Both are new ways in which people can directly communicate. They do not

replace the radio or the telephone, but they are simple, effective instruments that can send messages massively and in a matter of seconds. The internet makes financial and technical integration between clients and providers grow. Most electronic firms have access to their contractors' books regarding their products. Hewlett-Packard or, without going too far, national beverage companies can know, through the web and in real time, if their printers or their bottlers are functioning correctly. If this were not the case, they can solve it immediately. On the other hand, contractors have a direct, up to date immediate access to the information regarding their clients' sales. Some time ago, companies could separate innovation from production only in a few areas, such as standardized communications, digital design and quality norms.

Speed and simultaneity, among other advantages, are the most important characteristics of e-mail or electronic mail and chat communications, which also allow to communicate live and without borders, thus becoming a more human instrument.

There is only one certainty for the future: innovation will be a constant in all of our activities. If a person has internet influence, they do not only influence their circle, but the entire world. Our challenge as a country and as a society is to believe that we are capable of influencing.

The internet adds up to a world interweaving of websites and a very vast range of possibilities. It is the quintessential universal vehicle of information exchange and it is

constantly growing. It has become part of the everyday life of millions of people.

As connections increase, numerous websites that offer all types of services appear. Among them, those who allow to look online for houses or apartments, electric artefacts, cars and trips or, simply, give any kind of information. Google has 3.8 million searches every minute (curiously, this number is lower than the number of videos watched on YouTube: 4.5 million).

However, it would be a mistake to believe that the internet is a generalized habit. Connection numbers show that is a very effective cybernetic highway when it comes to sending and receiving information, but its potential use will take some time in emergent countries. Also, the decrease in the fees will cause that more people use the internet. Its success in rich nations is based on its accessibility regarding prices, quality, facility and utility. In Peru, the fee for 1 GB of mobile internet is 2.48 dollars, the lowest in all of South America, second only to Chile, where the price per GB is 1.87 dollars. According to the international portal [cable.co.uk](http://cable.co.uk) ranking, based on the analysis and gathering of information about 6313 mobile data plans in 230 countries, Peru is number 51. In Finland, the cost is 1.16 dollars. Considering this, there will be more changes in the way we think about clients. Products are more or less similar, distribution reaches the entire world, prices are more or less regulated by the market. The only frontier left for companies to differentiate themselves is the level of after-sales assistance and services they provide to

costumers. Consumers know they have options, and they use them until they find a company or business they find satisfying.

The development of the internet is transforming commerce, finance and many other elements of society. It gives countries special advantages, like the high technology field. It is not by chance that Seoul, Singapore, Tokyo, Hong Kong, Stockholm, San Francisco – Silicon Valley, Tallinn, New York, Pekin and New Songdo are, in 2019, the most surprising cities due to their facilities and inventions, and their technology in general. This is why not being in the network of networks will be compared to the story of that Napoleon's general who lost a battle for 57 reasons: first, he had no gunpowder. This was crucial; the other problems could have been solved.

The so-called New Economy has been changing the developed world, but Latin America is just beginning in this field. However, the growth potential in the region is incommensurable. Consultants have no doubt that, due to Latin America's demographic projection and increasing GDP, it will take the leap during this decade and it will position as an explosive growth market in the internet sector.

In that projection, Peru has stayed behind. According to the last measurement performed by Comscore, in 2019 there were 12.7 frequent internet users, whereas in Chile there were 13.3. Regarding the websurfers' profiles, they are mostly male (56.2%) and young: 69.2% of frequent internet user are under 34 years old and 48.1% are under

25. However, consumption habits are far from being productive: most of the time is spent on entertainment portals (6.2 hours), with Spotify on the first place, followed by the use of services and social media (4.2 hours).

What we need today is to shake off the lethargy we live in. it is not possible to remain isolated from change and the New Economy; to neglect them would be missing the train of progress and competition.

Encouraging initial impulses is the State policies' task. In more technologically advanced countries, the impressive development of online businesses had the universities, innovation companies and a massive risk capital formed by both public and private sources as a driving force.

In the next 35 years, Peru would need a 35 billion dollar investment in communication infrastructure for attaining an average OCDE connectivity, according to the Center for Latin American Telecommunication Studies. Due to its complex, particular geography, Peru needs public-private collaboration mechanisms in order to close the digital gap and to give the more isolated areas with no connectivity the infrastructure they need, so low income families would be able to access these services.



IV

WORK IN THE  
VIRTUAL WORLD

The interconnected, flexible, diversified, open and accessible-to-all media system marks the strengthening of virtual reality culture and creates changes in the foundations of life and the transformation of physical spaces.

The technological trend, or more precisely the virtual trend, creates opposition. The flexibility of processes allows for work instability and individualization to happen. Apparently, it has weakened the collective or societal element that used to be predominant in the industrial era.

Nevertheless, the strength of the technological change cannot be contained. Guru Nicolás Negroponte illustrates the difference between book and disc dominated commerce and bit dominated commerce:

*“Sending recorded music in the shape of plastic pieces, and the slow human management of most information in the shape of books, journals and video cassettes has turned into the instant, low cost transfer of electronic data which move at the speed*

*of light. This way, information becomes universally accessible”.*

We used to buy CD's with pre-selected songs; today, music is rented or downloaded online; no CD or USB cable required. Also, we access different global companies' musical libraries, such as Spotify. The web eliminates the intermediary. Another example: books –for example, Stephen King's books- or business catalogues can reach any place electronically. No need for printing. They can be translated to any language.

Probably internet will not disappear. Unlike discs and books, bits can live forever because they pass from one electronic medium to another without losing quality. Also, its cost could become insignificant, which is why we could say that certain elements of the internet will have eternal life.

When electricity became a basic economic force in the 1920's, similar things happen and it took some time for it to be accepted by societies. Just like back then, a few generations will have to pass for the network economy and modern technology dominance to take place. However, due to its speed, transparency and simultaneity in changes and transactions, new technologies are setting the conditions of commercial life, all of this while the traditional market becomes obsolete because it is slow and bureaucratic. In the New Economy, value is time and saving in transportation inputs. Neither agriculture nor electricity will disappear but, in modern dynamics, what creates work and businesses are the elements composing the net infrastructure and new technologies.

For certain analysts, from a value point of view, what matters is not accumulating and having, but experiencing and accessing. Thus, contacting is the value of a new economic system that arises and that will make us think about a new contract in which trust is an important value in the social fabric. Others think that the web is the new nature of capitalism, which reinvents itself every certain time. The same capitalism may last for decades and even for a century. According to this, people are still consuming pretty much the same elements, but now they can do it a different way.

A few characteristics of the current wave of technological support are remarkable. Digital technology allows companies to quickly increase or decrease their size by deleting frontiers and challenging traditional production patterns. New business models – companies based on digital platforms- are evolving from their condition of local emergent levels and becoming world giant, often with only a few physical, tangible employees.

The rise of markets based on digital platforms allows for the effects of technology to reach a large number of people as fast as ever. People and companies only need a broadband connection in order to exchange goods and services through digital platforms. This “massless scale” offers economic opportunities to millions of people who do not live in industrialized countries, or even in industrialized areas.



The changes in the skills that are in demand also affect these people. Automation gives more value to superior cognitive skills both in advanced and emergent economies.

Several facts have dominated the debate about work's changing nature. In the first place, technology is erasing companies borders, as shown by the rise of markets based on digital platforms. Through the use of these technologies, business peoples create companies that differ from the traditional business process, in which input is put in one side and products come out of the other. They generate value creating a web effect that connects clients, producers, producers and, at the same time, it facilitates interactions in a multifaceted model.

Compared to traditional companies, digital platforms allow to increase the scale more quickly and for a lower cost. The Chinese conglomerate Ali Baba reached 1 million users in two years, and accumulated more of 9 million online merchants and yearly 700 billion dollar sales for 15 years.

All in all, technology has created more jobs than it has eliminated. It has generated a higher level of job productivity in many sectors by reducing the need for workers when doing everyday tasks. However, that process has opened doors to new sectors that used to be left only for science fiction. As technology advances, companies adopt new production methods, markets expand and societies evolve.

Companies apply new technologies for improving the use of capital, for overcoming the information barriers, to hire externally and to innovate. The new technologies allow

them to manage their operations in a more efficient way: companies hire workers in a place where they produce parts, somewhere else to assemble those parts and, in a third place, to sell the final product. At the same time, consumers have a wider range of products at a lower cost.

In the current economy, market opportunities for every participant are arising. Some companies create new markets to exchange goods or services. Even small companies operate at a world level and grow more quickly. In the Alibaba platform in China, emergent business predominate. Societies benefit as technology increases options for service provision and for citizens to demand that their governments be held accountable for their actions.

Companies, workers and governments are creating new comparative advantages as circumstances change. For example, the Indian government invested in technical universities all over the country, and then it became a world leader of the high tech field, and Vietnamese workers develop their language skill, creating additional human capital that allows them to expand to other markets. However, in spite of the opportunities, there are disruptions; the decrease of the machine cost puts the workers at risk, especially unskilled labor performing routine tasks. This occupation are the most susceptible to automation. Displaced workers probably have to compete with other unqualified peoples for low paying jobs. Even when new employments are created, the reconversion is expensive and, often, impossible. Secondly, technology



is redefining the skills that are necessary for work, particularly because of three factors. First, the demand for non-routine cognitive and social skills seems to be increasing both in advanced and in emergent economies. Second, the demand of routine skills for specific jobs is decreasing. Third, the advantages of the combination of different types of skills seem to be augmenting.

People with more advanced skills are using new technologies better to adapt to the changing nature of their job. Since 2001, the employment proportion in occupations that require a high level of cognitive skills has increased from 19% to 23% in emergent economies and from 33% to 23% in advanced economies. The changing nature of work requires a set of abilities that will increase with the workers' adaptation capability and will allow them to go from one job to another.

Robots can complement workers who perform non-routine tasks that require advanced analytics, interpersonal or manual skills, or a high level of dexterity. For example, team work, relationship management, human resource management and care tasks. In these activities, people must interact with others based on tacit knowledge. It has been proven that tasks related to design, works of art production, doing research, managing teams, caring for others and cleaning cannot be easily automated. In Vietnam, regardless of the industry, workers who perform non-routine analytic tasks earn 23% more than those who don't perform analytic, interactive or manual tasks; those who carry out more interpersonal skills earn 13% more.



May, 2017. Macau's University of Science and Technology is located on the venetian Macao, on Taipa Island. It is the first university to be founded after Macao was given to the People's Republic of China. The Chinese Ministry of Science and Technology created two key centers on campus: the State Key Laboratory of Quality Research and the State Key Laboratory of Lunar and Planetary Sciences.

In advanced economy, work has been rapidly growing in highly qualified cognitive occasions and in those that do not require a lot of qualifications and great dexterity. However, there has been a change in the jobs that require middle qualifications, such as operating heavy machinery. This is one of the factors that may generate an increment in inequality in advanced economy. Wages for both medium qualification workers and low qualification workers could be reduced. In the first case, it would be because of automation, and, in the second one, the increase of competition.

In the end, technology is transforming the way people work and make work decisions. Instead of the long-term contracts that used to be the norm, digital technologies are making way for more short-term contracts, often through online job platforms. These sporadic work activities make certain types of jobs more accessible and offer more flexibility. The widest access to digital infrastructure – through portable computers, tablets and smartphones – creates great conditions in which services can thrive on demand. The examples go from sending food to clients' houses and car driving to more sophisticated actions, such as accounting, publishing and producing music.

Technology gives us the possibility to improve life conditions, but its effects do not manifest in the same way all over the world. The creative work process benefits all of society – and not just a few – specifically when the rules of the game are fair. In some sectors, workers benefit greatly with technological process, while in others they are replaced by technology and must retrain themselves in

order to survive. Technologies based on digital platforms create a great amount of wealth, but they put it in the hands of very small group of people. In the third place, the idea that all robots can replace workers generates frustration. In 2019, 1.4 new industrial robots were working. This means that the world total must ascend to 2.6 billion. However, the greatest level of robot to worker density is in Germany, South Korea and Singapore. No success. However, in these countries, employment rates are high in spite of the high robot prevalence. Because of this, certain specialists claim that the degree in which technology is a threat to human work is exaggerated. Some of the countries in which the industrial work proportion has dropped since 1991 show a shift towards services. However, it is likely that the automation will particularly affect younger workers. Even though the adoption of robots did not have a considerable net effect in employment in Germany, it reduced the hiring of new young people. This way, the effects of automation can be different in country with and older population compared to those with younger populations and foresee the incorporation of a great number of workers in the labor market.

Recent data shows that, even though technology may be replacing workers in certain jobs, in general it increases the work force. Technological progress pushes the direct creation of work posts in the technology sector. People use phones more and more, as well as smart phones, tablets, and other portable electronic devices to work, organize their finances, protect and heat up their homes, and have fun. Online interfaces encouraging this growth

are the work of employees. Given that the interests of consumers change rapidly, there are more opportunities for peoples with a training related to the development of mobile applications and designing a virtual reality.

Technology has also made job creations easier through online work or the incorporation to the sporadic job economy. Andela, an American company that trains software developers, created its business model about the digitalization of Africa. It has trained 20 thousand software programmers from different African countries by using free online learning tools. Once they were qualified, the programmers worked directly for the company or collaborated with some of its clients in different countries. Andela's goal is to have trained 100 thousand developers in 2024.

In the fourth place, many workers still perform low productivity jobs in developing countries, particularly in informal businesses that have access to that technology. The level of informality has remained high during the past 20 years, in spite of the improvements in business regulations: in over 70% of Sub-Saharan Africa, 60% in Southern Asia, and over 50% in Latin America. In Peru, informality has maintained at around 75% for the past 30 years, in spite all of the attention this issue has received.

Wages and productivity are significantly lower in the informal sector, where workers do not have a good education, medical insurance or social security. The ever-changing nature of work makes the reevaluation of the work necessary within the frame of the formal worker – informal worker gap.

In the fifth place, technology, particularly social media, influences on the perception of a growing inequality in many countries. People have always aspired to a better quality of life and to more participation in the economic growth they see around them. The larger exposure to different lifestyles and opportunities through social media – lifestyles that are often divergent – only exacerbates this sensation.

Conditions for sustainable, inclusive economic growth are good when aspirations and opportunities match but, when opportunities are unequal or when jobs and skills are imbalanced, frustration can encourage people to migrate or it can fragment society.

The refugee crisis in Europe, the migrants forced out of the Syrian Arab Republic by the war and the Arab Spring are remarkable manifestations of this perception. However, according to the World Bank, data on income inequality in developing countries does not corroborate such perception. In most emerging economies, inequality has decreased or remained unchanged in the last decade. Still, the fact that income inequality is not increasing – despite the opposite perception – is not a reason to celebrate, especially if we consider that 2 billion people around the world work in the informal economy sector, where many of them have no social protection. It is therefore necessary to create a social philosophy that will allow us to support the digital wave and allows life sciences and information sciences to converge on the design of a better world.





▼

HUMAN TALENT

The fear of “machines taking over our jobs” has worried people for hundreds of years, at least since the first industrial revolution, at the beginning of the eighteenth century. This revolution augmented productivity as well as the fear of unemployment.

There has never been a moment in which humanity has not been afraid of where its own talent for innovation may lead it. However, innovation has transformed life conditions. Life expectancy has improved, education and basic health services are basically granted, and the income of most people has increased. World population is healthier and better trained than ever. In 1980, in low-income countries, only 5 out of 10 children in primary school-age were enrolled. In 2015, this proportion had risen to 8 out of every 10 kids. In 1980, only 84 of every 100 children turned 5, compared to 94 out of 100 in 2018. In 1980, a child born in a developing country had a 52-year life expectancy. In 2018, that number was 65 years. However, there is still a very large unfinished agenda. Life expectancy in the developing world is still way behind rich



countries, such as the Republic of Korea, where a girl born in 2018 has more than an 85-year life expectancy.

In the eighteenth century, Scottish economist Adam Smith wrote: “The acquisition of such talents, by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a capital fixed and realized, as it were, in his person. Those talents, as they make a part of his fortune, so do they likewise that of the society to which he belongs”. This is still true in 2020.

Nelson Mandela once said: “Education is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor, that the son of a mineworker can become the head of the mine, that a child of farm workers can become the president of a great nation. It is what we make out of what we have, not what we are given, that separates one person from another”.

Automation is reconfiguring work and the skills it requires. It increases the demand for advanced cognitive and socio-behavioral skills, but the demand for specific skills in a particular job is decreasing. Meanwhile, skills related to “adaptability” are more and more in demand. This combination of specific cognitive skills (critical thinking and problem solving capacity) and socio-behavioral skills (creativity and curiosity) can be transferred from one job to another.

The efficacy of nations to face the demand for new work skills depends on the speed in which the aptitude offer

transforms. Learning in early childhood, tertiary education and adult education that are sought outside of the work place are becoming more important for being able to offer the skills that future labor markets will require. In fact, a large part of the children who started primary school in 2018 will work in fields that do not yet exist. Even in low and middle-income countries, many people work jobs that did not exist thirty years ago. India has almost 4 million app developers, Uganda, over 400,000 internationally certified organic farmers, and China, 100,000 data labelers. Meanwhile, many current jobs are changing, which results in new and sometimes unexpected skills. In 2020, it is possible for a marketing professional to write algorithms, and for a physics graduate to get a job as a quantitative operator in the finance sector. Workers that bring new skills to the corresponding technical specialties (such as teachers who are good at web design and ideal agents in macro data analysis) will probably be in high demand.

