

Navigating technology, the jobs of the future and government service delivery

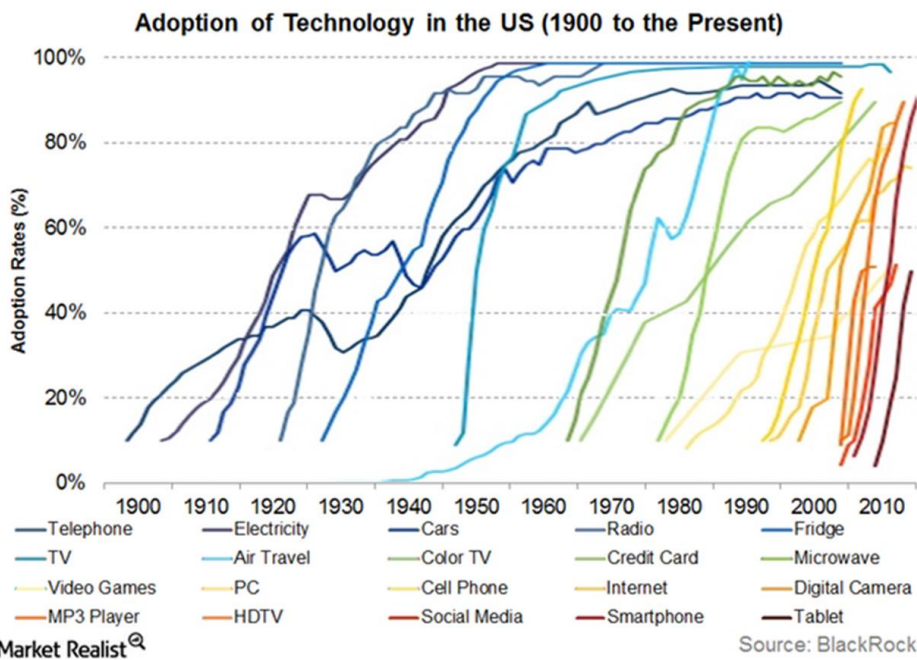
Dr Eva Balan-Vnuk

Executive Director, ICT and Digital Government





Confidentiality-I1-A1

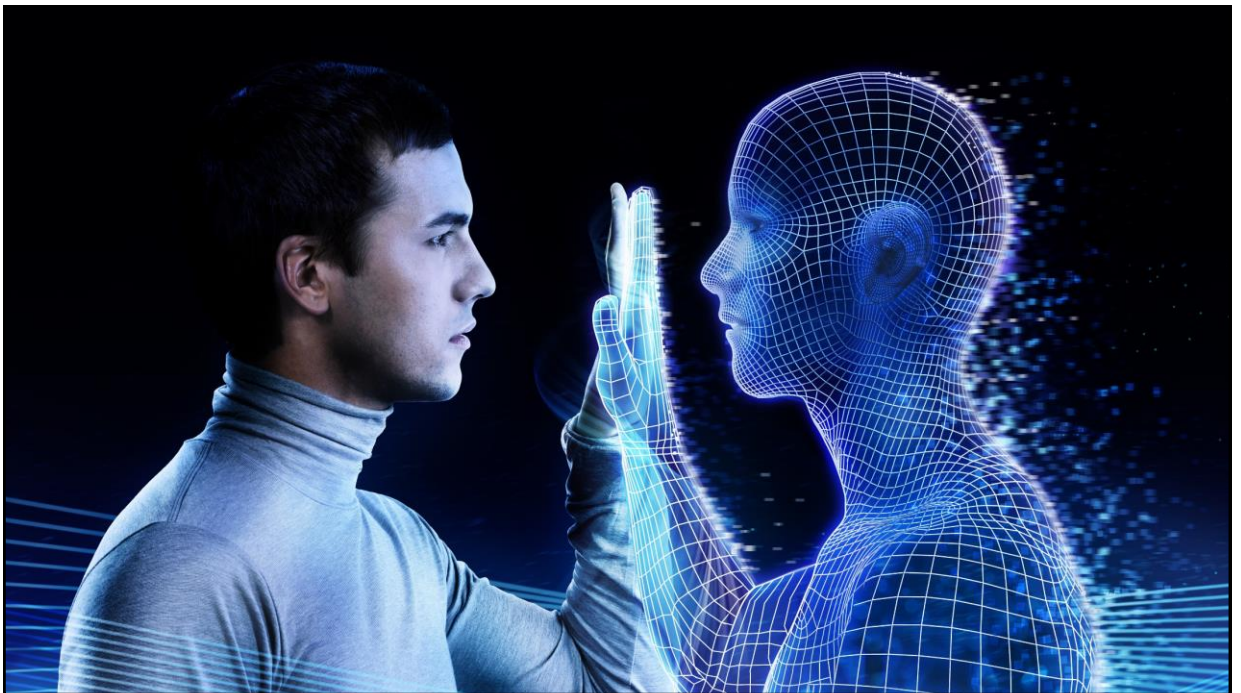


Government of South Australia
Department of the Premier
and Cabinet



The evolution of management

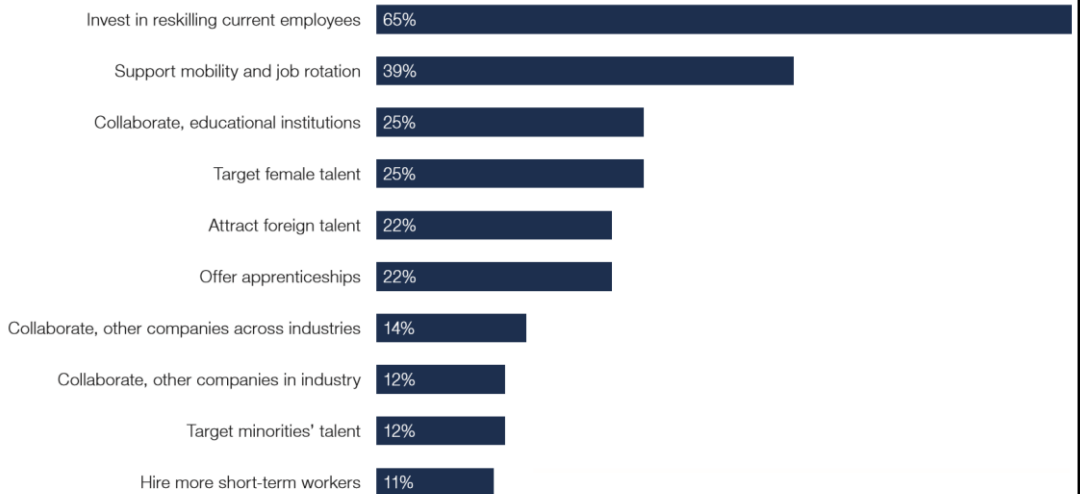
				
Industrial Revolution				
Key themes	Steam and machines	Production lines and electricity	Electronics, IT and automation	The Digital Era, cyber, security, physical systems
Opportunity	Organize and allocate resources	Increase efficiency through science (and a little art)	Increased pace & competition: do more with same or less	Accelerate everything, increase competition – unlikely sources, and continual disruption
The role of manager	<i>The Coordinator</i>	<i>The Inspector</i>	<i>The Accelerator</i>	<i>The Transformer</i>
	1784	1870	1969	2016



Net employment outlook by job family, 2015–2020
 Employees (thousands, all focus countries)



Future workforce strategies, industries overall
 Share of respondents pursuing strategy, %



Source: Future of Jobs Survey, World Economic Forum.
 Note: Names of strategies have been abbreviated to ensure legibility.

Which jobs have a future? (US Census Bureau data analysis)

Approx. 60% of jobs require “non-routine” capabilities:

- Problem solving
- Communication
- Creativity
- Empathy
- Agility...

