Migration Letters

Volume: 21, No: S4 (2024), pp. 1225-1236

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

The Lean Startup Approach as a Tool for Public Management in Peru

Freddy William Castillo Palacios[1], Groover Valenty Villanueva Butrón[2], Jose Felipe Villanueva Butrón[3], Frisa María Antonieta Aliaga Guevara[4], Luzmila Gabriela Maurtua Gurmendi[5]

Abstract

The lean startup approach is a new way of doing and understanding things, the methodology and dynamics of its application make it have a reach regardless of the sector or market. This management tool has managed to accelerate emerging companies and consolidate those already positioned in the market. This new approach not only helps to find the real needs of the customer in organizations, but has also presented contributions in public management. These contributions are directly related to the main problems of public management, such as the misappropriation of resources, the deficiency of public projects and the quality of services offered to citizens. This article presents a review, compilation and description of the main topics in context, thus delimiting the central objective, which was to describe the lean startup approach as a modern management model.

Keywords: *Lean start-up, public management, state.*

INTRODUCTION

With the passage of time, public management has presented different vicissitudes, where one of the most marked and important metamorphoses is public affairs, which has evolved from development planning to evaluation by objectives and rankings. (Valdez & Vergara, 2017). It should be noted that public management has a very influential function within society, this job is to optimize public assets and resources to improve levels of social welfare (Moreira & Lima, 2019).

Indeed, these meanings frame a common good within society, but despite this and over the years, in Peru, the same rhetorical question continues to be asked: Is the current public administration coherent towards the objectives of the Bicentennial Plan? If we make a priori a list of deficiencies and characteristics of public management, we can find the absence of an efficient planning system and its problems of disarticulation with the budget, the weak structuring of its functions, the infiltration of political groups, corruption and transparency in management. The latter is even more serious when it is observed that the purpose of

[1] Universidad César Vallejo campus Piura; Doctor en Gestión Pública y Gobernabilidad
[2] Universidad César Vallejo campus Piura; Doctor en Administración
[3] Universidad Privada Antenor Orrego, Maestro en Derecho Civil, Doctor en Administración
[4] Universidad César Vallejo campus Piura; Doctora en Educación y Magister en Gestión Pública
[5] Universidad César Vallejo campus Trujillo; Doctora en Administración, Magister en Educación con mención en Docencia e investigación universitaria

reaching certain positions of trust is to earn a salary above private activity. (Valeriano, 2019).

The future scenario in the social and economic context, in this sense, is not at all encouraging. The gaps of social inequality, poverty and citizen participation will continue to be a constant despite incipient private initiatives. Economically, public debt will not be able to support people's well-being if it does not stop growing (Cardoso & Campodónico, 2018). Likewise, the projections of a modern, efficient, transparent and decentralized state (CEPLAN, 2019) would be unattainable. In this way, the vision of a country with inclusive development by 2050 would only remain in a brochure and in the archive.

Faced with this problem of substance and possibly trite structure, new ways and perspectives of public management of a country must be evaluated, one way is to manage business by results. This characteristic has an impact on improving public policies, using project management, monitoring and evaluation as tools (Cañari & Bustinza, 2020). In this way, management and all the business experience is making more sense in public management, within which, one of the emerging ideas that has helped companies like General Electric a lot is the lean startup approach. The middle point of this approach to public management focuses on the main objective pursued by each of them: the needs of the people; Thus, this model could have a positive and influential impact on society (Bocken & Snihur, 2020). This approach that was born in Silicon Valley embraces the scientific model and transfers it to business management, the interesting thing about this approach is its disruptive idea of the feedback loop, that is, creating, measuring and learning.

In this sense, the main objective of this article is to describe the lean start-up approach as a modern management model. This review article is socially justified in order to promote and publicize a new management approach applicable to the public sector. The fact that there is a gap between the quality public service provided and the quality service offered is shown in two reports issued by the National Institute of Statistics and Informatics of Peru - INEI, which show a low level of trust of citizens towards public institutions, not exceeding an average of 35%. (INEI, 2020).

METHODOLOGY

This literature review article included a qualitative approach, which provided various philosophies and tools to study and analyze the actions of organizations and their influence on the world. (Gehman, et al., 2018). This qualitative approach also creates an opportunity for a greater sensitivity to the proliferation of studies and meanings. The design, then, was based on a grounded theory, which was aimed at the collection of publications that allowed reinforcing a theory with an in-depth analysis from various meanings of the subject of study

Also, the level of study used was descriptive, as it had no control over the variables, it was only limited to the collection of information to reinforce and argue a thesis. (Guevara, et. al., 2020). Thus, the literature review provided a summary of the specific topic with the obtaining of relevant and necessary sources of information to frame the research problem. These same data were verified, systematized and refined.

