



**Microsoft**  
Office Specialist

**AUTODESK.**  
Certified Professional

**IC3**  
DIGITAL LITERACY  
CERTIFICATION

**Adobe**  
CERTIFIED  
ASSOCIATE

**Microsoft**  
Technology Associate

**AUTODESK.**  
Certified User

**intuit  
quickbooks.**  
Certified User

**Toon Boom**

**Microsoft**  
CERTIFIED  
Educator

**ESB**  
Entrepreneurship  
and Small Business

Digital Economy Strategy Team  
Department of Industry, Innovation and Science  
GPO Box 2013  
Canberra, ACT, 2601

Dear Sir/Madam:

Certiport, A Pearson VUE business, welcomes this opportunity to respond to the Australian Government report entitled: "The Digital Economy: Opening Up the Conversation." As a former US State Senator that focused on improving real educational outcomes, I am also personally refreshed to see the level of detail the Department of Industry, Innovation and Science have put into this process.

In our response we have focused on the broad themes listed under the Purpose of the Paper section on page 5, placing a special emphasis on "*empowering all Australians through digital skills and inclusion.*"

Certiport is an educational support business, specialising in empowering people to help them succeed through certification. Our globally recognised credentials are valued by those who wish to enhance their individual productivity, marketability, and value.

Importantly for the digital transformation initiative, Certiport is the leading provider to the Information Technology (IT) industry in certification exam development, delivery, and programme management services. Our services are delivered through an expansive network of over 14,000 Certiport Authorised Testing Centres (CATCs) worldwide.

Certiport reliably delivers over three million tests each year throughout the secondary, post-secondary, workforce, and corporate technology markets in 148 countries and 26 languages. No other vendor offers the depth, reach, and experience that Certiport offers for implementing successful certification programmes in the academic market.

We are excited by this opportunity to meet and exchange information with the Australian Government, and provide this response to you describing our capabilities and recommendations. We believe we can assist you by empowering Australians with the digital education and skills they need to succeed in the global marketplace and, by extension, assisting the Australian Government as you lead Australia to compete more effectively with your global competitors.

Our entire organisation welcomes the opportunity to assist the Digital Economy Strategy Team in planning for, and supporting, the digital transformation of the Australian workforce. If you have any questions, please do not hesitate to contact JB Tinker, our Senior Territory Manager on +61 3 9811 2821 or [jb.tinker@pearson.com](mailto:jb.tinker@pearson.com).

We look forward to discussing the initiatives we have taken in digital transformation and how we can assist the Australian Government at your convenience.

Sincerely,



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Certiport, a Pearson VUE Business  
+1 (801) 847 3112  
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# Executive Summary

As the world moves to a digital global economy with easier movement of employees and increased competition, the technology skills gap is being felt in almost every country, including Australia.

The 2017 IT Skills and Salary Report from Global Knowledge confirms that skills gaps are a global concern. In their survey of 14,300 IT professionals worldwide, more than two-thirds of the IT decision-makers reported a gap between their team's skill levels and the knowledge required to achieve organisational objectives.

This trend is echoed in the Digital Economy report on page 32:

"Structural changes in our economy, including digital disruption, are changing the skills that employers need. This requires workers to be adaptable enough to adjust to the changing nature of work and undertake life-long learning, including the use of micro-credentialing."

The increased need to match employer needs with workforce skills, i.e., the digital divide, points out the need to close the gap through faster acquisition and recognition of knowledge and skills. This is possible through providing easy access to online learning applications, making immediate opportunities for skills and knowledge certification available, and providing more immediate and verifiable recognition of certification achievement through online badging.

This speedier process for learning and certification, particularly entry-level certification, will help more Australians become skilled in understanding and completing the job tasks that meet the needs of Australia's employers. They will also become more prepared to support the technological advances the Australian Government wishes to undertake and implement over the next 5 to 10 years.

## Skills Development is the Pathway to Employability and Prosperity

A prime example of this speedier acquisition of skills and knowledge is the new Skills Agenda for Europe, adopted by the European Commission on 10 June 2016, (<http://ec.europa.eu/social/main.jsp?langId=en&catId=1223>). This goal of this international initiative is to better match employer needs with workforce skills.



### The goals and actions on the Agenda are designed to:

- Improve the quality and relevance of training and other ways of acquiring skills
- Make skills more visible and comparable
- Improve information and understanding of trends and patterns in demands for skills and jobs (skills intelligence) to enable people to make better career choices, find quality jobs, and improve their life chances.

