



# Measuring the wage gap

Building a metadata registry for national gender equality indicators

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## \$26K gender pay gap

The full-time gender pay gap is trending down, but men still take home \$26,527 a year more than women on average.



## Gender equality overview

- Gender composition
- Pay gaps across all industries
- Drill down into industries and industry groups

[See the overview](#)

## Industry profiles

- Workforce composition
- Pay equity
- Strategies
- Targets
- Flexible working
- Support for carers
- Paid parental leave
- Family or domestic violence

[See the profiles](#)



## Organisation



## Workplace Gender Equality Agency (WGEA)

The Workplace Gender Equality Agency is a statutory body charged with promoting and improving gender equality in Australian workplaces. [read more](#)

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# WGEA dataset

Under the Workplace Gender Equality Act 2012, non-public sector employers with 100 or more staff must report to the WGEA annually, which covers over 12,000 Australian organisations. Information collected and contained in the data files are the gender composition of the workforce and governing bodies/boards, percentage of organisations with policy and/or strategies across a broad range of gender equality issues, paid parental leave and flexible work arrangement offerings.

## Data and Resources



**Workplace profile and reporting questionnaire ...** 🔥

[Explore](#)



**Gender Composition Division (2013-14)** 🔥

Gender composition of each industry division by occupation

[Explore](#)



**Gender Composition Subdivision (2013-14)**

Gender composition of each industry subdivision by occupation

[Explore](#)



**Gender Composition Group (2013-14)**

Gender composition of each industry group by occupation

[Explore](#)



**Gender Composition Class (2013-14)**

Gender composition of each industry class by occupation

[Explore](#)



**WGEA dataset - ANZSIC Division (2014-15)**

Aggregated by the top level of ANZSIC, displays workforce composition and...

[Explore](#)



**WGEA dataset - ANZSIC Subdivision (2014-15)**

Aggregated by the second level of ANZSIC, displays workforce composition and...

[Explore](#)



**WGEA dataset - ANZSIC Group (2014-15)**

Aggregated by the third level of ANZSIC, displays workforce composition and...

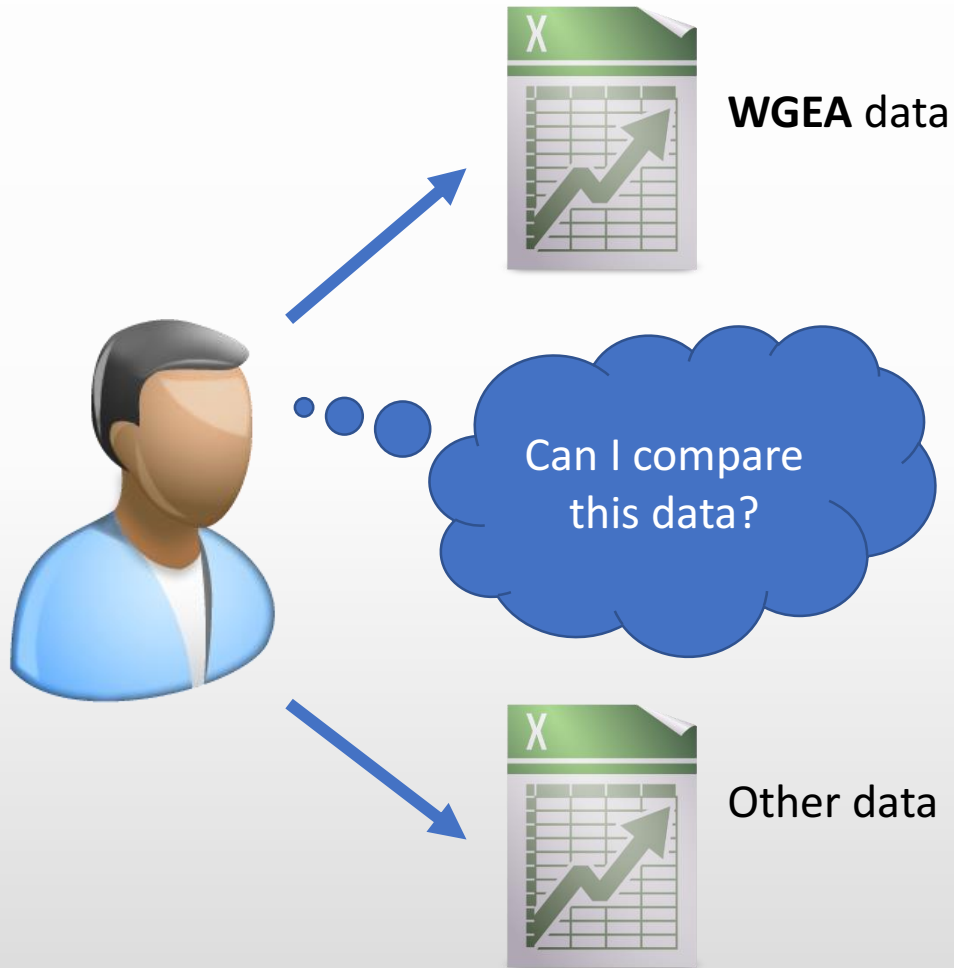
[Explore](#)

# The challenge

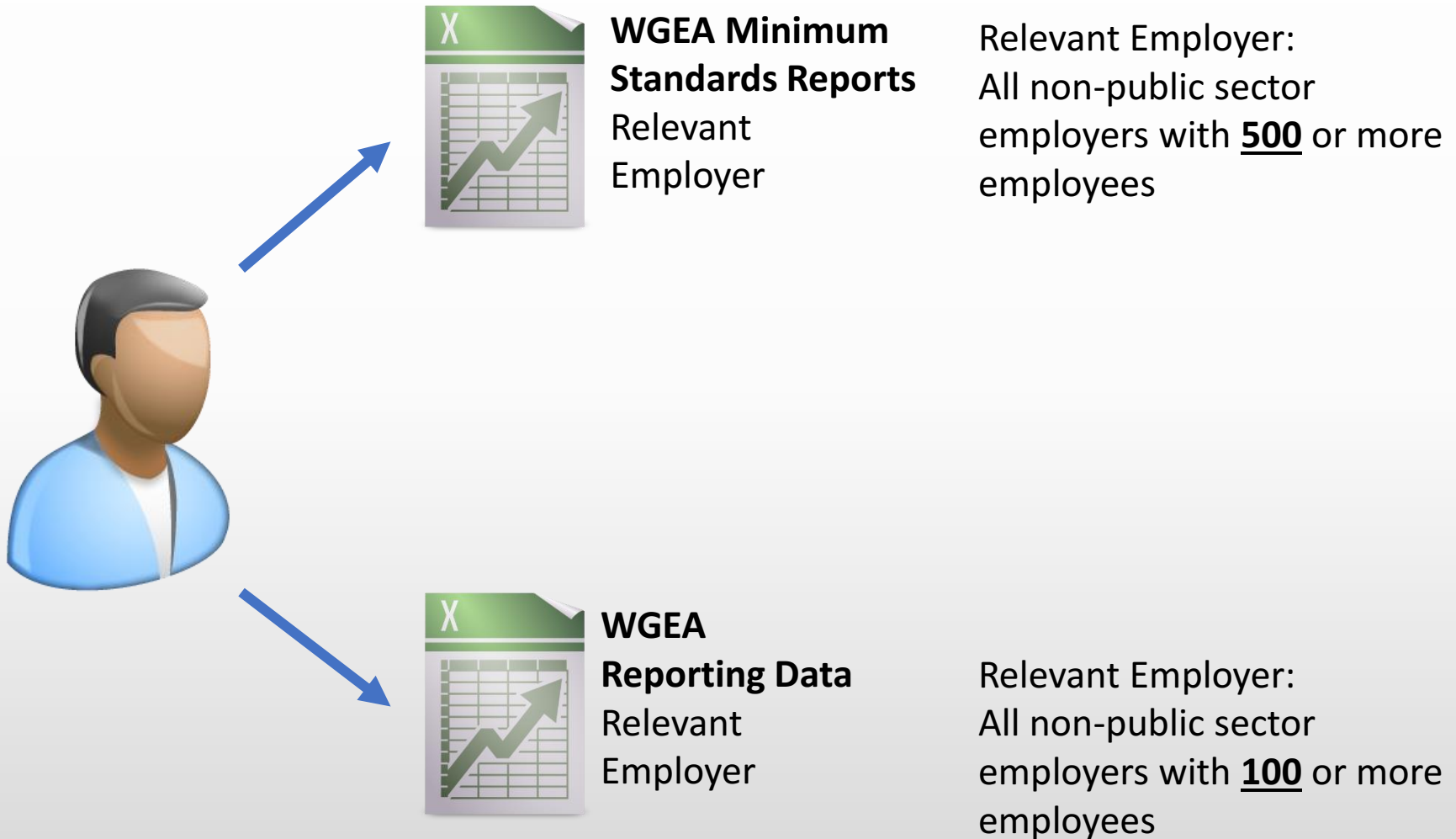


- The Workplace Gender Equality Agency is now entering its fourth year of data collection and capture of metadata into an appropriate, publically accessible repository remains a challenge.
- Developing an appropriate and enduring process for capturing metadata is a key step for the Agency on its journey to becoming a data agency.
- It is envisioned that the end product would be a system that houses the Agency's metadata and that is updateable by Agency staff as future data set specifications become available.
- *Where do we start?*