What are the least required skills? Studies show a polarization of the work field, meaning the expansion of high and low-training jobs, which comes with the decline of jobs that require a medium level of qualification. The demand for workers who can perform non-routine cognitive skills is growing, such as research that requires a high qualification. The same thing is happening with the relative demand for people that perform non-routine tasks that are easily automated, such as meal preparation. By contrast, the demand for workers who perform routine tasks, such as the ones carried out at medium qualification jobs (for example, data input), is declining because of automation.



Learning during early childhood, tertiary education and adult education that are sought outside the work place are becoming more more important for being able to offer the skills that future labor markets will require.

The creation of a work force that is trained for the future of work depends on the growing demand for advanced cognitive skills, socio-behavioral skills and adaptability, but the technological change hinders the task to anticipate what specific job skills will remain current and which ones will become obsolete in the near future. In the past, changes in skill demand driven by technologic progress took centuries to manifest. In the digital era, technologic advances seem to demand new skills overnight. The capacity to adapt quickly to changes has more and more value in the labor market. Adaptability is the characteristic people are looking for, meaning the capability to respond to unexpected circumstances and to unlearn and quickly learn again. This requires a combination of certain cognitive skills (critical thinking, problem solving capacity) and socio-behavioral skills (curiosity, creativity). Several studies about technical and professional training students have shown that having a high self-efficacy allows to significantly predict their adaptability in their career. Having a solid foundation of skills is important in order to later develop advanced socio-behavioral and cognitive skills, as well as other that are the base for adaptability. For most children, this foundation is built during primary and secondary education. However, according to a 2018 report by the World Bank, in many low and medium income countries, school does not give the basic skills we could expect. More and more frequently, there are important adjustments made outside of mandatory education and formal jobs.

Developing the right skills for facing the ever-changing nature of work supposes a permanent learning that is particularly related to the readjustment of skills within a

frame of demographic changes, whether it may be because of an aging population, as is the case in the European Union, or the large amount of a young population in Latin America.

The best way to make people acquire the skills required by the changing nature of work is starting in early childhood. In France, the age in which kids start school will be lowered from 6 to 3 years old. According to President Emmanuel Macron, this reform seeks to encourage equality through the improvement of the capacity of unprivileged background so they can be competitive in the educational system.

Early investments in nutrition, health, social protection and education set the foundations for the future acquisition of cognitive and socio-behavioral skills. Also, they contribute to a better resilience in the face of uncertainty. Investing in early childhood help increase the equality of opportunities. Currently, those investments are insufficient, particularly among poor and unprivileged children, who would benefit the most from them.

The architecture of the brain is formed from the prenatal stage to age five, so this period is fundamental for the development of cognitive and socio-behavioral skills. During these years, the brain's capacity to learn from experience is at its highest level. Experiences and learning acquired during this period have a direct influence on the achievements that will take place in adulthood. If we miss this opportunity, it will be more difficult to develop skills; investments in nutrition, health and stimulation that take place during the first 1000 days of life will allow forming

strong brains. The participation of parents and caregivers during this phase is also important for the child to develop linguistic, motor and self-regulating skills, as well as their social behavior.

From age three, socialization and a more formal early learning become important, and they will prepare the child for successfully going through primary school. A quality preschool education strengthens executive functions (such as functional memory, flexible thought and self-control) and leads the child through a path of better learning. However, in order to obtain those results, preschools must reach certain quality thresholds. In some cases, receiving a low quality preschool education is even worse for a child's development than not getting an education at all. Poorly developed early childhood programs are linked to unsatisfactory results in language development cognitive skills and sociability. In Peru, in spite of the Wawa Wasi program, which offers safe community nurseries and a healthy diet for children aged from four to six in impoverished zones, language and motor skills development has not improved due to the lack of properly trained caregivers.

Of all the investments a person receives along their life, the ones made in early childhood generate the most benefits, and their advantages increase over time.

Even though investments are an efficient tool for the development of valuable skills, early childhood investments do not reach the necessary level. In 2019, nearly 10% of the Ministry of Development and Social Inclusion of Peru

was given to the Cuna Más National Program in order to take care of 60688 children who need to see their basic health, nutrition, security, play and skill development needs met.

On the other hand, economies that are formed and driven by technology have started valuing higher education more (higher education being any kind of education that comes after high school, including institutes and universities). The average profitability of higher education around the world is 16%, but not all have such a high performance, as shown by Peruvian National Superintendency of University Higher Education (SUNEDU). Out of 141 universities and 4 graduate schools that applied for national certification in 2015, only 85 universities and 2 graduate schools received their licenses to offer their services, after the compliance for basic functioning conditions was inspected.

The changing nature of work makes higher education higher for three reasons. In the first place, technology and integration have increased the demand for higher general cognitive skills (such as the capacity for solving complex problems, critical thinking and advanced communication), which are transferred from one job to the next, but that cannot be acquired only through schooling. The growing demand for these skills has increased the wages of their graduates and, at the same time, has decreased the demand for workers with a lower educational level. In the second place, it generates more demand for permanent learning. It is expected for workers to not only change jobs during their lifetimes, but also to switch careers. Higher education – with its wide variety of courses and flexible







programs, such as online learning and open universities – meets this growing demand. Third, education – particularly in universities – becomes more attractive option in the changing world of labor because it is used as a platform for innovation. The pertinence of the higher education system will depend on how they perform on these three fronts. Skill acquisition becomes a never-ending journey, no longer delimited and unchangeable. Flexibility increases if a student is guaranteed not to have their options irrevocably limited once they choose a path. For example, when they start higher education, most students must choose between technical education and university. University education gives them the higher order transferrable skills that determine their general preparation for learning or receiving training. On the other hand, technical education is directly related to specific trades. Once a decision is made (especially if we opt for a technical training), it will be difficult and expensive to reverse it.

The relative profitability of university and technical education is changing in an unpredictable way, and most economies are still in need of both. Technologic progress tends to decrease the demand for specific training in certain fields, so some technical training diplomas are becoming obsolete. It also leads to a higher depreciation of the skills that are restricted to specific jobs compared to university skills.

Technical higher training meets the immediate demand for technical skills, allows a faster transition between education and job for some people, and it alleviates the

tension on the university system. There are three factors for which it is important to make the road between general and professional education flexible, due to the changing nature of work. First, the value of the combination of general and technical skills is growing. Second, even technical jobs seem to need more higher order general skills and their use, which means that people should be able to acquire them before starting their work life and as they work. Third, people with restricted professional skills would benefit from the opportunities to acquire new skills. In 2019 in Peru, over 250 000 students were educated in 1800 Technical-Productive Education Centers (CETPRO) which, according to the project by the Ministry of Education, would move forward to higher education institutes and schools, promoting the consolidation processes of different educational levels.

Higher education systems are not indifferent to the changes in the demand: the path of university education and technical training are often intertwined. A wide range of university programs includes a technical dimension or orientation, for example, in science, engineering and technology.

The platforms technology gives us make higher education more accessible. The most important long distance, open, massive education online programs take place in India and China. In Brazil, in 2013, Veduca stated the first online Masters in Business Administration program, and in 2018 it offered over 5000 courses. Courses are a promising way to offer flexible and personalized education to a large part of the population, but guaranteeing their good quality

is an important challenge. According to a recent study, students that took an online course performed worse than those who took on-site lessons. Higher education systems should guarantee the acquisition of a minimal number of transferrable cognitive skills, which are the best measure we could take to prevent work uncertainty, but not all systems make it.

Peruvian universities vary in their capacity to transmit fundamental higher order skills, such as critical thinking, problem solving capacity and communication. In 2012, one more year was added in Hong Kong to university education undergraduate programs, so they can focus their attention on problem solving capacity, critical thinking, communication, leadership and permanent learning skills. For most students, this change seems to truly encourage the acquisitions of the skills sought in an undergrad student.

Higher education also develops transferrable socio-behavioral skills, such as team work, self-confidence, negotiation, resiliency and personal expression. In a survey that took place in an Indian company that hires engineers, socio-behavioral skills' importance scored as high as technical qualifications and credentials, or even more when it came to entering the work force for the first time after graduating. Employers think that the lack of socio-behavioral skills is at least as problematic as the lack of technical skills.

In the developed world, there are well known examples of successful innovative universities: in the United States, Stanford University, the University of California, Berkeley

(Silicon Valley), Harvard and the MIT. In the United Kingdom, Cambridge University, Oxford University and the University College London (the "golden triangle"). In medium income countries, such as Peru, this type of educational centers has begun to appear as well: San Ignacio de Loyola University (USIL) has a Technological Innovation Laboratory and entrepreneurship labs.

As the nature of work changes, certain workers are affected by the constant modifications in the skills they need. As economies change to give us the human capital of the next generation, current employable age population begins to worry about their work perspectives. A first step to mitigate this worry is to promote adult learning as to transmit new skills or to improve the skills they already have. Adult learning is an important channel to readjust skills so they match the future of work, but their design requires serious reconsideration. Adult learning programs adopt numerous shapes: adult literacy programs, skill development for jobs and business programs.

According to the World Bank, over 2.1 billion adults of employable age (between 15 and 64 years old) have low reading skills. In Sub-Saharan Africa, almost 61% of workers cannot read properly. In Latin America and the Caribbean, it is 44%. This is a problem. In order to face the future of labor, functional literacy is a necessary skill for survival. The economic and social cost of adult illiteracy in developing countries is estimated in over 5 billion dollars per year.



May, 2017. As part of their academic tour in Asia, the delegation of authorities from San Ignacio de Loyola University had the honor of meeting the minister of Education in Singapore, mister Ong Ye Kung. Singapore has the second best education in the world, after China, according to the last results of the Program for International Student Assessment 2019 (PISA).

However, many adult learning programs do not have a significant impact. Business programs tend to improve business knowledge, but they do not generate employment. In Peru, training courses for female entrepreneurs allowed to improve existing businesses, but they did not cause a significant increase in employment, frequently, professional training for unoccupied people causes an increase of short term profit, although the number of job posts does not always increase in the long term. Even in successful adult learning programs, costs are high and they take a long time to create positive up-to-date net values, even if they maintain their benefits. For example, it took seven years for the Pro Joven initiative in Peru and 12 years for the Proyecto Joven in Argentina.

Adult learning is often only one expensive component of a bigger package, which is why it is difficult to determine its efficacy regarding costs. The two main reasons for low efficacy are a deficient design and an incorrect diagnosis. Adult brains learn differently, and this is not always taken into account when designing the programs. Due to the brain's capacity to learn decreases with age, learning initiatives during adulthood face an intrinsic difficulty: making the participants acquire knowledge when the brain learns less efficiently. Advances in neurosciences suggest different ways to approach this. The capacity of the adult brain to learn depends significantly on how much it is used.

Learning programs for this age group are more likely to be successful if classes are integrated into everyday life. Given adult people's time is subject to different demands,

programs with short modules given through mobile apps are particularly promising. For example, in Africa, students who received their training through their cellphones as part of an adult learning program got much higher grades on reading and on math than those who did not receive that kind of training. Also, training programs offered through cellphones protect the students from possible stigmatization. Besides, adults deal with high levels of stress due to family matters, as well as their kids and their jobs. They also face high opportunity costs regarding the income that they lose and the time they stop dedicating to their children, but these programs often have inflexible, long schedules.

The improvement margin for the design of adult learning programs using neuroscience and behavioral economics concepts is huge. Both practical exercises and visual aids are useful for this type of learning because they facilitate memorization. Also, it has been observed that including motivational tools, such as financial rewards, work experience or constant commentaries, improves learning in adults. An experiment with young adults showed that, if they are offered rewards, their performance improves when the training is over.

Adult programs have better results when they are explicitly linked to employment opportunities. One well known way of doing this is establishing said connection through training programs or internships that associate the training with everyday experience and motivate the participants with the promise of a future economic profitability. The Jóvenes en Acción program from Colombia combines classroom

instruction and practical training in private companies. The possibility to get a job and formal income increased in the short term and sustained in the long term.

When we analyze the magnitude of the challenge that preparing for the future of work means, it is important to understand that many children that are currently in school will work jobs that don't even exist today when they graduate school. As the scientist Marie Curie once said: "You cannot hope to build a better world without improving the individuals". The benefits of human capital transcend private benefits and extend to other people, and from one generation to another. For example, deworming a child decreases the chances that another child will have worms, which allows these kids to improve their learning and obtain higher salaries in the future. These individual benefits of human capital add up until they become great benefits for economies: the more human capital, the richer the country.

Human capital complements physical capital in the production process and is an important input for technological innovation and long-term growth. An aspect we must not ignore is that, when generating higher income, human capital accelerates the demographic transition and reduces poverty. In the long-term, human capital is important for societies and encourages social capital, gaining the people's trust and tolerance towards their peers from different cultures.





VI

# PERU OF THE BICENTENARY



In the face of this challenging world scenario that affects every aspect of our lives, we need to have a shared vision of the country. In principle, it is vital for young people to be a part of the solution instead of the problem. Secondly, the State must offer new answers for the institutions to work and guarantee favorable ecosystems for the development of entrepreneurship, entrepreneurs and Peruvian entrepreneur society.

These factors are important, as is a global vision of the world. Over the years, we have said it many times: the ideal entrepreneur society will never be separated from universal values such as democracy, freedom, justice and ethics. These universal values are the foundation of human coexistence, and they are becoming more accepted by different cultures. In his book *Clash of Civilizations and the Remaking of World Order* (1996), the political scientist Samuel P. Huntington, a professor of Political Sciences in Harvard University and founder of Foreign Policy magazine announced a certain global collapse caused by different visions of the role humanity plays.

This is due to the vision of some religious movements and heterogeneous, fundamentalist cultures. Even more so, because of what happened in Arab countries in 2010 and 2011, the years of the so-called “Democratic Spring”, as well as the refugee crisis in Europe caused by Islamic terrorism, we can see the acceptance of cultural diversity and assessment of ethics and morals, thus giving common attributes to every civilization. This reflection shows that every human activity must consider the system that encourages creativity and combines liberal and humanist values with the basic components that drive modernity, those that generate wealth: entrepreneurs and business people.

This thoughts matter because, in the modern business dynamic of the twenty first century, any business that calls itself competitive, no matter its size, aims to differentiate itself from others, weaving and transmitting an identity that matches the corporate social engagement. The latter does not have to be isolated from the environment in which it develops and the roots it came from.

In the face of what happened in Peru in the end of the twentieth century which, unfortunately, transcended negatively in the social and political fields (striking corruption in institutions, impunity in different levels of the government, among others), many people thought that the country would fall into a crisis, chaos, pessimism and citizen demoralization. However, the popular reaction was appropriate, and we were able to overcome the challenges imposed by authoritarianism and return to democracy.

It wasn't until July 2002 that the democratic forces signed the National Agreement, which is still valid today. By virtue of said engagement, we moved forward on many aspects with the goal to build a fair, plural, inclusive society, as well as to explore and exploit our resources according to the needs of Peru and the markets.

Today we also know that corruption affects the proper functioning of democratic systems as well. In the current context, corruption is a distorting interference of the private sector in the functioning of the public sector. The lesson this is teaching is that every agent and potential leader must abandon any temptation to break the law, violate institutions, or impose their individual or group interests. Their efforts must be oriented towards the encouragement of initiatives seeking the common good and prove that the development of an entrepreneur solidary society is the only way to guarantee sustainable growth and social and political sustainability. After all, the road to development and progress will always be long and winding. This is why our progress as a nation is not what he hoped to have as we get closer to the bicentenary, despite all our potential. This is reflected by a list of lost opportunities and uncertainty periods, jailed presidents or presidents who participated in illicit activities, business people tried and a bunch of unfortunate decisions that destroyed clear and safe perspectives for young entrepreneurs. Luckily, Peruvian wisdom and creativity, as well as the unwavering capacity to peacefully overcome adversity, mitigated whatever glimmer of social turbulence in any age. Building a great country, as the forefathers of independence dreamed, is still the compass that guides us towards progress.

Starting only in the beginning of the twenty-first century we are all aiming towards that supreme target: some, with intelligence and knowledge. Others, with drive and hard work. “Not gold but only men can make a people great and strong; men who, for truth and honor’s sake, stand fast and suffer long. Brave men who work while others sleep, who dare while others fly. They build a nation’s pillars deep, and lift them to the sky”. This quote belongs to the North American writer, philosopher and poet Ralph Waldo Emerson, and it highlights the transcendence of human will. If we want the decade of the bicentennial to find Peru celebrating its independence with a solid democracy, with the lowest unemployment and poverty, with profitable institutions, with a high investment in education and knowledge, with a competitive, global human capital, with an entrepreneur society and an internationalized economy, we must make now the transformations that the country needs.

Jorge Basadre, the illustrious Peruvian man who felt the frustration when independence, in 1821, did not fulfill its promise of prosperity, said:

*“The promise of Peruvian life concerns the youths, so they will revive it; men of study in their different fields, so they turn it into a plan; the public opinion in its conscious sector, so it becomes a purpose”.*

This is today’s engagement: to build a society that is different from the one we have, but still aligned with its ancestral roots of a solidary spirit and team work. “Tradition, modernity and future” could be the trilogy of this entrepreneur society we aspire to build together, and that

grows nonstop under a State that promotes productivity, equity, solidarity and citizen participation. To sum up, a strong State that ensures balance and social inclusion, harmonic economic growth and equality of opportunities, global competitiveness and national identity as an exportable brand. A State that will never be based on force or the will of only one person, but one that represents the true feelings of the whole nation. A humanist State, engaged with its community, and one that permanently seeks the common good. The economic development of the country must be the result of the effort of every economic agent, particularly companies, entrepreneurs and business people, who are responsible for the creation of wealth. Initiative, creativity and perseverance must drive social transformations. Economic growth based on the exaltation of profit has no place here because the interest in money does not understand equity and ends up facilitating the accumulation of wealth in only a few pairs of hands.

