

National Certification System of Labor Competencies Standards

Digitalization, Skills and Policy Responses

Industry 4.0: Challenges for productivity, employment and inclusion

Panel: Challenges of digital transition: Country experiences from Latin America

Silvia Ruz

Head of the Skills Unit - ChileValora

Bonn, May 2018.



About ChileValora



Who we are

ChileValora is a **decentralized public service institution**, with legal personality created in 2008.

It is related to the **Presidency of the Republic**, through the **Ministry of Labor**.



Main purpose of the Labor Competence Certification System

Tripartite Board of Directors



It is constituted by a board of Directors, integrated in tripartite manner and in equal numbers:

- 3 representatives of employers (Confederation of Production and Commerce and National Confederation of micro small and medium enterprises)
- 3 representatives of workers (United Workers)
- 3 representatives of State (Ministry of Labor, Economy and Education).
- 1 Executive Secretariat.

Purpose



Formally recognize labor competencies of people, regardless of how they were acquired and whether they have a degree or underwent formal education.



Promote opportunities for lifelong learning, recognition and appreciation.



Provide information for Technical and Vocational Education and Training.
To make the training processes more relevant, based on the Catalogue of Labour Competencies.
Promote the Recognition of Prior Learning (RPL)

Our Strategy



**Certification Programs
in priority economic
sectors**



**Articulation with Public
Policies that promote
certification as a quality
insurance**



**Articulation with
Technical Vocational
Education and Training**



**Cooperation Networks
and International
Homologation
Agreements**

TRIPARTITE SOCIAL DIALOGUE – SECTORAL COMMITTEES

Facts about Chile

POPULATION



17.400.000

GDP PC (PPP) US\$



24.797

LABOUR WORKFORCE



8.000.000

UNEMPLOYMENT RATE



6,6%

FEMALE PARTICIPATION



48,6%

POVERTY RATE



11,7%

COMPETITIVITY INDEX



(2017-2018)
33/137



MAIN SECTORS (EMPLOYMENT)

1. Commerce
2. Manufacture
3. Education
4. Agriculture, forestry and fishing
5. Construction



MAIN SECTORS (GDP)

1. Personal services
2. Manufacture
3. Business services
4. Commerce (trading)
5. Mining



EXPORTS OF GOODS (\$)

1. Copper
2. Salmon
3. Paper pulp
4. Bottled wine
5. Grape

Background Information



- ✓ Risk of work automation 49% for Chile [McKinsey Global Institute, 2017].



- ✓ Technological competences will not be enough to address the challenges of the future, other skills will also be needed, such as socio-emotional skills.



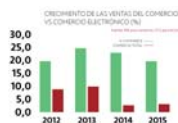
- ✓ PISA test: young Chileans are under the OECD average in teamwork, which deepens in vulnerable people.
- ✓ 3.4 million Chileans between 20 and 65 years of age have not completed their secondary education [Casen, 2015].



- ✓ Aging of the population and changes in the structure of work: 1/3 of those over 50 work in self-employment (Uber for example).



- ✓ Chile is one of the OECD countries with the highest turnover rate 37% [OECD, 2016].



- ✓ Rapid growth of e-commerce sales.

Background Information

Tendencies

Demographic
changes

Population ageing

Migration

Concern about the
environment

Sustainability

Technology
influence

Internet access

Connectivity

Importance of labor
flexibility

Compability of work
and quality of life

- ✓ Workers and companies must adapt to these changes, but so must the world of training and education.

The future from the present...

According to the Inter-American Development Bank the rise of technology (robots, artificial intelligence) will imply that the world of work:

- ✓ Demand more sophisticated skills that complement the machines.
- ✓ Demand social-emotional competences, know how to communicate, have empathy, ability to work as a team
- ✓ Demand more complex analytical skills, learn to learn, be able to solve problems, have entrepreneurial skills.
- ✓ The future of work will depend, to a large extent, on training and teaching young people those skills that differentiate them from robots, such as values, individual thinking and teamwork, through participation in activities that require creativity. , such as sports, music and the arts.

The future from the present...

But...robots cannot do all the work...can they?

- ✓ The disappearance of some jobs will be inevitable, but will come hand in hand with new opportunities for the development of certain skills that only humans are capable of. [BID, 2018].

El auto llevaba un conductor humano de emergencia, que no pudo reaccionar

Primer atropello fatal de un vehículo autónomo en EE.UU.



La víctima era una mujer de 49 años.

