

IA for good – Challenges & Opportunities to reduce inequalities at Brazil

Labour & Employment Ministerial Meeting november/2025

MINISTÉRIO DO
TRABALHO E EMPREGO



The duality of labour market is always present

- From one side: big enterprises (mineral sector, public enterprises) with a group of professional with good education and large experience on IA products (we could think in a sort of “*technocracy*”);
- From Other side - labor precariation of “data Workers” and “Platform Workers” are challenging terms and conditions of employment .
- From one side government and academics organized The Brazilian Plan on IA – **IA for good** – new public services
- From the Other side - Informal Entrepreneurial activities, small or even individual ones, arguing the right of pay less taxes and less stalments of social securiti, as if this could solve problems of generate decente work

How can we use AI to narrow inequalities? Is this possible?

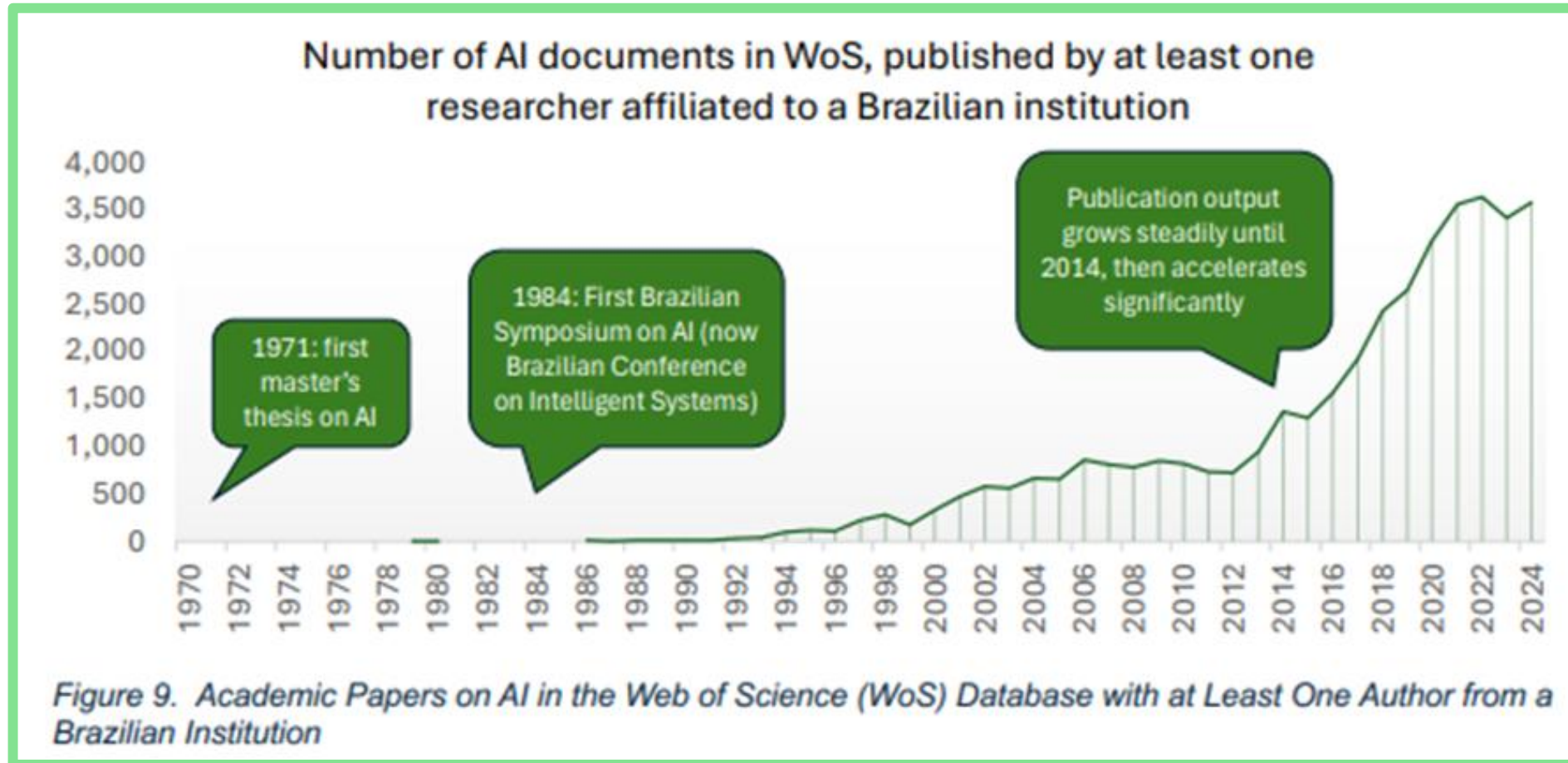
Infrastructure for AI is crucial, but is changing really fast

