

InvestChile Executive Summary

Title: The Digital Platform Economy (DPE) Index 2020

Author: The Global Entrepreneurship and Development Institute (The GEDI Institute)

This ranking is compiled by the Global Entrepreneurship and Development Institute (The GEDI Institute) and is a continuation of the 'Global Entrepreneurship Index (GEI)' ranking, which ended in 2019. This new indicator incorporates the changes introduced by the Information-technology Revolution (ITR) and globalization from an ecosystem perspective. It measures the Digital Platform Economy Index (DPE Index), which is a global digital ecosystem indicator.

Chile ranks 38th out of 116 countries in this global index, making it the leading country in Latin America.

The Digital Entrepreneurial Ecosystem (DEE)

This ranking evaluates countries from both a digital and entrepreneurship perspective, as they are two united and complementary ecosystems. They describe how the economy is currently developing within the Informationtechnology Revolution (ITR).

This framework situates digital entrepreneurship in the broader context of users. platforms, and institutions, in which two biotic entities (users and agents) act individually, along with two abiotic components (digital infrastructure and digital platforms). If the digital ecosystem is separate from the entrepreneurial ecosystem, then there is no certainty that new technologies will be adopted.

The ranking reveals that we are experiencing a new era involving the transition from a managed economy to a Digital Platform Economy (DPE). This study measures 116 countries and the DPE Index structure includes 12 pillars that form part of the two ecosystems.

Introduction

The Information-technology Revolution (ITR) has encouraged the entry of new technological companies. Many of them are Matchmaker businesses which have developed the ability to match one group of users with another,





thereby reducing transaction costs. The cost of storing, computing and transmitting information is reduced by representing it in binary units called bits.

Digital technologies reduce five types of distinct costs that affect economic activities: search, replication, transportation, tracking and verification. This ranking contributes two aspects to this study: 1) It introduces a DPE measure based on consistent concepts with twelve pillars and four sub-indices. 2) It examines the gap that exists whereby incumbent or traditionally dominant firms in Europe have failed to introduce new technologies in sufficient numbers and startups have remained small and not scalable.

The DPE structure is comprised of 4 sub-indices:

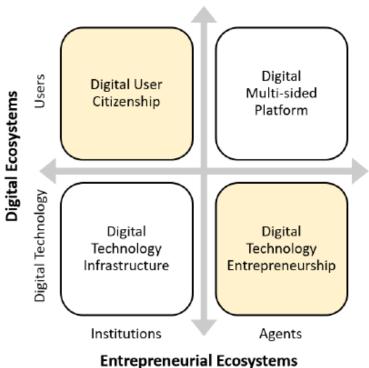
- 1. Digital User Citizenship, which includes users from both the demand and supply side.
- 2. DigitalTechnology Entrepreneurship, which includes app developers and other agents that contribute to entrepreneurial innovation, experimentation and value creation on platforms.
- 3. Digital Multi-sided Platforms, where social and economic activities involving users and agents are organized.
- 4. Digital Technology Infrastructure, which is pertinent to all the regulations governing social, economic and technical activities within the digital economy.

The diagram below explains the relationships between the four concepts in the digital and entrepreneurial ecosystems. The first consists of users and digital technology. The latter consists of agents and institutions.









Source: Song, 2019 p. 576

Each concept in each sub-index has distinctive characteristics, as described below:

- Protecting user privacy is vital to healthy and active Digital User Citizenship.
- Digital Technology Entrepreneurship drives entrepreneurial innovation and thus increases the efficiency of the platform.
- Multi-sided Platforms are the key organizational innovation for the ITR, which must be neutral, as monopolistic behavior can stifle competition and innovation.
- Digital Technology Infrastructure enables the platform economy to function. It represents the technology of the digital era, along with the regulations that govern its use.





Measuring the concepts

The evaluation of these four concepts, known as sub-indices, is based on privacy, competition, security and efficiency. This is achieved by measuring the performance of the following pillars:

- Digital Technology Infrastructure (DTI) addresses the coordination and governance that are needed to establish the set of institutional standards related to digital technology, and the following pillars are evaluated: digital access, digital freedom and digital protection.
- Digital User Citizenship addresses the explicit legitimacy and implicit social norms that enable users to participate in the digital society, and the following pillars are evaluated: digital literacy, digital openness and digital rights.
- Multi-sided Digital Platforms are where digital technology users and digital entrepreneurship agents meet, and the following pillars are evaluated: networking, matchmaking and financial facilitation.
- Digital Technology Entrepreneurship addresses the third parties involved in business innovation and value creation using hardware and software to build products that connect to platforms, and the following pillars are evaluated: digital adaptation, technology absorption and technology transfer.

Each pillar is then evaluated according to 12 digital ecosystem variables and another 12 entrepreneurial ecosystem variables.

Digital finance also has an important role in building a sustainable DPE. Secure and reliable digital technologies are necessary preconditions for online financial transactions to flourish. Migrating to a cashless society is an important first step, which users will only be willing to take if there are tangible benefits. One benefit is reduced transaction costs and a seamless payment experience between users and agents. Digital finance has also transformed the capital markets in the digital era.

Calculating the DPE Index

Accordingly, the Digital Platform Economy Index (DPE Index) is composed of 4 sub-indices, 12 pillars, 24 variables and 61 indicators.

Indicator selection was based on three criteria:

- 1. Relevance of the indicator to the phenomenon being measured
- 2. Specificity of the variable to the phenomenon it represents
- 3. Potentially flawless and clear interpretation of the indicator







Summary by country

Chile ranks 38th out of 116 countries. It has the highest place in Latin America, followed by Uruguay at 42 and Costa Rica at 46.

Countries below 25 are not analyzed in detail. The only details provided for these countries are their score and ranking for each sub-index. However, the DPE Index for all countries generally classifies their digital characteristics within the following clusters:

- Leaders
- Followers
- Gainers
- Laggards

Chile is among the gainers, along with other Latin American countries, such as Argentina, Brazil, Costa Rica, Mexico and Uruguay, without further differentiation.

As a review, the ranking states the following: "Gainers enjoy good digital technologies and their citizens are active users. However many aspects of the digital entrepreneurship ecosystem require considerable development. The laggards are the worst in terms of every pillar score average. These countries lack good digital technologies and an active stock of users. The last two cluster members are very homogeneous, as the differences inside these clusters are minimal. This is particularly true for the most numerously populated Laggards cluster."

An overall assessment indicates that the developed Anglo-Saxon and Nordic countries top the DPE Index ranking worldwide, followed by other prosperous countries in Europe, Asia and Oceania (i.e. Australia and New Zealand). Many medium-developed countries in Europe, Asia and Latin America, along with some oil-rich countries such as Bahrain, Oman, Qatar, Saudi Arabia and the United Arab Emirates have below-average DPE scores. The underperforming countries in DPE index terms include underdeveloped countries in Africa and Asia, as well as some developing European and Latin American countries.

Conclusion

The document aims to measure the Economics of Digital Platforms. It is a very good approach to examining interactions in the digital world and how countries should approach this challenge. Digitalization will bring new obligations to societies, where the digital literacy of users will become increasingly important. Chile's place in the







third cluster indicates that it must swiftly address this important issue, in order to embrace the Informationtechnology Revolution of the 21st century.