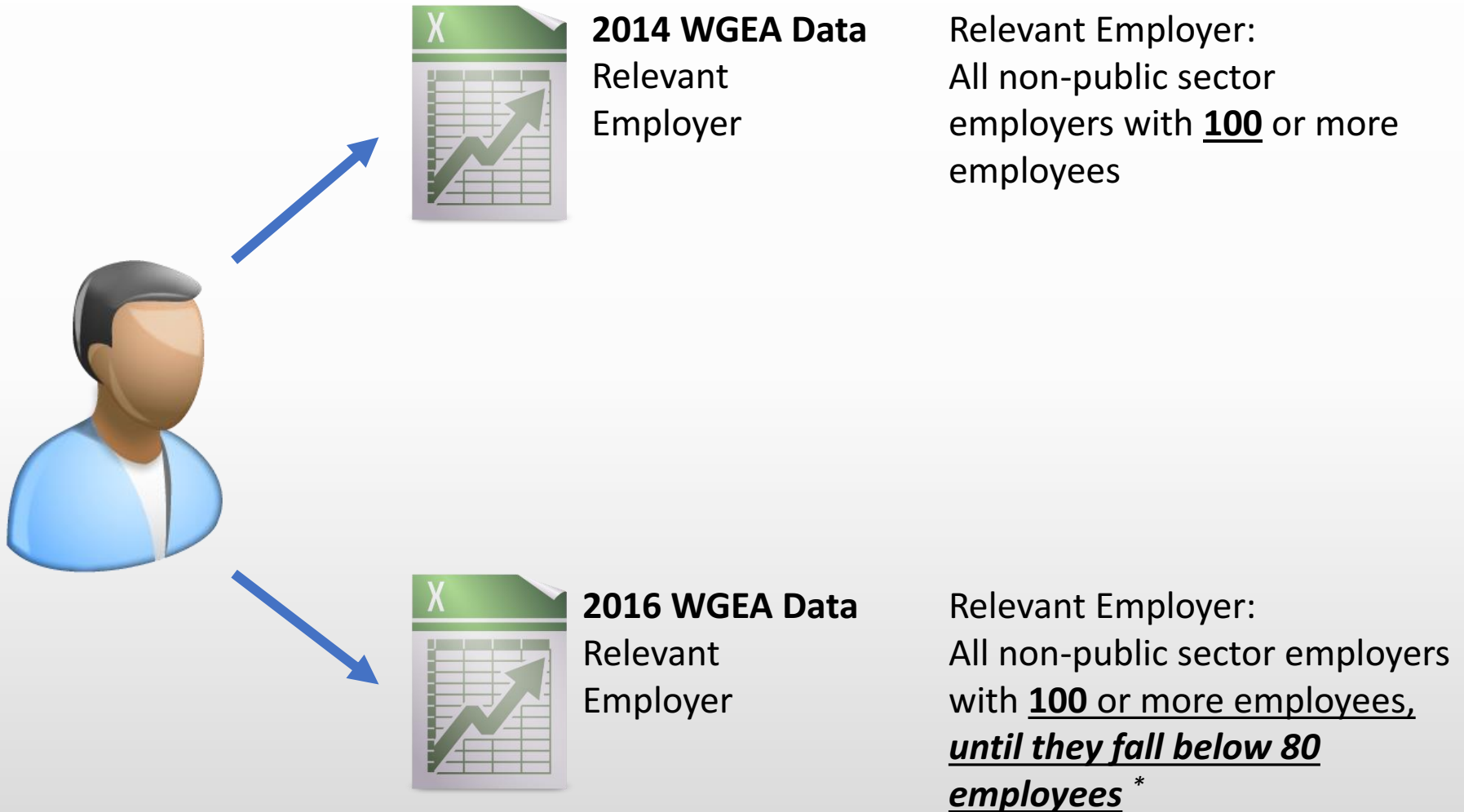
# Why are these definitions important?



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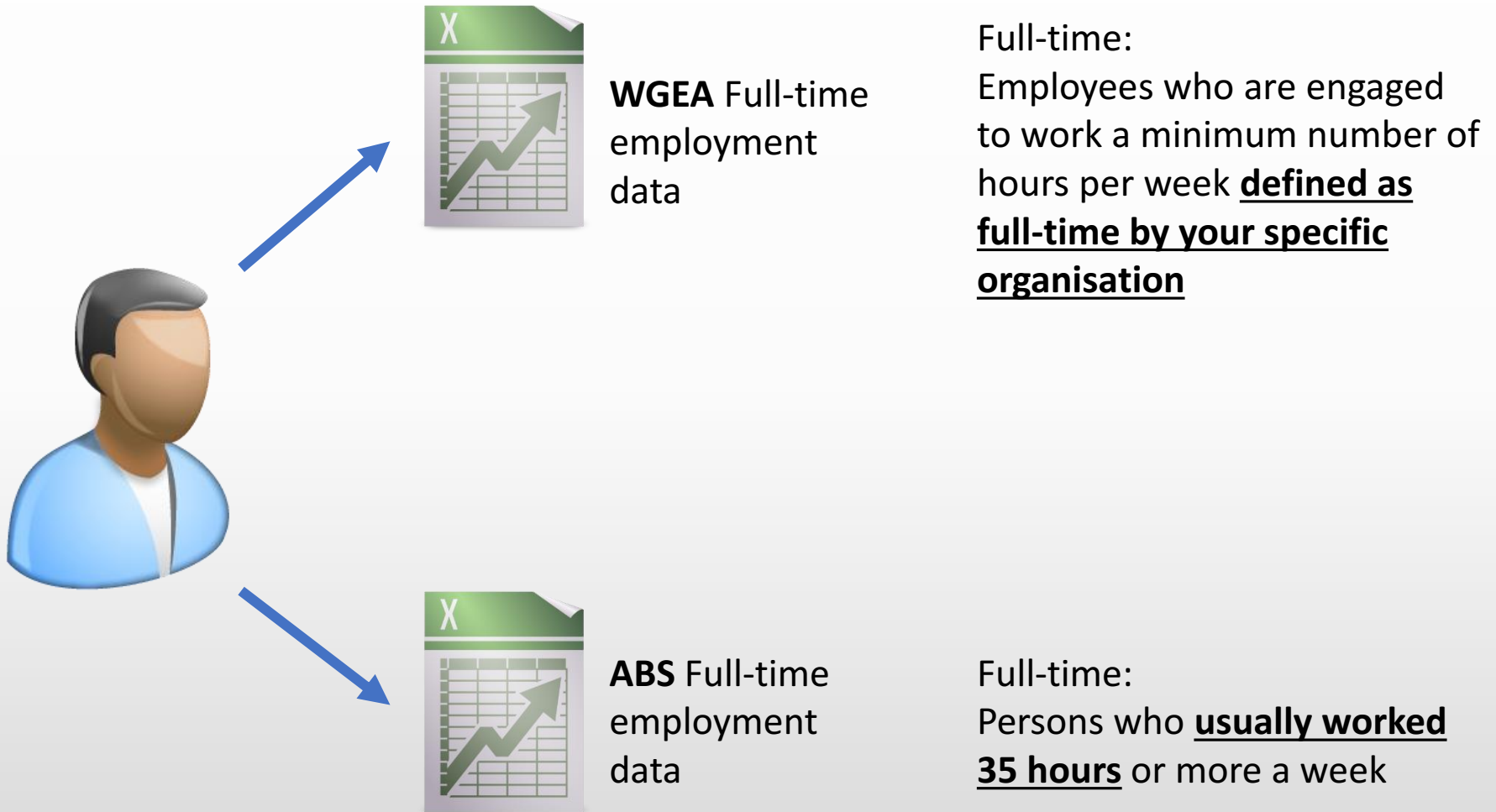