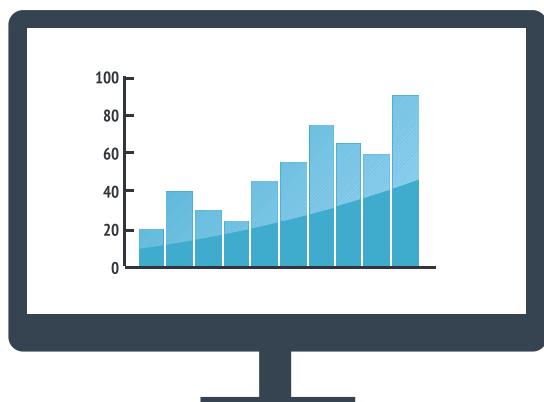
The Commission is continuing to take forward each of the Agenda's actions. It calls on EU countries, employers' associations, trade unions, industry, and other interested parties to continue to work together to ensure that these initiatives produce the best possible outcomes.

Many IT certification firms such as Adobe® and Microsoft® are participating in the initiatives being taken by the EU Commission. Adobe has asked current and aspiring digital media professionals about the essentials for launching a successful digital media career. When asked what would make a digital media professional's resume stand out in lieu of experience, 61% said "a demonstrable knowledge of digital design tools" and 44% said "digital media certifications from a top-tier company." The entire survey field agreed that certifications can help candidates prove their skills to prospective employers. In a Microsoft® Certified Professional survey, 91% of hiring managers said they consider employee certification as a criterion for hiring.

By supporting global certification clients such as Adobe and Microsoft in promoting digital skills and knowledge certification programmes, and meeting Certiport's own internal certification initiatives over the last 20 years, we feel we are in an excellent position to help clients such as Adobe, Autodesk, Intuit, Microsoft, and Toon Boom, and countries throughout the world, including Australia, close the current digital skills divide.

## Certiport's sophisticated portfolio of leading information technology certification programmes include:

- Adobe® Certified Associate
- Adobe® Certified Expert
- Autodesk® Certified User
- IC3® Digital Literacy Certification
- Official Microsoft Office Specialist® Certification
- Microsoft Technology Associate® Certification
- Microsoft Certified Educator®
- Intuit® QuickBooks® Certified User
- Toon Boom® Certified Associate



The following is a brief summary of how each of these programmes can assist in Australia's digital transformation:

| PROGRAMME                          | HOW THE PROGRAMME CAN HELP   |
|------------------------------------|--|
| Adobe Certified Associate          | In Australia's increasingly information-based economy, demand for digital communications skills will be enormous and growing rapidly. Adobe Certified Associate (ACA) is an unsurpassed way to demonstrate expertise in Web Design, Visual and Print Design, and Digital Video. With ACA, Adobe offers multiple options for students and instructors to validate their digital media skills and stand out from the crowd when competing for jobs. The six ACA exams include: Web Authoring Using Adobe Dreamweaver, Interactive Media Communication Using Adobe Flash Professional, Video Communication Using Adobe Premiere Pro, Visual Communication Using Adobe Photoshop, Graphic Design & Illustration Using Adobe Illustrator and Print & Digital Media Publication Using Adobe InDesign. More information about this programme is available at <a href="http://www.certiport.com/adobe">www.certiport.com/adobe</a> . |
| Adobe Certified Expert             | Becoming an Adobe Certified Expert (ACE) will give Australians a clear and focused way to tell the world about their expertise in leading products from Adobe. Adobe certifications are industry recognised and ACE exams are available for the Adobe Digital Marketing Suite products and Creative Cloud. Certification exams are computer based, multiple-choice exams that are delivered by Pearson VUE in a proctored environment. More information is available about this programme at <a href="http://www.certiport.com/ace">www.certiport.com/ace</a> .  |
| Autodesk Certified User            | Through the Autodesk certification programme, career and technical education programmes across Australia will be able to equip students with marketable 2D and 3D design skills by teaching them to use state-of-the-art Autodesk design software. Autodesk Certified User certification confirms students have the skills necessary to continue their design careers—whether they attend college, enter the workforce, or work toward additional levels of industry certification after graduation. The Autodesk Education Community offers Australia's students and educators free software, learning materials, and classroom support—giving them experience with the same design software that professionals use every day. More information about this programme is available at <a href="http://www.certiport.com/autodesk">www.certiport.com/autodesk</a> .   |
| IC3 Digital Literacy Certification | In today's high-tech world, digital literacy is a fundamental requirement. The best way for Australians to stand out in the crowd is to have the IC3 Digital Literacy Certification credential. For both the student and the job-seeker IC3 provides the foundation of knowledge needed for success, and it is a well-respected and internationally-recognised credential that reflects the most relevant skills needed in today's academic and business environments. The IC3 Certification is comprised of three individual examinations: Computing Fundamentals, Key Applications, and Living Online. More information is available about this programme at <a href="http://www.certiport.com/ic3">www.certiport.com/ic3</a> .  |



