Anticipating tomorrow's skill needs: Developping Integrated Labor Market Information Systems

African Forum on Youth Skills and Enterprises in the Digital Age

Tunis, April 18, 2018





- What jobs will be in demand in three years in Lomé?
- What trainings should be implemented in Mtwara?
- What are the requirements to become a veterinarian in Tunisia?
- What are the profiles of the top twenty firms located in Ouagadougou who are hiring?
- Do we need more plumbers in the Bizerte region?
- How do I find my new electrician, and how would I go about hiring him?
- What's the average salary of a laboratory technician?





- What are Labor Market Information Systems? Why are they important to help us understand tomorrow's Labor Market?
- 2. Types of LMIS
- 3. Building the integrated LMIS





Methodology: how we studied Labor Market Information Systems (LMIS) ?

- Systems approach vs. System: to agree on a definition that covers all aspect of the labor market problematic
- Landscape review of LMIS: characteristics and performance, from Australia to Rwanda
- Construction of a typology to analyze the systems as a function of their ability to improve the workings of labor markets
- Identification of targeted and sequential interventions to improve LMIS





# LMIS: For what, for who? And what are we talking about exactly?







# Information on the labor market:



















# A definition of a Labor Market Information System

The set of institutional arrangements, procedures and mechanisms put in place to coordinate the collection, processing, storage, retrieval and release of labor market information

Nicholas Manghozo (ILO, 2003)





# Landscape Review of LMIS

South Africa	France
Australia	Jamaica
Botswana	Rwanda
Cameroon	United Kingdom
Denmark	United States (California)





**5 Key observations of an advanced LMIS** 

- LMIS are composed of several, most often interconnected, subsidiary information systems
- Public interfaces of subsidiary systems are tailored to different types of users
- LMIS all contain a well-developed public job matching component
- Labor market information is detailed at the local level
- Effective partnerships underpin the governance of LMIS.





# Australia: myskills (directorate of training)



Australian Government Department of Education and Training

### **Course Search**

Keyword		HOW DO I CHOOSE ? 4 resul	ts found Show 20 per	page 🗘 🗘 Hide map
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ENTRY LEVEL COURSES		Certificate III in Engineering - Fabric	cation Trade	
Certificate I (0) Certificate II (1)		MEM30305 O Average Price: \$7953	Average Duration: 3 Years	
TRADE LEVEL COURSES		Certificate II in Engineering MEM20105 Q Average Price: \$2758	Average Duration: 3 Months	
COURSE FEATURES		Certificate IV in Engineering		
Offered online		MEM40105 O Average Price: \$17500	Average Duration: 1 Year	
Available in an Australia Apprenticeship (4)	an	Certificate IV in ESI Generation Main	ntenance (Fabrication)	000





HOME / COURSE SEARCH / COURSE DETAILS

### Certificate III in Engineering - Fabrication Trade

MEM30305

COURSE	TRAINING PROVIDERS	CAREER PATHWAY	STUDENT OUTCOMES	COURSE DETAILS	
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#### METAL AND ENGINEERING

Stream	Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Mechanical	CNC Machine Operator Equipment Maintainer Equipment Repairer	Fitter - Metal Fitter & Turner Fluid Power Mechanic Maintenance Mechanic/Motor Mechanical Fitter Metal Fabricator (Boilermaker) Metal Machinist (First Class) - Engineering Plant Mechanic Tool and Die Maker Toolmaker	Advanced Mechanical Maintenance Technician Advanced Toolmaker Fluid Power Systems Technician	Advanced Engineering Tradesperson - Mechanical	
Fabrication	Aluminium Anodising Production Worker Aluminium Fabrication Production Worker Die Casting (Production) Foundry Worker (General Fettling) Foundry Worker (General)	Boilermaker Boilermaker/Welder Foundry Tradesperson (Moulder) Pressure Welder - Engineering Sheetmetal Worker (First Class)	Advanced Metal Fabricator (Structural)		





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#### STUDENT OUTCOMES FOR CERTIFICATE III IN ENGINEERING - FABRICATION TRADE

These are the outcomes of graduates surveyed six months after completing their training for Certificate III in Engineering - Fabrication Trade





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#### DESTINATION AFTER TRAINING (OF ALL GRADUATES)