# Why are these definitions important?



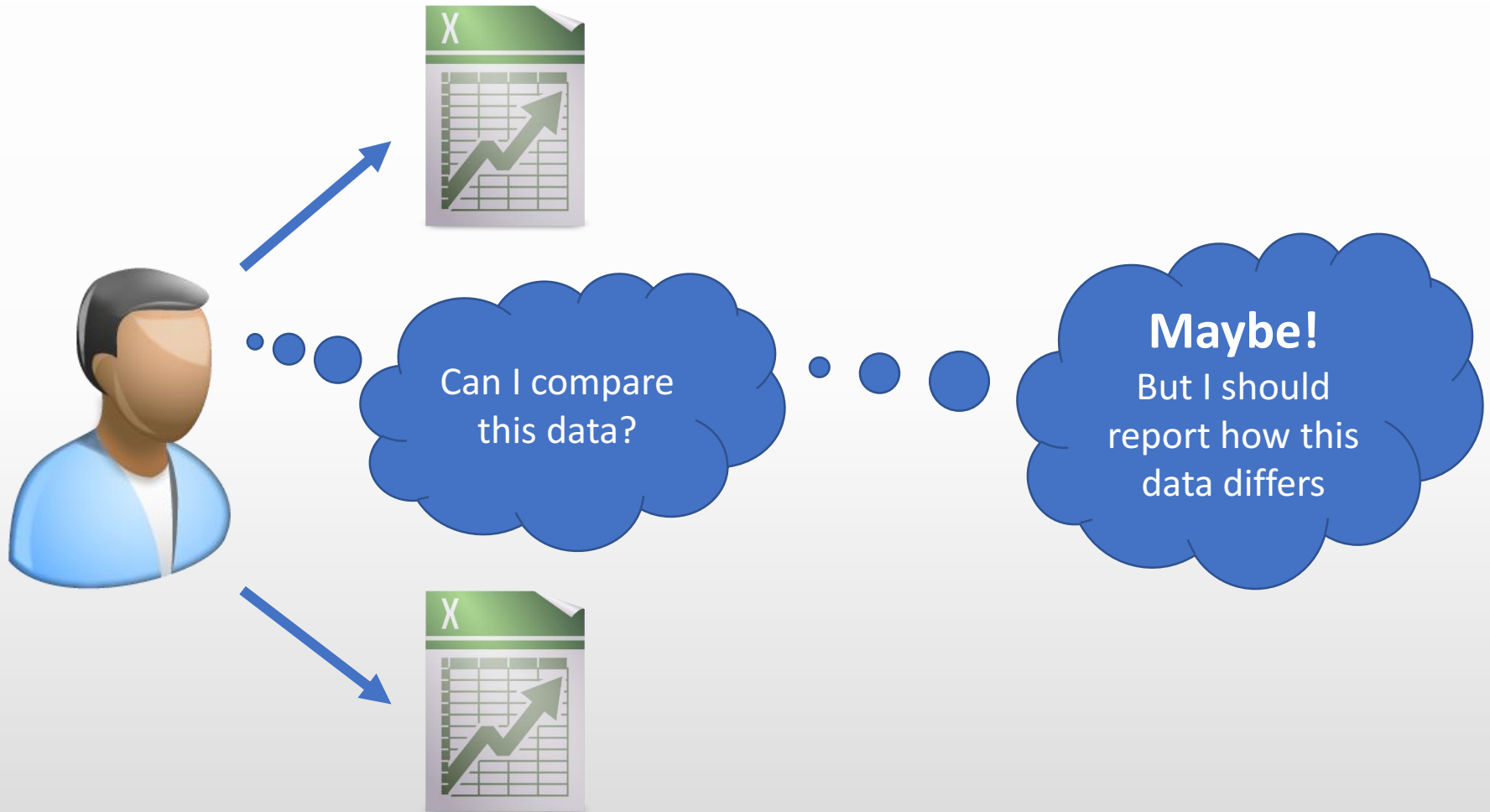
\* Equal Opportunity for Women in the Workplace Amendment Act 2012

# Why are these definitions important?





# Why are these definitions important?





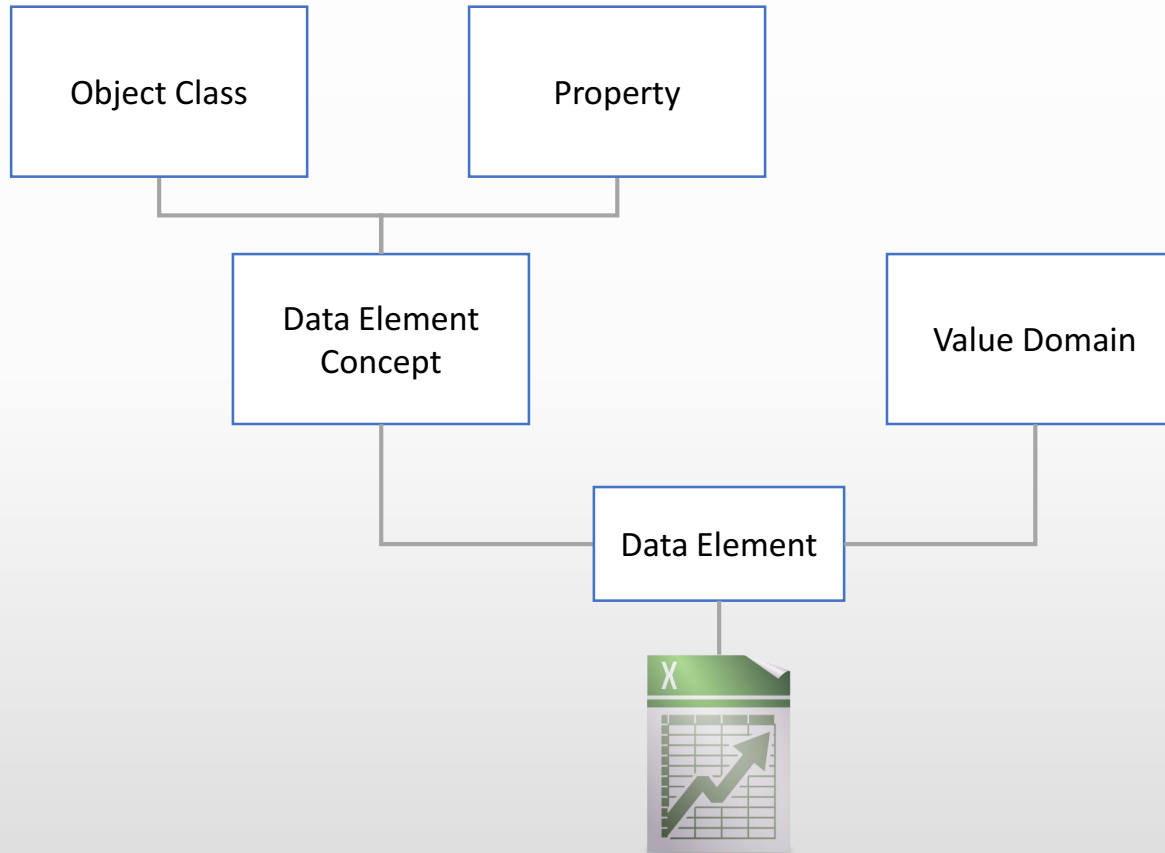
**ARISTOTLE**

metadata registry

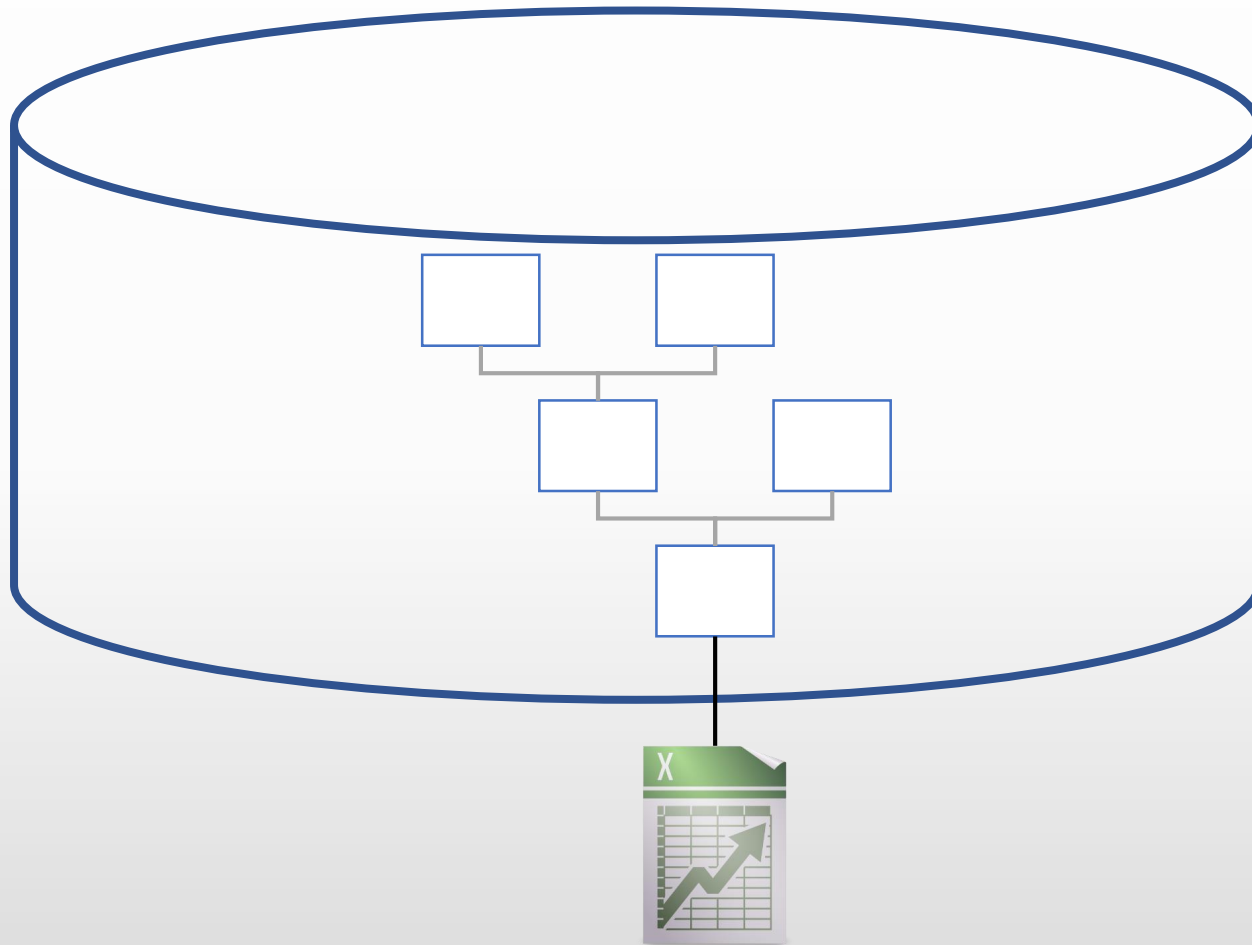
- ISO-11179 compliant metadata registry
- Open-source
- User-centric design
- Collaborative authoring tools
- Metadata workflow engine
- Metadata reporting tools