The central themes chosen for the literature review were selected due to their interest in the face of exponential growth and the lack of depth in the national context. The literature reviews, in this sense, address the two central themes, lean start-up management and public management in Peru.

For the present literature review, the search strategy was used as a tool, this exploration was carried out in those sources indexed in Scopus, WOS and others. In this sense, it was oriented to search for publications from the last few years also using keywords to specify the search. In fact, the procedure began with the identification of primary research sources, which were articles from journals indexed in databases. After that, we proceeded to the

compilation and documentation of the information necessary for the purpose of the study in parallel to maintain order and cohesion. Finally, it was referred to the literature review with a logical structure, synthesizing in a coherent text and organizing the sources of information.

Regarding the collection and analysis of data under the qualitative approach, they were developed in parallel, these processes sought to obtain data that became information and knowledge a posteriori (Hernández & Mendoza, 2018). Thus, the immersion was carried out in unstructured, non-numerical and heterogeneous data, which progressively emerged. Unlike the quantitative approach, the literature review under the qualitative scheme did not present inferences from statistical data, nor were results compared with predictions or hypotheses, but, on the contrary, an analysis of text and other related material was used, with the aim of describing, analyzing and developing the topic. It should be noted that these text analyses did not seek to compare, but to compile, synthesize and expand new meanings of study.

The inclusion criteria have been aligned with the central theme, taking into account publications in journals indexed in a database, presented in English or Spanish. On the other hand, the exclusion criterion was aimed at not considering publications made prior to 2017, with the exception of classic authors and referents of the investigated variables.

DEVELOPMENT

The main theory regarding the general objective is based on the acceptance of the pioneer of the lean startup methodology (Ries, 2018) conceives it as an approach to the launch of products or services that is based on validated learning, scientific experimentation and interaction with the customer. It is also necessary to elucidate the terms that make up the lean startup approach and, precisely the latter, leads to formulate the question, What is a startup? A recently coined Anglo-Saxon term that is accepted as a temporary organization of people oriented to the search for a recurring and scalable business model.

The term Read It is a trend that is marked in today's management, this is also added to another trend such as the new market study, from being a traditional marketing with the 4Ps to a digital marketing that inserts technology. This is how, over time, in practice, there is evidence of a gap in the real needs of the client; in that sense, other methods such as "learning by thinking" and "learning by doing" are now required (Gans et al., 2019).

Ries (2018) also considered three important elements to define a startup. The first is the product; that which is made available in the market, so that any user or customer can acquire it in order to satisfy a need (Muente, 2019). Thus, the product can be tangible or intangible, manufactured or non-manufactured. The second element considered is strategy, conceived as the procedure or process set up for decision-making in order to meet organizational objectives (Westreiche, 2020). Vision becomes, almost in addition, the other element of a startup. This element embraces the integral representation of the institution and the final goal, as well, is a clear description that is determined in advance for a time horizon (Akter, 2021). These elements have a particular characteristic, interdependence and are managed in a circular way, without strategy there is no vision and without vision there is no product.

It is also necessary to deepen scientific progress, in this context and specifically in this approach, as it is a cause of the development of the innovative and disruptive economy (Veretennikova & Vaskiv, 2018). Looking back, since the seventeenth century, the scientific method and the processes of science have had a great impact on the resolution of social problems such as health and technology, in the private and then in the collective. Within the collective and as a pioneer of the scientific revolution, it is also necessary to highlight the company as an agent of the microeconomy, since it also has a dose of social responsibility as a model to imitate. Companies that use a scientific approach perform better and pivot more, suggesting that the scientific approach facilitates the recognition of valuable insights (Wu et al., 2021). Indeed, the challenge of reinventing oneself in the short term leads to generating disruptive ideas that add value to the end customer. Therefore,

when launching an idea, it needs to fail, as long as it is corrected and learned from in the shortest time.

The lean startup approach is a methodology with great popularity in the entrepreneurial environment that makes it possible to implement businesses without wasting time, resources and useless efforts (Llamas & Fernández, 2018). Thus, the lean startup approach is a cyclical and non-inert process, based mainly on three key activities and inspired by the principle of lean manufacturing (as it was initially called): avoiding waste and optimizing the expenditure of resources (Karlsson et al., 2019). These premises show the genesis of the approach, the dynamics and one of the objectives of its application; This virtuous circle not only aims to discover the real need of the customer, but also seeks to generate less waste and unnecessary resources in the short term.

One of the biggest advantages of this approach, in addition to those already mentioned, is the reduction of risk and uncertainty in projects, and it is also applicable to any sector, product and service. (Fernández, 2020). Indeed, this approach, which has an incipient attention in Latino organizations, is related to scientific experimentation and the assumptions or hypotheses that demand it (Lévesque & Stephan, 2019), as well as a series of fundamental steps in its development: creating, measuring, learning (Ávalos et al., 2019). It is precisely the projects that incur the most in the application of this approach those of the private sector; The flexibility, autonomy and resources granted by the industry make the process more dynamic and untethered. On the contrary, in the public sector, specifically in Latin America, projects are subject to central government decisions, which generates a slowdown in public research.