- **The top computers** – Top500, indicates that among the 100 largest computers in use in 2024, two were Brazilian: Pegasus (70th place) and Santos Dumond (89th), establishing the country's leadership in Latin America.
- **Energie and water a lower costs;**
- **Data centers** - In 2023, there were 181 units in Brazil, corresponding to 1.5% of the global market
 - At then, there were 11,879 facilities located in 136 countries, 48% of which were in the United States, 29% in Europe, 15% in Asia, 5% in Latin America, and 3% in Oceania.

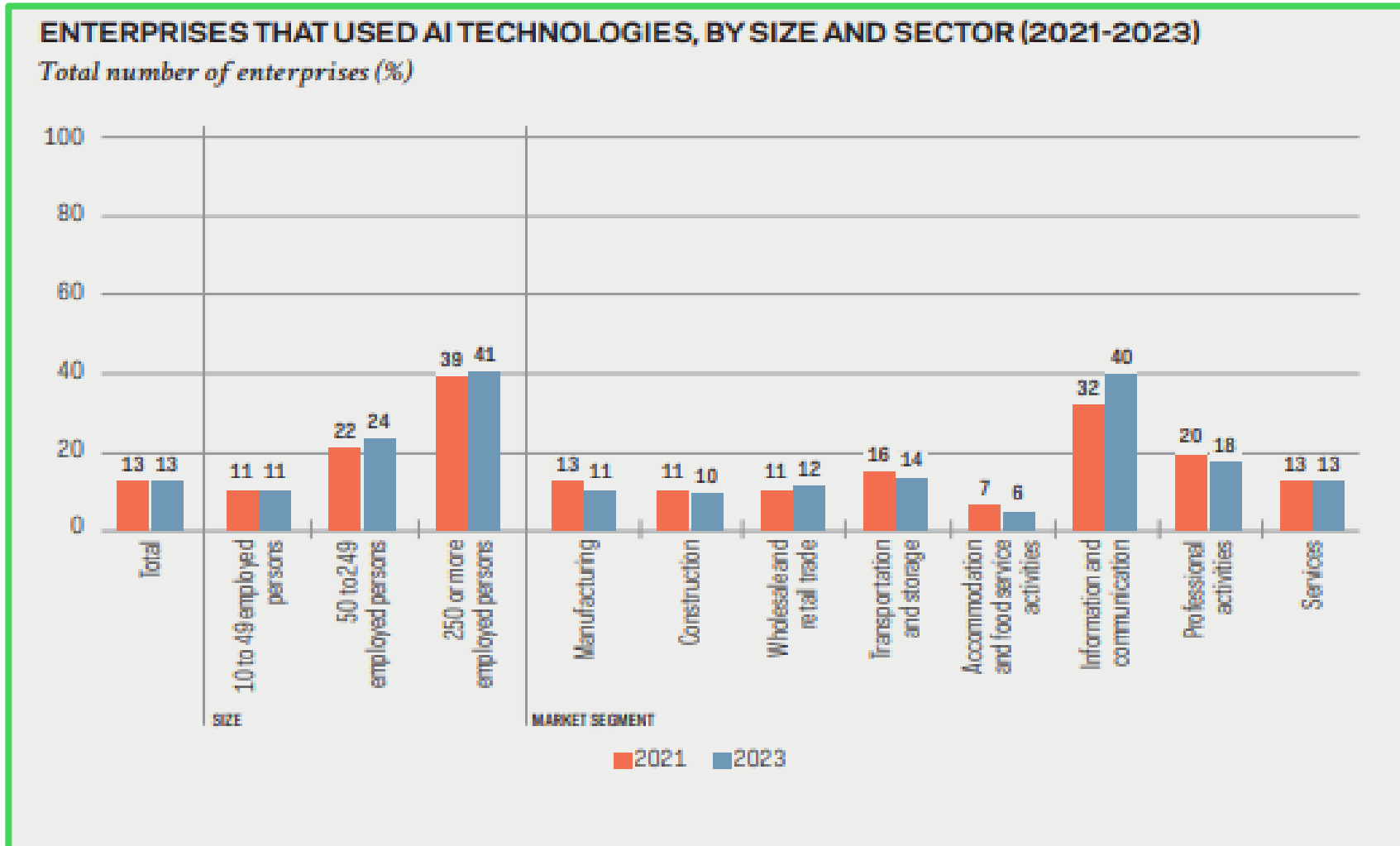
Brazil is home to **14,420** research units working on topics related to artificial intelligence.