We have stated that the basic sources of wealth are knowledge and work, and that the profit these forces generate must be equally distributed. Thus, competition in the market will not only be for products and brands, but for knowledge and technical qualification. I have promoted these ideals along my public and private careers. I have practiced them for over 50 years and I reaffirm myself in them once again. We understand that the economic aspect is a basic component of the social one, and that both constitute the pillars of what is human. This is why we must invest in the education of the unprivileged, as well as in science and technology, so our country is more

competitive. Below, the goals we must work for nonstop in order to fully become a country of entrepreneurs.

- ⦿ To strengthen and maintain the market social system, where the democratic, institutional Government sustains the empire of the law in order to guarantee the country's political and social stability.
- ⦿ Make a deep and lasting State reform that will facilitate private initiatives and has an influence over an efficient decentralized executive government action.
- ⦿ To sustain constant economic growth through the conditioning of the territory, the rational use of natural resources, capitation and mobilization of capital, and advanced technology.
- ⦿ Reaching progress and wellbeing for marginalized families and communities through social investments and programs that improve social sectors particularly in the fields of education and health.
- ⦿ Promote the value of peace and eradicate criminal activities in all their forms. Safety is vital for generating the trust of economic agents.

Given that politics must offer an answer to real people's worries, we need politicians that are in tune with them and have no ideological prejudice and who find solutions through feasible, well-designed measures. Government policies must not only answer to a balance between social

and economic needs, but also the challenge of creating the conditions for existing businesses to prosper and for new ones to establish. This way, we must not hesitate in promoting business values such as efficacy, innovation, competition and high performance. This way, we will encourage a positive mindset and an entrepreneur spirit in all levels of society.

The entrepreneur society we aspire to needs well-formed human resources that are willing to assume new roles in changing scenarios. This, of course, within the context of a system that rewards initiative and creativity. This society celebrates the success of entrepreneurs and has members that share the same convictions and attitudes. This is the society that shapes the country we describe.

### Global country

The economies are rapidly growing at the pace of innovation: from the exploration and exploitation of raw materials to industrial production, to the economy of growth, which is based on service and information, and now virtual or digital economy, based on technology. We Peruvians must value this change because it gives us the opportunity to reach more advanced countries in certain fields.

There is no doubt that with the internet we have the possibility to find jobs anywhere we want, acquire new skills, study now programs and establish and expand our own businesses. In the global dynamic, where information flows nonstop, we Peruvians are better informed, and the requirements to reach economic success are more accessible. This is because the information and the potential



of digital and satellite technologies is transcendent and it permanently modifies trends and trades, the way we learn and the way we communicate.

### Democratic country

Not only in Peru, but in this whole world, politics are looked at with disenchantment, particularly by the young. This phenomenon has a healthy side: people are no longer as dependent on politicians to solve their problems. They have learned to take responsibility for their own lives. We also know that, in a more complex, interdependent world, a politician is less relevant than before. “Finally”, some would say: we are finally no longer subject to the utopias of dogmatic, delusional elites. Actually, just as flesh and blood leaders have changed, globality has meant the reaffirmation of tendencies that aim towards the action of people, of the governments and the States. These are:

- ⦿ Democracy as a politic system.
- ⦿ Social market economy as a economic system.
- ⦿ The defense of human rights.
- ⦿ The promotion of world peace as the foundation of civilized coexistence.
- ⦿ The protection of the environment.
- ⦿ Meritocracy for good governance.

In 1900 there were barely 19 democratic countries. Currently, more than two thirds of the world's population



With the support of Luis Alberto Moreno, president of the Inter-American Development Bank (IDB) and with the creation of the Guarantee Fund it offers, it was possible to finance multiple projects from Peruvian young people.

lives under this system, according to *The Economist's* Intelligence Unit (2019). Democratization has advanced nonstop. Today, political balance includes the wide diffusion of this form of government, based on civil freedom and the election of their leaders.

The essence of the democratic system is alternation, which allow for people of different creeds and races get to be representatives. Democracy is shaped as a system of dialogues. Dialogue is the base of consensuses, which allow the participation of every political agent. Democracy is the only system humanity knows as an unbeatable source of trusting relationships and alternation in power.

Among the values of democracy, we quote responsibility, honesty, the respect for others' freedom, and tolerance. Its main social tools are the empire of the law, the free market and transparency. As long as we do not reduce it to mere elections, and it is protected by a Constitution that limits power, democracy is the only known system that can create constant change. The validity of a real democracy will create a Peru in which, whether it be by inertia or by the influx of freedom, creativity will prevail over conformity, and honesty over hypocrisy. A well-led democracy will guarantee trust and stability, which are fundamental if we want to achieve a harmonic growth and a sustained development. If we maintain these ideas, the three essential elements of progress will be guaranteed: entrepreneurship, sustainability and trust.

A report by the World Bank called "Institutions Count" claims that capital may be physical, financial, technological

or social. The latter includes legal and regulatory frameworks, institutions, ethical values, attitudes and behavioral guidelines society shares. This social capital is not created by the Government or the market, but by a strong civil society on which sustainability and stability are based. Therefore, we should not be surprised that the most stable countries are the ones that have changed the most in their form, but not in their norms. The United State has had the same constitution for over two centuries. This and monetary stability are the pillars which permanency has ensured its progress until today.

In Peru, it is the opposite. Whenever we have tried to change, the first thing we did was to replace the norms that, somehow, gave us stability. With the exception of a few presidents, most of the people in power thought that history began with them. Warlordism? Lack of vision? Messianism?

However, the democratic experience of the first decade of the twenty-first century has been pleasant: there have been changes in the governing style, but not in the model that created growth and wellbeing. However, during the past few months, this issue has been discussed through a constitutional reform project that aims to "modify the constitutional chapter linked to the economic regime". This initiative is a mistake, for we would go back to the infamous Peruvian pendulum, constantly changing our economic model. As a consequence, we would regress 30 years.

We cannot throw everything away. This is essential for giving continuity to the current economic model, which

has led us to a scenario of growth and economic stability, supported by institutions such as the Central Reserve Bank of Peru (CRBP), and reaffirmed world-wide by the IMF and the World Economic Forum (2018) due to the country's food performance in the management of monetary policies.

To sum up, democracy is the most efficient system to reach development, and its value should not be solely judged by its contributions to economic growth, but because it is an economic end to increase the people's wellbeing. Also, freedom, which is its essence, encourages creativity and the free flow of information we need to grow. Combining theory with some of the experiences that took place in Peru and the rest of Latin America, fortunately, in a report by the INEI (National Institute of Statistics and Informatics) we see that 50.2% people know about democracy and value it because of respect for peoples' rights, the freedom to express ideas and periodic clean and transparent elections. The population is certain that "democracy is preferable to any other form of government".

### **Solidary country**

Do all Peruvians have the same opportunities? Do they all equally get access to funding? Can a person stop being poor on their own? These questions and many more have been asked for hundreds of years. It seems reasonable that not all citizens have the same access to funding, given that not everyone has a warranty and that they are essential for credit.

Mohammad Yunus, 2006 Nobel Peace Prize, writes one answer for those questions in his book *Creating a World Without Poverty*, published in the '90s. The importance of this Bengali business man and professor's work consists in the demonstration that there are always new systems to fight extreme poverty and that, due to their conception, focus and operability, these systems are directed towards people or social groups that need solidary help. They are non-conventional, unorthodox ways of support, far from the assistentialism or populism that characterize our countries. They are formulas that defeat bureaucracy, appealing to the creativity and the engagement of the most impoverished people, and they activate their only assets: the desire and the will to work their way out of extreme poverty.

Grameen Bank has a relevant particularity: 95% of its beneficiaries are poor women. This is because, according to Yunus, the money that women bring to the household is much more beneficial for the families than the money men bring. After an experimental phase that started in 1976 in Bangladesh, the bank started working in 1983, fighting usury and giving micro loans to the poorest women from villages under a simple philosophical concept: trust as a supreme value (the bank does not ask for a guarantee or a collateral). They give micro loans to groups of 5 women (team work and mutual responsibility) and the reimbursements have interests that cover minimum costs.

Grameen Bank, which gives 50, 100 or 500 USD loans, helped over 100 million families all over the planet until





The 2030 Agenda is the most ambitious global plan to eliminate poverty, the fight against climate change and the reduction of inequality ever adopted by the international community. It was developed based on national questions asked to the most vulnerable populations in very country, among which there are 80 thousand Peruvians. It was unanimously approved by the 193 UN countries. Its goal is clear: to have a world where nobody stays behind.

In order to make this a reality, all Member States approved 17 Sustainable Development Objectives (SDO) and 169 goals associated to those objectives. They give an account of the scope and the ambition of this universal plan. The SDO show the complexity of development, emphasizing on its social, economic and environmental dimensions. This is why they are comprehensive and undividable. It is virtually impossible to move forward in one of them without moving forward in the rest.



2016. It moved tenths of millions of dollars a month in microloans. The same experience was imitated in over 50 countries, including marginalized areas in the United States.

The work of Yunus, AKA as “the banker of the poor”, has called the attention of the world. However, the Grameen philosophy is not charity: it is a solidary loan, which can allow a peasant to buy what she needs to make cheese and sell it, or a woman in a marginalized area to do the same in order to make cakes and sell them. Basically, they are small ventures that would allow to cover the costs of a family menu and that are not working because the family doesn’t have a minimum capital, or because families refuse to fall prey to usurers.

This proposal could be used in Peru today, where the search for a solution to extreme poverty, particularly in rural areas, has been one of the biggest issues for decades. A society must not hesitate to act in order to reverse extreme poverty. It is not possible to continue with inefficient management styles that dilapidate the resources they should use to fight it, or to keep using assistentialist policies that, instead of being a creative answer for the poor, promote their self-abandonment or conformism.

In the design of State policies there should be programs that include the economically weak inhabitants in society. In a nation such as ours, however, scarce resources must be well used: we must teach them how to fish. An institution such as Grameen should enter the national scene, which we could achieve if we had a true promoting and facilitating State, and a ruling class that firmly believes

that, in order to eradicate poverty, we need innovation. For example, why not deriving a part of the funds we recover from drug trafficking, or money laundering, or any fraudulent activities, to finance micro projects led by women from the Peruvian Andes? If we want a similar experience in Peru, we have what we need: poor people’s creativity, their attitude towards work and their decision to stop suffering.

These are the principles that drive us to promote the spirit of solidarity from a different approach, one that does not think charity should be used as a tool to help others. The option is being solidary, but considering people’s dignity and potential.

The term “solidarity” was formed with the moral reference of a world that tends towards hedonism. Being solidary means many things, and one can be solidary in many ways: when States practice the principles of equality and justice, when governments prioritize policies that help low income people and when businesses assume a responsibility towards their social surroundings.

Society also plays an important role regarding its solidary value: volunteer networks appear and, even though they have different quantities and qualities, they have the same social function and the same common goal to serve their community.

In a country of entrepreneurs, the solidary revolution will determine changes that, besides encouraging the protection of the environment, human rights and children,

will recognize the potential humans have to succeed on their own. It will promote a different model of solidary culture that can secure social harmony. Solidarity is one of the main values of modern societies and is essential to guarantee human co-existence. As the deceased Holy Father John Paul II said: “there will be no lasting peace if it does not come with equity, truth, justice and solidarity”. This is why we must work to globalize solidarity.

### **A country with values**

Peru's most critical values are linked to the weakening of universal principles and moral values. The political crisis in the '90s was the manifestation of a political model that privileged pragmatism over ethical principles. The end justified the means, and the buying and selling of consciousness degraded the nation's moral values. These problems still exist and, maybe, are even stronger. If we analyze the national scene of the end of 2019, we see the sad show of our politics, where everything is fair for the actors in order to achieve personal goals. Where are principles, doctrine, premises, values, virtues and co-existing styles? One wonders: what country grows on this group's interests?

These are all signs of society's moral deficit, and they form a scene that affects our life and the country's development possibilities. Trust, order, solidarity, mutual respect, among others, are collective values that leaders all around the globe appreciate in politics, economy and business.

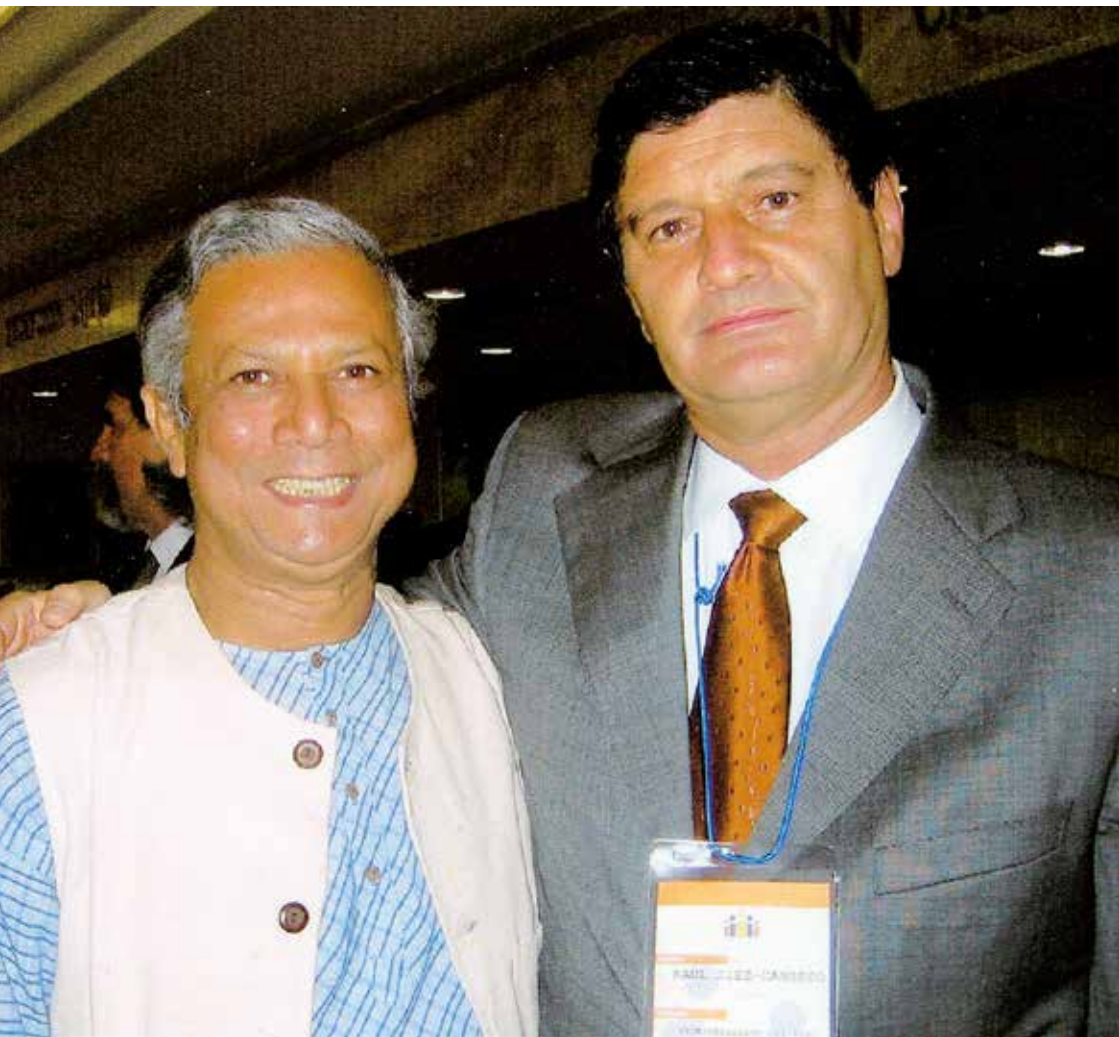
On the other hand, why are people talking about honesty, transparency or ethical behavior in world economic forums? Because globalization, the advancements in genetics, biotechnology, nanotechnology and their uncertainties create fears that take us to rediscover the essential values that secure our survival.

So, what world are we leaving for those who come after us? Differently put, what children are we leaving to the world? Both questions invite us to reflect on the influence of community, about the individual, their values and their contribution to society.

Education remains the great social pulley of value transmission that every society should preserve. This is why we need an educational system with the mission to transmit scientific or technical knowledge and shape a citizen consciousness engaged with the defense of moral concepts. How do we face a world in which all things seem possible, in a society in which time is becoming scarcer every day, and when we live in hard, foggy times? First, by strengthening an ethical consciousness, which is not remote or abstract, but a force in action.

Ethical values and moral sociability are essential in a healthy country and the happiness of its members. Contrary to that, corruption, arrogance, lie, injustice and violence, among others, are anti-values that degrade human co-existence.

