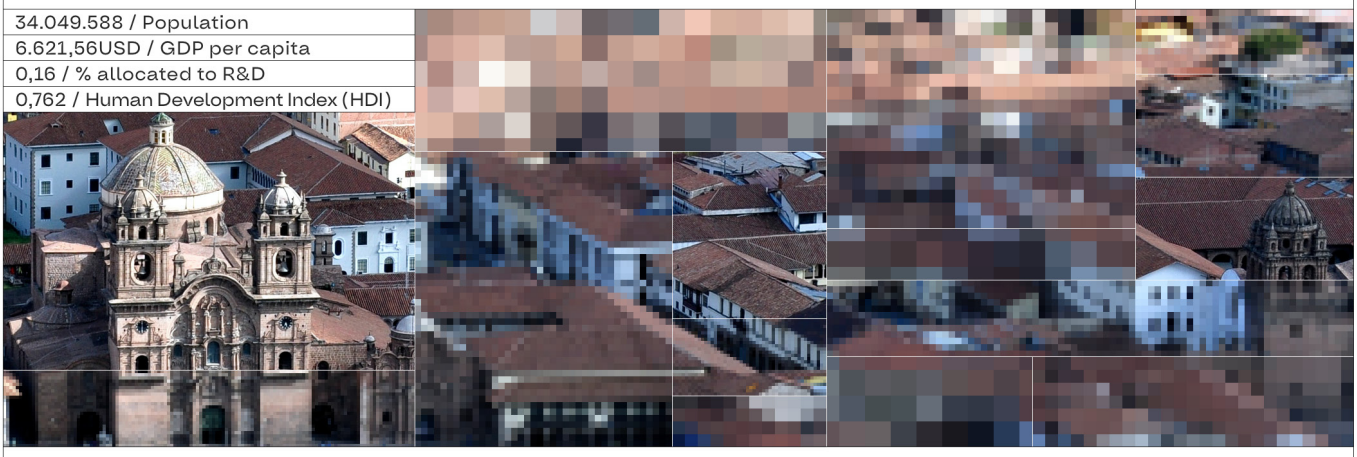
Peru

Index Score **45,55**

Ranking **7**

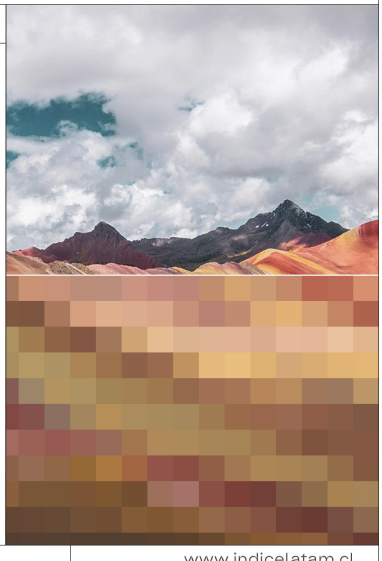
34.049.588 / Population
6.621,56USD / GDP per capita
0,16 / % allocated to R&D
0,762 / Human Development Index (HDI)



Infrastructre Average	**51,44**	Data Availability Average	**32,22**	Talent Development Average	**31,50**
Enabling Factors Average	**38,39**				
Research Average	**32,51**	Innovation and Development Average	**9,77**	Adoption Average	**22,24**
Research, Development and Adoption Average	**21,51**				
International Vinculation Average	**25,00**	Vision and Institutionality Average	**70,23**	Regulation Average	**100,00**
Governance Average	**65,08**				

