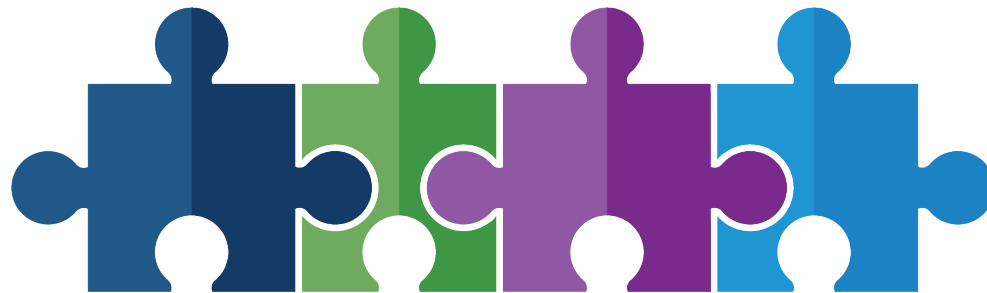# The future of work: continuity and change in the employer's investment in training

Presenters

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We've all heard about…

- 'Rise of the machines: what jobs will survive as robots move into the workplace?'

- 'Almost 40 per cent of Australian jobs could be replaced by technology by 2025, report finds

DAILY NEWS

No. 49,725   THE BEST SELLING NEWSPAPER IN THE WORLD   Today's Edition

National - World - Business - Lifestyle - Travel - Technology - Sport - Weather

ROBOTS ARE COMING!

View from the top

Lorem ipsum dolor sit amet, Consectetur adipiscing elit. Vivamus sit amet odio id lorem blandit luctus. Vivamus placerat viverra lorem. Vestibulum consectetur nunc vel sem laoreet dignissim. Cum sociis natoque penatibus et magnis dis parturient montes.

Consectetur adipiscing elit. Vivamus sit amet odio id lorem blandit luctus. Vivamus placerat viverra

The best way to get something done is to begin

Donec sed turpis ligula. Vestibulum vitae dignissim eros, quis scelerisque lectus. Donec blandit sed nisi eget pharetra. Phasellus sollicitudin a ligula in imperdiet.

"Morbi lobortis lacinia, elit in suspendisse egestis, ullamcorper ligula erat, non luctus."

Economy

Vivamus est elit, tristique id sollicitudin id, mattis et dolor. Morbi lobortis lacinia elit in euismod.

Technology advancements driving change

- declining costs of technology, increasing capabilities & computational power

- explosion in data volumes & rapid advancements in automation and AI

- level of routine in tasks now determines a jobs vulnerability

Source: Hajkowicz et al (CSIRO), 2016
Source: AiG, 2018

Future work skills

- Foundation skills

- Skills for collaborating

- Skills for learning and adapting

- Entrepreneurship skills

- Analytical skills

- Skills for adding value

- Non-automatable skills

- Social platform skills

Source: Allen, Teodoro & Manley 2017

Difference now is…

- How employers and workers gain future work skills

- Changes are faster, bigger and exponential

- Impact from major global trends, rapid technological innovation and increasing global trade

The project: Employer training in Australia: Continuity and Change

NCVER funded project

Researchers: Erica Smith, Jacqueline Tuck, Andy Smith, Victor Callan

Research Questions for this seminar:

1. Why do employers train their workers and what factors affect the extent of training?

2. How do employers train?

3. What are the key changes in employer training over the past 20 years?

4. What are the implications of the results for future changes in work?

Where did the idea come from for the research? Our previous projects

❖ Study of enterprise training in 1995 (A.Smith)

❖ Study of the use of Nationally Recognised Training in 2005 (E. Smith)

❖ Study of Industry-VET provider partnerships in 2004 (Callan)

Why did we do the research? Intrinsic interest in the "Black Box" of enterprise training

❖ Rates of workplace change

❖ Technological change

❖ Developing workforce capability

❖ Regulatory compliance

❖ Organisational size and resources

❖ Government funding

Why did we do the research in 2015?