In a report called “Peru: citizen perception on governability, democracy and trust in the institutions” (2018), INEI claims



Muhammad Yunus, 2006 Nobel Peace Prize, AKA “the banker of the poor”. The Grameen Bank has a relevant particularity: 95% of its beneficiaries are poor women. This is because, according to Yunus, the money that women bring to the household is much more beneficial for the families than the money men bring.

that corruption (49.5%) and delinquency (43%) are the main problems in the country. The data suggests that corruption is linked to political power, such as the traffic of influences, taking a percentage of contracts and biddings, embezzlement, compulsive discounts, among other indicators. Poverty is third, with 19.6%. According to a report by the General Comptroller of the Republic, around 17 billion soles are lost due to corruption activity. The mistrust and disrepute of public and private institutions is alarming. At the head of the ranking of mistrusted institutions, we have political parties, followed by the Congress of the Republic. Radio and TV (72.2%), as well as the written press (78.2%) do not escape this negative perception.

Corruption, which entered Latin America and the Caribbean political and social tissue like a cancer, has a decisive influence in the economic progress of the region. According to another study of International Transparency (Global Barometer of Corruption, 2019), more than half of the citizens in this part of the planet think corruption is increasing and that their governments do not do enough to fight it. Peruvians are among this group. The report also reveals that 20% of the interviewees has had to bribe someone in order to access a basic service like water, electricity, healthcare or education. The most affected countries are Venezuela, where 50% claims to have payed, Mexico (34%) and Peru (30%). Also, we can infer from this survey that bad political practices are linked to elections: 65% perceives that their representatives are influenced by private interests, and 25% claims that they have been

offered money in exchange for their vote. This study also highlights that corruption affects women in particular; they are forced more often to bribe someone in exchange for health and education services. Also, one in every five women has been sexually extorted.

A modern country is based on virtues and values, on ethics and morality as the foundations of a collective, solidary, entrepreneur spirit that looks towards the future. This is why young people's answers regarding values is comforting. For example, the students who went to the University CADE in the past few years, which slogan was "Creating change: our challenge": they will be the ones who will lead the destiny of the country. When asked by the survey about the values they try to practice in their everyday life, they said: responsibility, 34%; creativity/wit, 31%; honesty, 28%. Even though they are growing, these percentages show that there is still a lot to do.

From a business approach, some aspects mark the difference of people in business: honesty and respect are fundamental values of the new business culture. The modern business person understands that business behavior that matches fundamental values are not only a moral duty, but also, in the long run, give an added value to their company.

Values improve the image of a company when it interacts with the authorities, clients, providers, competitors, staff and financial entities. Also, the differentiation of its image can be attractive for young people who are less loyal to companies due to the intrinsic uncertainty of the

environment: they may prefer them as a more stable source of work. This is why the world's main business schools include courses on business ethics in their executive training programs, which shows its importance. On the other hand, big companies also establish ethical codes that their directors and employees must respect when they start working there.





VII

## A COUNTRY OF ENTREPRENEURS

For almost a decade (2000 – 2010), analysts and investors considered the emergent economies of Latin America and the Caribbean (LAC) to be the new motors of world growth. The development of our countries awoke an enthusiasm that, after a brief pause during the crisis of 2008, cemented on the vigorous recoveries of 2009 and 2010. This way, we had a new scene: thanks to the radical structural changes, both national and international, the potential of emergent economies was finally confirmed. Peru's GDP in 2010 was 8.8%. However, during the past decade, this enthusiasm has subsided. The obvious deceleration of emergent markets has cast doubt on the sustainability of the last's decades' high growth and has reawakened the old fear to financial and macroeconomic turbulence. In 2019, Peru's GDP only reached 2.3%. This does not mean that the enthusiasm over emergent LAC markets isn't justified. Quite the opposite: it is sustained on the unprecedented social progress the region has acquired during the last growth boom, and it shows in the reduction of poverty for millions of people, and others who joined the expansion of the middle class.



In Peru, the reduction of poverty has been the result of social policies than transferred the income to poor people. Social programs can be maintained in the short term, but they are at risk to be closed down if low growth is maintained for a long period. With the reduction of the economic dynamism in China, the United States and the European Union, which favored the region during past decades, our countries will have to use their own resources in order to encourage growth.

The productivity challenge is urgent precisely because social progress is linked to growth. When internal savings are relatively scarce and the investment of foreign capitals is decreasing, only an increase in productivity can sustain the income growth. The leaders of the region are completely aware of the importance of encouraging productivity but, what constitutes this battle? It regards the formation of an entrepreneur, innovative class, so that the best companies (meaning the ones that export goods, services and even capital) are no longer second class compared to the star entrepreneurs from other places. First, we must explore the challenges Peruvian entrepreneurs face in order to increase their growth potential.

### **Entrepreneurship and competitiveness**

According to the Global Entrepreneurship Monitor (GEM) report, which measures the entrepreneurship rate in 54 countries, Peru was the fifth economy with the highest entrepreneur spirit, and the first one in 11 Latin American and Caribbean countries that entered the study. However, according to the same GEM report, our country is number

14 in the world when it comes to businesses that close (6.2%). During the last survey, this indicator has shown a slight decreasing tendency, however, it is still above the Latin American average (5.2%). This disparity happens because, in Peru and many LAC countries, its location on the entrepreneurship ranking does not match its location on the innovation ranking. According to a report by the Global Innovation Index 2019, Peru is number 69 of 130 world economies, and is up 2 positions compared to 2018 due to its progress in human capital, research and innovation, despite the small investment in research and innovation. On the other hand, GEM 2017 – 2018 shows that only 17.8% of all early ventures have an innovating offer (new products and services for consumers, and with little direct competition).

One factor that explains this delay when it comes to innovation is the large amount of informal entrepreneurs that are a part of the labor market. This is a distinction of developing countries. In Peru, almost 3 out of 4 workers of the Economically Active Population (EAP) that currently have a job, work in an informal company, according to INEI (2019). This situation is even worse if we consider that, in the case of the younger generation and people over 65 years of age, 9 out of 10 work informally. This way, the informal sector absorbs 61% of available jobs. However, its production represents less than one fifth of the GDP. The gap between the work productivity of the formal and informal sectors, is 7.1 in favor of the first, according to the Institute of Economy and Business Development of the Chamber of Commerce of Lima (2019).

Business formalization remains a challenge for the encouragement of entrepreneurship, but why does it happen? One aspect is the lack of norms that explicitly support the new businesses' activities as well as their formal creation. There is still a lot of bureaucracy in order to obtain permits and licenses for micro and macro businesses, which elevates costs and favors informality. Even though bureaucracy restrictions are still strong in our countries, the time needed to create a business has reduced to half in less than 10 years. However, this significant time reduction has not increased the rate of formal businesses. According to GEM 2016, 1,3% of Peruvian entrepreneurs blamed bureaucracy for the failure of their businesses. On the one hand, this makes us think that administrative obstacles are not the most important issues when it comes to formalizing businesses and, on the other, that reducing bureaucracy barriers alone is not enough to encourage formalization, at least not without other reforms.

### Searching for seed money

According to the World Bank, Peru has the most favorable environment to develop microfinances internationally. However, it is one of the countries in the region with the lowest levels of finance inclusion. Most experts and researchers from GEM 2017-2018 claim that financing is the main barrier for entrepreneurship, particularly for early-phase entrepreneurs (those who are just starting a business, owners of managers with businesses that have been working for less than 3.5 years). If they had it, they would pay a lot for it, which makes the situation for young

entrepreneurs worse. The lack of financial instruments is also obvious, which is a limitation for future operations of new companies.

Formal financial institutions are offering products that are competitive and that adapt to the interests of excluded population. This situation becomes worse when it comes to vulnerable groups, such as women, rural population, people with only primary education and people with lower income. Informal loans are more expensive due to their elevated interest rates, which decapitalizes the entrepreneur. Also, informal savings are unsafe because they are not protected by a deposit insurance. The restricted access the financial system results in an insufficient coverage and development of financial infrastructure and distribution channels (bank offices, ATMs, internet bank, mobile bank,





etc). According to the Superintendenci of Banks, Insurance and Pension Fund Administrators, 44% of districts had no financing access in 2015 in Peru, and 30% showed an insufficient access with only one place, mainly communal agents or ATMs.

Since semi-formal financial institutions that offer financial services to impoverished or excluded clients, such as NGOs and cooperatives, are barely regulated, if at all, over indebtedness and late payment, which are usually linked to lack of information and transparency. This data seems right at first sight, but it is hard to categorically affirm that the lack of access to financing is an important reason for the region's innovation gap. A study performed by the World Bank shows that, even though the access to financing services such as long-term loans and risk capital for young and small companies in the region may be lower than expected, Peruvian companies do not have more access restrictions than companies from other regions that stand out because of their competitiveness.

As stated in a report called "Financial Development in LAC (De la Torre, Ize and Schmukler, 2012), the bank credit gap in this region is due to its financial turbulence and the lack of promising, productive projects (meaning, the lack of innovation), more than to bank rationing of credit and credit restrictions. Also, the restriction that seems more relevant for the offer of bank credits is the weakness of the contractual environment, which can undermine both the offer of credit and entrepreneur innovation. In that sense, State policies are essential for approaching the gap in business formalization and growth. I think that, in

order to succeed, we must change the current paradigm, which emphasizes the support to small companies, for a paradigm that focuses on supporting young, newly created businesses.

### **Betting on new businesses**

In relation to other countries or regions with similar development levels, Peru is behind. This is due to the nature of its businesses: when they are created, they tend to have less employees. According to GEM 2016, 33.6% of young entrepreneurs in Chile wanted to hire six or more employees during the five years. In Argentina, it was 18% and, in Peru, only 16%.

The experts conclude that new Latin-American companies do not grow as much as other regions'; they remain small. Those who are responsible for State policies have approached the lack of business growth by focusing on this type of company. This issue, as well as employment, translate into a set of government programs to support small and medium companies (SME), as is the case in Peru, despite their small contribution to quality employment creation. This is why a World Bank report questions the excessive emphasis different States put on the size of companies and suggest they focus their attention on young companies instead. In this sense, it is remarkable that 24.6% of Peruvians are involved in early-age ventures, the implementation of a business or are the owners or managers of companies under 3.5 years. In this context, Peru has the third place in the world ranking.

The empirical evidence on which these proposal is based comes from the detailed analysis of how new business work. The growth of a business increases with size and decreases with age. Thus, it is unlikely for a company that did not grow quickly at its beginning or middle stage will take off. Companies of all sizes grow more in their initial years, especially during the first four. It is even more interesting that average growth rates increase according to the company's size: the companies that grow the most are both young and large, which also create more jobs.

### **The impact of entrepreneurship**

Knowing growth expectations and the aspirations of young Peruvian entrepreneurs in their early stage is essential for determining the impact of entrepreneurship. This is because it allow to asses the growth potential and measure the impact they could have in the economy and society, which means not only creating more jobs, but better ones. Here, Peruvians' entrepreneurship intentions are high: 43.2% want to start a business in the next 3 years.

According to these historical data, there is a certain link between the country's economic development stages and the new businesses' economic sectors: the more they are based on efficiency and innovation, the more competitive they become. However, the numbers do not favor them. While looking at the economic sectors where entrepreneurs participate at an early stage, 24.6% are mainly oriented to retail and wholesale, which is above the Latin American average and the average in efficiency-based economies, meaning industrialization-based economies and economies of scale, such as Peru.

At the same time, established ventures (businesses that have been working for over 3.5 years), which represent a 7.4%, have more initiatives in manufacturing and transportation. Business that offer IT, financial and professional services are fewer.

An important change over the last few years was the predisposition that opportunity-motivated entrepreneurs have for developing their business initiatives compared to established entrepreneurs, which encourages better results. However, in both groups, most business initiatives are carried out by only one owner. Most of these opportunity-motivated entrepreneurs are men with a higher education. Within this segment of entrepreneurs lies the highest potential for the development of highly innovative initiatives, so this group is crucial for the development of government programs and policies.

Early-stage ventures tend to be developed by younger people, compared to established ventures. The average age of early-stage entrepreneurs is 36, and 74.3% is between 18 and 44 years old. There were also differences in the analysis of motivation-driven early stage entrepreneurs. Early-stage entrepreneurs motivated by need are mostly women and have more extreme ages, compared to opportunity-driven entrepreneurs. Another interesting difference is that, according to GEM 2013, Peru was the fifth with more entrepreneurial activity in the ranking of countries with efficiency-based economies, yet nearly 40% of entrepreneurs had yet to create a new job post besides their own during the first five years of their business. Today, 61.3% of early-stage ventures has



Bombay, India, 2010. Presentation of the Priyadarshini Academy Global Awards, considered as the Indian Nobel prize in the East.

at least one paid employee besides the owner, and opportunity-motivated businesses hire more employees compared to need-motivated ones.

### The challenge of innovation

There are many possible reasons for which LAC businesses grow as slowly as they do, and one of them is the lack of innovation. The creation of a business is just the beginning of the story, because companies need to continuously innovate in order to grow, or even to survive.

A well-known case is Kodak: in 1998, it had 170000 employees and sold 85% of photography paper around the world but, in only a few years, their commercial model disappeared and went broke. Today, Uber is the largest taxi business in the world and it does not own one single vehicle, and AirBnB is one of the best hotel companies at a global level, but it does not own real estate. We are currently living the revolution of nanotechnology, artificial intelligence, drones and 3D printers which, according to the Davos Economic Forum, are the architects of the Fourth Industrial Revolution. Let's explore the fields in which this Fourth Industrial Revolution will take place:

#### 1) Artificial Intelligence

- ⊙ A computer has already defeated the best Go player in the world, ten years before it was expected.
- ⊙ Anybody who is going to law school should be careful: in the USA, young lawyers are no longer finding jobs because of IBM Watson, where a person can get legal advice in seconds (for a basic

sum) with 90% accuracy, compared to 70% accuracy when the same task is performed by humans.

- ◉ Facebook already has a pattern recognition software than can identify faces better than humans can.

## 2) Self-driving Vehicles

In 2018 the first self-driven vehicles became available to the public, and many people are thinking about not buying a car: they will simply call one on the phone, which will appear at their house and will charge them only for the route. And what are its benefits?

- ◉ You can otherwise use your time on your way.
- ◉ If you can work on your way, people will move further to live in safer neighborhoods. The impact will show on real estate.
- ◉ Our children will never need to get a driver's license and will never own a vehicle.
- ◉ There will be less noise and pollution, we will need 90-95% fewer cars, and new cars will be electric.
- ◉ Parking lots can become parks.
- ◉ Every year, 1.35 million people die in car accidents worldwide. Thanks to self-driving vehicles, we will only have one accident every 100000 kilometers. This will save one million lives a year.
- ◉ Most car companies will go bankrupt.

- ◉ Insurance companies will have a big problem because, with no accidents, insurances will become much cheaper.

## 3) Health

- ◉ Star Trek's Tricorder is already a reality: it detects 34 diseases through sensors. We already have something very close to it called DxtER, which was developed by a small company called Final Frontier Medical Devices. This device uses non-invasive sensors to collect data and contrast them to an artificial intelligence engine with a medical database that can diagnose 34 diseases such as diabetes and hepatitis A. It will be cheap, so in a few years, everybody will have access to excellent medicine almost free.
- ◉ IBM Watson is helping doctors make decisions when managing the clinical and pharmacological treatment of lung cancer patients.
- ◉ We have the Moodies Emotions Analytics app, which focuses on the analysis of our emotions when we speak, as well as our secondary mood, which is the one express the least. Imagine a political debate or a trial in which we can see who is telling the truth and when.

## 4) 3D printing

The cheapest 3D printer went down from 18000 to 400 USD in 10 years. It also became 100 times faster. About its impact?



- ◉ The most important shoe companies started 3D printing shoes.
- ◉ Plane spare parts are being 3D printed in some airports.
- ◉ Space stations have a printer that eliminates the need for many spare parts they used to have.
- ◉ We will be able to 3D scan with our smartphones, which will allow us to scan our feet and print out perfect shoes at home.
- ◉ In China, they have printed a whole 6 floor tall building.
- ◉ For the year 2027, 10% of every item produce will have 3D printing.

## 5) Business opportunities

If you think about a business sector in which you are interested, ask yourself the following question: will we have the same needs in the future? If the answer is yes, what can you do for those needs to survive before the sector disappears?

Any idea designed to succeed today is doomed to change tomorrow. Innovative changes are vertiginous.

## 6) Work

- ◉ Between 70 and 80% of known jobs will disappear within the next 20 years. There will be many new

jobs, but it is unclear if there will be enough jobs in such a short period.

- ◉ There will be a 100-dollar agricultural robot. Imagine our farmers as administrators of their lands, instead of working every day under the sun.

## 7) Food

- ◉ The first petri dish created veal is now available, and it will be cheaper than natural born veal.
- ◉ Several emerging businesses will shortly extract insect protein and put it in the market. This type of protein has more nutritive than meat and it will be known as “the alternative source of protein”, given the fact that most people still rejects the idea of eating insects.

## 8) Longevity

Currently, average life expectancy grows 3 months a year. Four years ago, life expectancy was 79 years old; today it is 80 years old. In 2036, the increase will be of one more year of life expectancy per year. This way, we could live much longer, probably over 100 years.

## 9) Education

The cheapest smartphones already cost 10 USD in Africa and Asia. Until 2020, 70% of humans had a smartphone or a laptop. This means that every human being has the same access to education all over the world.

## 10) Energy

- ⦿ Electricity will become incredibly cheap and clean.
- ⦿ Solar energy is already starting to replace fossil energy around the world. The price of solar energy will become so low that all coal companies will have disappeared in 2025.
- ⦿ Cheap electricity brings cheap, abundant water. Today, desalinization only requires 2kWh per cubic meter. We don't have water scarcity in most places; only drinkable water scarcity. Imagine what would happen if we could all have all the clean water we wanted virtually free.