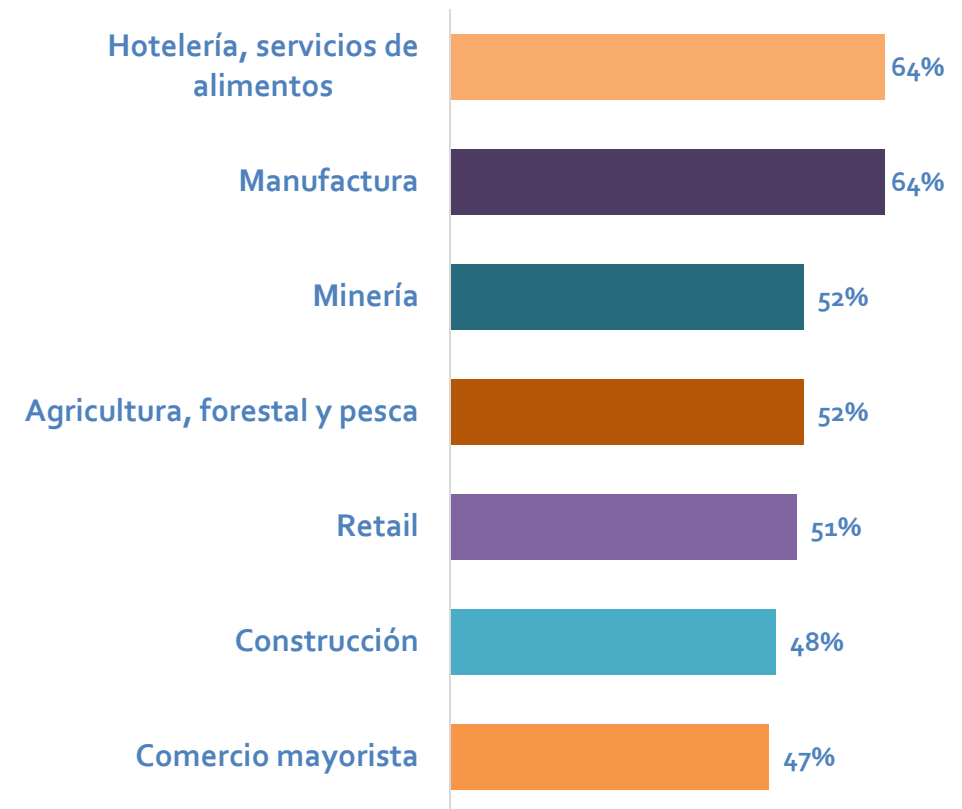
ROMA MONTAÑA G.

El primer accidente fatal que involucra un vehículo autónomo ocurrió en la noche del domingo en Tempe, Arizona (EE.UU.). Según informó la policía local, el auto atropelló a una mujer que cruzó la calle por un lugar no habilitado. "El vehículo se dirigía hacia el norte cuando una mujer que caminaba fuera del paso de peatones cruzó la calzada de oeste a este y fue arrollada por el vehículo", detallaron en un comunicado.

Aunque la policía afirmó que la víctima caminaba, en las fotografías que difundió el sitio de noticias ABC se observa una bicicleta junto al auto, con claras señales de haber sufrido un impacto. La cadena informó que el nombre de la ciclista era Elaine Herzberg y tenía 49 años. Fue llevada a un hospital, donde falleció por sus múltiples heridas. El auto corresponde a un vehículo experimental de conducción autónoma de la empresa Uber, que se encontraba haciendo trayectos de prueba. A bordo del

todoterreno había un conductor humano de seguridad, pero como el vehículo se encontraba en modo autónomo, aparentemente la persona no pudo reaccionar frente al accidente. "Nuestros corazones están con la familia de la víctima. Estamos cooperando plenamente con las autoridades locales en su investigación de este incidente", dijo Sarah Abboud, portavoz de Uber. De paso, la empresa confirmó que suspendieron de inmediato todos los viajes de prueba en tanto en Tempe como en Pittsburgh, San Francisco y Toronto.