20 years of change in the training landscape

- Changed approaches to training reform

- Training Packages

- Funding for training

20 years of change in the external environment

- Structure of the economy

- Nature of the workforce

- Technology in the workplace

- Economic fluctuations e.g. GFC

Enterprise Training project summary 1995

Drivers for training

- Workplace change
- New technology
- Quality assurance

Moderators

- Size of enterprise
- Industry training traditions
- Occupational structure
- Industrial relations

Nationally Recognised Training project summary 2005

25 per cent of employers were using Nationally Recognised Training (NRT)

Training helped with quality assurance

NRT facilitated worker attraction and retention in a tight labour market

Processes of taking up NRT
- Engaging
- Extending
- Sustaining

Project method

Two online surveys, one of employers (n=173) and of RTOs (n=107); Semi-structured interviews with 9 employers and 9 RTOs who were in partnership with each other.

Employer sample obtained through professional survey company. Answered by person responsible for training function. National, and stratified by employer size to allow comparison with 2005 project.

Micro (*1-49*): 29%; Small (*50-99*): 10%; Medium (*100-499*): 26%; Large (*500+): 25%

Survey respondents by industry area

	Industry area	Number	Per cent
1.	Primary (includes mining)	8	5.0
2.	Financial services	12	7.5
3.	Other services (includes hospitality)	16	10.0
4.	Communications & IT	8	5.0
5.	Transport and distribution	4	2.5
6.	Sales (wholesale and retail)	20	12.5
7.	Manufacturing	14	8.8
8.	Government/community/public utilities	33	20.6
9.	Construction and civil engineering	13	8.1
10.	Health	13	8.1
11.	Consultancy	5	3.1
12.	Education	14	8.8
	Total	**160**	**100.0**

Changes in their operating environment, according to employers (previous five years)

	Use of technology in the industry	Skill needs of the industry	Skill needs of the organisation	Intensity of the competitive environment for the organisation
Increased rapidly	**23.2%**	**17.2%**	**17.8%**	**28.2%**
Increased steadily	**62.2%**	**57.1%**	**60.7%**	**45.4%**
Undergone no real change	14.0%	24.5%	20.2%	24.5%
Declined	0.6%	1.2%	1.2%	1.8%
Total	100.0%	100.0%	100.0%	100.0%

Why do employers train?

	Weighted average
Quality	1.59
New Technology	1.43
Business strategy	1.37
WH&S requirements	1.33
Licensing requirements	1.30
Other regulatory requirements	1.30
Business/organisation change	1.29
Demand from employees	1.22
Market pressures	1.17

The stated MOST Important reasons were:

- New technology;
- Quality.

'Business strategy' was more important for large employers (500+).

Regulation collectively was important.

Is more or less training going on?

Answers to question 'Had their provision of training increased over the past five years?'

- ❖ **15.3% said yes, greatly**
- ❖ **40.5% said yes, somewhat, and**
- ❖ **35% said it had remained about the same**.

❖ Increase in training increased with company size except that medium-sized companies were most likely to report a great increase in training.

❖ Half had a dedicated training department or section, the likelihood increasing with employer size.

	Training structures	Processes to plan and evaluate training
More common	Workplace trainers/instructors 61.9%	Evaluation of workers' satisfaction with training events 58.9%
	Company training manuals 54.7%	Formal development plans for staff 54.4%
	Written training strategy 53.2%	Evaluation of workers' learning outcomes 52.2%
	Reimbursement of course fees 53.1%	Evaluation of impact for the organisation 49.7%
	Training manager 51.9%	Training based on systematic needs analyses 47.5%
	Training budget 51.6%	
	In-house online learning system 43.9%	Evaluation of workers' changed behaviour after training 44.9%
Less common	Purchased online learning system 34.6%	Training committee 28.3%

Did they use external training providers?