OVERALL SITUATION

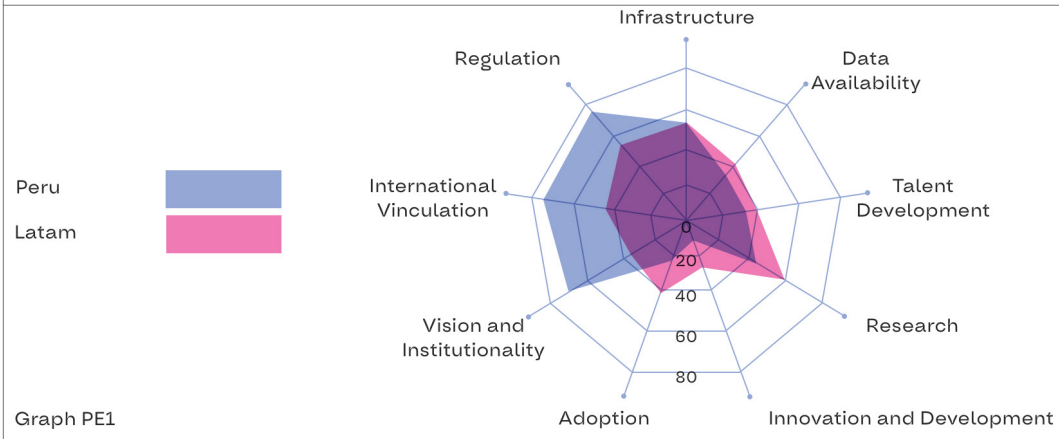
Peru is in a favorable position to advance in the development of AI, taking advantage of positive elements in infrastructure, technological adoption and governance that can contribute to other areas in which it is lagging behind. It faces challenges in professional training, advanced human capital and research. Governance stands out as a strong point in Peru, but it is essential to continue strengthening the strategic vision and the linkage of society, taking advantage of international insertion in this area. In terms of talent migration, it is not seen as a significant phenomenon for the country, while the relevance of exchange within the region in terms of collaborations and migration of authors stands out.



Peru

Index Score **45,55**

Ranking **7**



Graph PE1

GENERAL FINDINGS

In Peru, the digital infrastructure presents opportunities to strengthen the development of AI, as it has a 5G network, but internet usage and download speeds are slightly lower than the average for Latin America. Similarly, cloud demand and the number of data centers lag behind the regional average. In terms of devices, mobile subscriptions are above average, but the percentage of households with computers is low. The data barometer indicators are below the regional average, suggesting areas of opportunity to improve the use and impact of data and its governance.

In talent development, in terms of AI literacy, ICTs have been incorporated into the school curriculum, but it is necessary to advance in specific open courses on AI and its formal inclusion. This could be conducive to promoting the penetration of technological and disruptive skills in the workforce.

In research, the productivity of AI researchers stands out, but it is necessary to increase the number of publications, their impact and the presence of active researchers in the field. In addition, to enhance all the above elements and collaboration, it would be beneficial to promote the creation of research centers, a project announced but pending materialization some years ago. In R&D, it has the potential to improve its productivity and quality in open source as well as the number of patents, all indicators in which it is below the average for the region. In innovation, it is essential to seek mechanisms to promote inward investment in AI. Government promotion of investment in emerging technologies is relatively high, but translating this into increased adoption of AI in companies remains a challenge.

In the governance dimension, Peru excels in vision and institutionality. The country has a strategy in place, supported even by the highest authority, which incorporates different dimensions elements of orientation to the common good. In the future, formal mechanisms for stakeholder participation may be incorporated to give the strategy greater legitimacy. In addition, there is more than one institution in charge of the strategy, which has coordination powers. The country stands out in regulation, both for the existence of specific and updated regulations in AI, as well as in issues related to cybersecurity and data protection, achieving the highest regional score in terms of regulations.

Peru

Index Score **45,55** | Ranking **7**

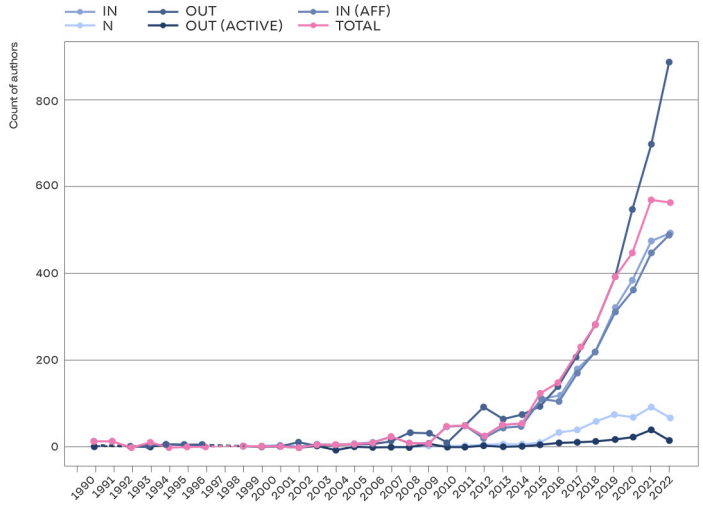
TALENT DRAIN:

The talent leakage in AI is not significant and is lower than that of the rest of the analysis elements (out-active). We observe that the number of authors has grown steadily from 2012 to 2021, especially since 2012, and as for Latin America in 2022, we see a negative impact, probably from the pandemic (total).