All of this and more will happen in the immediate future. According to the GE Global Innovation Barometer 2016, 70% of executives worldwide have positive expectations regarding the deep world transformation. This study claims that emerging markets – particularly Asia, are adopting more disruptive innovation than their developed economies counterparts. Business people and citizens agree that the most innovative companies create completely new markets or products instead of improving or repeating the ones that already exist. Being disruptive is the golden standard for companies, but it is still a complicated goal: the new startup culture offers a new model that faces and challenges existing policies and work ways. According to the GE Global Innovation Barometer 2016, 81% of executives fight to have radical ideas, and only 24% feels their business is functioning the right way and quickly adapting to emerging technologies under the pressure



As a part of his global initiatives, in September 2018 USIL presented a modern digital educational platform in the Peruvian Consulate in New York to teach Peruvian cuisine through online interactive courses. It is a modern teaching method that mixes cuisine and new information technologies to share the theoretical-practical knowledge of Peruvian cuisine with the world.

of “digital Darwinism”. This means that businesses will survive as long as they are permanently innovating.

If we analyze the GEM 2017-2018 study, 17.8% of Peruvian entrepreneurs offer an innovative product. A generalized trend in Peru is the use of technologies that are over 5 years old. Even more so, in 2013 only 0.4% of young entrepreneurs said they worked in the high and medium technology sector, such as software, biotechnology, telecommunications, plastics, pharmaceuticals, etc.

### **The opening of new markets**

Despite the extraordinary growth of our countries during the first decade of the new millennium, there are reasons to doubt the sustainability of these growth rates in the long term, especially if it was linked to the rise of raw materials. In that sense, it is fundamental for young entrepreneurs to dare look for new markets not only inside their economies but, particularly, outside. Even a small number of entrepreneurs is trying to enter new markets, there are many others whose activity takes place in highly competitive places of the local market. Even more so, the percentage of businesses with a strong international orientation (whose foreign clients are more than one quarter of their total clients) has declined in comparison to past years. According to GEM 2015, the entrepreneurial activities that generate more dynamism are, in the first place, consumer-oriented (retail, restaurants, bars, health, education, social and personal services), with 80.9% followed by agricultural activities, with a 7.6%.

It is worrisome that the profile of entrepreneurial activities associated to information, communications and technology show no sign of growth, and that Peru is number 55 in a world ranking of 60 countries, whereas Argentina is number 34. In the case of finances, the case of Peru is disastrous: it has a 0%.

### **New management in the era of artificial intelligence**

The qualities of business management practices is an additional dimension we must take into account in this new age of innovating entrepreneurship. With the exception of Mexico, LAC countries practices are more similar to Chinese and Indian companies than to high-income countries. Given that companies in our regions have higher work costs than Chinese and Indian companies, bad management means a more severe competitive disadvantage.

Allow me to make a confession: experienced entrepreneurs, in general, do not have time to generate knowledge about our everyday tasks because our efforts focus on making our business grow and using new development opportunities in favor of the country. Academicians, on the other hand, have the time and the space to reflect about the elements that create success or failure in a new venture and, based on that, generating new business models.

Unlike before, when things could be improvised, now entrepreneurs need a solid technical and academic training to efficiently manage their businesses, as well as financial backup and a permanent innovation vocation. Specialists think unanimously that economy today is more creative,

digital, automated and global. It is not enough for today's entrepreneur to have basic skills in new technologies if they are not conveniently accompanied by cognitive dexterity and other skills such as creativity, communication, team work and perseverance. It is the absence of these skills which might explain the region's deficit regarding management and, therefore, innovation.

### **Education and innovation**

A fundamental element that explains the lack of innovation is the human capital gap, particularly in the quality of education. Experts say that education does not significantly promote entrepreneurship yet, and that it is a limiting factor. Besides the low quality of public education, there is no learning line related to the formation of entrepreneurial capabilities. Technical and productive programs are not valued, in general, we still have an employee generating model.

The lack of knowledge and trust on the financial system is a fundamental element for entrepreneurship. There is a manifestly poor financial education. According to the World Bank, 37% of people who don't have a savings account say that lack of trust is one of the reasons. This lack of trust reflects the lack of information of potential users and their difficulty to understand how the financial system works.

In 2017, the results of the PISA test of financial education showed that 51% of Peruvian students have a level 2, which means a very low level in the development of financial skills. Peru is the second last on a list of 14

countries with 403 points, right after Chile, which has 432 points. This corroborates the CAF Latin American Bank of Development (2011)'s conclusions, which shows that near 50% of Lima inhabitants who do not have a bank account, does not know the requisites to open one. Another regional characteristic is the lack of human capital –engineers and scientists- who might probably generate innovating entrepreneurs. The human capital stock of a country is often measured by the average schooling years of the active population and the quality of education, which is measured through standardized academic tests results. However, the human capital that is linked to innovation and entrepreneurship needs a particular analysis.

The chronical lack of a scientific and engineering training in the country is worth examining. The number of engineers in LAC countries is below the median, and its quality is lower than expected for its development level. In fact, the number of engineers is relatively low even in the most advanced countries in the region, like Brazil, Chile, Colombia and Mexico. For example, Peruvian mining industry has 50 billion dollar portfolio of projects, but these projects cannot be carried out without around 5 thousand engineers with 15 years of experience and not will people who just graduated. There is, particularly, an unmet demand for industrial, mechanical, electronic engineers, not because they don't have the right training, but because they don't have any experience or specialization. A production manager needs to have knowledge in all of these fields. Having said this, it may be necessary to encourage engineering quite a lot, as well as a scientific high school



education that increases the interest in those programs, as the United States did in the twentieth century or as are doing a few schools in the European Union, teaching programming to children.

In order to understand why there is so much enthusiasm regarding entrepreneurship in our region, but little innovation, we need to differentiate the motivations that lead people to start a business.

Peru is high among the entrepreneur countries because it has what is known as need-motivated entrepreneurship. This means that, when you have no other options, you must “start a business” to pay the bills through, generally, a subsistence economy. In this case, “starting a business” would be the same as selling cakes outside of a church. On the other hand, choice or opportunity-based entrepreneurship, in which the main motivation is using market opportunities in order to generate income, as it happens in developed countries, will be an independent job with an innovation charge.

In advanced economies, “starting a business” is creating a technology-based business or inventing something that does not exist in the market. Be a part of something different, with the support of a knowledgeable entrepreneur who bases on an ecosystem where investors are fighting to finance their project.

In Peru, in spite of a change in the motivation of entrepreneurial initiatives in favor of opportunity-based businesses (62%) compared to need-based

entrepreneurship (16.7%), we still cannot see the expected innovative changes. We see that the main motivation for the opportunity-based entrepreneur is more the need for more income than it is a desire for independence based on innovation.

### **State policies that favor innovating entrepreneurs**

Acknowledging innovation as the key of growth, Yale professor Robert Shiller (2013) recently claimed that “capitalism is culture. To sustain it, laws and institutions are important, but the more fundamental role is played by the basic human spirit of independence and initiative”.

Entrepreneurs transform ideas into successful, therefore profitable initiatives. In general, this transformation needs singular talents, such as the capacity to innovate, the introduction of new products and the exploration of new markets. This process also requires skill to lead other people, to prioritize tasks in order to increase productive efficiency and give the best possible use to all available resources. However, these skills are not enough. Entrepreneurs thrive when the economic and institutional environment is favorable and encourages results from innovation. When the environment is right, entrepreneurs take risks and invest in innovation, thus stimulating market productivity.

Why should governments care about entrepreneurs? The answer is simple: entrepreneurship is a fundamental driving force of growth and development. The basic premise is that leader entrepreneurs are not simply a consequence of development, but their promoters. Entrepreneurs play a crucial role in the transformation of low-income



University of South Florida (USF), June 2015. Raúl Diez Canseco Terry receives the President's Global Leadership Award due to his distinguished career in the educational sector. With him, Judy Genshaft, USF president, and Harold Mullis, USF directive.

societies, characterized by low productivity and, often, by subsistence self-employment in dynamic economies with innovation and a large number of well paid workers. This is why, as long as there is a link between entrepreneurship and productivity growth, it is fundamental to use State policies to accelerate the development process through the improvement of incentives and support that institutions give to entrepreneurial innovation.

I believe the three most important measures to encourage entrepreneurial activity should focus on:

1. Access to financing. Both in the private and public sector, we must emphasize on the creation of competitive funds to finance innovating projects with a high impact on productive and technologic development that can be competitive regionally or globally. Not only the business ecosystem will benefit from these programs, but also the widening of the country's financial system based on innovation, competitiveness and productivity with social inclusion. One crucial mechanism is the creation of a support net that maximizes the relationship between every agent in the entrepreneur ecosystem to join efforts and identify synergies. It is essential to create and strengthen dialog platforms in the financial system so we can analyze and debate the financial inclusion of the entrepreneurs.

One vital element in the improvement of the support network is the telecommunications' connectivity coverage and to overcome cost barriers as well

as the difficult geographical access. We should use cellphone and digital technology to increase bankization through non traditional channels, such as mobile or digital banks, both for transactions and for the confidentiality of information for the benefit of entrepreneurs, turning them into more secure partners for inclusion.

2. Public policies. An entrepreneurship law must be considered a State need in order to encourage innovation-based entrepreneurship and the improvement of businesses' competitiveness. This way, private investments in high growth entrepreneurial projects will benefit. Also, special tax and work laws must be adapted to entrepreneurs during the first few years of the company.

We could consider the creation of an autonomous entity with technical and specialized capability for the promotion of new ventures and that acts as the central axis of all entrepreneurship encouraging policy, avoids double efforts and optimizes financial resources. Another one of its functions would be to procure the joint work of all the agents in the entrepreneurial ecosystem, as similar experiences have shown in Chile and Mexico. In that sense, it is fundamental to create an entrepreneurs' network, so they can exchange experiences between incubators and transfer technology among entrepreneurship support centers.

3. An entrepreneurial education. As previously stated, the sensitization about creating products and improving their environment must be promoted in early childhood, particularly with the use of new technologies.

High school students must receive training in administration and finances, as well as guidelines that teach them how to do exploratory market and opportunity research. They also must learn agile, dynamic methodologies that help them create innovating businesses, particularly in the high-tech services.

On the other hand, financial training must be accessible along every stage life, thus ensuring impartiality and objectivity in training policies and the adaptation of educational programs to the specific needs of the population segment they are intended for. It is also fundamental to highlight the need of cooperation between all parties involved to facilitate the exchange of better practices.

I am convinced that Peru is the country of opportunities and that entrepreneurship has no limits, but we need to take the next step: quality entrepreneurship, prioritizing creativity, innovation and excellency in whatever goods or services they may offer. This is why, in this new stage, the concept of entrepreneurship includes entrepreneurs and younger businesses that originate in university classrooms.

We entrepreneurs must lead by example, and we believe that those who have reached success and have the privilege to lead their companies should commit to sharing their experiences with those who are just starting in the entrepreneurship and innovation world. We would like for more Peruvians and institutions, particularly educational institutions, to contribute to the task of creating a twenty-first century entrepreneurial culture. As time goes by, if we win the battle of productivity, we will enter a virtuous circle of stronger markets, more growth and opportunities for all.





VIII

STARTING UP, ALWAYS  
STARTING UP.

**H**uman beings undertake projects all along our lives, whether it is looking for a way to get out of bed as soon as the alarm rings, a means of transport that takes us safely and timely to where we want to go or doing a certain economic or philanthropic activity that will give us economic, personal and social revenues.

Starting a business is a long-term race, it is a constant up and down because of the successes and falls we may have along the way. Knowing how to face the challenge any of the activities we do, no matter how small or brief, is essential. Thanks to my more than twenty years of entrepreneurial experience, I believe starting a business is a constant learning, which is why I try to reinforce my skills every day, but everything has a starting point. My first business was the foundation of the San Ignacio de Loyola Academy in 1970. Then, I brought the KFC and Pizza Hut franchises (1980 and 1982, respectively). Since 1983, I focused on the educational service. That year I founded the San Ignacio de Loyola Institute. Two years later, in 1985, the San Ignacio de Recalde School in Lima and, in 1987, a school with the same name in Asuncion, Paraguay.

The following startups were in the university education sector. In 1996 I founded San Ignacio de Loyola University and, in 1998, I created the post-graduate school. In USIL we promote Peruvian cuisine in the world: in 2005, we inaugurated the Chef School. Then came the reaching restaurant Don Ignacio and, in 2007, Di Patisserie bakery. Three years later, in 2008, I started the first Peruvian Chef School Miami, the San Ignacio Culinary Arts, that later became San Ignacio University.

For the past thirty years, I've had the opportunity to travel around Peru thanks to the invitations I received from different universities to share my entrepreneurial experience. I spoke of my beginnings in the franchise business and in the promotion of education. In all those travels, I met many entrepreneurs that wanted to create a business, but didn't know how. Young people told me that one of the barriers they always found was the lack of access to financing to begin. As a consequence of these conversations and experience exchange with young people, I decide to propose the design of a program that would allow them to learn how to create an investment project, to get training, and to get financing. This way. In 1998 we took the first step with the creation of an NGO, Pro Wellbeing and Development Association (PROBIDE), a nonprofit aiming to promote business training, creativity, innovation, sustainability and competitiveness culture in Peruvian young people.

At its early stages, PROBIDE had the support of Peruvian companies to sustain potential entrepreneurs' enthusiasm and good ideas. During this inaugural phase, Dionisio

Romero's support was essential. He is the president of BCP (Peruvian Bank of Credit) and the Romero Group. Also, Efraín Wong and his brothers' support. Later, after the initiative's success, other important institutions and both national and international solidary corporations began participating, such as the Spanish Agency for International Cooperation (AECI), the Chamber of Commerce of Lima, the National Chamber of Tourism, the Development Finance Corporation (COFIDE), the National Superintendency of Tax Administration (SUNAT), USAID and Cosude-Swisscontact. As the years went by, the Inter-American Development Bank (IDB), the Andean Development Corporation (CAF) and the Community of Madrid.

### **1. Creer para crear program (1998-2013)**

It was PROBIDE's first program and institutional foundation. It was presented on October 15, 1998 at the National Society of Industries (SIN).

Creer para Crear was preceded by the results of the first National Competition of Young Entrepreneurs, PROBIDE's pilot, which summoned over 45000 participants for the conferences, seminars and talks. The spark of entrepreneurship ignited in over 1500 young people who presented 453 projects nationwide.

In July 1999, after a long, rigorous evaluation by INDECOPI (National Institute for the Defense of Competition and Intellectual Property), 32 projects were validated by sponsor companies. These initiatives involved 117 students from all around the country who became the first generation of young business people from the PROBIDE project.

After the contest's success, the plan escalated with the support of the IBD and with the creation of the Guarantee Fund it offered, which allowed the financing of more projects. *Creer para crear* lasted for 10 years, as agreed with this international institution, which is the main source of financing for the economic, institutional and social development of Latin America and the Caribbean. The IBD became the guarantor for new business proposals, and supported the projects that won the contest. This allowed low-income young people to meet their warranty need to access bank financing.

The main lines of action for the support to micro business creation were the potentiation of microloans, business consultancies, training, project incubation, market research, training for trainers, and training for volunteers.

The program had a remarkable success:

- ◉ 16000 young people were trained in investment projects elaboration.
- ◉ 5119 business ideas were identified, most of them coming from inner provinces.
- ◉ 130 businesses guaranteed for financing entities.
- ◉ 9817 collateral beneficiaries in young people who participated in project creation workshops.
- ◉ 3000 people went to international conferences.

*Creer para crear* innovated in the way to start a business putting the concept of venture capital as a source of support for business projects and investment opportunities in all socioeconomic sectors. Through this program, PROBIDE was the first NGO to apply trust funds as a financial object so that banks would give small loans to hundreds of new projects, to such extent that now banks offer this type of products, just like Caja Municipal de Ahorro y Créditos, Rural cajas, among others.

### Success stories

#### EL AUTOMÁTICO – mechanized carrot washing machine

##### Chupaca – Junin

Financing: Bank of Credit of Peru  
19000 dollars

This is one of the most representative projects of the program due to its growth. It began with an operational capacity that allowed it to wash 5 tons of carrots per day, and today it washes 60 tons. It intends to install new washing tanks in Arequipa and Bolivia. Currently, PROBIDE supports the design and presentation of entrepreneurship advertising in the region, as well as the negotiations for the commercialization of the product in Wong supermarkets.

"I never thought I would have the chance to develop my inventing capacity far away from Lima and, at the same time, put such a quick and efficient cleaning system at the service of carrot producers from my region, Chupaca, in Junin. This system replaces the washing process in the Cunas river".

Luis Antezano Vélchez, general manager.





### **HELICONIAS DEL ORIENTE – exotic flowers trade.**

#### **Pucallpa – Ucayali**

Financing: Bank of Credit of Peru

6000 dollars

This business trades exotic flowers that grow in the region, has specialized technical staff and offers gardening services to institutions and natural persons. Their marketing plan focuses on the positioning of their brand through sponsorship in social events.

### **INDUSTRIAS SISA S.A.C. – sachá inchi-based products trade and production**

#### **La Molina, Lima**

Financing: Continental Bank

15000 dollars

This company started working by making sachá inchi seed snacks and, after building their industrial plant in Los Olivos district, it has expanded their offer to vegetable oil products, gourmet creams and sauces, which are sold to the main supermarkets (Wong, Vivanda, Tottus) and exported to France, Belgium, Spain and the United States.