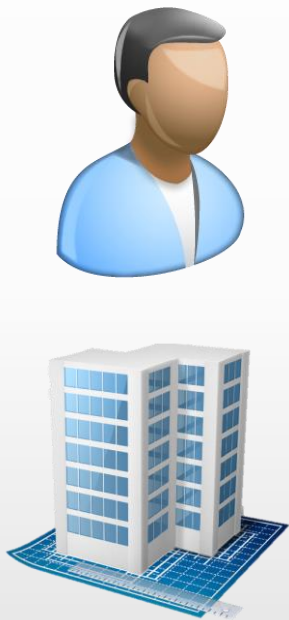
# ISO 11179:3 – Data description



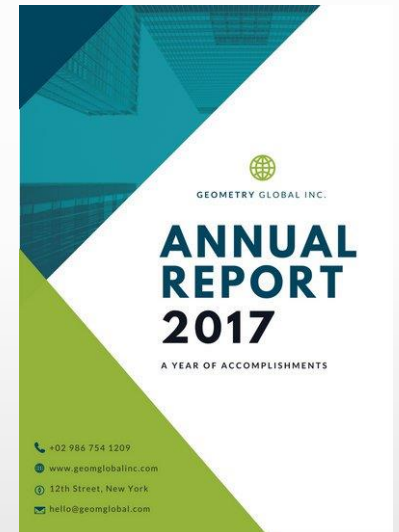
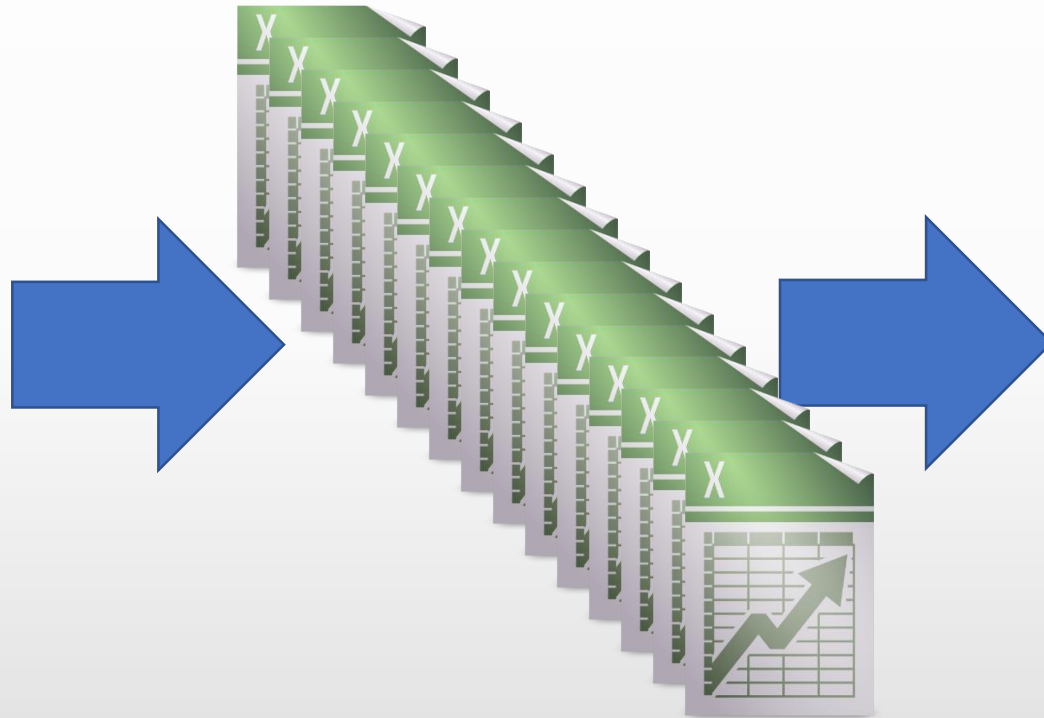
*A tale as old as time...*







Who?

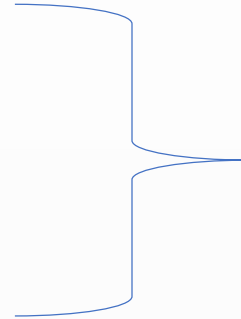


Why?

# Where to start recording metadata?

- Definitions of key *objects* of interest

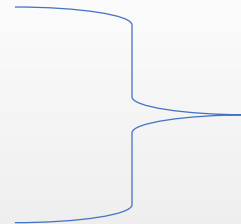
- Who are we reporting on?
- Who are we reporting too?
- Are definitions nested?



Who?

- Definitions of key reporting resources

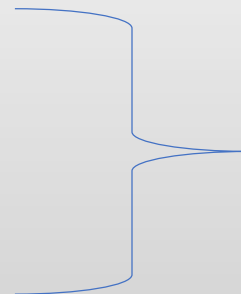
- Performance Indicators
- Agreed data resources



Why?

- Linking to known information

- Legislation
- Data dictionaries
- Explanatory notes



Where?



Object Class &  
Properties

Who is being observed?

Indicators &  
Outcome Reports

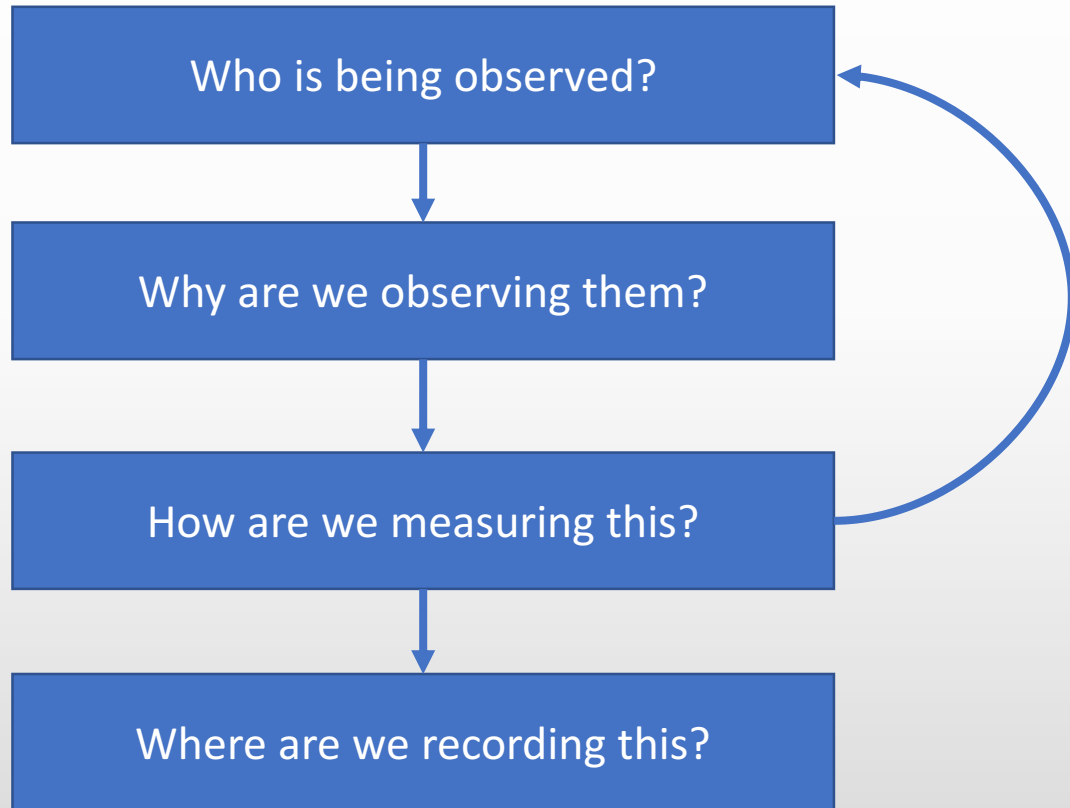
Why are we observing them?