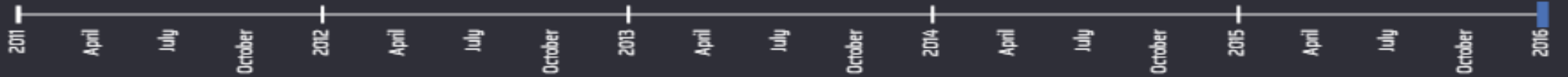
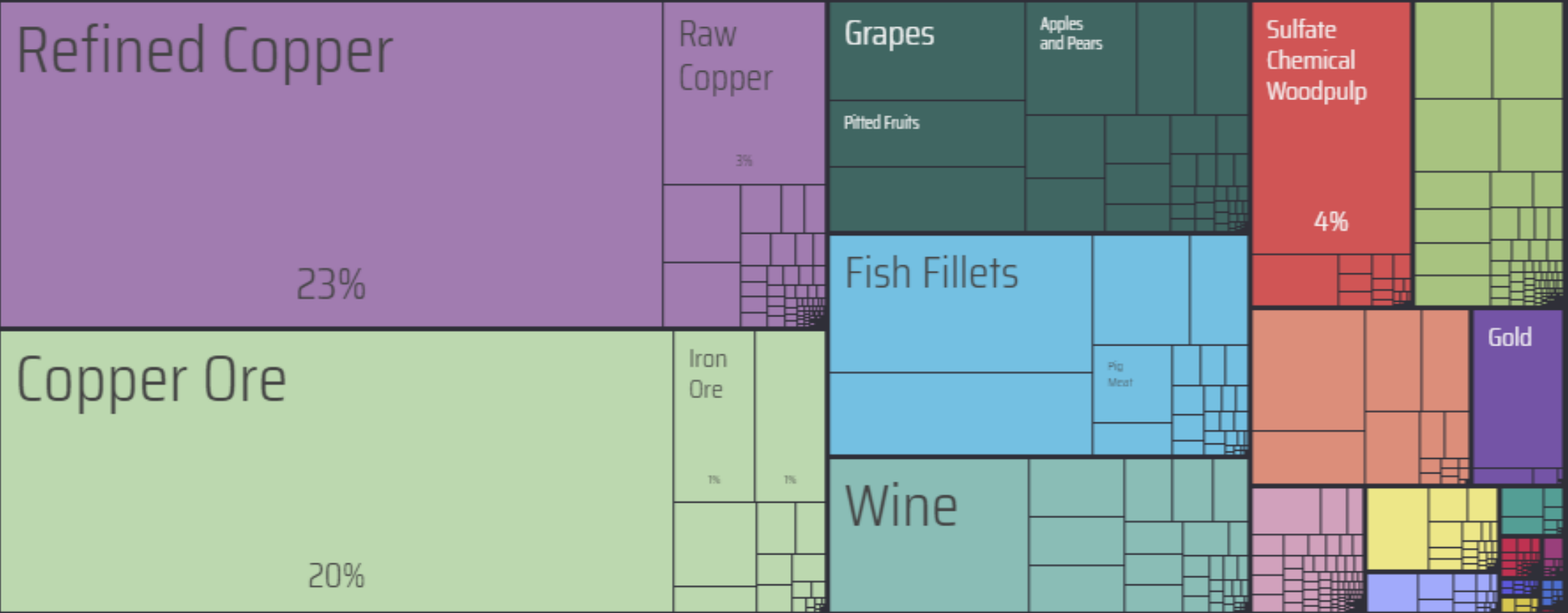
Percentage of Chilean workers that could be replaced by machines, according to sector



EXPORTED PRODUCTS BY COMPANIES BASED IN



Total: US\$ 56.06 b



OCCUPATIONS BY WORKERS

Total: 7.5 m people



SOURCE: New Income Supplementary Survey (NESI) - National Institute for Statistics (INE) - 2015

Chile Digital Agenda 2020

It is a roadmap since 2015 to advance towards a digital development of the country, in an inclusive and sustainable way through the information and communication technologies, allowing to disseminate, to give coherence and to facilitate the monitoring and measurement of the progress of the measures committed.

There a Ministerial Committee (7) that advises de President in the digital issues.

The Digital Agenda is structured in 5 axes that establish strategic guidelines that materialize in 60 measures.

Rights for Digital Development

Digital Connectivity

Digital Government

Digital economy

Digital skills

Transforma CORFO (The Production Development Corporation)

- Transform has the challenge of improving the competitiveness of our economy through the development of different strategic sectors. Their selection, as well as the roadmap of each of them, was carried out with the participation of different actors. It is currently in the implementation phase with the following objectives:
- Incorporate: Knowledge and technology in sectors of comparative advantage, to create new markets that are positioned by their efficient, modern and sophisticated profile.
- Sectors: tourism, mining, food, creative economy, aquaculture and fishing, solar industry, smart industries, advanced manufacturing, health.

WHO PARTICIPATES?



Participation is the basis of Transforma. We believe that trust and collaboration among public institutions, private sectors, academy and civil society actors are necessary to achieve higher levels of country development. We are an instance of articulation, dialogue, and collective action.