Data was collected for **39,558** articles from the **Web of Science**. It position **Brasil** as the **15th** country in **number of publications**.

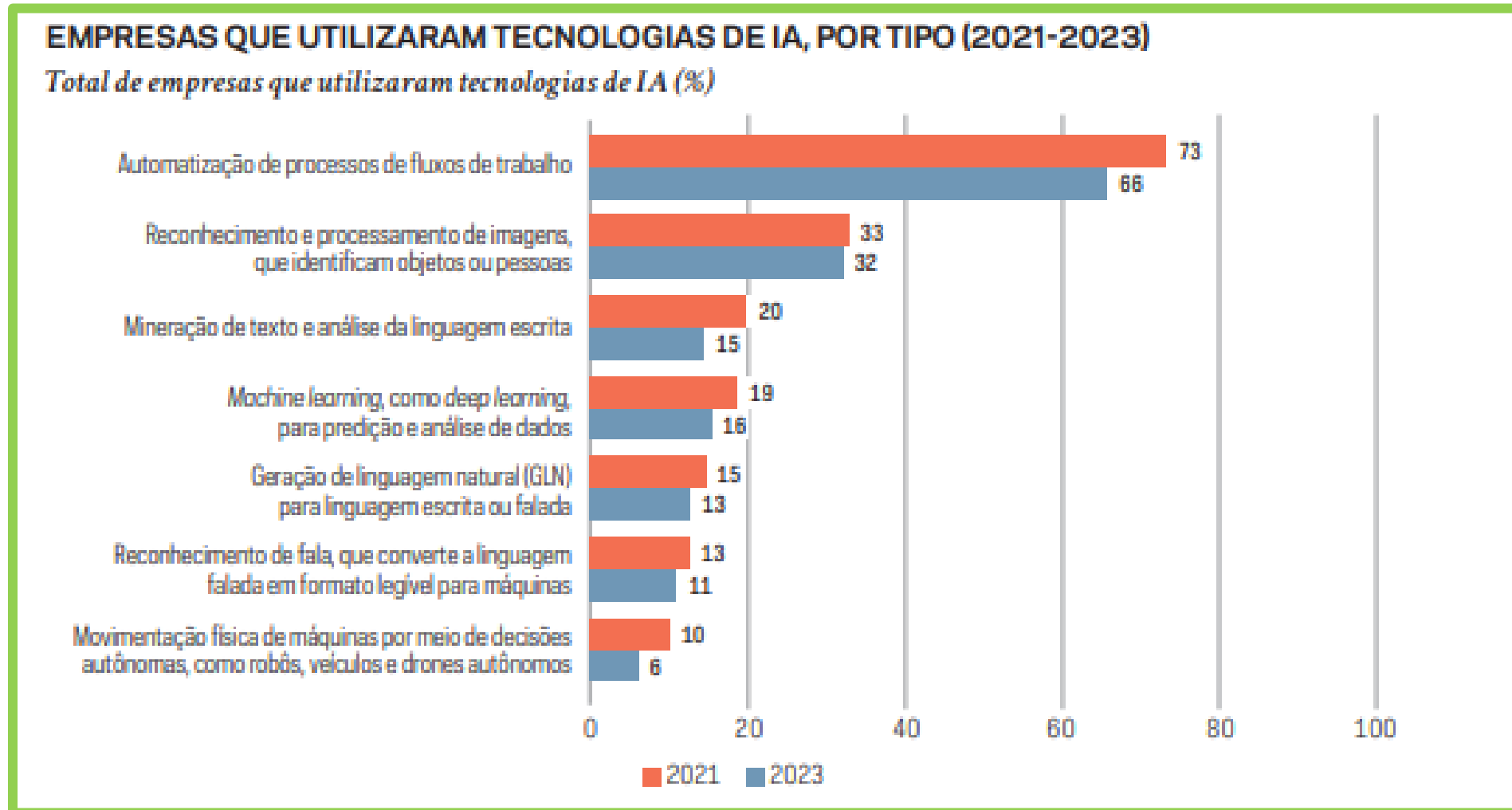
In 2025, 50% of the scientific paper be in produced in collaboration with international institutions