## Learn-Practice-Certify: A Simple, Practical Model for Australia's Digital Transformation

Certiport has been the global leader in performance-based certification since 1993 and has developed a simple model for certification success: Learn – Practice – Certify. Certiport has the courseware materials to make the student's learning process easier and more effective. Certiport also provides practice tests that help the student accurately determine their skill and knowledge level prior to taking the certification exam. Certification success happens when a student has learned the material well and practiced it effectively. More information about this model is available at [www.certiport.com/lp](http://www.certiport.com/lp).

| PROGRAMME                      | PROGRAMME INFORMATION  |
|--------------------------------|--|
| Microsoft Certified Educator   | The Microsoft Certified Educator (MCE) programme provides robust tools that can help Australian educators drive best-in-class integration of information and communication technology (ICT) into classroom instruction. Mapped to the UNESCO ICT Competency Framework for Educators, MCE programme resources include a free self-assessment, free customised eLearning, and the Technology Literacy for Educators (62-193) certification exam. Each of these learning and validation steps aligns to six key aspects of ICT and pedagogy integration: Education Policy, Curriculum & Assessment, Pedagogy, ICT/Technology Tools, Organization & Administration, and Professional Development. Learn more at <a href="http://www.certiport.com/mce">www.certiport.com/mce</a> .   |
| Microsoft Office Specialist    | Microsoft Office Specialist (MOS) certification is the leading IT certification in the world. More than 1 million MOS exams are taken every year in over 140 countries, including Australia. MOS enables individuals to tap the full features and functionality of the Microsoft Office system, resulting in heightened levels of individual performance, confidence, and differentiation. In academia, MOS promotes success in the classroom, builds individual distinction, and prepares students for an increasingly competitive workforce. For business, MOS maximises office productivity and efficiency for the organisation and increases job satisfaction and heightens career achievement among employees. Learn more at <a href="http://www.certiport.com/mos">www.certiport.com/mos</a> .   |
| Microsoft Technology Associate | Microsoft Technology Associate (MTA) certification is an entry-level credential from Microsoft that validates fundamental technology knowledge among Australian students seeking to build a career in technology. MTA certification is the ideal and preferred path to Microsoft's world-renowned technology certification programmes, such as Microsoft Certified Solutions Associate (MCSA) and Microsoft Certified Solutions Developer (MCSD). MTA is positioned to become the premier credential for Australians seeking to explore and pursue a career using Microsoft technology, or to augment related pursuits such as business or other fields where technology is pervasive. MTA includes several exams in three categories: Developer, Database, and IT Professional. Learn more at <a href="http://www.certiport.com/mta">www.certiport.com/mta</a> .  |
| QuickBooks Certified User      | The Intuit QuickBooks Certified User (QBCU) certification validates the knowledge and skills to help manage the books effectively in the most prevalent bookkeeping application in small business today. By earning QBCU certification, Australians can validate their technical abilities and demonstrate marketable skills that speak to Australia's employers. The exam objectives reflect an easy-to-understand platform for students to grasp accounting concepts and bridges classroom learning to real-world application. QBCU certification is the best way to communicate one's skills and expertise of QuickBooks to potential employers and stand out from the crowd in a competitive job market. More information about this programme is available at <a href="http://www.certiport.com/quickbooks">www.certiport.com/quickbooks</a> .  |
| Toon Boom Certified Associate  | Toon Boom creates award winning animation software that is widely adopted and used worldwide, including Australia. Many of the top television, movies, games, and other animated programmes are created using Toon Boom software. Australia is quickly becoming a powerhouse in creative storytelling and production led by studios like Animal Logik, Moshi Studio, BES, 12 Field, Flux Animation, Cheeky Little and numerous other studios across the content creative market. These local stories are being played internationally, bringing more attention and renewed jobs and industry to Australia. Toon Boom are predicting that in 5 to 10 years' time Australia could become the next Canada, whose Media and Entertainment industry is continuously growing and is commonly known as Hollywood North. More information about this programme is available at <a href="https://certiport.pearsonvue.com/Certifications/Toon-Boom/Certified-Associate/Overview">https://certiport.pearsonvue.com/Certifications/Toon-Boom/Certified-Associate/Overview</a> . |