For executives of established companies, the focus may be on the continuous development of new solutions, satisfying existing customers, overcoming organizational barriers, and fostering an internal business orientation in large organizations (Lichtenthaler, 2020). Thus, this methodology proposes a substantial degree of flexibility, materialized in the notion of pivot; Based on the feedback received, the company iteratively adapts its product or business model in order to address the product's market setpoint (Levinthal & Contigiani, 2018).

Ries (2018), collected three revolutionary concepts of the new millennium and proposed, in summary, this lean startup approach. The first concept is the agile manifesto, which at the same time embraces four values; The most important is valuing individuals and their interaction over their processes and tools. The second concept is lean manufacturing, a philosophy that consists of offering the greatest possible value to the customer with the minimum necessary resources (Jáuregui & Soler, 2017). The last concept adopted is the customer development methodology, which, roughly speaking, consists of eliminating those products that were manufactured and that do not have a purchasing potential (Wanodyanti et al., 2019). In effect, a premise was born that was conceived almost as absurd, but which makes sense with circular learning: to validate the model first.

The antecedents outlined above determined the route of the new lean startup approach, concepts and theories that make sense in practice with validated knowledge. Precisely, the main objective set in the lean startup methodology is the latter, validated learning. It aims to measure the progress of the strategy and seeks to measure the business model with its three characteristics: feasibility, profitability and scalability (Fernández et al. 2018).

Validated learning is, then, the penultimate step in the cyclical process of the lea startup methodology. Before this, Ries (2018) proposes the formulation of hypotheses or assumptions, after that, validation through an MVP (Minimum Viable Product) whose purpose is to meet the needs of the market niche (Zamora, 2016) and, following this, measurement. This last step prioritizes having control through metrics as instruments for measuring progress. The loop never closes, it's repetitive, iterative, and feedback. The model of the steps mentioned above, present a similarity with the Deming cycle or continuous improvement cycle, the difference lies in the underlying issue; while in the

Deming cycle it is prioritized and aimed at improving productivity, in the lean startup cycle it is intended to satisfy the real need of the customer through a product or service that adds value.

Regarding the first specific objective, the vectors that manage the Lean Startup circuit are described in depth. This virtuous circuit, in fact, is implemented from the formulation of hypotheses. This first step involves gathering information about people's needs and their unresolved problems. The best way to obtain this information is by doing fieldwork or, as it is colloquially called, going out into the street. Observing the different realities of the market awakens a value that is not always internalized in the entrepreneur: empathy. (Arias, 2018). Knowing that people's problems are also the entrepreneur's problems fosters the development of transversal skills throughout the process. It is precisely in this process that a market niche can be projected.

After asking people and collecting their real needs, Ries (2018) proposes to experiment and validate the hypothesis through a prototype or MVP (minimum viable product). It plays an important role not only for a startup's team, but also for the startup's external stakeholders, such as potential users, investors, and mentors (Duc & Abrahamsson, 2016). The creation of a prototype differs from common sense, which holds that you have to create a perfect product to launch it, on the contrary, the great principle of an MVP (minimum viable product) is to be insufficient for the consumer, becoming something necessary, useful and disruptive. In this process, moreover, a dilemma is created because it is not applicable to decisions as risky as health and safety.

Hypothesis measurement is the continuation of prototype experimentation or validation. In this part of the process, the information from the feedback received is analyzed. Entrepreneurs can benefit enormously from the learning captured by customers, when they demonstrate changes that make certain activities more efficient (Mannsori, 2017). That information, then, is sincere with the KPIs or metrics already defined above. This gives a greater scope of fulfillment or advancement with respect to the objectives of the business idea.

The core and heart of this approach focuses on learning or validated knowledge. The study becomes inconsequential when after experimentation and measurement nothing has been learned. The feedback collected by early adopters will not only help entrepreneurs pivot or iterate early, but will also help keep motivation high for the rest of the process (Hegger, 2019). In fact, validating knowledge or learning is built through a routine that in-crescendo with experience and the pivots made.

The cycle of this approach is intended to be repetitive and not fall into inertia. The main premise, in this sense, is to launch the interior steps once again, but this time with an improved product or service (Alcalde, 2017). The lean startup approach, then, changes and revolutionizes almost all paradigms and theories. Very recently it was a conception, learning in order to create, this was internalized in the ways of working in organizations. The lean startup proves that it can be executed in the opposite way, creating a virtuous, constant and feedback circle. Therefore, experimentation and learning trump planning and policy. (Stagars, 2015).