In 2023, quantitative research estimates that around **62,000 companies** (13%) were using AI. The use of AI has increased at larger the Enterprise: **41% enterprises with 250 and more employees**. The activities with more indication of use are **40% of enterprises on Information and communication sector**



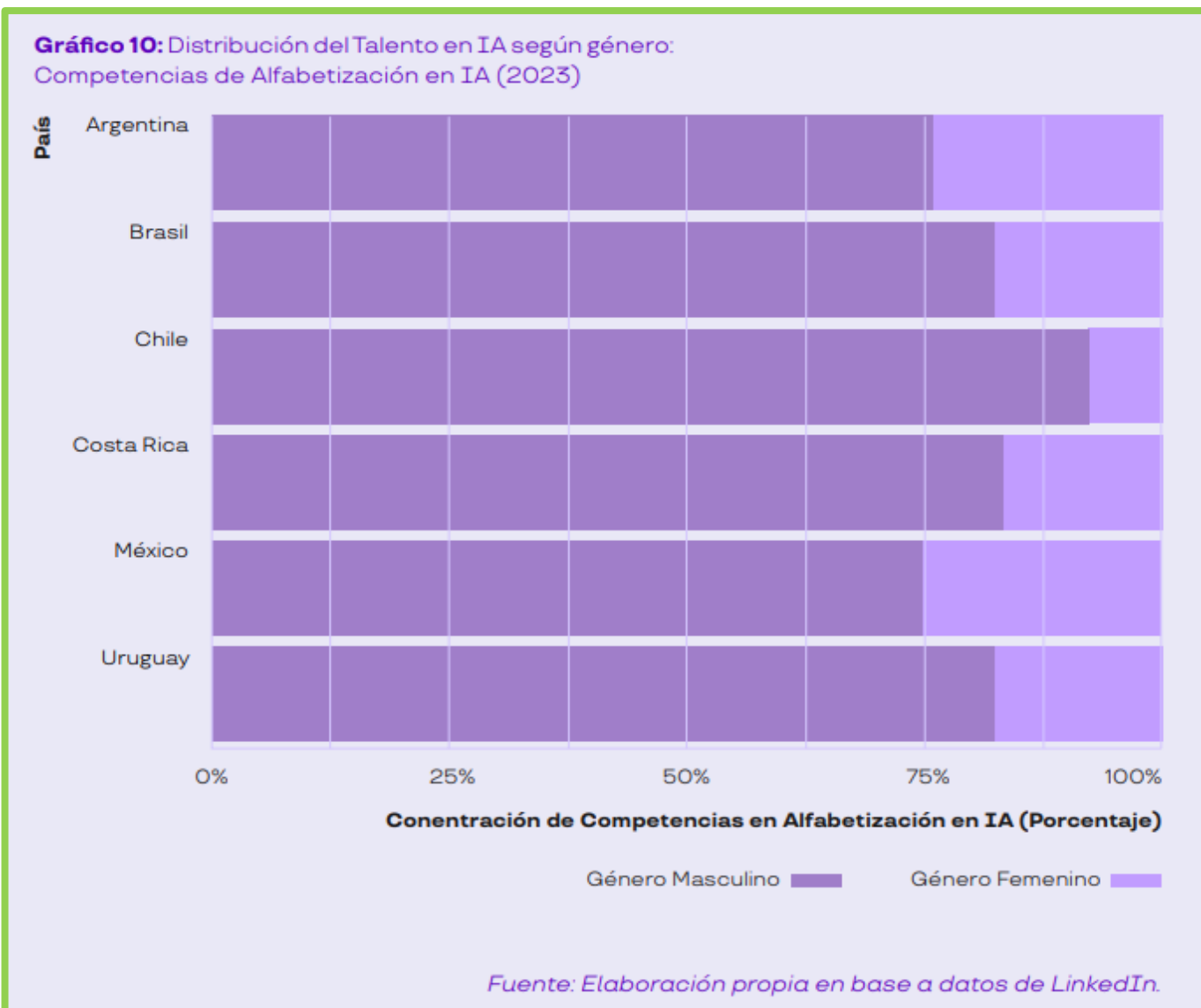
Main uses confirms the automation on processes, data images, mining information and texts, use of machine learning