“My grandmother Judith Reátegui del Águila used to prepare a delicious soup called *inchicapi*, made of peanuts and toasted sachá inchi. She also spoiled us with *inchicucho* sauce, which we used to spread on boiled yucca, and it was delicious. In order to make these dishes, she toasted the sachá inchi, also known as the peanuts of the Incas. This memory gave me the idea to create the sachá inchi snacks”.

**Claudia Gonzales Valdivieso, general manager.**

### DEPORT CENTER PERU S.A.C

#### Synthetic court rent service

##### Comas, Lima

Financing: Continental Bank

16500 dollars

This Company has increased the court rent service in Comas (1) and Los Olivos (2) districts through agreements with educational centers that had unused terrains that were refurbished with infrastructure and fixtures.

#### MUSTIKUSIKUY S.R.L –Differentiated tour service with new routes at the Titicaca lake

##### Titicaca lake, Puno

Financing: Continental Bank

12081 dollars

There is a different tour service according to the target audience. They offer three types of tours: eco-tour, sunset tour and party tour. This business has a diffusion-based marketing plan with foreign tourists, who are their main source of income, and have developed a website showing their attributes. Also, it has established alliances with national and foreign tourism agencies.

#### SMALL COMPANY PIG – pork production and trade

##### Characato, Arequipa

Financing: Continental Bank

15000 dollars

This company is Camal Don Goyo's main provider. Camal Don Goyo is the most important meat trader in Arequipa.





Small Company has its own office, which is also adapted for other animals and includes chickens and guinea pigs. They also sell livestock viscera in local markets.

#### **ZOO COCHAHUASI S.A.C. – wild flora and fauna zoo in Cusco**

##### **Cochahuasi, Cusco**

Financing: Continetnal Bank  
16500 USD

After overcoming the natural phenomena that ravaged their headquarters, they got a second loan to finish refurbishing their infrastructure. Today, this business is a tourist attraction center in Cusco.

“In April 2008, with two macaws and one turtle as our main attractions, the zoo was inaugurated with 10 kids who came from a rural school nearby, and we earned two soles! Today, the main attraction in Cochahuasi is the Andean condor, which has been trained to be in contact with the visitors and who is a part of the local touristic circuit. For this, we have tour guides who speak English, French, Portuguese and Italian, and our income has allowed us to pay back the loan PROBIDE helped us obtain. Our project also contemplates the reproduction of the Andean condor, a species from the Peruvian Andes, which is endangered.

**Dante Chávez Álvarez, general manager.**

#### **HIDROAMÉRICA S.A.C. – civil sanitation work service**

##### **Lima**

Financing: Continental Bank  
15000 dollars

This company has a select professional team, with technicians and operators that are qualified in sanitation services. It has an exclusivity contract with the most important company in the sector, Sedapal, to which it offers its services with high tech equipment.

#### **TRANSPORTES EMMY – construction materials transportation (coarse sand, fine sand, concrete, crushed stone) and land clearance**

##### **Ate, Lima**

Financing: Bank of Credit of Peru  
15000 dollars

This company acquired a Volvo F716 dump truck, with a 10M<sup>3</sup> load volume. Transportes Emmy uses 100% of their capacity and is now negotiating a new loan for the purchase of a new unit. Its main clients are construction companies in La Molina district.

#### **2. Productive Development PROBIDE projects (2005 – 2015).**

In 2001, I was elected vice-president of the Republic and named Minister of Industry, Tourism and International Negotiations, which became the Ministry of Foreign Trade and Tourism in 2002. There, I encouraged the insertion of Peru in the international market through the free trade agreement. From 2005 on, I aimed PROBIDE towards the



encouragement of entrepreneurship in order to rationally use the great variety of natural products Peru has, giving them added value and improving the economy of producer communities through training and consulting so they use modern techniques and state of the art equipment.

Thanks to the participation and financing of allies that share PROBIDE's mission, this type of projects allowed producers from many regions in the country to elevate quality standards and competitiveness in their businesses. Also, these initiatives have allowed the contribution to the empowerment and development of women entrepreneurs.

#### MÓDULO DE FERMENTACIÓN – CITE CACAO

Financing:

USIL (PROBIDE): 125000 dollars

Cedro-USAID: 120000 dollars

Andean Development Corporation (CAF): 125000 dollars

The *Desarrollo del Centro de Innovación Tecnológica del Cacao* project (CITE CACAO), in the San Martín region, aimed to strengthen the cacao productive chain through the improvement of crops and the processes of fermentation and drying, in order to obtain a better cacao grain and transform it into other products: liqueur, cocoa, chocolates, etc.

The program allowed us to train 90 producers in management, entrepreneurship, and systematization of technical-productive and commercial information. We also trained 150 technicians and workers so they use the opportunities offered by forest management of cacao.



Also, 2500 producers were benefited with soil analysis and clonal gardens to improve their fertilizing range and produce their own clones, sprout branches and cacao plantations. 25775 San Martin produces benefited from the program: 5675 producers associated to organization s benefited directly and, 20000 non-associated ones benefited indirectly. The training included three fermentation module in Tocache, la Banda de Shilcayo and Calzada.

The total investment of the project was 370000 dollars. USIL contributed with 125000, Cedro-USAID, 120000, and the Andean Development Corporation (CAF), 125000.

#### Homologation of providers in Junin

Financing: Andean Development Corporation (CAF).  
70098 dollars

The economy of the Junin region is based on mining, commerce, agriculture and construction, but it still needs to reinforce and improve the quality of its products so they reach an exportation level. According to the Ministry of Production (2016), there were 56963 formal companies, 55280 microbusinesses, 1537 small businesses, 43 medium businesses and 103 large businesses in Junin. Only 46% of them belong to the commerce sector, 39% to the service sector, and 8% to the manufacturing sector.

One step to improve the economy in the region was the project *Homologación de proveedores Plaza Veá region Junin*, supported by San Ignacio de Loyola University, which allowed to connect MSEs in the center of the country

to the large market in Lima. Thanks to this project, MSEs received technical consultancies for the improvement of their processes, procedures, infrastructure, and quality policies, and they could become providers of the Plaza Veá supermarket chain.

The project was financed by the CAF, which gave 70098 dollars to identify, select and train 150 SMEs so they would reach the quality standards needed to sell to supermarkets in Huancayo, and then, in supermarkets nationwide.

All participant SMEs, 70% of which came from the country side, offer cacao, processed oranges, coffee products, citruses, fruits, jams, honey, pollen and chilies. When the training and evaluation process finished, 31 SMEs in La Merced, Chanchamayo, San Ramón, Pichanki and Satipo were certified with SGS to become a part of Plaza Veá providers for processed or agricultural foods.

PROBIDE won the Business Creativity contest under the name of Peru Pasión in the Social Commitment category in 2010 thanks to the implementation of the best innovating practices in Peru, in different fields of business and social development.

#### FYNPME MUJER EMPRESARIA

Financing: Inter-American Investment Corporation (IIC) from the IDB  
376 858 dollars

This program aimed to promote women's empowerment, developing their administration and economy skills. Also,



it aimed to diagnose businesses in order to improve them, and organizing talks and workshops.

In order to carry it out, IIC approved a 376858 fund to develop four explicit phases with different activities exclusively focused on women-owned businesses.

The beneficiaries were 50 businesswomen who sold over 1 million soles a year with staff on their payroll. They also participated in related conferences to increase the competitiveness of their companies, and received technical assistance both individually and in groups. 32 companies finished the program.

#### MÓDULO DE FERMENTACIÓN – CITEXPOR

Financing: Ministry of Foreign Trade and Tourism (MINCETUR)  
400000 dollars

CITE CACAO's success replicated in CITEXPOR with the funding of MINCETUR, who gave 400 thousand US dollars that allowed to build five fermentation modules. It had training programs in Cayena, Pajarillo, Machu Picchu (El Dorado), Campanilla and Awajún. The project allowed 150 farmers to get business management and export training.

CITEXPOR is a training and improvement center for international trade associated to the cacao sector. Its main goal is promoting industrial and technological development of cacao through the strengthening of producers' competitiveness and the encouragement of a technological innovation, quality and efficient articulation entrepreneurial culture. CITEXPOR focused on improving

the added value on exportable offers on two different axis of the cacao chain and its products: “benefits of certified cacao” and “artisanal chocolate”. Through this project, new production, packaging, control and technical normative compliance processes were implemented, as well as a better physical export distribution, among other issues linked to foreign trade.

### 3. PROBIDE technology initiatives

In its technology and entrepreneurship system, PROBIDE has a vast project incubation and acceleration program in the bio-business, hotel, tourism, cuisine, education and health sectors, which allows access to different training modules that adapt to each startup's needs aiming to lead them towards their maximum development.

An important ally for this program is San Ignacio de Loyola Educational Corporation, based in Lima and with branches in Cusco and Arequipa and, internationally, Paraguay, the United States and, soon, Bolivia. San Ignacio de Loyola University has USIL Ventures, its own business incubator, which is a member of PROBIDE.

### USIL VENTURES

USIL's startup incubator has developed an entrepreneurship-oriented educational model, sowing educational DNA in the university's students through transversal courses all along their degrees. Thus, agile methodologies were introduced in order to boost innovation and creativity with a technological approach, as well as the encouragement of dynamic scalable startups.

USIL Ventures is one of 20 startup incubators/accelerator nationwide, supported by the Peruvian State through the National Program of Innovation for Competitiveness and Productivity (INNÓVATE Peru) of the Ministry of Production, aiming to increase business productivity by strengthening the agents of the innovation ecosystem (businesses, entrepreneurs and support entities) and facilitating their interrelation.

### Technologic Ecosystem

USIL Ventures' incubation and acceleration model is inspired in the best international practices and it includes:

- ⦿ An incubation and acceleration manual aiming to systemize USIL Venture's incubation and acceleration processes.
- ⦿ A modern coworking space in La Molina and Lima Norte, with high tech machines.
- ⦿ A startup management system software for the followup and monitoring of the startups in the program.
- ⦿ Our own mentor network, formed by prominent entrepreneurs, business people and national and international professionals.
- ⦿ Telefónica's Open Future Global Network's only hub in Lima. Open Future is in Europe and Latin America, and its hubs bring innovation and entrepreneurship to the business ecosystem,

strengthening and giving visibility to startups and internationalizing technological solutions.

- ◉ The Peruvian Seed Money Association (PECAP), which gathers the main agents of the Peruvian innovation and entrepreneurship ecosystem, which aims to the creation of angel investment and seed money mechanisms, collaborating with State Entities to promote growth.

Three incubation and acceleration programs: StartUp USIL, Biostartup and Acelérate Open Future.

- ◉ The support of INNÓVATE PERU to help in money seed funds management raised by startups in the SartUp Peru and Reto Bio programs.

#### **Achievements: 2014 – 2019**

- ◉ 19 open calls for accessing the different incubation and/or acceleration programs.
- ◉ Accompanying 127 startups with over 1800 mentorship hours through incubation and/or acceleration programs.
- ◉ Raising 9.4 million soles in investment funds for projects in the portfolio.
- ◉ Generating 592 new job posts: 318 for men and 274 for women.
- ◉ 37 founders are women.

#### **4. BIOSTARTUP: UNDERTAKE DIVERSITY (2015)**

This is a PROBIDE contest, also carried out with the help of San Ignacio de Loyola University. BioStartUP arises from the convergence of two factors: the great Peruvian biodiversity –with its abundant flora and fauna – and the arrival of the Fourth Industrial Revolution or Industry 4.0, a world in which machines interact among them and where robotics, genetic engineering, telecommunications, industrial design and artificial intelligence merge.

With BioStartUp, PROBIDE enters a new stage aligned with the new technological times, seeking to develop a new incubation line that supports new enterprises that develop products or ingredients based on the variety of national species.

The different editions of the competitions correspond to a current business line: bio-business, with products linked to nutrition and esthetics based on natural products. This type of products have unique, privileged conditions in Peru. With BioStartUp, technology values and shows Peruvian resources to the world, with a business model that seeks sustainability and the care for the environment. In the same way, it gives development opportunities to communities that, despite living in the places where raw materials come from, still have low economic resources.

#### **BIOSTARTUP 1G**

Financing:

PROBIDE: 285450 soles (67.06%)

GIZ: 140200 soles (32.94%)



In 2016, PROBIDE launched the first BioStartUp contest through its Business Incubator BioStartUp and the CEUSIL (San Ignacio de Loyola University's Entrepreneurship Center). This happened thanks to the support of Bio Innova Peru, a Swiss Corporation – SECO and German Cooperation initiative, Implemented by GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit). It aimed to strengthen selected entrepreneurs in the development and growth of their projects in order to generate an environmental, social and economic impact in the country. This first contest was focused on ventures that developed products or ingredients for the cosmetic or nutraceutic industry from Amazonian plants. The project included the proper incorporation of good practices to access genetic resources and distribution of benefits. Seven entrepreneurs were selected among over 25 applicants based on rigorous, demanding criteria, such as environmental and economic sustainability, the entrepreneurs' capability, their business model, the innovating merits and the market potential:

- ◉ Neoeological: natural matico and quinoa face cream.
- ◉ Casa Vértiz: intimate hygiene soap with dragon's blood.
- ◉ Frutiawajún: elaboration and trade of ungurahui oil for cosmetic objectives.
- ◉ Shiwi: lip balm with aromatic oils.
- ◉ Camino Verde: Tambopata Amazonian essential oils.

- ◉ Bocados: Amazonian plants filter bags with anti-diabetes properties.
- ◉ Industrias Alimentarias Amazónicas: the elaboration of copuazú butter for cosmetic use.

When the program ended, all seven ventures settled in the market presenting basic products, better sales and new packages with a business model that adapts to social and environmental demands. Frutiawajún and Shiwi participated in the Latin American Forum of Investment and Impact (FLII9, organized by New Ventures, which allowed them to associate with the international entrepreneurial ecosystem.

## BIOSTARTUP 2G

BioStartUp – second generation (BioStartUp 2G) was a contest that encouraged entrepreneurs in their projects' development and growth as well as their social and economic impact on the country. This second edition supported the incubation of startups that developed products and/or services based on the sustainable management of Andean forests in Peru.

Mountain ecosystems, particularly Andean forests, play a key role in ecosystems' goods and services: they regulate climate and water, they mitigate floods and draughts, they protect against erosion, they mitigate greenhouse gas emissions and maintain the habitats that allow the permanence of biodiversity.

Understanding the benefits of Andean forests and their role in local and national economy as well as their potential for adaptation and mitigation of climate change and the development of productive activities leads us to face the marginalization challenges these forest are currently going through.

BioStartUp second generation (BioStartUp 2G)'s main goals were:

- ⦿ Boosting businesses that seek to innovate or improve services and/or products based on the sustainable management of Andean forests, considering climate change.
- ⦿ Highlighting the role of Andean forests in the adaptation and mitigation of climate change so they contribute to the resilience of both peoples and ecosystems, integrating them in a sustainable development context.
- ⦿ Propitiating the creation of viable economic alternatives based on Andean forest ecosystems' goods and services.
- ⦿ Supporting the articulation of value chains based on the sustainable management of Andean forests.
- ⦿ Stimulating entrepreneurs' innovation and creativity aimed to contribute the country's efforts to reduce deforestation and forest degradation.

The program had the support and the experience of strategic allies such as the Andean Forest Program, an initiative by HELVETAS – Swiss Intercooperation – CONDENSAN, which has COSUDE funds. The finalists were:

- ⦿ Bayas Peruanas (wild berry recollection, production and trade – Andean blueberries).
- ⦿ Evea Ecofashion (the manufacturing of hevea shoes and accessories by the community).
- ⦿ K'allampas (recollection, production and trade of Andean edible mushrooms).
- ⦿ Llama Pack Project (valorization of llama breeding and promotion of llama use as a pack animal in touristic areas in the high Andes).
- ⦿ Wais (filtering bag and ready to drink energy drink based on "wais" processed leaves)

All five finalist companies entered an incubation/acceleration program, accessing sustainable commerce, business model, value chain, financial and legal issues, marketing and sales in international market, and benefits of adaptation and climate change mitigation services. The winner was Evea Ecofashion.

### BIOSTARTUP 3G

BioStartUp 3G supported the incubation of ventures that develop products from the southern region of Peru for cosmeceutics, nutraceuticals, sustainable tourism and super



foods sectors. Superfoods are foods with a high nutritional value, such as quinoa, maca and kiwicha among others.

The call for the contest was aimed to Arequipa, Cusco and Madre de Dios, and it was oriented towards startups and businesses. We sought the organizations or ideas that develop products or services from the sustainable management of ecosystems in those regions. Its goals were:

- ◉ To boost the creation of businesses or business models based on biodiverse services and products from the south of Peru.
- ◉ To highlight the country's native biodiversity, considering biocommerce's principles and criteria.
- ◉ Creating economic alternatives from products and services that come from Cusco, Arequipa and Madre de Dios.
- ◉ To strengthen the value chain of the companies' products.
- ◉ To implement good access practices to genetic resources and profit distribution.
- ◉ Supporting the implementation of innovative and financially, socially and environmentally sustainable business models that are oriented towards the creation and development of sustainable businesses.



Six finalist projects were elected, which entered an intensive startup formation program, with feedback from specialized mentors and the participation in a BioDemoDay with the designated jury at the end of the program.