As for successful cases and precedents of the application of the lean startup approach in public and private companies that took the risk of embracing the entire repetitive cycle of the lean startup, Hawkers, an international retail company, implemented its business model based on the theoretical principles of Lean Startup. Indeed, the growth model went through iteration and validated learning, from an MVP to a finished product with a high degree of market acceptance (Ferrer, 2017). This is supported by what was mentioned by its chief strategy officer Nasser Hantout, the great basis of his work was based on trial and error weighing all the variables and the exhaustive analysis of customer data.

At General Electric, quick decisions have to be made quickly in the face of impulsive change in customer needs, and the CEO and his entire board of directors know that all too

well. To achieve today's development, GE implemented its FastWorks program, with a faster and more innovative dynamic. This program engaged customers from the beginning of the design process to the completion of the product (Jesemann et al., 2020). The dynamic consisted of presenting the first prototype of the new product to the customers, the development team used the comments and adapted the prototype to the needs found. The question after this was: What did GE accomplish with all this? Well, quite simply, to reduce the risk of creating something that cannot be sold after the fact.

The biggest challenge for public administrations is to optimize the public resources allocated to create better opportunities and close inequality gaps in society. In 2010, the United States was experiencing several financial problems, including the high fees charged by financial services companies and the collection policies of credit card companies. Barack Obama, former president of the United States, approved the Dood-Frank Act of financial reform and consumer protection, among the provisions of the aforementioned law, was to create a federal agency (CFPB), with the function of protecting consumers from abuse. The agency's work team began to collect complaints, incidents and then turn them into assumptions. These financial disclosure forms traveled through the lean startup cycle to their final design: an application that allows you to visualize authoritative information from lenders and mortgage brokers, user experiences, and user recommendations.

In the public sector, there are many stakeholders; Within this world of governance, medical care and health present the greatest complexity, because here a dilemma arises and the question arises: is digital transformation for government applicable to health? (Benjamin & Potts, 2018). In England, NHS England's experience stands out for bringing cutting-edge digital design practices to large organisations. One of the ambitious plans of the UK's National Health Service was to find the best digital solution to meet the needs of the population, gaps that were associated with online health information, understanding the symptoms of the condition or treatment pathways.

The level of challenge was made even greater by the highly regulated environment, health policies, and influential political agendas. The success of this project was based on the use of the agile methodology and the classification of mini-projects or sprints that sustained two major problems at the same time: mild and moderate depression and type 2 diabetes. Currently, the NHS ALPHA project continues to iterate, test and develop the scope of its service with a focus on the citizen as the focus of execution.

In Peru, public projects are part of a problem that mostly affects public management; Embezzled resources, discrepancies with the public budget, and hand-picked tenders awarded to companies are specifically endemic evils that we know exist but no action is taken to mitigate them. In a study applied by Quintanilla (2021) in Pucallpa for public projects, it was discovered that the lean startup methodology allows optimizing the execution of more than 50% of sanitation projects. The most interesting thing in this case is that the scientific method is used to set its objectives and design its strategies, using initial hypotheses that are cleared up in the learning path.

With regard to the balance of public management in Peru with respect to what was planned in the Bicentennial Agenda, it is necessary to first carry out a retrospective of the evaluation of external organizations such as the Inter-American Development Bank (IDB). This organization conducts a macro-level evaluation in Latin America and the Caribbean of the progress of the 5 pillars of results-based management: planning, budgeting, execution, control, and monitoring and evaluation of the results of institutions and public policies. These pillars are based on a new public management channelled through the evaluation system (PRODEV).

This same evaluation system, which includes 18 components, 37 indicators and 142 requirements, evaluated the GPR in Peru on a scale of 0 to 5, where 0 is the most deficient level and 5 is the optimal level. This evaluation, through its comprehensive index, rated Peru with 2.9% as an intermediate development country (IDB, 2015). The ranking that

places Peru in sixth place among countries in development progress shows a relative advance in results-based management, however, it masks a situation of deficit in some pillars. In this sense, the gaps that stand out the most are planning, program and project management, and the monitoring and evaluation system.

Public management in Peru has been and will be a complex variable for a future strategic plan, execution and follow-up. This inference is given to the historical data issued in contrast to the planned targets. For the 200 years of independence, in 2011 the bicentennial path was announced through the Bicentennial Agenda 2030, an agenda that delimits and determines the actions to achieve an equitable society, in continuous improvement and development in favor of all Peruvians (Rojas, 2020). This project, in practice, must be articulated with the executive branch, regional governments, civil society, professional schools and the private sector, so that they can generate ideas and thus achieve a public management that is camouflaged and linked to the current situation, which offers factual answers to its citizens based on their needs and demands as a society (Government of Peru, 2020). Indeed, this project prospected in the future would encounter unforeseen problems and scenarios that would prevent the progress and achievement of the objectives.