What occupations were more frequent related with AI

- An experimental study by Torres et al., 2023 with companies in São Paulo, using UNESCO methodology, showed that the most sought-after professionals were:
- **data protection officers;**
- **and management positions for information departments;**
- **risk departments,**
- **statisticians and data engineers;**
- **data scientists, machine learning applications developers.**
- **Professionals who involve high levels of IT knowledge and information use in addition to IT techniques**

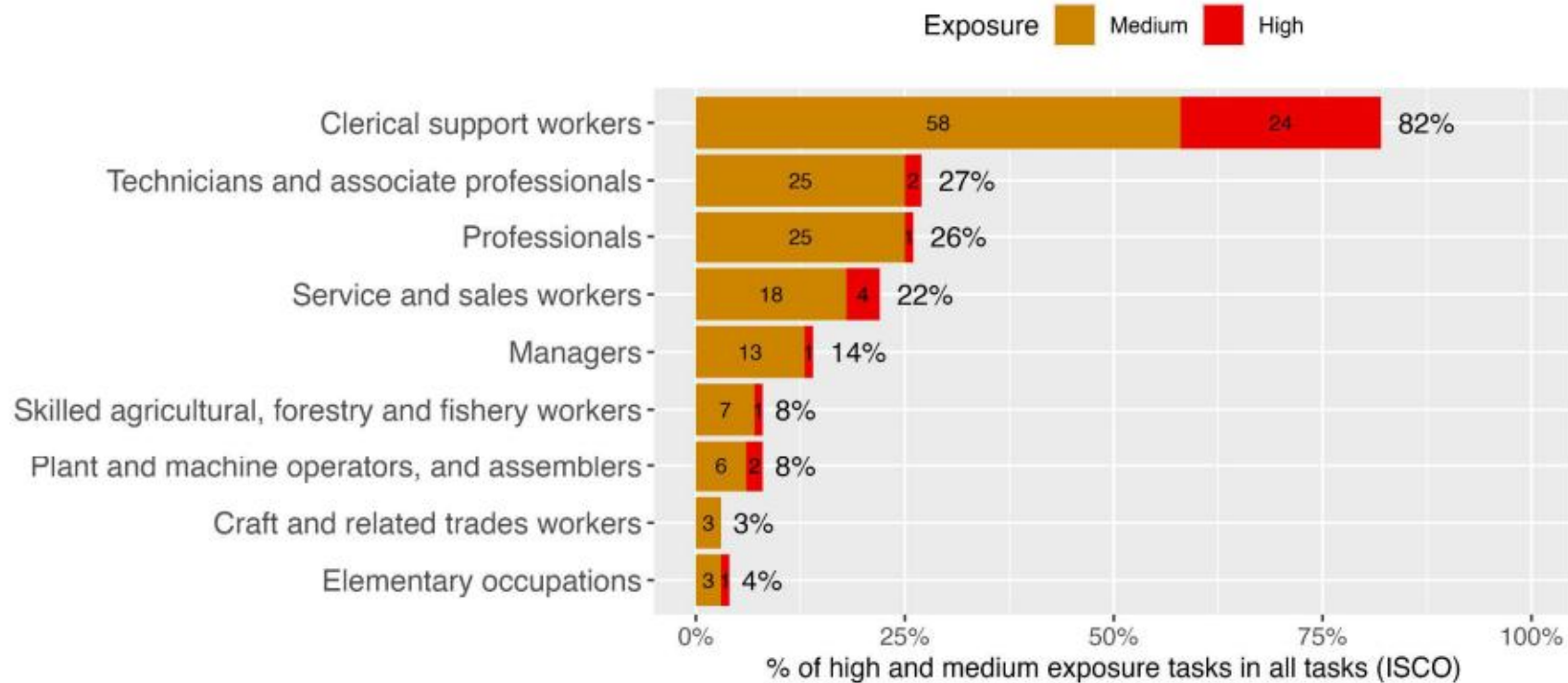
Who are the worker of those occupation on AI



Almost 80% of this Workers are man in Brazil and Other countries in Latin America

Which are the occupations more expected to be affected by AI

Clerical support workers are most exposed to risk of automation



Source: Gmyrek et al., 2023.

in Brazil those occupational groups correspond to: **around 15 million people in the formal sector that will be affected in some ways in a few years**