Cognitive

Manual

	Routine	Non-routine
Cognitive	Office assistant Sales agent X-ray technicians	Managers Engineers Health care
Manual	Assembly line Mechanics	Hospitality Security Maintenance

Confidentiality-I1-A1



Government of South Australia
Department of the Premier
and Cabinet

Top 10 skills

World Economic Forum

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity



<https://www.weforum.org/agenda/2015/01/the-10-skills-you-need-to-thrive-in-the-fourth-industrial-revolution/>

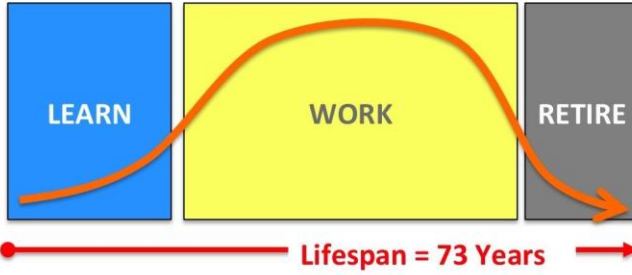
Confidentiality-I1-A1



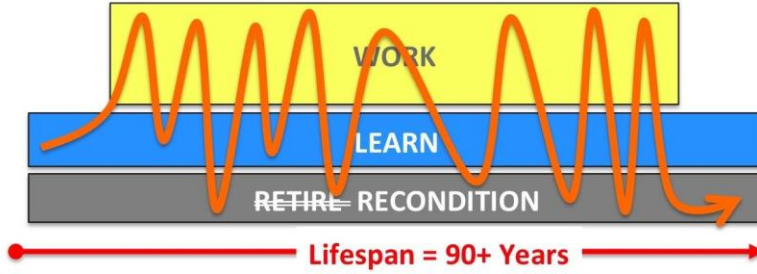
Government of South Australia
Department of the Premier
and Cabinet