Businessmen
and
entrepreneurs



Academy



Public Players



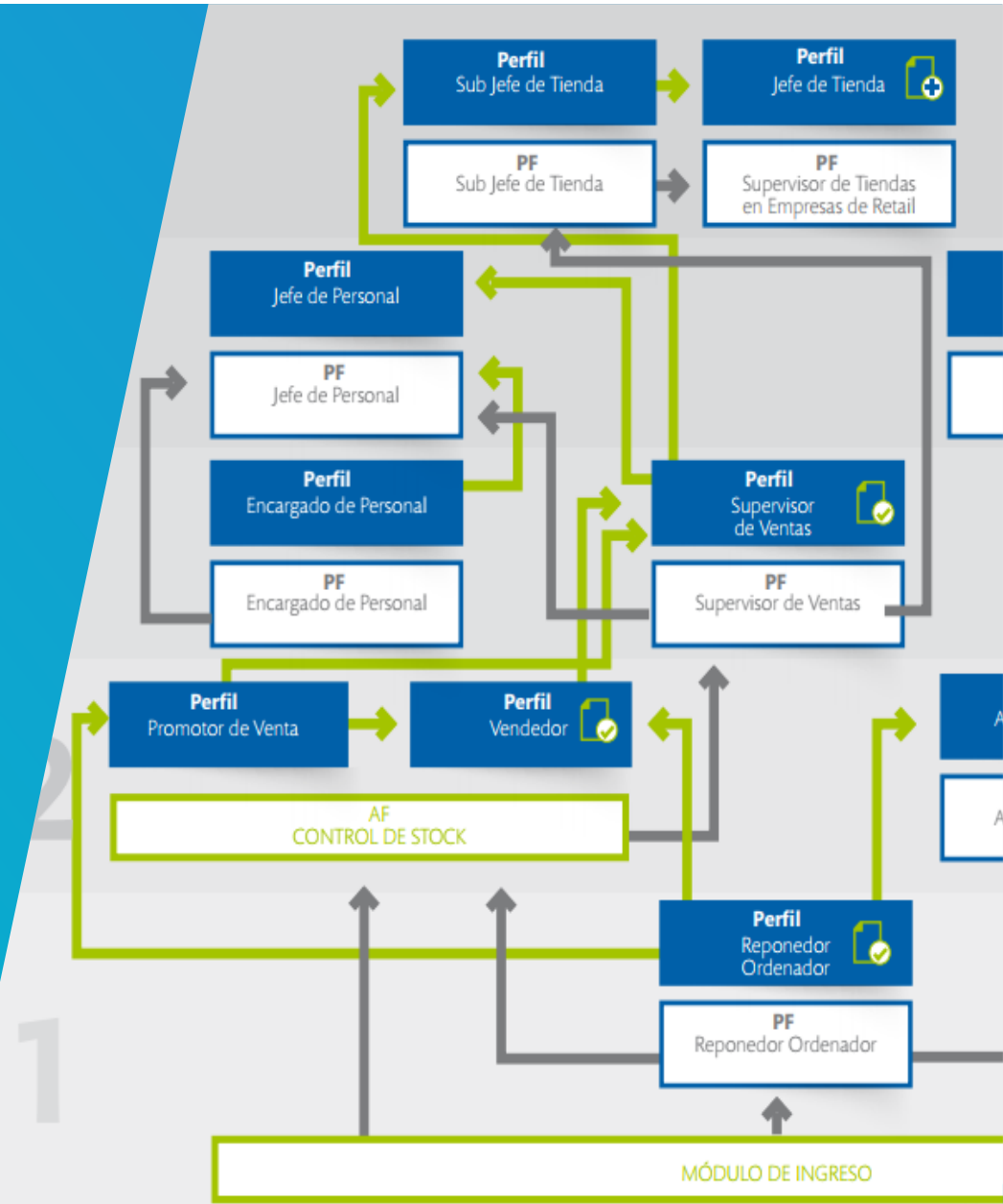
Community
Players

Labor Reform (Flexible working hours)

- Law 20,940-which modernizes labour relations-allows the parties to agree freely, and without subjecting themselves to regulated collective bargaining, weekly four-day working days for three hours of rest and the fulfilment of work in places other than Of the company for workers with family responsibilities.