On those groups there are more women

There are changes in the informal work also



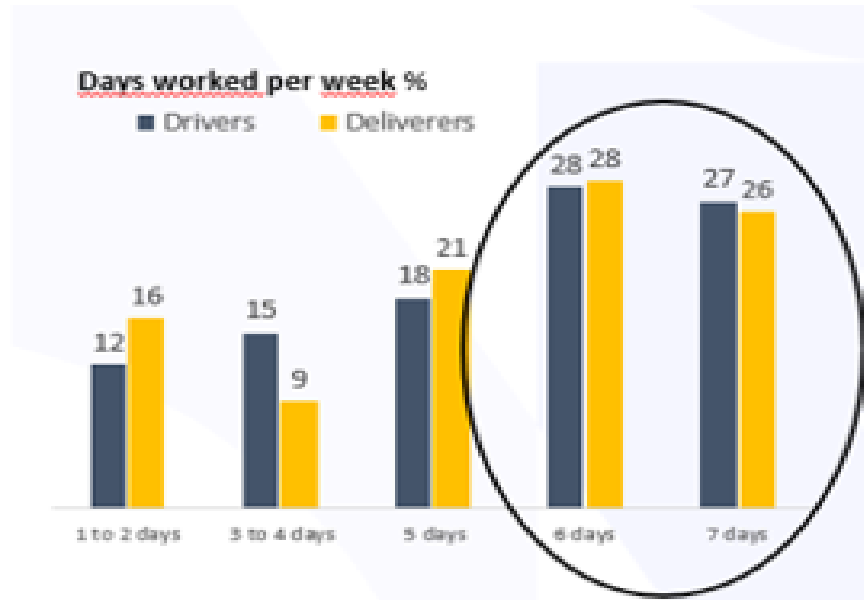
NÚCLEO DE TECNOLOGIA DO MTST

Homeless Worker Movement in Brazil and the struggle for digital sovereignty

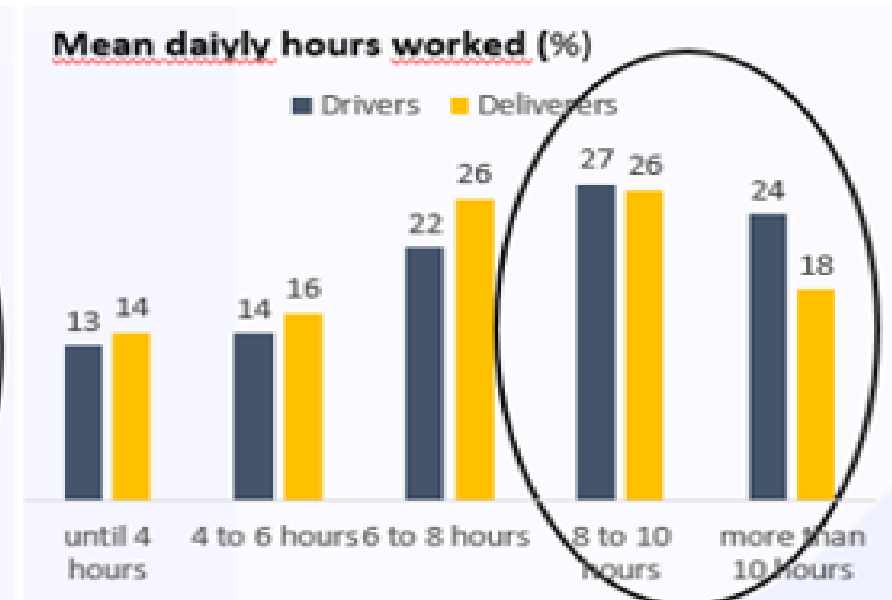
SOBERANIA

In 2023, the estimative are 2,1 million people were working through platforms (ecommerce, all kind of work that are mediate for platforms) main group are in transportation 55% of drivers and 54% of deliverers work every day of the week, more than 8 hours per day 55% of drivers and 62% of deliverers received from 1/2 to 2 minimun wage

Graphic 1



Graphic 2



Bill in discussion on the congress for driver have some key points:

- Regulation and registration:
 - Registry of all the contracts, payments and contributions;
 - Work relation covered and inspected by the Ministry of Labor;
 - Creation of workers union to represent the category;
- Work conditions:
 - Mandatory social security contribution by companies and workers, equivalent to other self-employed contract;
 - Maximum connection period of 12 daily hour;
- **Minimum remuneration equivalent to the proportional minimum wage plus service costs – verified by the monthly report**