New Economy Requires Shifting Our Life Blocks

**OLD
ECONOMY**

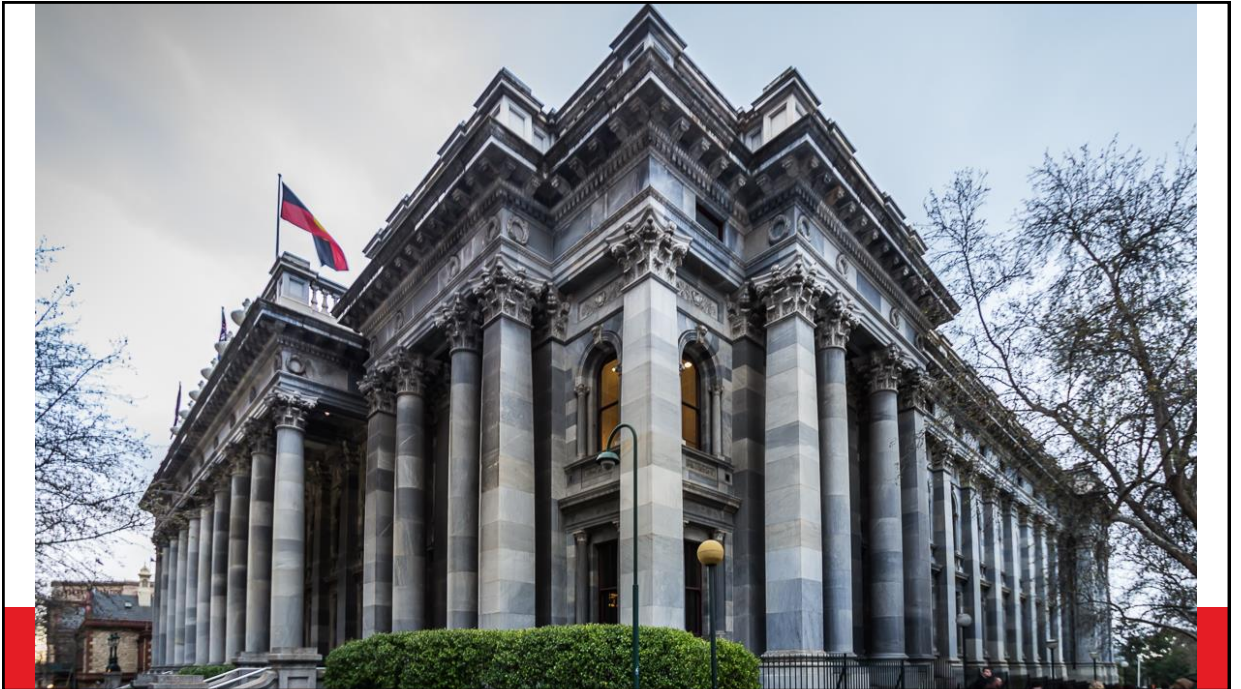


**NEW
ECONOMY**



Work to Learn Concepts

Chris Shipley | Heather McGowan



ICT and Digital Government Division, DPC

Dr Eva Balan-Vnuk,
Executive Director,
ICT and Digital
Government

Abhishek Singh,
CIO, Office for
Technology

Karin Geraghty,
Chief Digital
Strategist, Office for
Digital Government

David Goodman,
CISO, Office for
Cyber Security

Rachel Newrick,
Director, Policy and
Engagement

Confidentiality-I1-A1



Government of South Australia
Department of the Premier
and Cabinet



Building the Bridge: *Mindset*, skill set, tool set

ICT view is often:

- Provider centric
- ICT assets & lifecycles
- Products
- BAU
- Stability
- Consistency
- Risk mitigation
- Technical skills
- Expertise
- Local scale



Digital moves us to:

- Customer centric
- Mature market
- Services
- Innovation
- Agility
- Differentiation
- Opportunity
- People skills
- Learning
- Global scale

Confidentiality-I1-A1

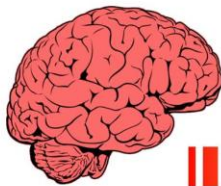


Government of South Australia
Department of the Premier
and Cabinet

Professor Carol Dweck
Mindset: the new psychology of success

A Mindset Shift

Fixed



- Avoid challenges
- Give up easily
- See effort as pointless
- Ignore useful negative feedback
- Feel threatened by the success of others

Growth



- Embrace challenges
- Persist in the face of setbacks
- See efforts as a path to mastery
- Learn from criticism
- Feel lessons and inspiration in the successes of others.

Consider where you would place yourself currently. Now think about what you can do to release your growth mindset.

First Attempt In Learning

Confidentiality-I1-A1



Government of South Australia
Department of the Premier
and Cabinet

P
L
A
N
N
I
N
G



Pre-mobilisation
Problem space, is agency ready?



Mobilisation
Team planning, logistics

D
E
L
I
V
E
R
Y



Discovery
Real user needs



Alpha
Test our hypothesis, logistics



Beta
Define MVP, public to test



Live
Continuous improvement, decommissioning

User Centric Design: UCD tool kit offers guidance to iterative and co-design approaches

1. Ensures the right problem is being addressed
2. Prepares the multi-disciplinary team to begin the UCD delivery process
3. Research **real user needs** & find opportunities for transformation
4. Test hypotheses by **rapid prototyping & testing**.
5. Validate you are building the “right thing” before building it
6. Build the minimum viable product (MVP) & allow the users to trial
7. Continuous improvements & decommission service

Confidentiality-I1-A1

UCD Toolkit available from: <https://digital.sa.gov.au/ucd>



Government of South Australia
Department of the Premier
and Cabinet

The current D3 Challenge

D3 DIGITAL CHALLENGE INITIATIVE

About D3 Challenges

The current D3 Challenge

Previous D3 Challenges



Healthy Kids Menu

Challenge #6 'Healthy Kids Menu' aims to explore ways to increase the amount of healthy food choices available for children in a way that benefits both families and venues.

Raising happy, healthy children is the goal for all parents. Many South Australian diets are high in sugar, salt and fats, and our children's are no exception. Growing bodies do not need high amounts of these nutrients and children should be encouraged to eat more from important food groups such as dairy, fruit and vegetables. Children's eating patterns are essential to their health: what they see and are exposed to shapes lifelong eating behaviours and food preferences. Unhealthy food options are readily available, yet healthy choices are more difficult to find. This can have a negative impact on our children's health.

DEVELOPMENT: AGILE VS WATERFALL where the risk lies



-  Deliverable Product
-  Chance of failure
-  Project Run Rate

Agile development uses an iterative approach to reduce risk and create products that are "launchable" throughout development.

thycotic

DHS' new front-line will be virtual assistants

By Allie Coyne
Dec 19 2016
6:45AM

Powered by Watson and Cortana.

No more hours on hold or queueing to see a welfare officer: that's the future the Department of Human Services is working towards, with a little help from Watson and Cortana.