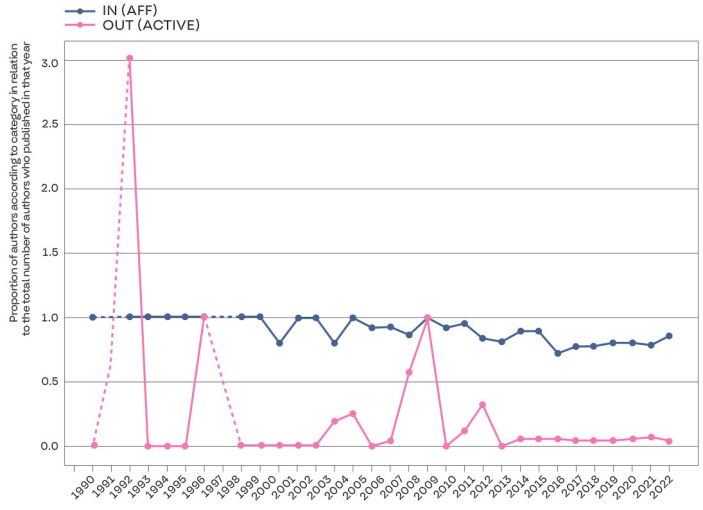
Authors consistently publishing in AI have progressively increased throughout the series especially from 2015 to 2021 (N). In addition, those who published in other countries and began to publish in Peru have progressively increased (in-aff), especially since 2012, an increase that is also reflected in those publishing for the first time in IA (In).

Since 2019, the number of authors who integrate AI concepts in their publications has been growing more intensely than the other groups (out), therefore, the trend towards transdisciplinary scientific production deepens in that period until 2022 (see Graph PE2).

Talent migration: Peru / Graph PE2



Talent migration: Peru / Graph PE3



The high variability between 1990 and 2010 is due to the fact that the academic community was still small, so the mobility of few authors strongly impacts the proportion. Graph PE3 shows that the proportion of authors who had not published in the region and who do so in the year of analysis starts very high and has a slight tendency to decrease, but remains stable at around 80% (in-aff). On the other hand, the proportion of talent drain is marginally lower for Peru than for other countries in the region (out-active) (see Graph PE3).