Our experience

Anticipation of demand: 1. Labor-training pathways

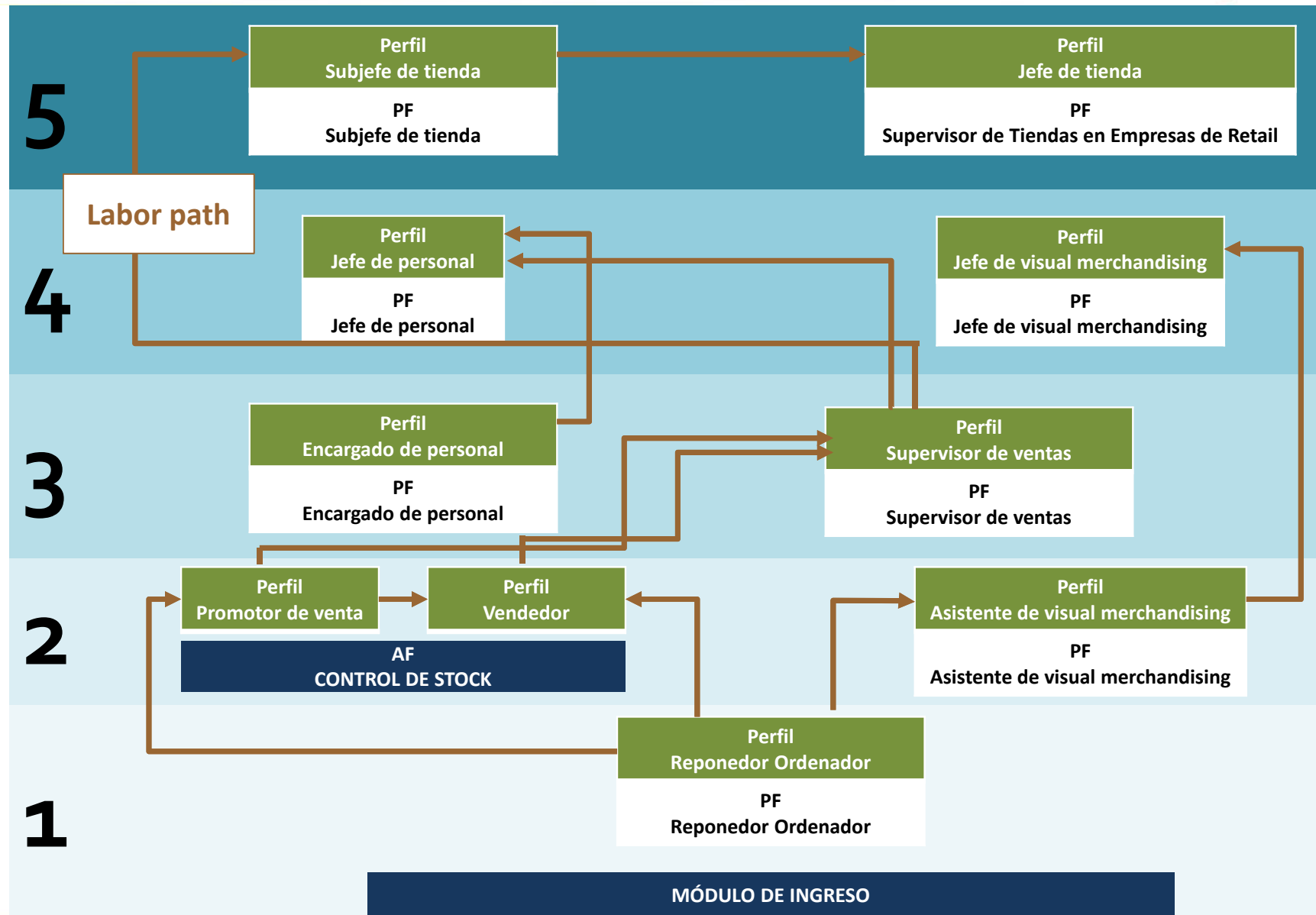


Construction of labor-training pathways

1. Process map: identify the key processes.
2. Identify Occupational Profiles for each function.
3. A level is assigned for each profile, according to the qualifications framework descriptors.
4. Each profile is positioned in a labor-training pathway. The labor-training pathways allow workers to continue to certify their skills, as they acquire new ones.
5. The connections of labor-training pathway are identified.
6. Design of training plans, based on the requirements of the labour market.