The program lasted for six months. The contest was divided into two categories: businesses and ideas. The first category considered the commercial aspect and the use of mentorships. The second, the impact of the idea on society. For the ideas category, the winner was La Clotilde, from Arequipa. It received 3500 soles as a seed money prize in services for the development of a basic viable product. For the business category, the winner was Cusco Mara, from Cusco. They grow and sell quinoa and won an internship visiting the entrepreneurial ecosystem of another country in the region.

In this category, Hawakur, a company from Madre de Dios, supported by the Association for the Conservation of the Amazon Basin and the Vicerectorate for Research, presented a project to the Fondecyt of Concytec and won a 500000 soles prize, which they used to buy machines and accessories for the extraction of sinami oil.

#### **BIOSTARTUP 4G**

The fourth generation of BioStartUp supported the incubation of ventures that developed products or services in the interior of the country and are a part of the agricultural and food value chain (AGRITECH) in the food, sustainable tourism and sustainable cuisine sectors. Between September and November 2019, ten

ventures participated in an intensive incubation program, with feedback from specialized mentors. The winners participated in a biobootcamp. There were mentorships and coaching, access to investment networks and contact with the ecosystem, which allowed them to boost their startup or business model with innovation and technology. Finally, the winners were prepared for their participation in Biodemoday with a jury that selected the two winners in both categories, which prizes were:

- ⦿ Ideas category: 3000 soles of seed money for the development of their minimum viable product or service, backed by an agreement both parties signed.
- ⦿ Business category: an internship to visit the entrepreneurial ecosystem in another country within the region.

#### **5. Sustainability**

USIL has the potential to significantly contribute to finding a solution to the most basic problems of society through the execution of the duties established in the University Law. Said norm, which passed in 2014, demands that universities give 2% of their institutional budget to social responsibility activities. This social mission has represented a brilliant opportunity for the design and development of a new University Social Service Model, with specific initiatives and a wholesome strategy for the sustainable development of rural communities under a territorial and multidisciplinary approach, using the different professional programs and specializations USIL has to offer.



Sustainability and social responsibility programs and startups carried out by USIL link the academic to society through three main university functions: extension, articulating efforts and generating synergy between organizations; research, by performing impact studies and systematizing good practices for the design of better interventions; and teaching, through the development of skills that allow the self-sustainability of the communities. At the same time, they involve the students so they strengthen their formative skills and commit ethically to the service of society.

### ***After Occopata's sustainable development***

Occopata is a rural community 40 minutes away from Cusco city center, in the Santiago district, Cusco province, at 3941 meters above sea level. It has 900 inhabitants, a health post and three educational institutions: IE N° 216 Occopata preschool (41 kids), IE Virgen del Carmen de Occopata primary school (75 kids), and Alternation mode Wayakunaq Yachaywasin High School (120 kids).

Occopata's economy depends almost completely on its native potatoes, because 600 varieties grow in its territory. The rest of agricultural activities are mainly for personal use. However, during the past few years, some greenhouses have settled there for growing strawberries and flowers.

Potatoes are appreciated in Peru and around the world. As important as being the true guardians of native potato is, Occopata has different difficulties that PROBIDE wants to



erase, joining forces with the State, the private sector and the educational sector.

The main difficulties in the community are the high prevalence of anemia, the low quality of water, overcrowding, the poor management of solid residues and the limited conditions and capacity for generating income. The goals of this great sustainable venture are very wide:

- ◉ The incorporation of an entrepreneurial spirit in Occopata's women weavers, promoting their team work and search for new products and markets.
- ◉ Visibility of the community on written and audiovisual media, as well as social media.
- ◉ Helping to renovate the community's preschool.
- ◉ Creating a graphic commercial identity, designed by the Gabarrón Foundation, as the result of an artistic workshop with Occopata children.
- ◉ Installing garden centers and water filters in the IE N°216 preschool and the Virgen del Carmen primary school, which was done in conjunction with the NGO 33 Buckets.
- ◉ The implementation of a psychomotricity classroom and the renovation of the kitchen at the preschool.
- ◉ The implementation of the library and improvement of the dining room and kitchen in the primary school.

- ◉ Trash Challenge in Occopata, where the community, students, international volunteers and administrative workers, and the District City Hall of Santiago participated, cleaned and encouraged the proper management of residues and environmental protection.
- ◉ Celebrating the Occopata-USIL Christmas. This event included integration activities performed by San Ignacio de Recalde School teachers and students, a Christmas carol contest in Quechua and Spanish, whose winners travelled to the Sacred Valley of the Incas.
- ◉ Incidence in the local government for the construction of 54 community greenhouses.
- ◉ The elaboration of a formula and a prototype for iron fortified potato bread in order to fight anemia.
- ◉ Development of community rural tourism in Occopata workshops: i) tour coach, ii) food and drink services, iii) tourist accommodation.

#### **General achievements:**

- ◉ Multidisciplinary participation and work by collaborators from over 20 different undergrad programs, administrative areas and three corporation educational units.
- ◉ The initial design of over 60 intervention initiatives based on the experience and field of the undergrad programs, thus creating teaching challenges.

- ◉ The implementation of actions under the learning-service model.
- ◉ Occopata Living Lab model, designed to contribute to the community's needs, aligned to its Sustainable Development Goals with a multidisciplinary approach.
- ◉ Internships and volunteering for San Ignacio de Recalde and University students from the Music, Business Art and Design, Tourism and Nutrition USIL programs in educational and health institution for the training of villagers.

## 6. The University of Guinness Records

Throughout a dynamic, constant transformation that adapts to current times and always looks forward, USIL seeks to influence the social and economic development of Peru and to promote Peruvian human and natural resources around the world. In that sense, the Corporation started a worldwide venture in 2015 in order to beat world record through the famous Guinness World Records (GWR), a prestigious international institution that has been officially registering new records in multiple categories for the past 63 years. It shares with USIL values such as integrity, passion, detailed research and inclusion.

The global impact that beating a Guinness World Record means, as well as GWR's trust and exigence for their official events are a golden opportunity for showcasing USIL and Peru to the world.

Cuisine is one of the GWR's categories and one of the emblematic USIL programs. It is also the element that allows us to show our professional training offer and to contribute with the development of the communities involved in each GWR.

The cornerstone of each one of USIL's records is a Peruvian food product, or a food product which presence is very important in this country due to its nutritional qualities and potential impact on the sustainable development of the community where it grows. This way, every try seeks to highlight and promote Peruvian farmers and producers' work, and to suggest solutions that will improve their quality of life and ensure the sustenance of the next generations.

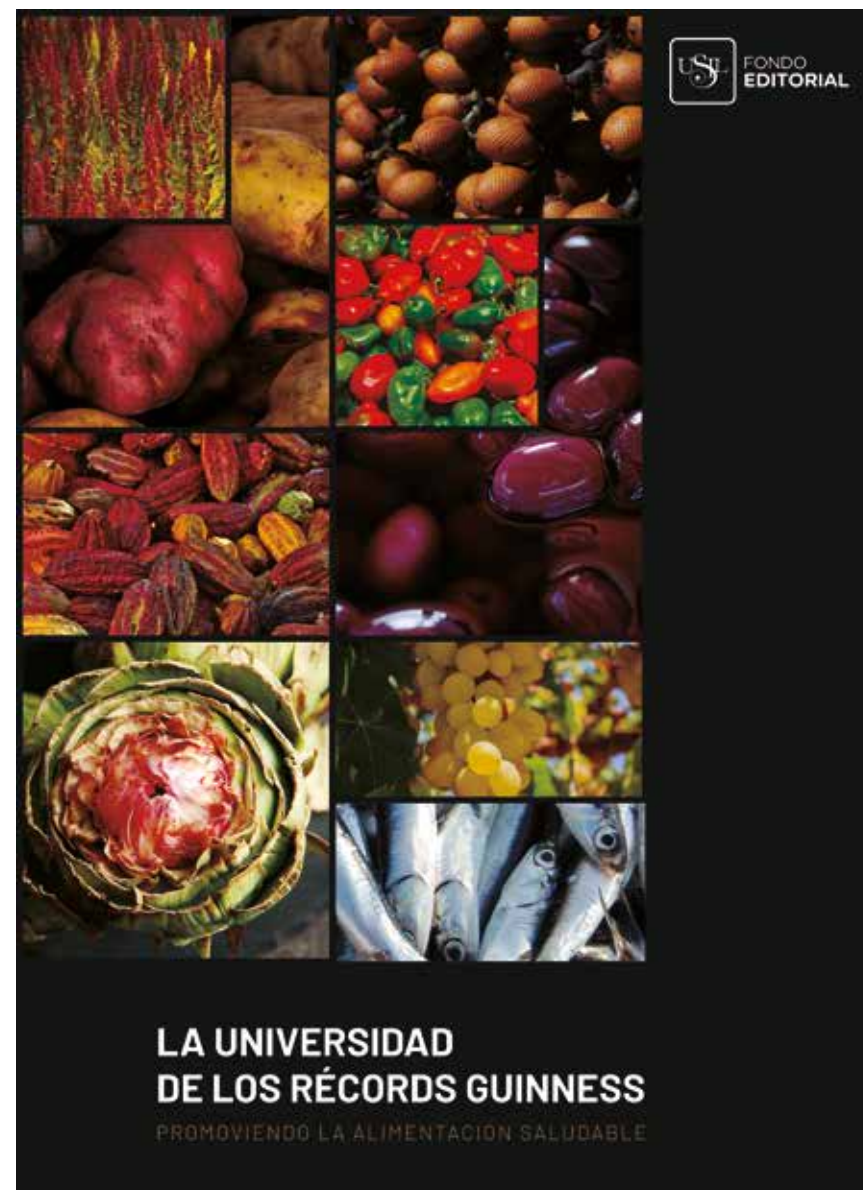
After the star product is chosen, and demonstrating our national cuisine's unique flavor, USIL chooses a Peruvian dish that, when made in a large scale, will lead to the breaking of a world record. Every adventure in the quest for breaking a record mobilizes a multidisciplinary team from the university that includes chefs, engineers, researchers, communicators and nutritionists who, with great enthusiasm, join synergies in order to surprise the world with a new, tasty, nutritious and very Peruvian Guinness World Record.

During the test, the USIL team is supervised by GWR judges in every step of the preparation process, so they with the high process and product standards the international institution demands.



Thus far, USIL has beaten nine GWR with the priceless support of government authorities (city halls and regional governments) from the cities that hold each challenge, creating world visibility and sparking the initial flame for future growth and progress opportunities that benefit everyone involved.

All Guinness records USIL has obtained thus far are: the world's largest quinoa salad (Miami), the world's largest rocoto relleno dish (Arequipa), the world's largest olive salad (Tacna), the world's largest causa rellena (Cusco), the world's largest chocolate degustation (Pucallpa), the world's largest aguaje fruit mazamorra (Iquitos), the world's largest degustation (Ica), the world's largest artichoke salad (Trujillo) and the world's largest cebiche degustation (Callao).







IX

THE PERU  
WE WANT

Michael Porter, professor and director of the Harvard Institute of Strategy and Competitiveness, considered a strategy theory and competitiveness guru, said in the '90s that a nation obtains wealth through the generation of products and the way those products are obtained. He added that the microeconomic environment depends on four factors that determine the quality of life in a country. Well, so far, his fundamentals have not changed:

- ◉ The existence of high quality materials (qualified, specialized work force, capital, infrastructure).
- ◉ High quality clients. He claims that, if the client is tolerant and does not discriminate, a country cannot be efficient.
- ◉ A climate that celebrates competition with fundamental pressure for productivity and innovation.
- ◉ The construction of a group environment, because no company can maintain itself in isolation.



During his last visit to Peru in October 2011, this prestigious economist said our country has the chance to be a world leader in economic growth with social inclusion in an international crisis context. He also highlighted the growth opportunity for national companies to apply the “shared value” issue, where all businesses can grow and society is included in environmental, poverty reduction and other social criteria. “In order for this to happen, Peru has to be more competitive and allow the private sector to grow more rapidly”, he said. Also, he claimed that, the best opportunities to grow in a country usually come from the fields where its experience lies. In Peru’s case, it is oils and gas, meaning the petrochemical industry.

The main issue for Peru are the commodities’ prices, to make them reach a lower price for a lower demand. This is why Peru needs to emphasize their economy beyond mining and gas, so the impact of commodities’ price oscillation will be reduced, he suggested back then. For this process, the business person is the main agent of competitiveness. Of course, an efficient action depends on many factors but, whatever they are, the game will always be determined by business people’s maneuverability and skills.

Then, why are there not enough jobs if we have such entrepreneurial potential? Until the end of the ‘90s, the answer was simple: a business did not grow enough due to the lack of clear policies, the absence of leadership and an obsolete industrial development model that couldn’t face the aggressive globalization process.

After almost 30 years, we are going through a relative economic growth process, but what creates controversy



*The political teachings and the values they represent in my life went hand in hand with Fernando Belaunde Terry and Violeta Correa, who lived by them with honor, loyalty and decency.*

is not the free market or the democratic system: it is the State's growth and development model and the businesses malpractices. It is obvious that, besides the international market's favorable conditions for our export products – mining, agricultural and marine – the country shows a relatively sustained economic growth within a democratic regime. However, the new challenges of Peruvian economy are competitiveness and innovation in strategic management, as well as the development of comparative advantages in its products and services. In that sense, creativity and technology are still significant factors for the generation of value, particularly the exporting industrial system. Due to its capacity to absorb human resources, its participation in de GDP and its main role in the conquest of new markets, industry will become the motor of national growth and the paradigm for innovation.

How to make of Peru a competitive, prosperous, entrepreneurial nation? I dare suggest the following actions:

- ⊙ Having a global vision of the country and the way the world works, a vision that must be shared by all the collectivities that form the nation's social tissue.
- ⊙ Carefully handling the macroeconomic variables and implementing realistic policies in the socioeconomic sectors that allow the transformation from a primary economy –the exploitation and export of raw materials to an internationalized economy with a high added value and a sustainability approach.

The basic condition for a development model to succeed is that it can be implemented with a good institutional design.

This will be possible if there is the criteria in Peruvian people's mission and vision are the same and also coincide with action, particularly when it comes to wealth creating agents: the State and business people.

It is essential to have a government-business strategy that boosts comparative advantages in sectors with a high technological level and an important human capital in order to increase productivity levels. We need to establish a virtuous circle formed by sectors and products with potential competitive advantages that meet the markets' and international consumers' requirements.

This way, in the twenty-first century, citizens must show the capacity to adapt to changes and defeat conjunctures, expecting the same of their governments and their political and business leaders. This is why we must strengthen the conditions for businesses to thrive and the entrepreneurial culture to internalize in every level in society; thus we shall have a high competitiveness in the international market in a reasonable deadline.

The challenge is to revalue our natural resources –we have them all along national territory- and develop and increase competitive capacity of our companies linked to the international market.

Strengthening and maintaining local, regional or national competitive advantages is key to facilitate the State and businesses' task. Competitive advantages are those visible or hidden forces that allow a region or country to obtain wealth from their prosperity sources, which their competitors do not have. I quote Michael Porter again:



he says that wealth is guided by productivity or the value created in one work day for every dollar invested and for the unit of physical resources used by a nation.

“Progress depends on the improvement and specialization of local production factors: the sophistication of local demand, in order to help local producers anticipate and meet international needs; the triggering of local rivalry under more advanced competitive dimensions and; the creation of related company and industry clusters.

Porter claims that, in some countries, those clusters were formed from the exploitation of a natural resource, but it was the development, investment and innovation in other similar areas what boosted different, more profitable activities which are now their main income source. An example of this is Denmark, which has milk and cattle complexes and manufactures the equipment necessary for these activities. Also, Canada and Australia, which mining complexes do not only extract and process minerals, but also produce equipment and specialized services, and the Netherlands, where there are conglomerates that produce and trade flowers. These complexes generate such solid activities that, many times, they outlive the disappearance of the natural resource that originated them. For example, mining in Finland originated a large mining equipment manufacturing industry. Finland also created a forest activity cluster. In order to do this, they use their comparative advantages: large forest plantations, reserves, and their closeness to the ocean, which allows reducing transportation costs. As it became a more mature industrial complex, forest activity allowed the association

with other activities, which creates products with more added value. Finland continues to export sawn timber, construction products and furniture, pulp, lignin, cardboard and paper.

In the '90s, a study in Peru (Monitor Group, directed by Porter), identified that the agricultural industry, textile industry and tourism are the comparative and potentially competitive advantages we must exploit. Thirty years from that, we have the appropriate physical resources and weather conditions for the agricultural industry and the other sectors to become our economy's competitive advantages.

Let's review our potential resources:

### **Educational reform**

The tool that will allow us to walk the path of success is education. First, we have to accelerate the educational reform that is already taking place through the improvement of school management and a modernization of school infrastructure, which includes the reduction of a gap of 10% of the GDP in this sector. This means that, in order to place value on this economic potential, we need to restructure our educational model, developing a critical and productive thinking in our children and young people, until both the public and the private sector start investing in research and development policies.

We need a new approach to improve basic reading, writing and mathematical skills, as well as the access to higher education access for low-income students and those who

live in rural areas. This is the case for Beca 18, which has helped thousands of students from the poorest regions of the country.

Our country's investment in research, innovation and development is very low compared to other countries in the Organization for Economic Co-operation and Development (OCDE). Israel invests 4.3% of its GDP in research and development; we invest only 0.4%.

We need to create a national strategy: the creation of funds and the concession of tax benefits for innovating companies. Patent registration is an indicator of the effects of science and technology, a sector in which Peru has deficient results. Chile and Colombia respectively almost triple and double the number of patents registered.