Peru

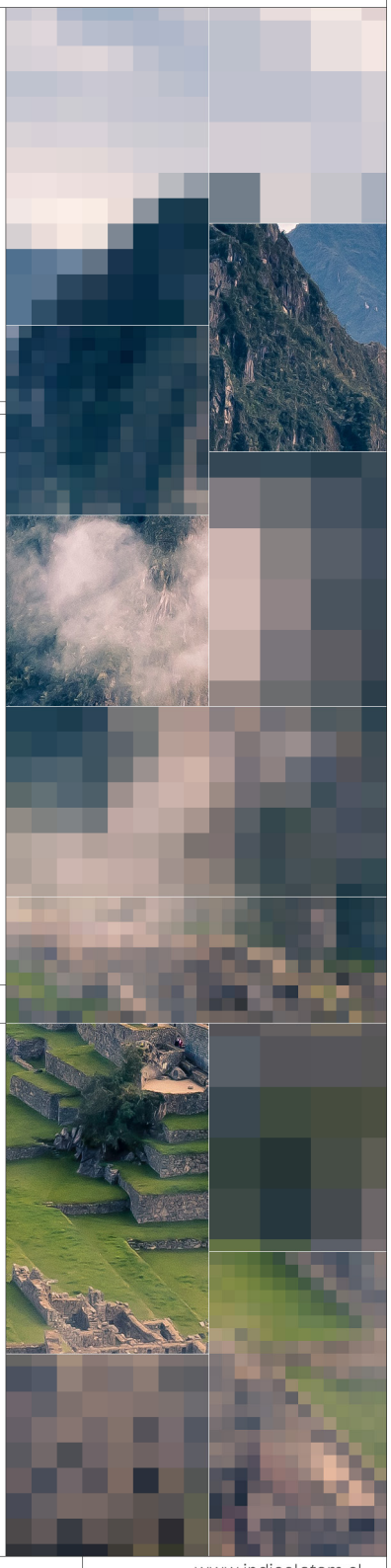
Index Score **45,55**

Ranking **7**

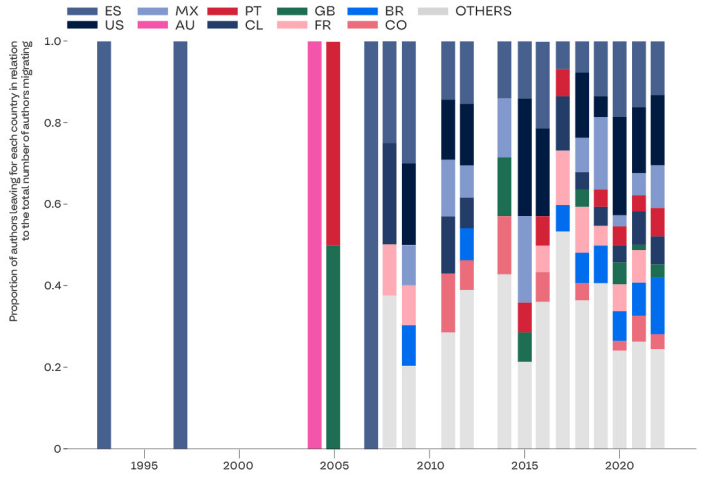
TALENT DRAIN:

Regarding the origin and destination of the authors, the importance of Spain and the USA is evident, both for those who arrive and those who leave. In addition, collaboration and destinations within Latin America are relevant for Peru for both arrivals and departures; among them are Brazil, Mexico, Chile, Colombia and Argentina.

It is important to note that the importance of countries such as Spain has not diminished as it has for the rest of the region, nor is collaboration from or to China. The migration patterns described for arrivals are similar to those for departures, i.e., as at the regional level, most of the incoming authors come from countries to which the authors had previously left, except that those arriving from Brazil and the USA are many more than those migrating to those destinations. Regarding the phenomenon of diversification of destinations, in Peru it is much more important for migration than for the entry of talent (see Graph PE4).



Talent migration: Where are the authors that published in Peru going? / Graph PE4



Talent migration: Where does the authors that publish in Peru come from? / Graph PE5

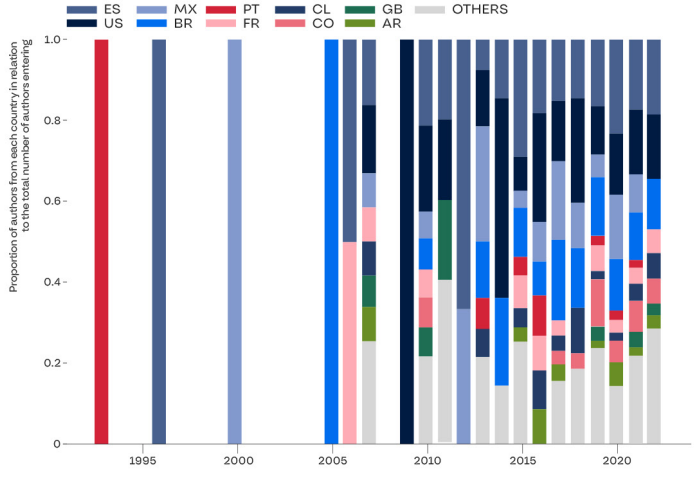


TABLE PE 1 Summary of scores and ranking in each sumdimension and indicators for Peru

Dimension	Subdimension	Indicators	Peru	LAC Average	Ranking
Enabling factors	Infrastructure	Conectivity	67,044	56,320	6
		Computing	29,436	33,725	9
		Devices	57,864	63,597	7
	Infrastructure average		**51,448**	**51,214**	**7**
	Data	Data barometer	32,220	39,800	8
	Data availability average		**32,220**	**39,800**	**8**
	Talent development	AI literacy	62,500	48,958	3
		AI professional formation	13,317	33,888	8
		Advanced human capital	18,687	28,053	6
	Talent development average		**31,501**	**36,966**	**7**
Enabling factors average			**38,390**	**42,660**	**7**
Research, development and adoption	Research	Research	32,510	58,471	12
	Research average		**32,510**	**58,471**	**12**
	Innovation and development	Development	12,116	24,768	9
		Innovation	7,434	24,684	9
	Innovation and development average		**9,775**	**24,726**	**12**
	Adoption	Use of AI in companies	10,707	25,798	7
		Public promotion of AI	33,779	50,734	9
	Adoption average		**22,243**	**38,266**	**9**
Research, development and adoption average			**21,510**	**40,488**	**12**
Governance	Vision and institutionality	AI Strategy	85,714	35,417	1
		Social involvement	37,500	21,875	3
		Institutionality	87,500	43,750	1
	Vision and institutionality average		**70,238**	**33,681**	**3**
	International vinculation average		**25,000**	**45,833**	**3**
	Regulation average		**100,000**	**54,167**	**1**
Governance average			**65,080**	**44,560**	**5**
AI Index			**41,660**	**42,615**	**7**