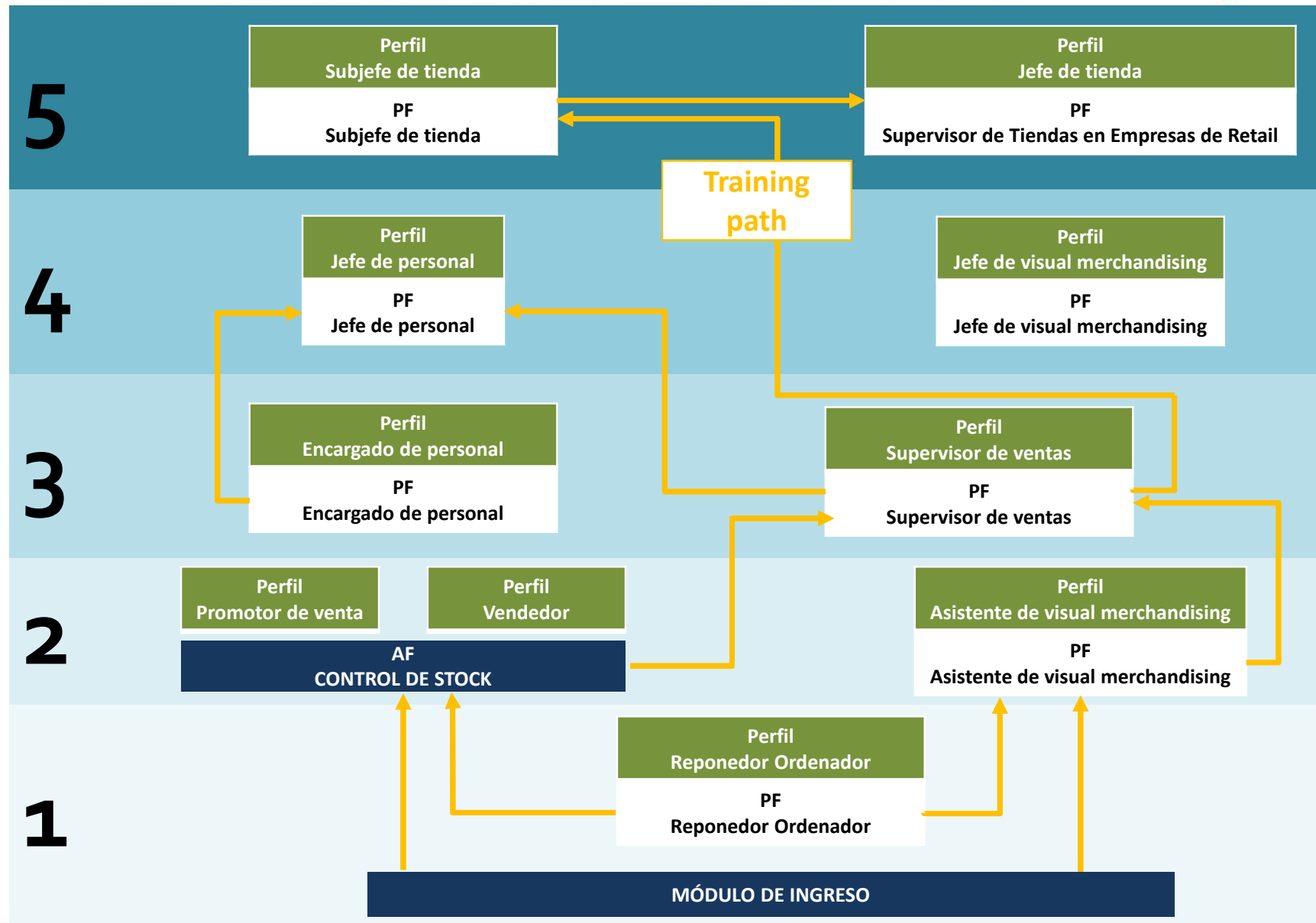
Subsector:
Retail

Process:
Store Operation



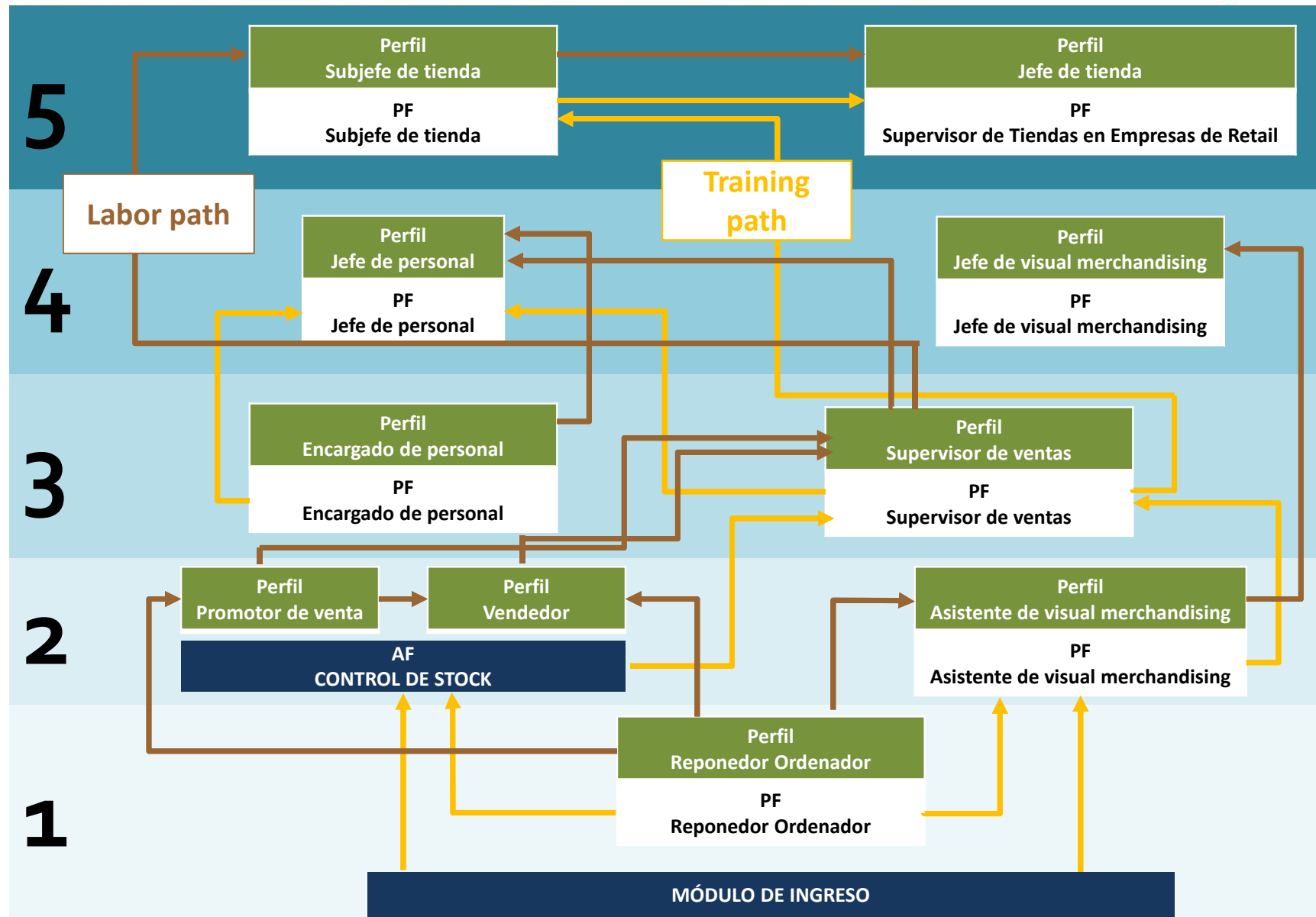
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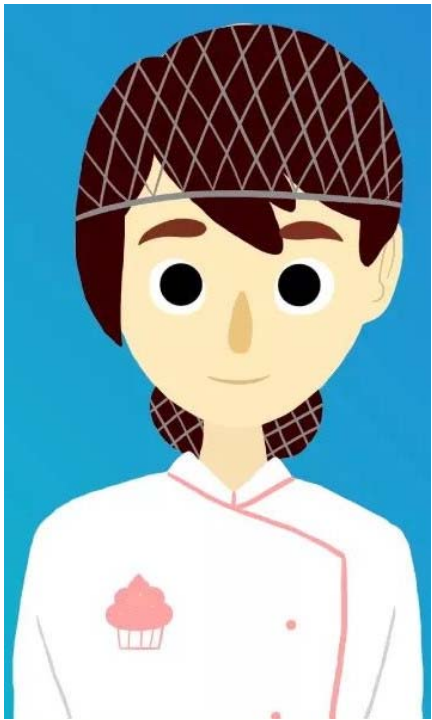
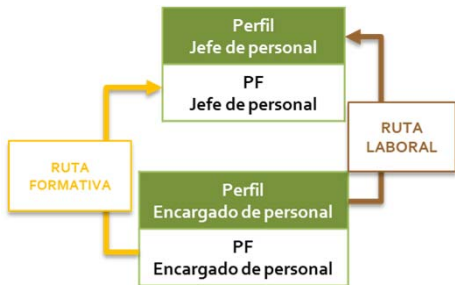