Accumulating productive knowledge is hard. Thanks to the interaction with digital technology, today we can encourage mental processes that were not that easily activated before, and that can facilitate the creation of productive knowledge. Today, we have a series of cognitive instruments that are strongly linked to the art of critical thinking.

The future is today, and its speed is exponential. Dreaming with becoming a more prosperous society entails the building of interactions, networks, communities and institutions that will allow us to share knowledge and experiences. This is always easier from digital environments. My vision of Peruvian education for 2050 is concrete and ambitious: to make the largest amount of



*The tool that allows us to walk through the path of success is education, first, by accelerating the education reform through the improvement of school management and the modernization of school infrastructure. This translates as a smaller gap that represents 10% of the education GDP.*

Peruvians generate productive, complex and sophisticated knowledge, so they can create a better quality of life for themselves and the country.

### **Health reform**

The health of Peruvians is linked to human development, economic growth and competitiveness in Peru as a State-Nation. It is particularly important now, when Peru is among the countries with medium-high income.

From a health point of view, the main problem is inequity in medical attention. Therefore, enlarging the coverage and the access to safe, good quality health services must be the cornerstone of the next governments.

The national health system has still an endemic crisis, despite the efforts for its modernization and reform. The current government has acknowledged the situation and declared emergency measures first, in Lima public hospitals and, second, in first level medical attention centers.

The Ministry of Health must improve the governance in the sector with a health policy and strategic vision based on values, evidence and the rational use of resources, with a transparent management, rendering accounts, being responsible for their actions and seeking for citizen participation.

The strengthening of the rectory in public health is the most important challenge the Ministry of Health is facing. Right now, we must develop the institutional capabilities to face the great trends that define the situation of

health: 1) the persistence of transmissible diseases, 2) the ageing population, 3) chronic diseases, 4) emerging risks: overweight, obesity and child malnutrition, physical inactivity, 5) the “epidemic” of deaths caused by traffic accidents, and 6) the preparation for a quick response to natural disasters.

In Per, we have a fragmented, segmented National Health System, formed by the Ministry of Health, Social Health Insurance (Essalud), Armed Forces’ Health, the private sector and a public/private sector: SISOL-Salud and health providing entities.

In general terms, we can say that our health system is still inefficient and inequitable. All of these subsystems can become a high-performance institution in a competition and collaboration context, offering individualized attention and developing a first level of attention with solving capability which is connected to polyclinics, general hospitals and specialized national hospitals.

The priorities of productive investment in health must focus on two main issues for the improvement of this sector. First, the closing of infrastructural gaps through the construction of community health centers, polyclinics and general hospitals for an efficient first level attention. Second, to close the human resource gap and offer an efficient management of health services nationwide.

### **Clean water**

As a country, we have some unique assets. Peru is one of the countries with the largest hydric offer in the world: we



*From a health point of view, unequal attention in hospitals are the main problem. Therefore, a better access to safe, good quality health services must be the cornerstone of the next governments.*

are number 8 in the ranking of countries with more water. We have over 2 billion cubic meters of fresh water in our territory. This is 1.89% of the planet's water reserves. The problem is that a lot of this water ends up in the ocean.

During my most recent travels through the northern coast of Peru, I was able to see in situ the everyday effects caused by the El Niño phenomenon, and I witnessed the impotence of our national, regional and local authorities to face it. We always talk about reconstruction and we offer alternatives for the mitigation of El Niño's devastating effects on infrastructure and farmlands, but we don't talk about making decisions for stopping such effects from ever happening in the future.

Climate phenomenon – rivers growing, colossal downpours, floods – are a cyclic, recurrent reality. We know that, in a few years we will have climate anomalies again, and that they will become more and more frequent. What we need, then, is to have a Climate Change Authority, a high-ranking official with power who does not only work in reconstruction, but also in prevention. It will become worse over time; we cannot stop climate change, but we can mitigate its effects on the economy. One way to do this is creating five-year plans for, for example, channeling the coast rivers that overflow because of El Niño.

Our ancestors were able to manage water through channels, dams and platforms. They mastered a wild, difficult geography that, according to some historians, fed between 12 and 20 million inhabitants; one of the country's strengths is agriculture.



### **Agriculture and forest resources**

Only 16.8% of Peruvian territory is used for agriculture. Approximately 28% of permanent farming land have any kind of irrigation. The rest of them are drylands that get watered when it rains.

Another asset that goes unused are forests. More than half of the territory has this type of ecosystem. We have 10 million hectares with potential for forest plantations. We are the second country with the most Amazonian area, the ecologic lung of the planet, after Brazil. If we handle forest plantations with a long-term strategic vision, they can promote investments, generate jobs and wealth in the interior of Peru, as well as reducing the pressure due to deforestation and restoring degraded areas.

Chile has 2.8 million hectares of plantations that create nearly 800 thousand jobs in the forest sector, and it exports almost 6 billion USD. Brazil, with 6.5 million hectares of plantations, has a positive commercial scale that reaches 57 billion and employs 5% of its economically active people in direct and derived jobs.

Currently, Peru has granted 7.5 million hectares of permanent production forests in concession. However, nearly 43% have been reverted due to the ending of the concession and the ineffectiveness or non-compliance of managing plans, according to the National Wild Forest and Fauna Service.

### **Biodiverse country**

Of all 34 climates the Earth has, Peru has 28 in its many levels of altitude. We are one of 12 countries with 70% of

the world's biodiversity. We can produce almost everything most of the year, whereas, in other places, they cannot due to climate reasons.

These climate characteristics put us in an advantageous situation compared to Europe, North America, China, Russia and other regions. Our Amazon is a living laboratory where we can install research and development centers, putting ourselves at the forefront of biotechnology and genetic engineering. We can also create and chain specialized and highly productive clusters through production and development centers and technological institutes in different regions of the national territory.

The founder of the Life Sciences Project from the Harvard Business School, Juan Enríquez, claims that the genetic revolution is growing three times faster than the digital revolution. Peru is one of the largest germplasm centers of flora and fauna; it is one of 12 countries with mega-diversity and it has around 50 thousand plant species, 1200 of which are wild. Could we use this natural capital to become a privileged country and boost biotechnological development in Peru? Of course we could. Could we do this in other areas? Yes, we could too.

### **Food for the world**

Five centuries ago, we brought the world foods that saved humanity from hunger, such as potatoes and corn. Quinoa was domesticated in our lands thousands of years ago, and now it is a part of astronauts' diets and it has conquered the most demanding palates. We have over 3800 potato varieties, 1200 domesticated edible plants and over 1400 medicinal plants.



Only 16,8% of Peruvian territory is used for agriculture. Approximately 28% of farmlands have some kind of irrigation system. The rest are drylands, watered only by rain.



Peru is a leader in the agricultural activity sector due to the positive effects of the soil and the sun. Let's see some examples: for every hectare of grapes, we have 21 tons of grapes, whereas in Chile they only have 12. For every hectare of avocado, we have 11.5 tons, when in Mexico they have 10 and, in Chile, 5. The same thing happens with asparagus: 11.8 tons per hectare, whereas in the Netherlands they have 6 tons and, in Spain, 4.8.

In the year 2001, we exported a little bit over 600 million dollars in agricultural production. In two decades we have multiplied that number by 1' and we have almost reached 7 billion dollars: our agricultural exports added 6647 USD in 2018, with fresh mangoes, frozen mangoes, processed vegetables, Cavendish Valery bananas, cacao grains, fresh asparagus, and grapes, among others. We export almost 2.5 billion dollars in fruit only (such as grapes, mangoes, citrus and berries, among others). Who would have thought that, some years ago, Piura would grow more grapes than Ica, one of the cradles of vineyards!

Peru also has 7.6 million hectares of land for intensive crops, but only on third is exploited. Only the coast region has 500 thousand hectares of the highest international quality for growing asparagus, tomatoes, grapes and vegetables. In Mages, there is a smallhold farming area –subsistence agriculture) and basic needs crops that do not qualify for exportation nor for the development of large-scale production activities. We summon agricultural businesses, where agricultural production, its industries and associated services meet and form a significant part of the GDP, to make a difference compared to other nations. This way, Peru is among the 10 main food providers of



*Peru is among the 10 world food providers, with products such as asparagus, coffee, maca, quinoa, olives, grapes, avocados, artichokes, dry peppers, beans, mandarins and others.*



the planet, with products such as asparagus, coffee, maca, quinoa, olives, grapes, avocado, artichoke, dry peppers, beans, and mandarin, among others. In 18 years, our country has become a true “heavy weight”, a trusted provider worldwide.

### **An ocean with many species**

The ocean is a source of food security. According to the UN Food and Agriculture Organization (FAO), we have 220 hydro biological daily fishing species. 80% of those are fish, 17%, invertebrates and, 2%, other resources. Along the coast, there are almost 200 fisher coves which bring food to the markets, which, at the same time, bring food to the tables’ of all Peruvians. We are one of the largest fish floor producers. Our main buyer is China, followed by Germany, Japan, Taiwan and Vietnam.

### **Mining**

Between 2018 and 2022, 28 mining projects are prepared to begin. However, the main obstacles are social opposition, the low prices of metals in previous years, which delay advances, or the fact that the projects lack studies that guarantee and interesting return of investment. Best case scenario, in 2022, 10 projects will begin with a total investment of 15.74 billion USD, which will create more job posts.

### **Tourism**

In 2018, tourism was the third income generating activity in Peru, with 4.895 billion, after mining (27.7 billion) and agriculture (6.6 billion). Due to its natural and cultural diversity, there are different types of tourism in our country:



adventure tourism, ecotourism, beach tourism, medical tourism, maritime tourism, business tourism, rural tourism and luxury tourism, and all of them must be exploited for the benefit of every region. We have identified 34 hotel projects for 10 billion dollars in the 2018-2021 period, in five regions of Peru. 17 of them are in Lima, followed by Cusco, Arequipa, Piura and San Martin.

Despite the importance of tourism in the creation of income and jobs, its representativeness in the GDP is calculated indirectly, gathering different activities, such as accommodation, restaurants, financial services, entertainment, transport and travel agencies, among others. In 2015, the Ministry of Foreign Trade and Tourism estimated a 3.9% of the GDP was tourism- related. Due to its transversality, this activity has competitive disadvantages compared to neighboring countries: inadequate and insufficient transport infrastructure, low safety, social conflicts and a limited human capital.

Our rich eco-systemic, genetic and biological assets open a window of opportunities for new economic sector that create jobs, such as eco-innovation, bio-commerce, ecotourism, cuisine and the powerful culture and entertainment industry.

In spite of the dark veil that some experts claim is about to cover us, Peru must look the 2020 decade with optimism. Our country has grown a lot in the last 20 years, and this generation of young people has a more advantageous situation than previous generations in pretty much every aspect.

If we consciously value the results of our country's aperture to commerce, migration, capital flows and technology exchange, we will see an amazing progress in human development, a progression that the current generation must not only maintain, but also increase.

The current average income (6200 USD) has practically tripled in the past two decades thanks to the right macroeconomic policies and the boom of raw materials combined with a better investment climate. However, we have a moral obligation to say that the benefits of economic integration and technological changes are not equitably distributed. It is urgent to create better social protection programs. In other words, the openness to commerce does not guarantee success but, without it, Peru would not be where it is today. Now, what does this mean for Peru, which, despite the world crisis, is one of the fastest growing economies in Latin America? Do we have today a new chance to make this dream come true?

I personally believe we do. But, the first task of the pilot that flies the plane called Peru must abandon the autopilot and make the decisions the emergency situation needs. The sustainable economic process of Peru must be looked at through a multidimensional approach, with indicator that align to social and institutional goals which improvement is essential for a healthy, sustainable growth. This is because we have clearer goals in the following sectors:

### **Investments and infrastructure**

It is urgent to increase investments in transportation systems, telecommunications, energy, water and

sanitation. We are living in a bubble of institutional paralysis and economic deceleration. The public sector has over 800 paralyzed construction works that only need an accessible investment –a little bit more than 200 million soles- to put them at the service of the people. These construction works have been completed in an 80%, but are not ready yet because of a small detail regarding city hall, the regional government or the national government. The Controller General of the Republic has presented a draft bill that would allow to continue these construction works but, so far, nothing has been done to solve the problem.

The expansion of the Lima Metro, which will allow a better connectivity and will reduce traffic, is a good example that we can do things right. Another one is the construction of new roads that connect the coast to the mountains and the jungle. These connections will have a favorable effect on the business sector and among consumers.

Given the gap in infrastructure which, according to some calculations, is the equivalent to 35% of Peruvian GDP, the country will need to increase tax income and improve the framework for public/private associations.

### **Public Safety**

When we ask the people what they think the biggest national problems are, they say: economic problems (35%), crime (19%), and the political situation and corruption (9%). When we ask the same people what the main problems are in their main district, community or neighborhood, this are a bit different. In the neighborhood, the main problem is crime (24%), followed by economic problems (20%).

In conclusion, people want public safety and economic growth, as well as jobs in order to increase their income.

In all of Peru, we have 1495 police stations, many of which lack the right equipment to offer an efficient attention to people; some of them don't even have a landline or a radio to communicate. First, we need to understand that we are at war: a war against armed groups that have divided the territory and are becoming more violent every day. These are the problems that people perceive and that they expect their national, regional and local governments to solve urgently. We must guarantee order and we must recover the principle of authority. We need an efficient coordination work in order to combine the force of the National Police and the Armed Forces once and for all, and thus take care of the main services and patrol strategic areas in the city.

Approximately 34 thousand young people joins the Volunteer Military Service every year. 80% did it in order to serve in the Peruvian Army. If only 20% of those young people that are a part of the Military Police worked for the National Police and were trained for complementary actions, their role would be different than that of the Armed Forces and we would have a 7000 agent dissuasive task force ready to patrol the most dangerous streets in the city and put some order. This would come with a Public Safety Operational Plan which would include city hall cameras in the district cameras and to the emergency number, 105. Fighting crime cannot happen in isolation; there must be no frontiers when chasing delinquency. This is why, not long ago, Pueblo Libre, Magdalena and San Miguel city halls agreed to unify their guards, their radio and camera

systems and their vigilance centrals. And on the hills?, you may be asking. The National Police doesn't arrive to those places. An you are right. Cars don't get there. So, let's reinforce Motorized Police and lets put Mounted Police to work as well. Let's reinforce a comprehensive patrolling. Once and for all.

First, we need to regain our trust. Without trust, everything becomes more complicated. Trust is the base of institutions and, in the end, it is what supports a democracy. When trust fades, desperate measures appear, as well as populism, outsiders, who damage the country so badly. Second, it is time to instaure order and public safety in order to continue to grow and generate job posts.

### **Political Reform**

It is necessary to continue with the reforms that went unfinished with the previous congress, such as the Constitutional Tribunal (CT). We need, then, to find the most transparent, less politicized mechanism of CT, because many issues related to the judiciary end up in the CT. The electoral political reform was also pending. My thoughts are that, if there had been a senate, it would have avoided the rupture between executive and legislative authorities. I remember that, during Alan García's APRA government, bank standardization was quickly approved by deputies, but stopped at the Senate. APRA senators themselves stopped it. Congresspeople must keep their parliamentary immunity because they must be secure in their legislative function. However, nobody should become a congressperson if they have pending issues with the

justice system, depending on the gravity or their crime: immunity does not mean impunity. Parliament must have enough autonomy elements.

On the other hand, we need to eliminate preferential vote. I think that previous elections in political parties with the supervision of the National Office of Electoral Processes (ONPE) would be beneficial for the country. Authentic parties must have militants and not be shells for rent or for sale to the best buyer. we need to end parties that start with a certain shade and change color with every election. we need strong, transcendent parties, with principles, values, and that sustain their programs.

### **Fighting corruption**

The corruption phenomenon, which appears in many ways in the political, social, judicial and economic Peruvian scene, affects governability, trust in institutions and people's rights. the fight against corruption is, today, a priority. The lack of trust that people have in politicians is due to all the disappointment and frustration they have brought on people. Corrupt public workers denigrate the people's dignity; for this, they deserve the worst possible punishment stipulated by the law, and a civil death given by the people. We need a great institutional reform, starting with the judiciary and the Public Ministry, because the law is equal for everybody and we are all under it, with no distinctions or privileges, but also without instructions or vendettas. A law that is fair for everybody does not allow societies to ensure eternal peace, but the certainty that those who commit a crime must pay for it.

We live a crisis if values where trust has been violated by fear of others. “Viveza” has replaced respect for rules, and honesty has been eroded by corruption. We must rescue the three principles taught to us by our ancestors, principles that have proven to become more necessary with time: Ama sua (do not steal), Ama llulla (do not lie), Ama quella (do not be lazy). In the new Peru, these principles force us to be honest, sincere and to work hard. Public servants, police officers, judges, lawyers, business people, but also housewives, young people, all of us who share this great house that is Peru, have the duty to not let down our future generations and to redouble our efforts to make our country a big, generous land. The frontal fight against corruption needs a joint effort from State institutions, civil society and the business sector in order to achieve an efficient, honest, inclusive public administration, as well as a people with an ethical value culture.

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I am firmly convinced that we will make our prosperity dream come true thanks to the amazing energy and wit of young entrepreneurs, whose generation has an extraordinary opportunity to lead the transformation of Peruvian economy in the twenty-first century. Both the State and business leaders have the responsibility to make the right decisions and act in a way that will give opportunities to the bicentennial generation.

*Peru is a country of opportunities.  
We only need to start...paths are  
made by walking.*