Within the framework of the state, well-being and equity among Peruvians are focused, but transversally there are problems that directly influence political decisions, these problems are rooted in the divergence and interests of political parties encapsulated in the government for a long time. Problems such as the pandemic have exposed the flaws and shortcomings as a structure in health and safety, these problems have also diverted and generated unbudgeted expenses, evidencing a reactive management. The greatest evidence of public deficiency was the lack of scientific response to confront the advance of the pandemic in its first instance.

In the Bicentennial Plan, 6 strategic guidelines were contemplated, of which it is necessary to observe the scope and progress of the most complex and hardest hit lines in recent years. With respect to opportunities and access to services, a gap is graphed between the quality public service provided and the quality service offered, in the latest report issued by the INEI, it is detailed and evidenced a low level of trust of citizens towards public institutions, which do not exceed an average of 35%. (INEI, 2020).

However, not everything is favorable in terms of progress with respect to the projection of the Bicentennial Plan. The fifth axis referred to refers precisely to regional development and infrastructure. It is precisely here that an unsolved problem that has been generated since the last century is exhibited: spatial concentration. THE OECD-CEPLAN (2016) indicates that Peru is diverse in its territory and that growth dynamics have a lag between regions. Lima alone accounts for more than 50% of GDP. Another of the main handicaps of Peru's economic development is infrastructure, many of which are deficient in the regions and generally concentrated in Lima. In most rankings measuring transport, communications and energy infrastructure, Peru is at the bottom of South America (Llungo, 2018).

Next, the discussion is presented based on the results of qualitative data obtained. Thus, the lean startup approach in its concept and in its context is relatively different from lean manufacturing, the central difference is found in the purpose of each approach. While it is true, Ries (2018) mentions and embraces it as a model and a starting point, lean startup focuses on the real need of the person, while lean manufacturing is drastically oriented on productivity and quality. In this sense, there is a first difference between two concepts, however, it is necessary to identify a middle point inserted in the process, but not in the purpose; The point of connection between the two approaches is the minimization of resources without altering quality.

It is necessary to highlight the trends set by Gans et al. (2019) on current management and the use of technology as an ally to improve efficiency in processes. Likewise, this trend is reinforced by Teece (2018) highlighting that management approaches aimed at continuous

learning have been taking hold in today's organizations. Indeed, a company's architecture is increasingly focused on creating and delivering value to customers. Thus, the biggest challenge for organizations today is to find the real needs of their customers and users; map your changes and be at the forefront of it.

Likewise, what Veretennikova & Vaskiv (2018) mentioned about evolution and scientific progress in recent years is collected. Indeed, science and its process have managed to find great discoveries in solutions of social interest such as safety, health and technology. It is unavoidable, then, not to mention how decisive, important and influential the scientific method and its objective of understanding nature, to such an extent that it has now been inserted into business. Indeed, the scientific method with its premises and precedents offers support or a certain security in the efficiency of the lean startup approach. This is the meaning of this new methodology, as Ries (2018) conceives it.

On the other hand, it is necessary to make an evaluation of what, in theory, is one of the first phases of the methodology: the formulation of hypotheses and collection of data. Arias (2020) mentions that the best way to obtain this information is by doing fieldwork or, as it is colloquially called, going out into the street. This differs from the current reality, from the post-pandemic health limitations and, as Mendoza et al. (2020) point out, from new technological habits, as the tool in question has a greater scope and greater optimization of resources for management.

It is worth mentioning centrally one of the purposes of the lean startup approach: to create in order to learn later, something very unconventional in process management. The discussion in this sense is based on the creation of a Minimum Viable Product (MVP), on the one hand, Ries (2018) prioritizes that organizations must create a product with deficiencies and with observations that will be improved through feedback, while, as an antithesis, Antón (2019) marks it as a great disadvantage, since it is perceived that the product should not go to market with an unfinished state and with inconsistency problems. In fact, and contrasting these two theories, the problem is not the MVP, but the little learning acquired after feedback or observation from early adopters.

The experience of management based on Lean Startup in England shows hope for the new public management by bringing cutting-edge digital design practices to large organizations, however, it is not very encouraging to know that the reality in Latin America and Peru is totally outdated and, as mentioned by Parada et al. (2017), most Latin American countries are in a technological transition and deployment. Thus, the biggest challenge for organizations that intend to embrace the lean startup concept is to consider very important factors such as culture, idiosyncrasies and, above all, political limitations.