As the demand for digital learning and certification programmes increases across Australia, Certiport will continue to work with our clients and the Australian educational community to offer new programmes that help Australians gain the skills they need to succeed.

The following section of our response highlights our capabilities in responding to the questions that the Digital Strategy Team posed to the industry regarding how businesses such as Certiport can help Australia's economy adjust to the digital transformation. In our response we have chosen to focus on digital learning through online educational programmes. This topic represents to us the core initiative the Australian Government needs to undertake in order to close the digital divide and truly begin to transform the Australian economy.

# Digital Economy Strategy Consultation

## The Digital Transformation's Impact on Our Business

During the last five years, Certiport has been in the process of re-imagining ourselves and restructuring our business models dramatically. Similar to the Australian Government, our business has been caught up in the digital revolution tsunami, the impact of which, to our minds, far exceeds the impact that the first printing press had on the ability of humans to share knowledge and communicate the latest news and ideas.

Until a few short years ago, Certiport, like most other education support businesses, relied on print to distribute its learning products and services. Now, these products and services (and even more) are online. Whilst these changes have a negative impact on printing establishments and shipping businesses, students benefit greatly by being able to access textbook material online, more quickly and easily than ever before.

Instructors and teachers have also benefitted by not having to plead with school administration to include the cost of the latest textbooks within their school budgets for the next school year, so they can teach from the latest materials. They can now simply provide a link to an Internet page containing the most current educational material they want their students to read, no matter when it becomes available, even during the school year!



Our industry is a prime example of the impact the digital revolution is having on the economy: new online systems have made it easier and faster to access learning and training resources that were previously costly to access, and that access is always available, at the most critical time the resources are needed.

Digital has undoubtedly made the learning process faster at Certiport, and it has made our global reach easier and less expensive. But we've had to make drastic changes in our business processes and the skillsets of our personnel in order to survive. Container ships no longer carry our textbook supplies and training materials, airwaves do. Our internal teams, dispersed throughout our global locations, meet and work together by traveling via the Internet, instead of using planes.

With a focus on emerging markets, we have a fully integrated team that is based from 50 locations. We utilise mainstream tools such as email and video chat, but also other online tools such as LinkedIn, Facebook, Asana, and Trello. Oftentimes the meeting is seen as the biggest disruption to business, so we make sure that people have the opportunity to work in their local market but are fully integrated into a much larger group.

Again, digital's impact on our business is this: continually making it easier and faster to access costly resources (in this case, our personnel) at the most critical times that those resources are needed.

Similar to the Australian Government, if Certiport doesn't keep up with the digital tools our competitors are creating and using to distribute their educational products and services and conduct their businesses, we risk becoming more costly than they are and suffer the even greater risk of being outmoded. Nothing would be more costly for our business in the current digital markets in which we compete.

We must change if we want to survive as an educational services business. Likewise, Australia's economy will have to change in the new world of online education and other online services in order to survive in the global digital economy.

# Disruptive Technologies' Impact on Australia

Being in the education industry, the most disruptive model that Certiport have experienced is in how education is being delivered. Australian students and adults are now increasingly turning to online books and online schools to gain new skills and knowledge and learn how to use new technologies. In five years' time, we expect to see online schools in Australia overtaking the traditional "bricks and mortar" school model, and in 10 years' time, the complete use of online schools as the primary mode of education. And, in 20 years, we may have completely individualised learning systems, with other forms of social interaction traditionally a part of a student's educational experience to replace the traditional school's extra-curricular activities in music and the arts and sports.

Whilst education is in the midst of this long-term upheaval, disruption will make its way through all industries. This upheaval will cause massive pain to established businesses (such as ours) today. However, in every case, today's disruption offers far greater benefits in providing more control, greater personal choice, and faster results tomorrow.