Data Elements,  
Value Domains &  
Questions

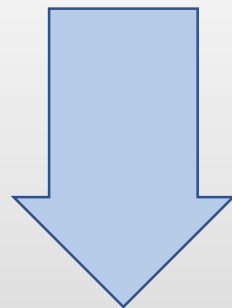
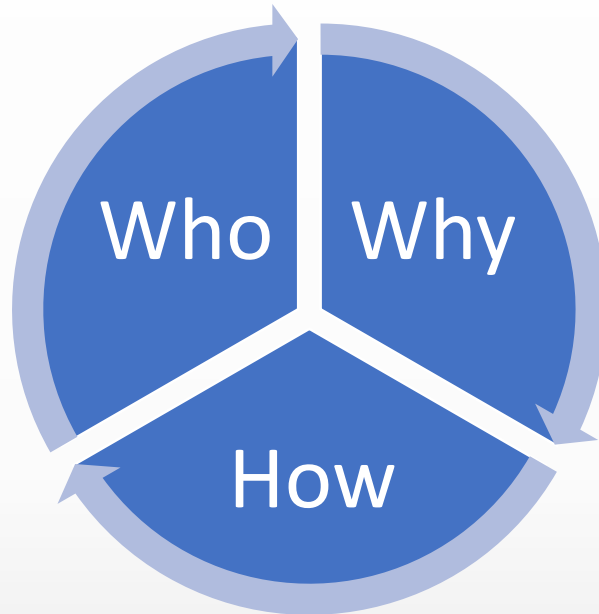
How are we measuring this?

Data Sets

Where are we recording this?



# Cogsworth model

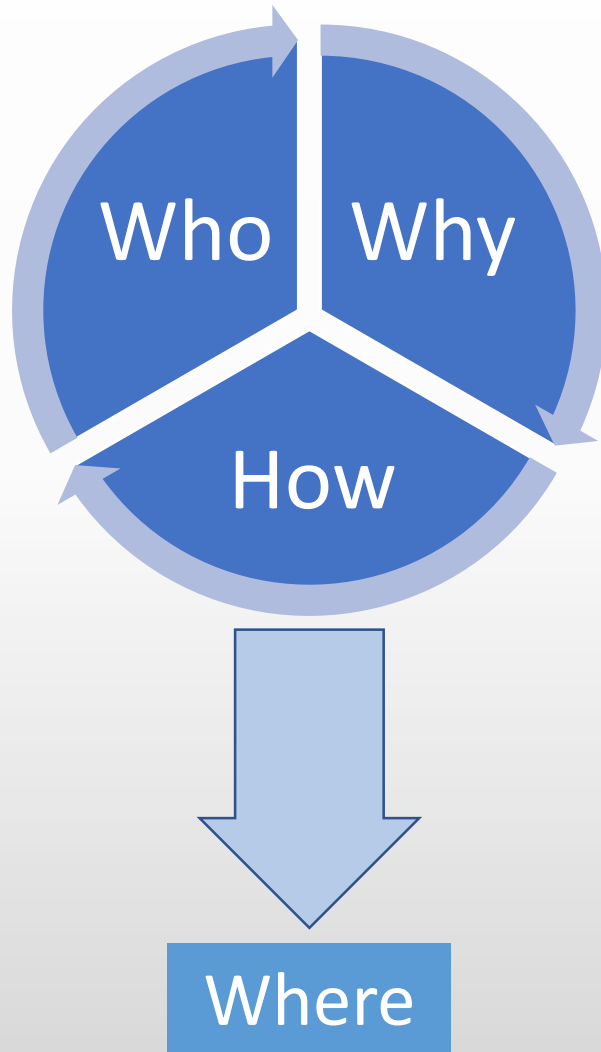


Where

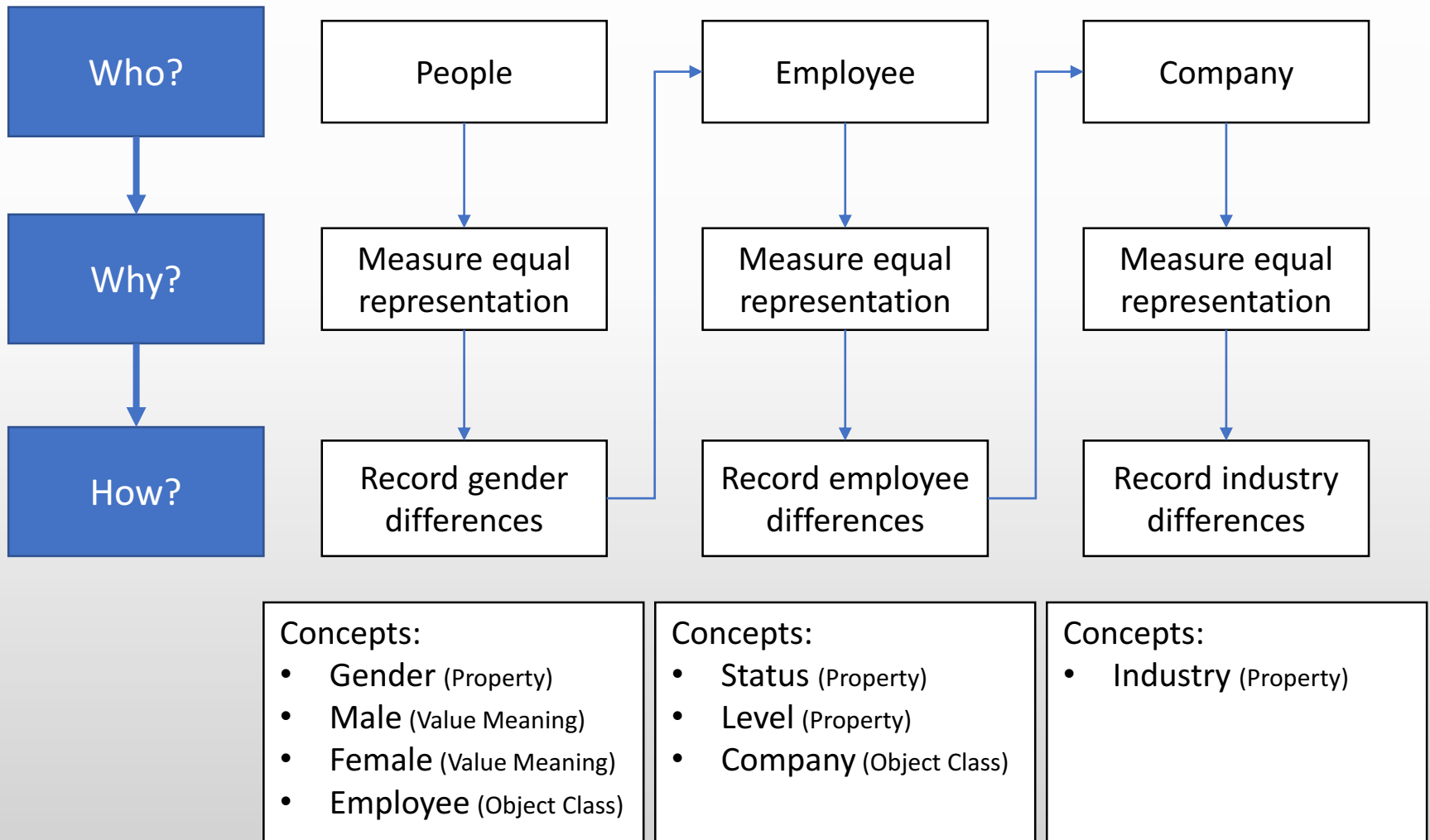
Conceptual

Physical

# Cogsworth model



# Cogsworth model in practice



# Output from the Cogsworth model

- Performance Indicator
  - Gender composition of the workforce
- Data Elements (Numerators)
  - Person-Gender, Code
  - Company-Total Employees, Count
- Data Elements (Disaggregations)
  - Employee-Status, Code
  - Employee-Reporting level, Code
- Object Classes
  - Person
  - Employee
  - Company
- Properties & Conceptual Domains
  - Gender
  - Employment Status
  - Manager Level
  - Industry Classifications

# Example: Reporting levels to CEO

## WGEA-defined manager categories & 'reporting levels to the CEO' Example 1: Flat organisational structure

- The five WGEA-defined manager categories are based on the responsibilities of the role. See definitions in the reporting *Reference guide* or *Indicative format* documents on the WGEA website.
- 'Reporting levels to the CEO' reflect the number of reporting lines/levels between the CEO and the manager (e.g. the manager who reports to the CEO has a reporting level of -1). These usually reflect an employer's organisational chart.
- Example 1 reflects a flat structured organisation where there are no managers who meet the definition of "KMP" and "Other executives/general managers".
- The employer's aggregated data workplace profile table below reflects Example 1.