In an encouraging scenario, it should also be noted that there are precedents of viable projects that are based on the concept of lean startup, mainly in Peru, the project presented by Quintanilla (2021) and the results that determine a 50% efficiency in resources in sanitation service projects, reflect an adaptability in public-private projects in the national context. In this sense, it is necessary to evidence, highlight and further promote projects that guarantee lower spending of the public budget as the model of the previous case. It can be inferred that the lean startup approach is a work methodology that in the near future will be a trend in public management due to its application dynamics, the minimization of waste, the minimization of the public budget and the real attention to people's needs.

It is necessary to analyze the data issued by the National Institute of Statistics and Informatics of Peru (2020) and its discouraging report on the quality of services felt by citizens. Opportunities and access to services as the core of the Bicentennial Plan, which included achieving equitable access to quality fundamental services in education, health, sanitation and housing; However, the perception of trust and access by citizens does not exceed 35% on average. In fact, the experience of the quality of service within the structured guideline is very deficient. Citizens' response patterns are being directed towards distrust of the public services currently offered.

Likewise, it is necessary to carry out an analysis of the external evaluation carried out by international organizations such as the Inter-American Development Bank (2015), which through PRODEV carried out an evaluation with respect to results-based management in Peru. These results evidenced the greatest flaw in Peru's public management: the deficiency in the management of programs and projects and in monitoring and evaluation. The gap in these pillars is greater due to causes such as political instability, corruption and embezzlement of public resources. In this sense, a great sense of urgency and a greater focus is created on projects for public purposes, since most of the executions do not create real value to citizens in terms of their needs and in terms of the quality of what is offered.

CONCLUSIONS

The vectors of the lean startup method are based on the phases of the circuit: create, measure, and learn. The circuit begins with the collection of people's needs, followed by this, an MVP is created with the least possible resources, immediately tested if it is viable as a project or if it pivots to redesign the product or service. The great concept embraced by the lean startup is validated knowledge, that is, learning quickly through people's feedback.

The lean startup approach has a positive track record in project implementation, in the private sector and in the public sector, nationally and internationally. The precedents set determine the efficiency of the lean startup approach and the interest in greater attention to people's needs, less embezzlement of public resources and the creation of products/services that close gaps in society and that are sustainable over time.

In Peru, there is evidence of management systems that are still in the process of maturing, combining innovative experiences and international best practices with challenges rooted in Latin American bureaucratic culture and short-term visions. In Peru, in theory, there has been a constant attempt to improve public management through changes in its processes; However, this has been influenced by a variety of factors, such as political instability, power relations and socio-economic disparities.

The lean startup approach is a new management model applicable to any sector, industry and public or private project that allows products or services to be created through the scientific method. This new approach has a philosophy based on trial and error, that is, it inserts an organizational culture of taking risks, trying and failing. The central focus of this approach is the person, who is essential for data collection or needs, feedback and learning.

Bibliography

Anton, A (2019). Lean Internationalization: How to apply this methodology to European startups. Bachelor's Degree in International Relations. Comillas Pontifical University, Spain. https://repositorio.comillas.edu/rest/bitstreams/283212/retrieve

Mayor. J (2017). "Lean Startup. Economipedia.com. https://economipedia.com/definiciones/metodo-lean-startup.html

Akter, S. (2021). Companies' vision, mission, and core values focus on human resource management. International Journal of Financial, Accounting, and Management, 2(4), 343-355; https://doi.org/10.35912/ijfam.v2i4.412

Arias, A. (2018). The LEAN STARTUP Method: A Theoretical Review. Ingenuity and Society Management, 3(1), 18-25. http://gis.unicafam.edu.co/index.php/gis/article/view/68

Ávalos, C., Pérez-Escoda, A. & Monge, L. (2019). Lean Startup as a Learning Methodology for Developing Digital and Research Competencies.Journal of New Approaches in Educational Research (NAER Journal), 8(2), 227-242. University of Alicante.https://doi.org/10.7821/naer.2019.7.438

Benjamin K. & Potts HW. (2018). Digital transformation in government: Lessons for digital health? Digital Health. https://doi.org/ 10.1177/2055207618759168

IDB (2015). Building Effective Governments: Achievements and Challenges of Public Management for Results in Latin America and the Caribbean. https://publications.iadb.org/publications/spanish/document/Construyendo-gobiernos-efectivos-Logros-y-retos-de-la-gesti%C3%B3n-p%C3%BAblica-para-resultados-en-Am%C3%A9rica-Latina-y-el-Caribe.pdf

Bocken, N. & Snihur, Y. (2020). Lean Startup and the business model: Experimenting for novelty and impact, Long Range Planning. (Volume 53), Issue 4. https://doi.org/10.1016/j.lrp.2019.101953.