Type of provider	Did they use?	Were they satisfied?
Private training providers (not necessarily RTOs)	73%	80%
Equipment/product suppliers	63%	79%
Employer/industry/prof. assns	61%	84%
Universities	47%	82%
TAFE	46%	66%

Stated potential benefits of external providers

Most commonly reported

> Opportunity for employees to have wider viewpoint.
>
> Providers' content expertise and providers' training expertise.
>
> *Of this group of reasons, gaining a wider viewpoint had more 'great deal of benefit' responses.*

Also reported

> Availability of a range of qualifications.
>
> Useful when only one or a few people require training.
>
> More resource-efficient than providing in-house.
>
> *Of this group of reasons, the availability of a range of qualifications had more 'great deal of benefit' responses.*

What types of employers use nationally recognised training (NRT)?

48.4% had used NRT for existing workers in the current and previous calendar year

Those which used NRT were likely to:

- Have multiple sites;
- Have a diverse employment structure;
- Be affected by regulation and licensing;
- Be expanding their operations;
- Be in industries where technology use is increasing rapidly.

Some industry areas using NRT
(from interviews)

Why do employers seek nationally recognised training?

Outcome reasons

- Allows systematisation across sites;
- Offers quality assurance;
- Provides upskilling and career development;
- Allows for multi-skilling for expansion.

Process reasons

- The (varying) availability of public funding, which particularly influences whether firms engage in skill sets or full qualifications;
- The quality and flexibility of training providers;
- The availability of reliable information relating to the training market.

Informal training and learning

How important was this compared with formal training, as part of total training effort?

- 28% of firms said it was more important than formal training;
- 55% said it was equally important.

What types of informal training were used 'sometimes' or a 'great deal'?

- Supervision to guide employees 65%;
- Structured job rotation system 60%;
- Mentors or buddies 59%;
- Structuring work from simple to complex tasks 58%;
- Learning through watching others 58%;
- Regular meetings of employee groups including learning components 53%;
- Development for supervisors in use of informal training 50%.

Two commonly mentioned jobs	Methods of informal training
Administration	• Mentoring • 'Just trained by another staff member' • Buddy system/observation and repeat • Promotional opportunities/acting in other capacities • Tutorial
Call centre operator	• Courses and in house • Trained by senior staff members • Initial six-week induction, on-the-job training and coaching, online modules and knowledge system • On-the-job training • 'Reading on Wikipedia' • Seminar • Side-by-side coaching with a manager