Destination This Similar All Certificate III after training course courses courses Employed or in further study after training (%) 91.5 91.2 85.8 Employment outcomes: Employed (%) 90.8 87.5 76.7 Full-time (%) 86.3 75.9 44.4 Part-time (%) 3.8\* 11 31.4 Further study outcomes: Enrolled at University (%) 1.7 5.3 Enrolled at TAFE (%) 8.8 9.3 14 Enrolled at Other provider (%) 4.4\* 9.6 11.5 Satisfied with the training (%) 92.2 86.8 87.5

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### Australia: job active and job outlook



#### **Structural Steel and Welding Trades Workers**

OVER	RVIEW	PROSPECTS	STATISTICS	SKILLS	VACANCIES	TRAINING	REPORTS & LINKS
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#### Overview

Structural Steel and Welding Trades Workers cut, shape, join and repair metal components of iron and steel structures, boilers, pressure vessels and pipes, ships and other vessels. The links below provide quick access to basic information for this occupation. Greater detail can be found using any of the page tabs above. A one page printable summary of the key statistics for this occupation can also be found under the Reports and Links tab above. Just click on the tab and follow the link for **Occupational Bulletin**.

- Job prospects
- Weekly earnings
- Occupation size
- Find Vacancies
- Find Training
- Browse Skills

#### Tasks

This occupation may include associated occupations with varying tasks.

- · studying blueprints, drawings and specifications to determine job requirements
- · selecting, cleaning and preparing metal stock

### **Structural Steel and Welding Trades Workers**



These data show past and projected (to 2020) employment levels (thousands). Source: ABS Labour Force Survey, Department of Employment trend data to November 2015 and Department of Employment projections to 2020.

### Structural Steel and Welding Trades Workers

OVERVIEW PROSPECTS STATISTICS SKILLS VACANCIES TRAINING REPORTS & LINKS

### Knowledge, Skills and Abilities

This page provides data, sourced from the United States Occupational Information Network (O\*Net) on skills, knowledge, abilities, interests, job environment, work values, activities and tasks for the best fit O\*Net occupation.

### View Knowledge, Skills and Abilities

Select an attribute	Skills \$	SHOW	

#### Skills

Skills are developed capacities that facilitate learning and the performance of activities that occur across jobs. The most important skills for this occupation are shown below.

Skill	Importance (%)	Description
Operation Monitoring	75	Watching gauges, dials, or other indicators to make sure a machine is working properly.
Critical Thinking	72	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
Operation and Control	70	Controlling operations of equipment or systems.
Quality Control Analysis	70	Conducting tests and inspections of products, services, or processes to evaluate quality or performance.
Active Listening	67	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Equipment Maintenance	65	Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.
Reading Comprehension	65	Understanding written sentences and paragraphs in work related documents.
Troubleshooting	65	Determining causes of operating errors and deciding what to do about it.
Equipment Selection	Selection 62 Determining the kind of tools and equipment needed to do a job.	
Monitoring 62 Monitoring/Assessing performance of yourself, other individuals, or organizations to make improven action.		Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.





Home + Find Work + Find Jobs, Employment & Career Opportunities

Find a Job	)		
Keywords		Q QLD (ALL) Trades & Services - Searc	h
Exclude Commit	ssion Jobs	ADVANCED SE Exclude Business Opportunities/Self Exclude Similar Results Exclude Other Job Boards Exact Words Employment Jobs	EARCH
Filter results by	•	Found 67 jobs with 69 positions.	irch ★
Location		QLD (ALL) X Structural Steel and Welding Trades Workers X Exclude Commission Jobs X Sort results	
QLD - Brisbane & Gold Coast (ALL)	49	Exclude Business Opportunities/Self Employment Jobs 🗶	
QLD - Remote (ALL)	0	1. Boiler maker	<b>m</b> *
QLD - Regional (ALL)	20	ARUNDEL   Casual position	
Occupation		Employer is looking for an experienced boiler maker to assist the team in the aluminium department. They will be doing some basic aluminium welding work, learn how to put the jetty's together and other basic duties as	1178
Structural Steel and Welding Trades Workers	69	Date added: Friday, 16 September 2016 Modified: Monday, 19 September 2016 Source: Employment Service Provider	
Job Age		2. Apprentice Boilermaker	*
Past 3 days	6	WACOL   Full time position	
Past week	32	East Coast Apprenticeships are currently looking for a motivated, hardworking individual to commence or recommence a Boiler making Apprenticeship based	
Past fortnight	43	Date added: Monday, 12 September 2016 Source: Public Employer	
Tenure			
Contract position	23	3. Welder	1/2 *
Permanent position	45	NORTHGATE   Full time position	JD
Temporary position	1	Experienced welder required for immediate start. Day shift. Northgate location. Email resume to info placementbrokers.com.au	placemei brokers
Vacancy Type		Date added: Wednesday, 7 September 2016 Source: Public Employer	
Australian employment covenant	0	4. CNC Machinist	* ((()
Express Vacancy	0	GLADSTONE CENTRAL   Full time position	1 >>>
Fly-in, fly-out job	0	Trade qualified CNC Machinist/Fitter Must have experience in programming and operating CNC lathes and mills. The main objective of this position is to accurately program, set up and run our CNC mills	1188
Out of area job	0		/
CDP Vacancy	0	Date added: Tuesday, 6 September 2016 Source: Employment Service Provider	