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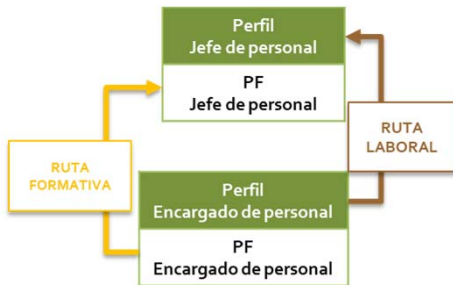
Labor-training pathways : How can we anticipate the demand?



It depends on the case:

- ✓ Obsolete occupational profile: update
- ✓ Existing profile but not in catalogue: create
- ✓ Existing profile in leading companies, but not in catalog: Observation of fieldwork
- ✓ Occupation profile don't exist in the country:
Training plans
 - ✓ Photovoltaic panels case

Rapid Changing Sectors



- ✓ Large-Scale Mining
- ✓ Agriculture (Agro-Industrial)
- ✓ Information Technology and Communication
- ✓ Retail Sales and Customer Services
- ✓ Hospitality Industry
- ✓ Energy and Non-conventional Renewable Energies
- ✓ Banking

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de Competencias Laborales



OBSERVATORIO
LABORAL CHILE

Sectores Productivos

Noticias

Observatorios Regionales

Anticipation of demand :

2. Chilean Labor Observatory (OL)

laboral del país a partir de múltiples
ción que presenta información sobre los
condiciones laboral, una sección de
le y la actividad en términos generales.

Grupos
prioritarios

Indicadores
macroeconómicos

de las tasas de desempleo, ocupación y
s y el aporte de cada sector económico al

icipación, 2010-2016

62,4
59,8
participación (%)

Cantidad neta de trabajadores que entra o sale de
la región en busca de empleo (miles de personas)

Sale

Entra

Región de Arica y Parinacota

2.3

Región de Tarapacá

1.7

Región de Antofagasta

57.3

Región de Atacama

10.8

Región de Coquimbo

14.5

Región de Valparaíso

27.3

Región Metropolitana

20.9

Región del Libertador Bernardo O'Higgins

8.8

Región del Maule

5.1

Región del Biobío y Ñuble

23.1

Región de La Araucanía

8.7

Región de Los Ríos

8.7

Background and objectives



- ✓ Created in 2015 to as a tool to make training more relevant in Chile.
- ✓ Mission: produce knowledge about the occupations performed in Chile and about the gaps of current and future occupations.
- ✓ The observatories collect, standardize, produce and link information about occupations, as well as on current and future requirements at the national, territorial and sectoral levels.
- ✓ Gobernance: depends on training service [IDB project]. Advisory Board [action strategies] Technical Committee: [methodological areas].
- ✓ Regional OL: executed by Universities, tax exemption benefit [US\$ 190 mil by year]
- ✓ Users:

Labor intermediary
organizations

Students

Training
centers

Companies

Public sector

Workers and people
looking for a job

Performance and products



Information tools

Data integration

- Adoption of standards that allow interoperability among data sources

System integration

- Link systems for a comprehensive and coherent service for users

Labor Information System

National job offers (BNE)

TVET and higher education

Occupational profiles and pathways career, ChileValora

Training offer SENCE

- Link with occupation of workers

- Link with TVET speciality
- Career-occupation relationship [Mineduc]

- Profile catalog recoding ISCO 08 to ISCO 88

- Secondary analysis

- Coding training courses



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Our main results



Main results

Catalogue of Labour Competencies

85% Employment, based on the top 100 main occupations

39% Describes 154 of 392 occupations

80% 21 sectors: 80% of GDP 2016



82 thousand certified (91%)
100 thousand process (03/2018)



902 accredited profiles



2.277 Labour Competency Standards units

Planes formativos



Rutas Formativo-Laborales 32 subsectores



52 OSCL



34 CECCL



1 catalogue of transversal competencies for employability



12 public sector institutions
public sector institutions



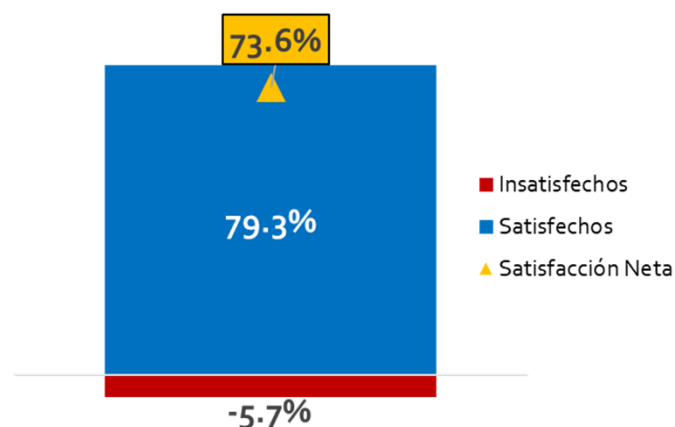
1 Migrant policy



1 migration towards the new qualifications framework TVET

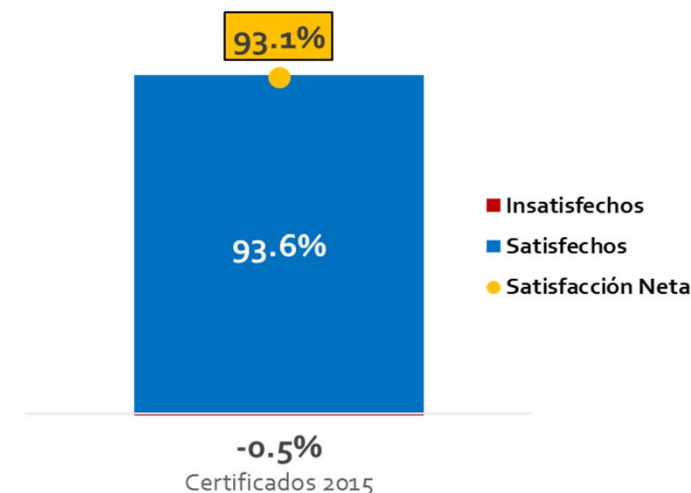
Users satisfaction surveys

COMPANIES



- ✓ **73,6%** net satisfaction of the companies that have participated in a process of evaluation and certification.
- ✓ **94,9%** of the companies surveyed, would recommend to another company in their industry to participate.
- ✓ High perception that certification contributes to commitment, climate and to decrease turnover.

CERTIFIED WORKERS



- ✓ **97%** would participate again in an evaluation process
- ✓ High perception that certification would help them to detect gaps and is a recognition from society.

The main purpose of our work

Evaluate and certify

Training and close
gaps

Guide career
developments

Support human
resources
management

Support the
dialogue between
companies and
unions

Contribute to
productivity and growth

Learning and challenges

- ✓ Learning in the coding of Catalog of Labor Competencies, what is the space to innovate?.
- ✓ Importance of a common language: talk about occupations.
- ✓ Strengthen tripartite social dialogue spaces, such as OSCL sectoral representative bodies, as privileged instances to approach to human capital challenges of each country and sector and ensure the relevance of training processes and certification to changing demands of business and industry
- ✓ Advancing towards integrated systems of training for work, that under the same framework of qualifications agreed by all the actors, allow people to advance in training and work itineraries, recognizing the different types of learning that people acquire throughout of life and are in tune with the challenges of a highly changing labor market.
- ✓ An advance in this line is the recent approval in Chile of TVET Qualifications Framework. Our institution is committed to adopting this new frame of reference.