Cañari, C. & Bustinza, P. (2020). Influence of results-based management on the effectiveness of State reform and modernization policies. (Issue No. 54), pp. 744-763. https://polodelconocimiento.com/ojs/index.php/es/article/view/2310

Cardoso, H&Campodónico, H. (2018). The future of Latin America in the global economy. An interview with Fernando Henrique Cardoso.International Development Policy. Revue internationale de politique de développement. https://doi.org/10.4000/poldev.2501

CEPLAN. (2019). Peru's Vision to 2050. https://www.ceplan.gob.pe/visionperu2050/

Contigiani, A., & Levinthal, D. A. (2019). Situating the construct of lean startup: Adjacent 'conversations' and possible future directions. Industrial and Corporate Change, 28(3), 551– 564. https://doi.org/10.1093/icc/dtz013

Duc A.N., Abrahamsson P. (2016) Minimum Viable Product or Multiple Facet Product? The Role of MVP in Software Startups. In: Sharp H., Hall T. (eds) Agile Processes, in Software Engineering, and Extreme Programming. XP 2016. Lecture Notes in Business Information Processing, vol 251. Springer, Cham. https://doi.org/10.1007/978-3-319-33515-5_10

Ries, E. (20218). The Path to the Lean Startup: How to Harness Entrepreneurial Vision to Transform Your Company Culture and Drive Long-Term Growth (Deusto) (Spanish Edition) Kindle Edition

Fernandez, A. (2020). Application of the Lean Startup approach and agile methodologies for project management in innovative environments. 87 p. Institutional repository of Oviedo. https://digibuo.uniovi.es/dspace/handle/10651/56222

Ferrer Moreno, A. (2017). The creation of e-commerce companies based on the Lean Startup methodology and Business Model Canvas: analysis of the case of Hawkers Co. http://hdl.handle.net/10251/89284

Gans, J; Stern, S. & Wu, J. (2019). Foundations of entrepreneurial strategy.Strategic Management Journal,40(5), 736– 756. https://doi.org/10.1002/smj.3010

Gehman, J. Glaser, V. Eisenhardt, K. & Gioia, D. (2018). Finding Theory–Method Fit: A Comparison of Three Qualitative Approaches to Theory Building. Journal of Management Inquiry, 2018. https://doi.org/10.1177/1056492617706029

Government of Peru (2020). Agenda for the Commemoration of the Bicentennial of the Independence of Peru. https://bicentenariodelperu.pe/wp-content/uploads/2020/10/Agenda-de-Conmemoraci%C3%B3ndel-Bicentenario-de-la-Independencia-del-Per%C3%BA-2020.pdf

Guevara, G., Arguello, A. & Catro, N. (2020). Educational research methodologies (descriptive, experimental, participatory, and action-research). Revista RECIMUNDO, 4(3), 163-173.

https://doi.org/10.26820/recimundo/4. (3).July.2020.163-173

Gutierrez, E. Guevara, M. & Ramírez, N. (2020). Agile methodologies for project development. Unicatólica University Repository

http://hdl.handle.net/20.500.12237/2038 .

Hegger, J. (2019). The lean startup and successful discontinuous innovations. Exploring the effects of the lean startup method on the success of new ventures developing radically new innovations. https://theses.ubn.ru.nl/handle/123456789/9067

Hernandez, R. & Mendoza, C. (2018). Scientific Research Methodology. The routes, quantitative, qualitative and mixed. McGraw-Hill.

INEI. (2020). Peru: Citizen Perception of Governance, Democracy, and Trust in Institutions, Semester: October 2019 - March 2020. http://m.inei.gob.pe/media/MenuRecursivo/boletines/informe_de_gobernabilidad_may2020.pdf

Jauregui, P. & Soler, V. (2017). Lean manufacturing: A tool to improve productivity in companies. 3C Business, Research and Critical Thinking. Ed.esp:116-124. https://riunet.upv.es/handle/10251/102320;DOI:10.17993/3cemp.2017.especial.116-124

Jesemann, I. Beichter, T. Herburger, K. Constantinescu, C. & Rüger, M (2020). Migration of the Lean-Startup approach from High-Tech startups towards product design in large manufacturing companies, Procedia CIRP, Volume 91,2020, Pages 594-599, ISSN 2212-8271. https://doi.org/10.1016/j.procir.2020.03.110.

Lévesque, M. & Stephan, U. (2020). It's Time We Talk About Time in Entrepreneurship.Entrepreneurship Theory and Practice. 2020; 44(2):163-184. https://doi.org/10.1177/1042258719839711

Levinthal, A. & Contigiani, A. (2018). Situating the Construct of Lean Startup: Adjacent 'Conversations' and Possible Future Directions. Available http://dx.doi.org/10.2139/ssrn.3174799

Lichtenthaler, U. (2020). Agile Innovation: The Complementarity of Design Thinking and Lean Startup. International Journal of Service Science, Management, Engineering, and Technology (IJSSMET)11(1); https://doi.org/10.4018/IJSSMET.2020010110