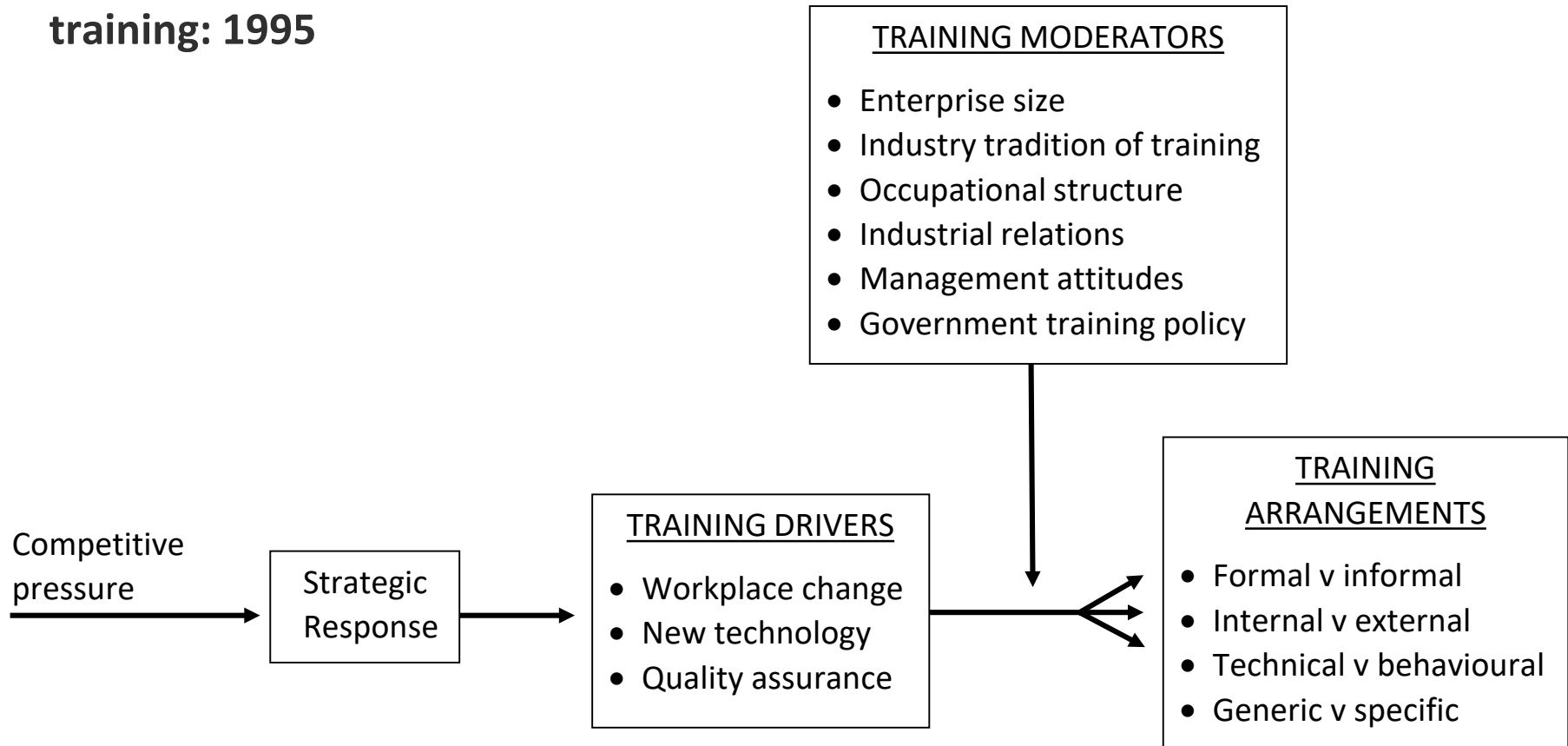# What were the barriers to more training?

60% of respondents would have liked to have provided more training over the past year than they did.