# **Australia: Labor Market Information Portal**

Home



Australian Government Department of Employment

Search LMIP:

Type your search



Employment Services 2015-2020

Find

Employment Service Area (DES only)

Labour Force Region (SA4)

Small Area Labour Market

**Disability Employment Services** 

Vacancy Report

**Employment Projections** 

Publications

Industry Information

**Recruitment Analysis** 



Get Assistance

### Welcome to the Labour Market Information Portal

If you would like to be added to the LMIP mailing list, please send an email to: lmip@employment.gov.au

The Department of Employment publishes a wide range of information about the labour market. For more information, please see our brochure.

#### Latest News:

July 2016 Labour Force Survey data are now available from the Labour Force Region (SA4) channel. You can download this information from the Downloadable Data channel.







#### Search LMIP:

Type your search

Find

#### Home

Employment Services 2015-2020

Employment Service Area (DES only)

Labour Force Region (SA4)

Small Area Labour Market

**Disability Employment Services** 

**Vacancy Report** 

**Employment Projections** 

Publications

**Industry Information** 

**Recruitment Analysis** 

### **Employment Projections**

Home Employment Projections

#### **Employment Projections**

Employment is projected to increase in 16 of the 19 broad industries over the five years to November 2020. Health Care and Social Assistance is projected to make the largest contribution to employment growth (increasing by 250,200), followed by Professional, Scientific and Technical Services (151,200), Education and Training (121,700) and Retail Trade (106,000). Together, these four industries are projected to provide more than half of total employment growth over the five years to November 2020.

#### **2016 Employment Projections**

Employment projections for the five years to November 2020.

Each year, the Department of Employment produces employment projections by industry, occupation, skill level and region for the following five-year period. These employment projections are designed to provide a guide to the future direction of the labour market, however, like all such exercises, they are subject to an inherent degree of uncertainty.

2016 employment projections are based on ABS employment data for November 2015 and the Government's forecasts and projections in the December 2015 Mid-Year Economic and Fiscal Outlook (MYEFO).

2016 Industry Employment Projections Report (DOCX) Industry projections – five years to November 2020 (XLSX) Occupation projections (XLSX) Skill Level projections (XLSX) Regional projections – interactive tool (XLSM) Regional projections (XLSX)

If you are having trouble accessing the Regional Projections XLSM interactive data tool, please click here for troubleshooting information. For more information about

# **Rwanda: Labor Market Information System**





# Main weaknesses of LMIS

- Narrow institutional support
- Focus on generation of broad, macro-level data instead of providing information useful for employers and workers
- Exclusion of the private sector from effectively taking part in the governance and the formation of new information
- Failure to incorporate the informal sector even though it comprises the vast majority of the labor force.





How to evaluate a system?







### The number of links is a function of the number of actors







# **Determinants of our typology**

	Data only	Data & Services
Public actors	Type 1	Type 2
Public and private actors	N/A	Туре З











### LMIS type 2: Public actors, few services



### LMIS type 3: Several public and private actors, several



# **PRIORITIES FOR AN INTEGRATED LMIS**







Roadmap for the development of LMIS Feuille de Route pour le Développement des SIMT

# Available here: *fhi360.org go to « Economic Development »*

www.fhi360.org/resource/roadmap-development-labormarket-information-systems