Llamas, J. & Fernández, C. (2018). The Lean Startup methodology: development and application for entrepreneurship. UAN Magazine.

https://doi.org/10.21158/01208160.n84.2018.1918

Llungo, J. (2018). Inequalities and Regional Policies in Latin America: A Current View. Regional Research - Journal of Regional Research, (41), 11-51. https://www.redalyc.org/articulo.oa?id=28966226005

Mansoori, Y.(2017) Enacting theLean Startup Methodology: The role of vicarious and experiential learning processes. International Journal of Business Research and Behavior, Vol. 23, No. 5, pp. 812-838. https://doi.org/10.1108/IJEBR-06-2016-0195

Mansoori, Y; Karlsson, T & Lundqvist, M. (2019). The influence of the lean startup methodology on entrepreneur-coach relationships in the context of a startup accelerator, Technovation, Volumes 84–85, 2019, Pages 37-47, ISSN 0166-4972. https://doi.org/10.1016/j.technovation.2019.03.001.

Mendoza, O.., Cordero, M., & Barrientos, E. (2020). Computer management as the basis of management in competitiveness in the face of the economic recession due to the coronavirus (COVID-19) pandemic. Colombian Journal of Advanced Technologies, 2(36), 164-172. https://doi.org/10.24054/16927257.v36.n36.2020.33

Moreira, C. & Lima, V. (2019). Fiscal management, public management efficiency and socioeconomic development of Ceará municipalities. Revista de Administración Pública Ceará, pp. 791-801. https://doi.org/10.1590/0034-761220180234

Muente, G. (2019). Learn how knowing what types of products are for your marketing strategies can help. https://economipedia.com/definiciones/estrategia.html

Parada, J., Ganga, F. & Rivera, Y. (2017). State of the art of social innovation. Journal of Humanities and Social Sciences No. 82 Pg. 563-587- https://dialnet.unirioja.es/metricas/documentos/ARTREV/6233641

Pezzetti, V. (2021). Why align Lean Startup with Design Thinking and Agile? Open Journal of Applied Informatics, 4.

http://portalreviscien.uai.edu.ar/OjS/index.php/RAIA/article/view/9

Quintanilla, V. (2021). Applicability of the Lean Startup methodology for the execution of sanitation projects in the city of Pucallpa, period 2017 – 2019. (Thesis to opt for the professional title of Bachelor of Administration). National University of Ucayali

http://repositorio.unu.edu.pe/bitstream/handle/UNU/4753/UNU_ADMINISTRACION_2021_T_VICTOR-QUINTANILLA.pdf?sequence=1&isAllowed=y

Ries, E (2018). The Path to Lean Startup: How to Leverage Entrepreneurial Vision to Transform Your Company Culture and Drive Long-Term Growth. Kindle Edition

Rojas, R. (2020). Peru, on the road to the Bicentennial: What does it mean to be a volunteer? https://stakeholders.com.pe/informes/peru-rumbo-al-bicentenario-significa-voluntario/

Stagars, M. (2015) The Lean Startup Changed Everything. In: University Startups and Spin-Offs. Apress, Berkeley, CA. https://doi.org/10.1007/978-1-4842-0623-2_2

Teece, D. (2018). Business models and dynamic capabilities, Long Range Planning, Volume 51, Issue 1,2018, Pages 40-49, SSN 0024-6301. https://doi.org/10.1016/j.lrp.2017.06.007.

Valdez, A. & Vergara, A. (2017). The New Public Management Based on Rankings: From Planning to Evaluation. Revista de Universidad Externado de Colombia, pp. 79-94. https://doi.org/10.18601/16578651.n21.05.

Valeriano, F. (2019). Transparency in Peru's public and private management in the face of the crisis of values that affect the country's development. UNMSM Research Journal, 22(43), 31–43. https://doi.org/10.15381/gtm.v22i43.16951

Veretennikova, N. & Vaskiv, R. (2018). Application of the Lean Startup Methodology in Project Management at Launching New Innovative Products, 2018 IEEE 13th International Scientific and Technical Conference on Computer Sciences and Information Technologies (CSIT), 2018, pp. 169-172, https://doi.org/10.1109/STC-CSIT.2018.8526731

Wanodyanti, N; Fahmi, I., & Maulana, A. (2019). Customer Development Model Dalam Bisnis Jasa Pembelajaran Program English as Second Languange (ESL). Jurnal Aplikasi Bisnis Dan Manajemen (JABM), 5(1), 95. https://doi.org/10.17358/jabm.5.1.95

Wu, Y; Eesley, C. & Yang, D. (2021). Entrepreneurial Strategies During Institutional Changes: Evidence from China's Economic Transition. https://doi.org/10.1002/sej.1399

Zamora, L. (2016). 5 reasons to use the "Lean Startup" method. https://www.entrepreneur.com/article/271613