Brazilian Legislation are evolving relatively quickly

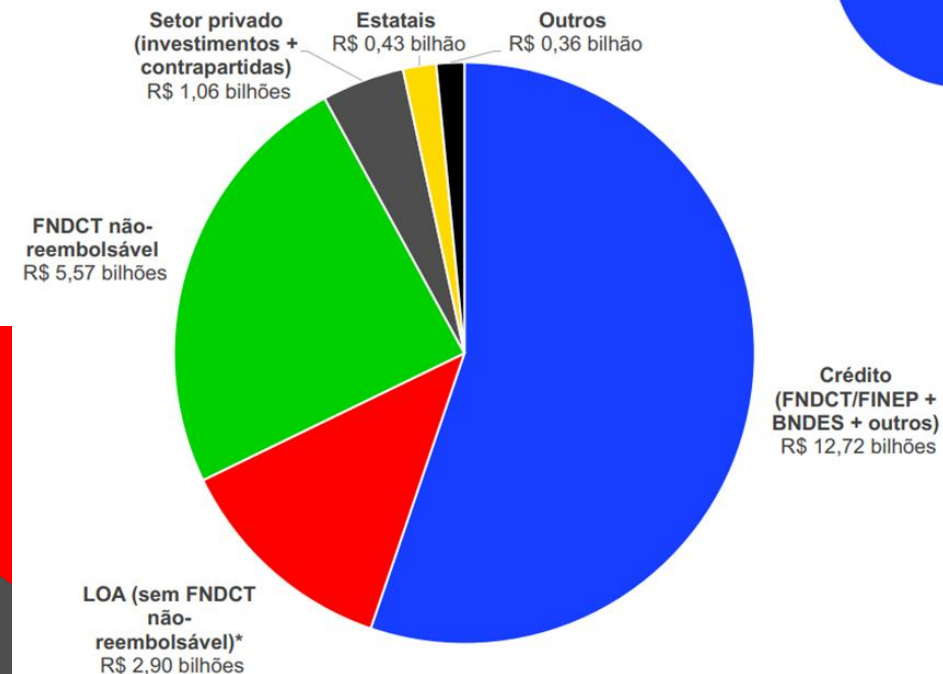
2.1. The Evolution of Brazil's AI Legislation



Brazilian Plan for AI - AI for good – define budget for 2024-28: R\$23 bilhões

Fontes dos investimentos

Investimentos PBIA 2024-2028
Total: R\$ 23,03 bilhões



*Valor global projetado, pendente de confirmação na programação orçamentária e financeira de cada ano.

Investimentos previstos

Descrição	2024-28
Ações de Impacto Imediato	R\$ 435,04 milhões
Infraestrutura e Desenvolvimento de IA	R\$ 5,79 bilhões
Difusão, Formação e Capacitação em IA	R\$ 1,15 bilhões
IA para Melhoria dos Serviços Públicos	R\$ 1,76 bilhão
IA para Inovação Empresarial	R\$ 13,79 bilhão
Apoio ao Processo Regulatório e de Governança da IA	R\$ 103,25 milhões
Total	R\$ 23,03 bilhões

PBIA has **31 action** on strategic areas to solve priority problems to the Brazilian population are in motion and hopefully will narrow inequalities

- Health
- Agriculture
- Industries and innovation
- Education
- Social Development
- Environmental
- Public Services

AI regulation Bill 2.338 was approved on Senate 2024 and for work it is supposed to provide:

- More qualification to help workers dislodged by AI products
- More communication campaign to explain to the population AI uses – avoiding fake news, false advertising, unsafe work
- Human attendance to prevent problems with chatbots and other illegal, toxic or explicit responses

The need transformation on educational system

- Providing **digital literacy** - Escola do Trabalhador 4.0 (courses from Microsoft, in partnership with Ministry of labour)
- **Changes on the curricula** considering the
- new tasks on the occupation (**SENAC**);
- Transformation on what is taught using AI (**SENAI**)
 - Technical Education for customize solutions
- Creating new methodologies to taught adults (**SESI**);
- Creating new machines to taught processes



There good starting points, but as a large country we need scale and garanties of qualities on territories



Technical Vocational Education

Technological Support and Innovation



Training of Teachers and Instructors

Training of educators and design of teaching and learning guidelines.



Preparation of Learning Materials

Creation and improvement of learning resources for technical and vocational education.



Online Educational Technologies

New technological solutions to expand access to high-quality distance learning.



Modeling of Technical and Vocational Education

High-quality technical and vocational training connected to technological innovations and changes in the world of work.



Engineering Projects

Highly complex engineering solutions and development of new services.



Digital Teacher +

Training of educators to use new teaching and learning technologies.



Large-Scale Performance Assessment

Platform for large-scale assessment of technical and vocational education.



Professional Certification

Certification to hasten the qualification of industry professionals.



Strategic Alliances

Partnerships with global innovation ecosystems for highly complex projects.



Technology and Innovation Networks

Implementation of technology networks and centers for technological services and industrial technology innovation.



Thank you for your patience

Paula Montagner