Manager occupational categories (generated as per your selection in the table at Step 2 in the portal)	Reporting level to CEO	Employment Status	No. of employees		
			F	M	Total employees
CEO	0	Full-time permanent/ongoing	1	0	1
		Full-time contract (fixed-term)	0	0	0
		Part-time permanent/ongoing	0	0	0
		Part-time contract (fixed-term)	0	0	0
		Casual	0	0	0
Senior managers	-1	Full-time permanent/ongoing	2	0	2
		Full-time contract (fixed-term)	0	0	0
		Part-time permanent/ongoing	0	0	0
		Part-time contract (fixed-term)	0	0	0
		Casual	0	0	0
Other managers	-1	Full-time permanent/ongoing	0	0	0
		Full-time contract (fixed-term)	0	0	0
		Part-time permanent/ongoing	0	1	1
		Part-time contract (fixed-term)	0	0	0
		Casual	0	0	0
	-2	Full-time permanent/ongoing	3	0	3
		Full-time contract (fixed-term)	0	0	0
		Part-time permanent/ongoing	0	0	0
		Part-time contract (fixed-term)	0	0	0
		Casual	0	0	0
Sub-total: All managers			6	1	7



- Key:**
- WGEA-defined manager category: bold, black text
  - reporting level to CEO: red numbers

# Example: Reporting levels to CEO

## WGEA-defined manager categories & 'reporting levels to the CEO'

### Example 2: More complex organisational structure

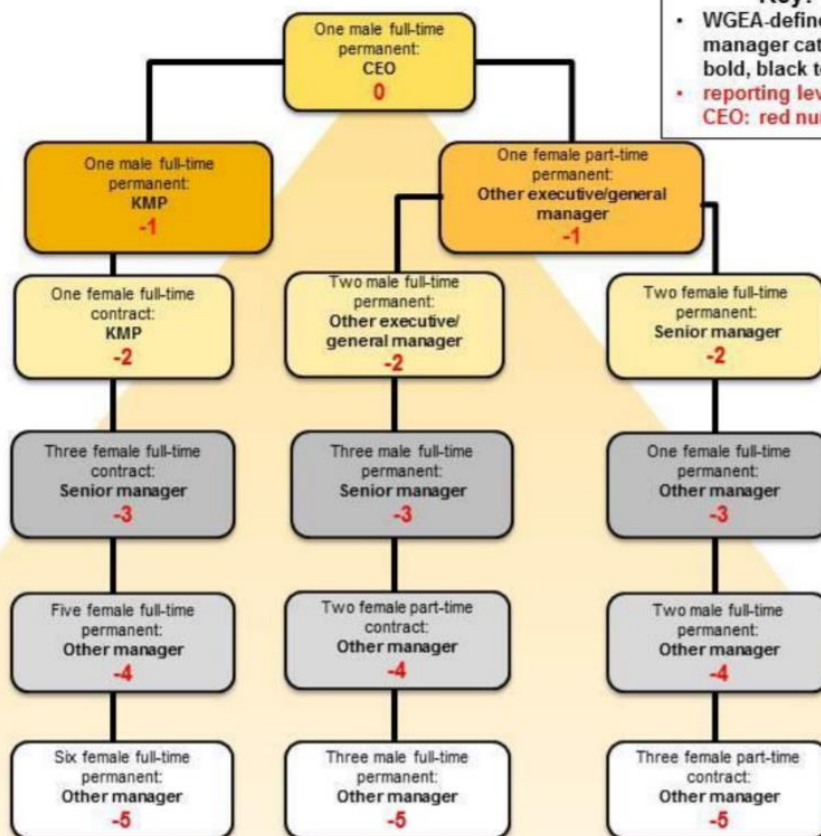
- The five WGEA-defined manager categories are based on the **responsibilities** of the role (see definitions in the reporting *Reference guide* or *Indicative format* documents on WGEA website).
- 'Reporting levels to the CEO' reflect the **number of reporting lines/levels between the CEO and the manager** (e.g. the manager who reports to the CEO has a reporting level of -1). These usually reflect an employer's organisational chart.
- Example 2 reflects a more complex organisational structure where people in different manager categories also have the same reporting level to the CEO (e.g. there are **Senior managers** and an **Other manager** who have a reporting level of -3 to the CEO); and where a manager category appears at multiple reporting levels to the CEO (e.g. some KMPs report directly to the CEO (-1) and other KMPs report to those KMPs (i.e. -2).

**Example 2 - aggregated data workplace profile excerpt**

manager occupational categories (generated as per your selection in the report at Step 3 of the system)	Reporting level to CEO	Employment Status	No. of employees	
			F	M
CEO	0	Full-time permanent/ongoing	0	1
		Full-time contract fixed-term	0	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	0	0
		Casual	0	0
KMP	-1	Full-time permanent/ongoing	0	1
		Full-time contract fixed-term	0	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	0	0
		Casual	0	0
KMP	-2	Full-time permanent/ongoing	0	0
		Full-time contract fixed-term	1	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	0	0
		Casual	0	0
Other executives/general managers	-1	Full-time permanent/ongoing	0	0
		Full-time contract fixed-term	1	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	0	0
		Casual	0	0
Other executives/general managers	-2	Full-time permanent/ongoing	0	0
		Full-time contract fixed-term	0	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	0	0
		Casual	0	0
Senior managers	-2	Full-time permanent/ongoing	0	0
		Full-time contract fixed-term	0	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	0	0
		Casual	0	0
Senior managers	-3	Full-time permanent/ongoing	0	0
		Full-time contract fixed-term	0	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	0	0
		Casual	0	0
Other managers	-3	Full-time permanent/ongoing	1	0
		Full-time contract fixed-term	0	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	0	0
		Casual	0	0
Other managers	-4	Full-time permanent/ongoing	5	2
		Full-time contract fixed-term	0	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	2	0
		Casual	0	0
Other managers	-5	Full-time permanent/ongoing	6	3
		Full-time contract fixed-term	0	0
		Part-time permanent/ongoing	0	0
		Part-time contract fixed-term	3	0
		Casual	0	0

**Key:**

- WGEA-defined manager category: **bold, black text**
- reporting level to CEO: **red numbers**