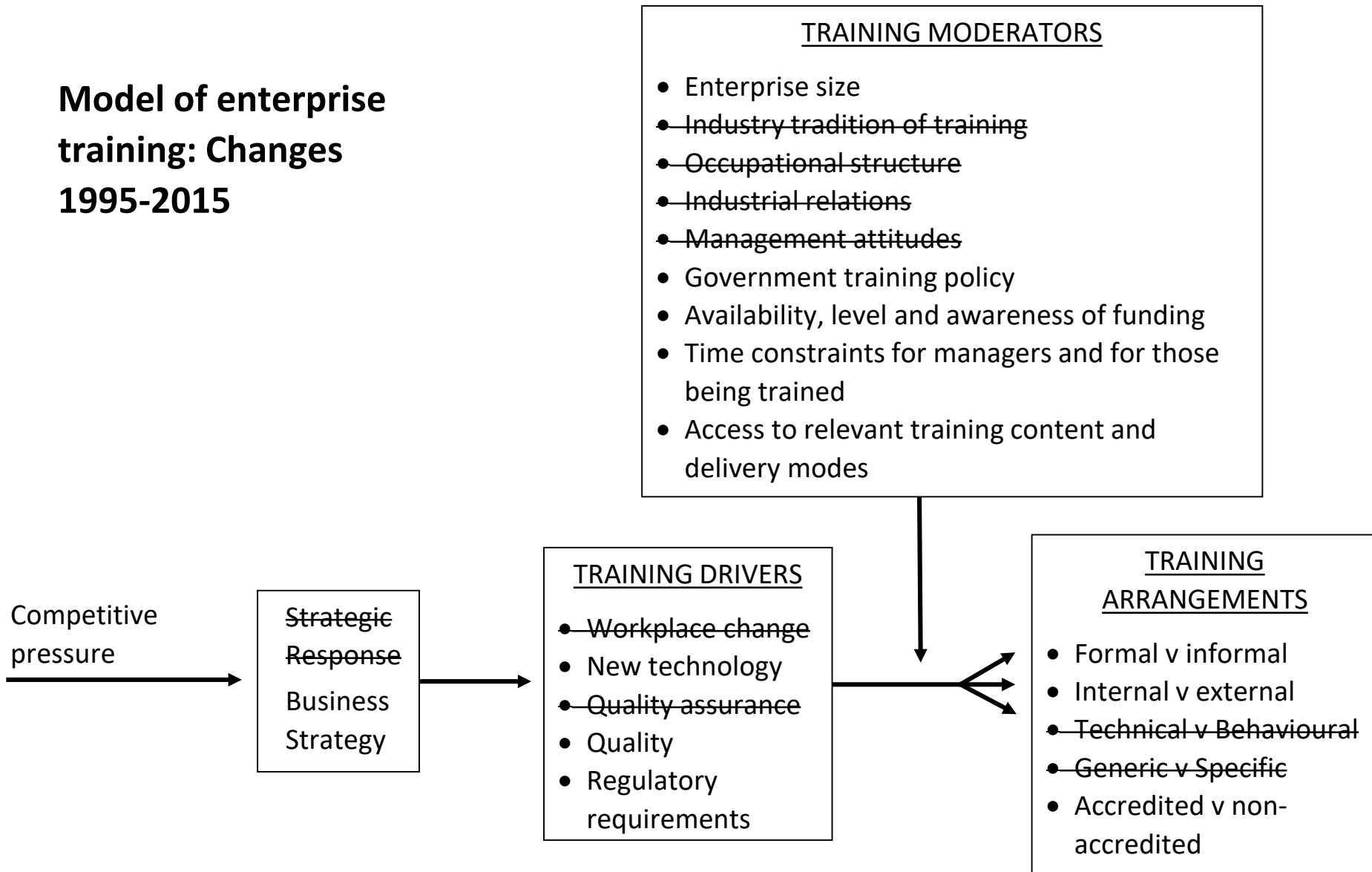What was the *one* most important reason for not doing more? (from a provided list)