The department recently went live with an internal virtual assistant it has dubbed 'Roxy', powered by Microsoft's Cortana technology.



1 Comment

Twitter Facebook LinkedIn Print Email

RELATED ARTICLES

DHS aims for AI-driven service delivery future

It uses elements of the Microsoft framework like Luis, the natural language classifier, to help claims processing officers solve problems.

Gartner Customer Experience & Technologies Summit 2016
18 - 19 June Sydney, Australia

PROOFING & AUTHENTICATION

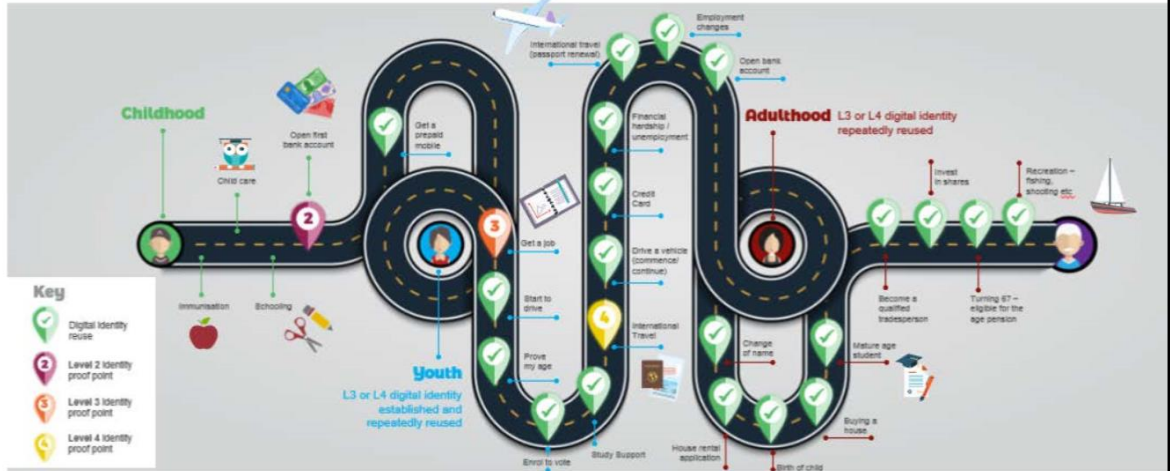
DTA identity: levels of assurance

Commencement of Identity (CoI) – document anchors identity and provides evidence of its establishment in Australia (e.g. birth certificate)
Binding – govt-issued Photo ID, linked to document holder with biometric quality facial image (e.g. Drivers Licence, Passport)
Use in the Community (URC) – document can demonstrate use of individual's identity in community, issued by govt or trusted source (e.g. Medicare card)
Linking – document provides linking evidence between two names (where a name has been changed, e.g. through marriage)

Identity Proofing And Authentication Credential Levels

		IP 4 Level 3 identity supported by further evidence	
		IP 3 Physically identifies person to whom identity belongs	
		IP 2 Claimed identity with evidence of existence and activity	
IP 1 No requirement for identity to be proven		Supporting documentation to be presented at in-person interview Police and background check	
Pseudonymous identity is unique Contact details are validated (e.g. email validation link)		Plus Level 3 requirements	
Binding document Use in Community document If required, Linking document between different names		Commencement of Identity document Real-time matching of facial image through FVS	
Plus Level 1 requirements		Plus Level 2 requirements	
One of: Memorised secret Shared secret Single-factor One-Time Password device Single-factor Cryptographic solution	Memorised or shared secret AND Single-factor OTP or cryptographic device	Memorised or shared secret AND One of: Multi-factor OTP device Multi-factor cryptographic software Multi-factor cryptographic device	
Single factor credential with low security		Two factor credential with additional security	
CL 1		CL 2	
		Two distinct authentication factors through secure authentication protocols	
		CL 3	

DIGITAL IDENTITY LIFE CYCLE Future State



3

dta



Top 10 skills

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility



in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity



<https://www.weforum.org/agenda/2016/07/the-10-skills-you-need-to-thrive-in-the-south-australian-revolution/>

Confidentiality-I1-A1



Government of South Australia
Department of the Premier
and Cabinet