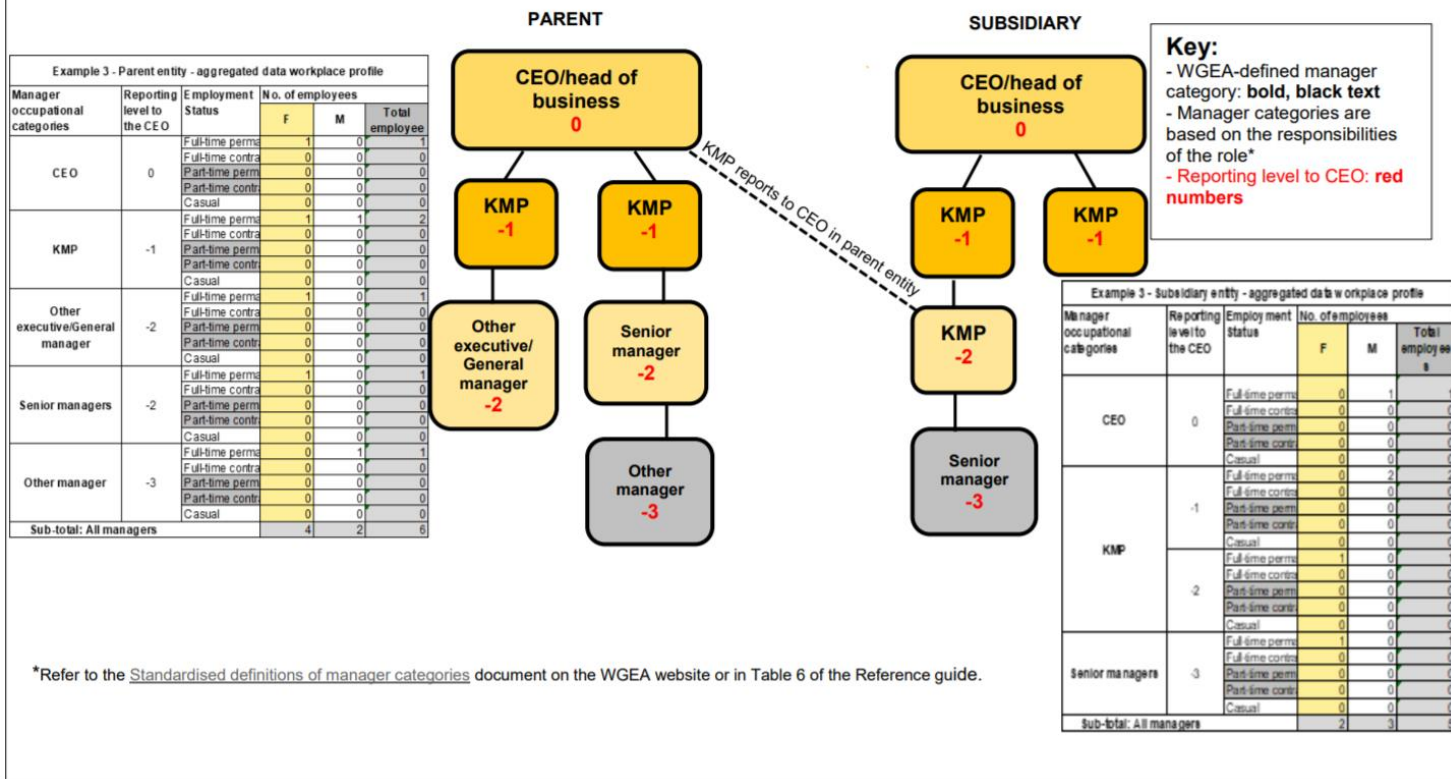




# Example: Reporting levels to CEO

## WGEA-defined manager categories & 'reporting level to the CEO' Example 3: Reporting levels to the CEO in corporate structures

- 'Reporting levels to the CEO' reflect the number of reporting levels/distance between the CEO/head of business (or equivalent) and the manager (e.g. the manager who reports to the CEO has a reporting level of -1). These usually reflect an entity's organisational chart.
- Example 3 reflects a corporate structure where a manager reports to someone who is in another entity in the group. In this example, a KMP in the subsidiary reports to the CEO/head of business (or equivalent) in the parent entity. The KMP's 'reporting level to the CEO' needs to reflect their seniority in the hierarchy (organisation chart) of the **subsidiary** (which is where they work), NOT the parent. In other words, it's the relative distance between them and the CEO/head of business (or equivalent) of the subsidiary. In this example, it is -2.





*Something there...*

*that wasn't there before*

# Achievements

- Key metadata spanning 4 years of change
- Online record of Australian Gender Equality Indicators
- Links between WGEA and external government metadata
- Tools for:
  - Management tools for adding additional information
  - Visualising relationships between metadata
  - Visualising differences between metadata definitions

## Australia's Gender Equality Indicators

Workplace gender equality is achieved when people are able to access and enjoy the same rewards, resources and opportunities regardless of gender.

Australia, along with many countries worldwide, has made significant progress towards gender equality in recent decades, particularly in education, health and female workforce participation.

However, the gender gap in the Australian workforce is still prevalent; women continue to earn less than men, are less likely to advance their careers as far as men, and accumulate less retirement or superannuation savings. At the same time, men have less access to family-friendly policies such as parental leave or flexible working arrangements than women.

**Below is a list of indicators that describe how the WGEA measures and reports on Australian businesses, their gender breakdowns and how industries compare to Australian gender equality benchmarks.**



### **GEI1: Gender composition of the workforce**

Each relevant employer is to report on the gender composition of its workforce



### **GEI2: Gender composition of governing bodies of relevant employers**

Each relevant employer is to report on the gender composition of its governing bodies



### **GEI3: Equal remuneration between women and men**

Each relevant employer is to report on the remuneration of managers, including distance from the CEO or equivalent, and non-managers.



### **GEI4: Availability and utility of employment terms, conditions and practices relating to flexible working arrangements for employees and to working arrangements supporting employees with family or caring responsibilities**

Each relevant employer is to report on the availability and utility of employment terms, conditions and practices relating to flexible working arrangements for employees and to working arrangements supporting employees with family or caring responsibilities.



### **GEI5: Consultation with employees on issues concerning gender equality in the workplace**

Each relevant employer is to report on consultation with employees on issues concerning gender equality in the workplace.



### **GEI6: Sex-based harassment and discrimination**

Each relevant employer is to report on sex-based harassment and discrimination in the workplace

Relevant employers are required to report annually to the Agency on both a workplace profile and a reporting questionnaire, structured around the six GEIs. The Agency itself must submit a report to the Minister on the progress achieved in relation to the GEIs every two years, with the first report due after the period ending 31 May 2016.

## 1.1 Gender composition of the workforce (Indicator)

### Definition

Each relevant employer is to report on the gender composition of its workforce.

Matters that must be included in the report

1. 1.1 Disaggregated data by gender on workforce profile is required on:
  1. 1.1.1 employment status;
  2. 1.1.2 managers, including distance from the CEO or equivalent; and
  3. 1.1.3 non-managers.
2. 1.2 The existence of strategies or policies to support gender equality.
3. 1.3 The composition of applicants appointed to positions by gender and by manager/non-manager.
4. 1.4 The number and proportion of employees awarded promotions by gender, employment status and manager/non-manager.
5. 1.5 The number and proportion of employees who have resigned by gender, employment status and manager/non-manager.

### Calculation rules

#### Numerators

- [Relevant Employer–Full-time equivalent staff, Total Number](#)

#### Denominators

- *Nil*

### Disaggregation

- [Person–Gender, Code](#)
- [Person–Employment Status, Full-time/Part-time code](#)
- [Person–Manager level, WGEA Manager Classification](#)

### References

Reference guide 2017: <https://www.wgea.gov.au/sites/default/files/CABR-Technical-User-Manual.pdf>

### Submitting Organisation

Workplace Gender Equality Agency



0



Actions



Download

#### 1.1 Gender composition of the workforce

Type: [Indicator](#)

Identifiers: [UUID - 5481205c-6c53-11e7-8377-0242ac11004b](#)

Endorsed by [\[Change\]](#) :

- [Workplace Gender Equality Agency](#) : Standard on April 1, 2015

[View registration history](#)

Last updated: [an hour ago](#) By [sam](#)

Created: 2017-07-19

Supersedes [\[Add\]](#) :

- *None*

Superseded by [\[Add\]](#) :

- *None*

## Employer v 2017 (Object Class)

### Definition

Means an individual, or a body or association (whether incorporated or not), that employs an individual:

- (a) under a contract of service, whether on a full-time, part-time, casual or temporary basis; or
- (b) under a contract for services; or
- (c) as described in subsection (5) or (6).

For the purposes of the collection of data for the WGEA, relevant employer means:

- (a) a registered higher education provider that is an employer; or
- (b) a natural person, or a body or association (whether incorporated or not), being the employer of 100 or more employees in Australia; but does not include the Commonwealth, a State, a Territory or an authority.

Alternate names:

**Synonyms:** Relevant Employer

### Comments

For the purpose of paragraph (b) of the definition of relevant employer in subsection (1):

- (a) a corporation employs a person where the person is employed by another corporation which is a subsidiary of the first-mentioned corporation; and
- (b) the question whether a corporation is a subsidiary of another corporation shall be determined as it would be determined for the purposes of the Corporations Act 2001.

(2A) If, at any time, an employer ceases to be a relevant employer because the number of employees of the employer falls below 100, this Act continues to apply to the employer as if the employer were a relevant employer unless and until the number of employees falls below 80.

### References

[Workplace Gender Equality Act 2012](#)

[Equal Opportunity for Women in the Workplace Amendment Act 2012](#)

#### Employer

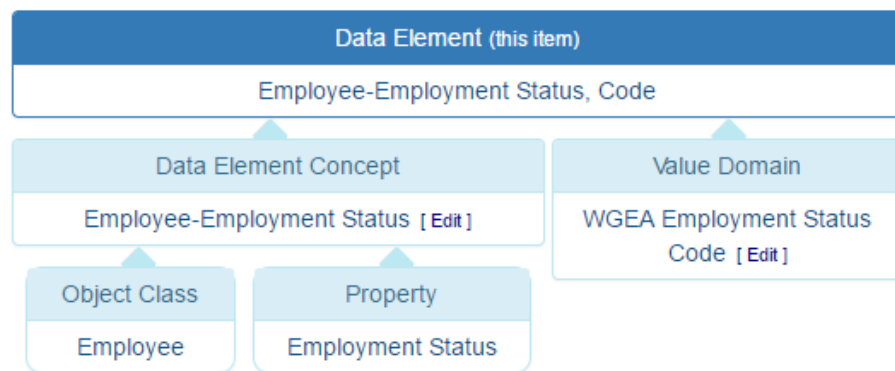
Type:	Object Class
Identifiers:	UUID - 533c09ba-6c52-11e7-aab6-0242ac11004b
Endorsed by :	<ul style="list-style-type: none"><li>• <a href="#">Workplace Gender Equality Agency</a> : Standard on April 1, 2015</li></ul> <a href="#">View registration history</a>
Last updated:	2 seconds ago
Created:	2017-07-24
Supersedes :	<ul style="list-style-type: none"><li>• <a href="#">Employer</a></li></ul>
Superseded by :	<ul style="list-style-type: none"><li>• <i>None</i></li></ul>

## Employee-Employment Status, Code (Data Element)

### Definition

Employment status refers to the nature of employment as per the contractual agreement under which the employee is employed. Employers are required to classify employees as full-time, part-time, permanent/ongoing, fixed-term contract (non-ongoing), or casual. Table 5 provides definitions for each of these terms.