- Insufficient money: 38.0%
- Employees are generally too busy to be trained: 19.0%
- Managers do not have time to organise training: 13.9%.
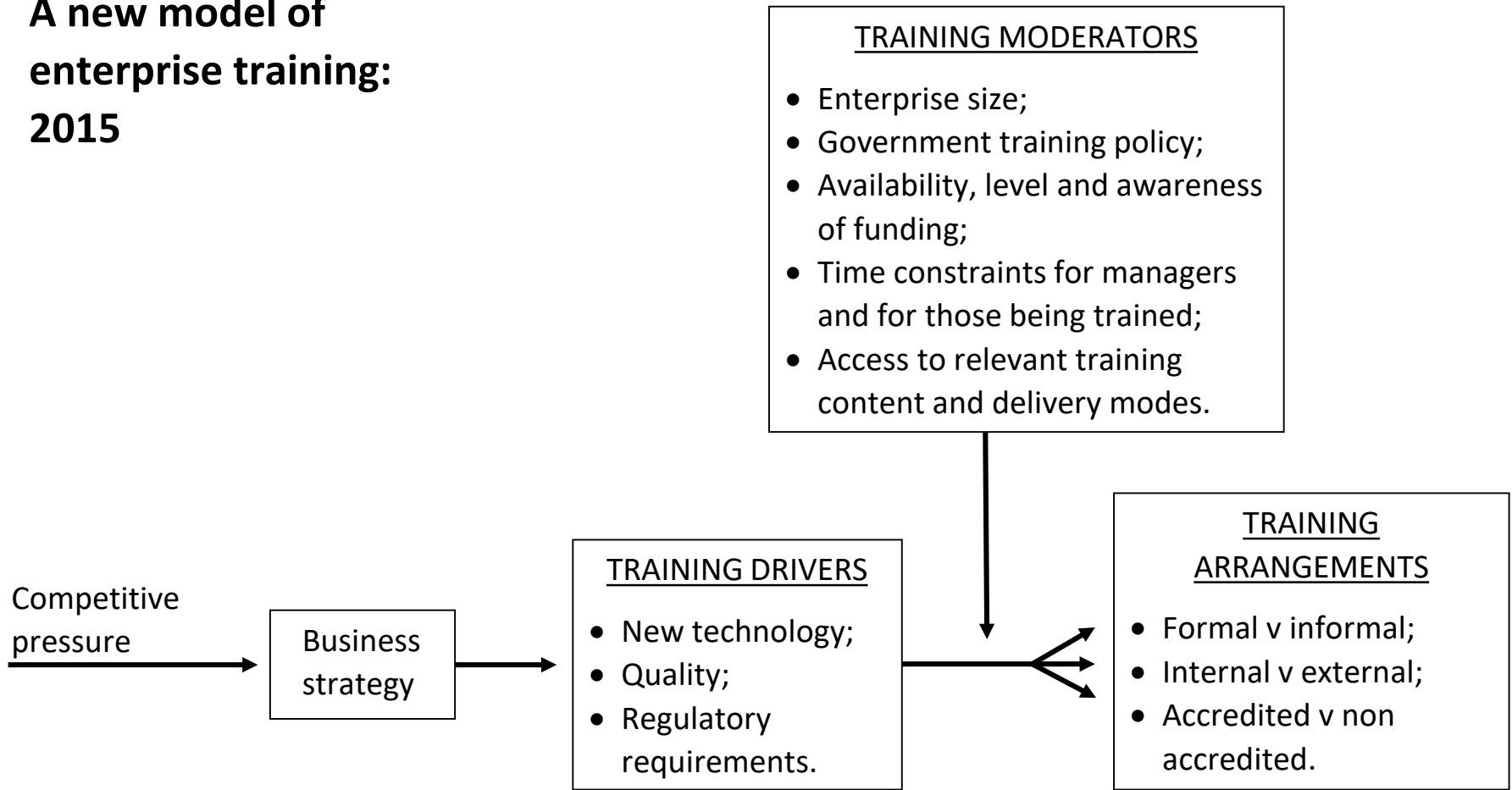
So what had changed in 20 years?

Model of enterprise training: 1995

TRAINING MODERATORS

- Enterprise size
- Industry tradition of training
- Occupational structure
- Industrial relations
- Management attitudes
- Government training policy

Competitive pressure → Strategic Response →

TRAINING DRIVERS

- Workplace change
- New technology
- Quality assurance

TRAINING ARRANGEMENTS

- Formal v informal
- Internal v external
- Technical v behavioural
- Generic v specific

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Model of enterprise training: Changes 1995-2015

TRAINING MODERATORS

- Enterprise size
- ~~Industry tradition of training~~
- ~~Occupational structure~~
- ~~Industrial relations~~
- ~~Management attitudes~~
- Government training policy
- Availability, level and awareness of funding
- Time constraints for managers and for those being trained
- Access to relevant training content and delivery modes

Competitive pressure

~~Strategic Response~~ Business Strategy

TRAINING DRIVERS

- ~~Workplace change~~
- New technology
- ~~Quality assurance~~
- Quality
- Regulatory requirements

TRAINING ARRANGEMENTS

- Formal v informal
- Internal v external
- ~~Technical v Behavioural~~
- ~~Generic v Specific~~
- Accredited v non-accredited

Continuity or Change?

❖ A strong thread of continuity despite economic and technological change;

❖ A more dynamic link between training and the environment;

❖ Increased and changed use of Nationally Recognised Training.

Policy and practice implications

❖ A need for assistance for employers to streamline and plan training;

❖ The role of training/HRD practitioners in industry is more complex, yet neglected;

❖ We should continue to support and fund the use of NRT in enterprises, partly because it leads to an increase in non-funded training as well;

❖ An onus on providers: TAFE and RTOs are a key source of expertise for employers in the training system. TAFE may need to investigate reasons for lower satisfaction.

Implications for the future of work: Will employers be caught out?
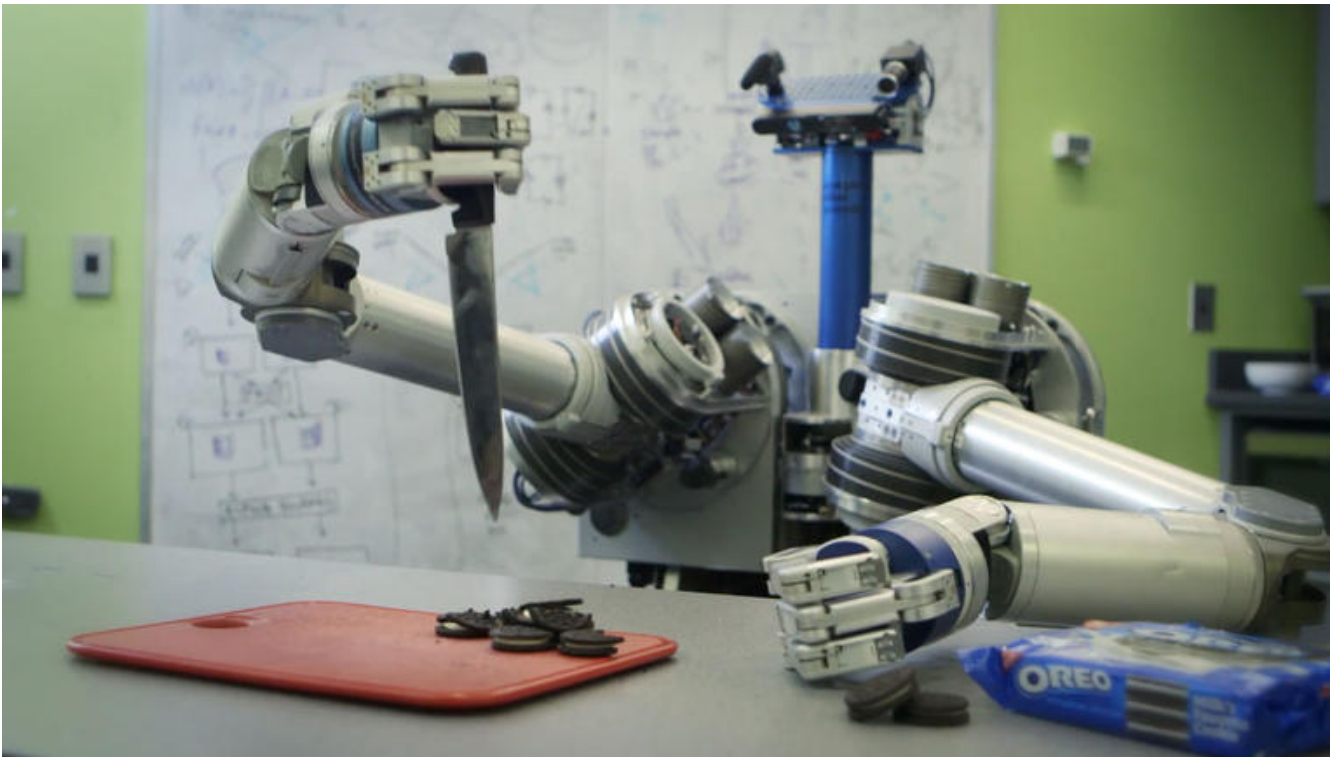
What's the good news?

Employers are committed to training and the current systems will continue to work.

- New technology is already the most important reason for training;

- External providers include universities: will be able to assist with advanced technology;

- High usage of external providers will aid diffusion of technological and work processes;

- Less emphasis on industry traditions of training means smoother structural adjustment.

More information?

The report and Good Practice Guide are on NCVER web site: www.ncver.edu.au

Contact Erica Smith e.smith@federation.edu.au

The three earlier reports:

Enterprise training: The factors that affect demand (Smith, A., Hayton et al. 1995)

Working together: Industry and VET provider training partnerships (Callan & Ashworth 2004)

Enterprises' commitment to nationally recognised training for existing workers (Smith, E., Pickersgill et al. 2005).

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