### Components



### Representation

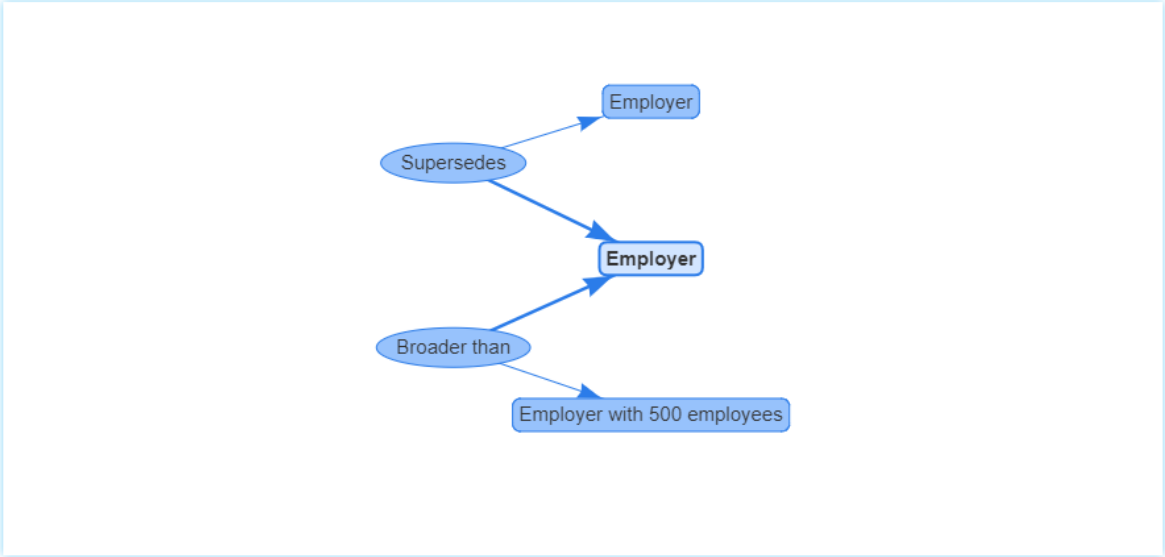
	Value	Meaning
<b>Permissible Values</b> <a href="#">[edit]</a>	C	Casual
	FTC	Full-time Contract
	FTP	Full-time Permanent
	PTC	Part-time Contract
	PTP	Part-time Permanent

# Relationships

Click on the name of any relationship to learn more about the different roles available for links that implement these relations.

Relationship	Role	Concept
<a href="#">Supersedes</a>	Supersedes	<b>Employer (v 2017)</b>
	Superseded by	Employer (v 2014)
<a href="#">Broader than</a> The properties skos:broader and skos:narrower are used to assert a direct hierarchical link between two SKOS concepts. A triple <A> skos:broader <B> asserts that <B>, the object of the triple, is a broader concept than <A>, the subject of the triple. Similarly, a triple <C> skos:narrower <D> asserts that <D>, the object of the triple, is a narrower concept than <C>, the subject of the triple.	Broader	<b>Employer (v 2017)</b>
	Narrower	Employer with 500 employees (v 2017)

## Graphical representation



- Ovals indicate instances of different relationships, Rectangles indicate different metadata objects within a link.
- Select a relationship to see all metadata objects in that relationship.
- Hover over a line to see the role a metadata item fills within a relationship

# Concept comparator

Compare

This form allows you to compare items. Text in green below is present only in the item in that column, text in red is present only in the opposite column and text in white is similar across both items.

Field	First item <div>Employer x ▾</div>	Second item <div>Employer x ▾</div>
comments <div>Descriptive comments about the metadata item (8.1.2.2.3.4)</div>	<div>For the purpose of paragraph (b) of the definition of relevant employer in subsection (1):</div> <div>(a) a corporation employs a person where the person is employed by another corporation which is a subsidiary of the first-mentioned corporation; and</div> <div>(b) the question whether a corporation is a subsidiary of another corporation shall be determined as it would be determined for the purposes of the Corporations Act 2001.</div> <div>(2A) If, at any time, an employer ceases to be a relevant employer because the number of employees of the employer falls below 100, this Act continues to apply to the employer as if the employer were a relevant employer unless and until the number of employees falls below 80.</div>	<div>For the purpose of paragraph (b) of the definition of relevant employer in subsection (1):</div> <div>(a) a corporation employs a person where the person is employed by another corporation which is a subsidiary of the first-mentioned corporation; and</div> <div>(b) the question whether a corporation is a subsidiary of another corporation shall be determined as it would be determined for the purposes of the Corporations Act 2001.</div> <div>(2A) If, at any time, an employer ceases to be a relevant employer because the number of employees of the employer falls below 100, this Act continues to apply to the employer as if the employer were a relevant employer unless and until the number of employees falls below 80.</div>
version	20174	20147
Fields below are identical for both items.		
synonyms	Relevant Employer	



## Concept comparator

[Compare](#)

This form allows you to compare items. Text in green below is present only in the item in that column, text in red is present only in the opposite column and text in white is similar across both items.

Field	First item Employer x ▾	Second item Employer x ▾
<b>comments</b> Descriptive comments about the metadata item (8.1.2.2.3.4)	For the purpose of paragraph (b) of the definition of relevant employer in subsection (1): (a) a corporation employs a person where the person is employed by another corporation which is a subsidiary of the first-mentioned corporation; and (b) the question whether a corporation is a subsidiary of another corporation shall be determined as it would be determined for the purposes of the Corporations Act 2001. (2A) If, at any time, an employer ceases to be a relevant employer because the number of employees of the employer falls below 100, this Act continues to apply to the employer as if the employer were a relevant employer unless and until the number of employees falls below 80. The definition for a <a href="/item/ad75e518-6c52-11e7-88a8-0242ac11004b">Relevant employer is defined elsewhere in this registry</a>	The definition for a <a href="/item/ad75e518-6c52-11e7-88a8-0242ac11004b">Relevant employer is defined elsewhere in this registry</a>For the purpose of paragraph (b) of the definition of relevant employer in subsection (1): (a) a corporation employs a person where the person is employed by another corporation which is a subsidiary of the first-mentioned corporation; and (b) the question whether a corporation is a subsidiary of another corporation shall be determined as it would be determined for the purposes of the Corporations Act 2001. (2A) If, at any time, an employer ceases to be a relevant employer because the number of employees of the employer falls below 100, this Act continues to apply to the employer as if the employer were a relevant employer unless and until the number of employees falls below 80.
<b>definition</b> Representation of a concept by a descriptive statement which serves to differentiate it from related concepts. (3.2.39)	Means an individual, or a body or association (whether incorporated or not), that employs an individual: (a) under a contract of service, whether on a full-time, part-time, casual or temporary basis; or (b) under a contract for services; or (c) as described in subsection (5) or (6).  For the purposes of the collection of data for the WGEA, relevant employer means: (a) a registered higher education provider that is an employer; or (b) a natural person, or a body or association (whether incorporated or not), being a relevant employer that is the employer of 1500 or more employees in Australia; but does not include the Commonwealth, a State, a Territory or an authority.	Means an a relevant employer that is individual, or a body or association (whether incorporated or not), that employs an individual: (a) under a contract of service, whether on a full-time, part-time, casual or temporary basis; or (b) under a contract for services; or (c) as described in subsection (5) or (6).  For the purposes of the collection of data for the WGEA, relevant employer means: (a) a registered higher education provider that is an employer; or (b) a natural person, or a body or association (whether incorporated or not), being the employer of 5100 or more employees in Australia.; but does not include the Commonwealth, a State, a Territory or an authority.
<b>references</b>	Workplace Gender Equality Act 2012: <a href="https://www.legislation.gov.au/Details/C2012C00899">https://www.legislation.gov.au/Details/C2012C00899</a>   Workplace Gender Equality (Minimum Standards) Instrument 2014:	Workplace Gender Equality Act 2012: <a href="https://www.legislation.gov.au/Details/C2012C00899">https://www.legislation.gov.au/Details/C2012C00899</a>   Workplace Gender Equality (Minimum Standards)

*Happily ever after?*



# Future directions?

- Filling in gaps in definitions and across time
- Formalising endorsement workflows
- Connecting metadata with data systems
- Improve migration & creation process



# Questions?

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