The focus is changing to provide what individuals need when they need it; going where they want when they want at the price they want, which makes companies such as Amazon, Google, Uber, and Lyft so successful. The technologies they and others like them are inventing, and will continue to invent, will be custom applications that solve a simple, specific need of providing an immediate choice and faster service delivery to the consumer. We believe the more Australia can do to implement adaptive, responsive learning and certification in the education sector will help Australia move to the forefront of implementing new technologies in all aspects of the economy.



## Implementing Digital Standards

The report's question 8 about establishing digital standards is one that is very timely and on point for helping Australia through this transformation. We see a very important role for the Australian Government to play in establishing digital standards throughout the Australian educational system and, as a result, throughout the rest of Australia's business and government networks.

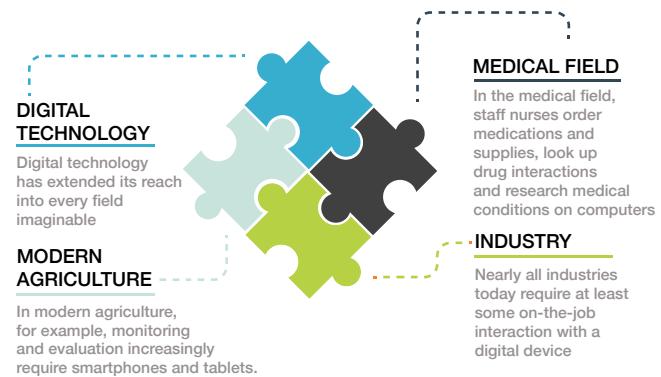
Digital technology has extended its reach into every field imaginable — and the impact is being felt everywhere, not just in corporate offices. Nearly all industries today require at least some on-the-job interaction with a digital device, including sectors the general public often doesn't consider technology dependent.

In modern agriculture, for example, monitoring and evaluation increasingly require smartphones and tablets. The driverless tractor, which has gone from concept to reality in just a few years, uses geospatial positioning systems (GPS) and other wireless technologies to farm land without the need for a human operator behind the wheel.

In the medical field, staff nurses order medications and supplies, look up drug interactions and research medical conditions on computers. They also use smartphones and tablets to communicate with physicians about patients in their care.

In the automotive industry, a modern car now has an average of 60 to 100 sensors on board. Within a few years, this number is expected to rise to 200 as cars get "smarter" and have more autonomous capabilities. Today's auto mechanics need more than a wrench to diagnose and repair car and truck problems. They must know how to use a laptop to connect to and operate automotive diagnostic machines.

Our recommendation is for the Australian Government to start from the bottom up, starting with a basic digital learning standards programme, based on similar standards supported by UNESCO in its new Strategy for Technical and Vocational Education and Training (TVET) (2016-2021), which supports governments in enhancing the relevance of their TVET systems.



The strategy, strongly endorsed by UNESCO Member States and adopted by UNESCO's Executive Board in April 2016, focuses on equipping all youth and adults with the skills required to find decent work and develop entrepreneurial and innovative mind-sets as well as becoming active citizens in an equitable, inclusive, and sustainable society.

The strategy was launched on World Youth Skills Day, July 15, 2016 at the UNESCO International Centre for Technical and Vocational Education and Training (UNESCO-UNEVOC), in Bonn. The event, organised jointly by UNESCO and UNESCO-UNEVOC, brought youth and TVET stakeholders together to discuss the way forward. During the event, representatives of governments, international agencies, relevant institutions, the private sector, and youth reflected on areas of cooperation and synergies and looked into the interrelations between TVET and key areas of sustainable development.

Certiport's launch of its IC3 Digital Literacy programme was undertaken by working with UNESCO and other bodies to establish the digital literacy standards to be taught that would help fill the void in basic computer education. The programme teaches basic digital literacy concepts that students will need to get — and keep — a job after graduation.

Rather than starting at the top by setting standards for complex technical details, IC3 teaches pragmatic, real-world computer skills. Its three main exams focus on key applications, such as how to use popular office programmes, including a word processor and a spreadsheet. IC3 also teaches computer fundamentals, such as how to connect and troubleshoot a printer. And, importantly, it educates students about online etiquette: how to interact professionally and safely online, and how to effectively use search and other internet tools.

Again, by starting at the bottom, and establishing basic educational standards for the platforms needed to complete the skills needed across all industries, the Australian Government will have the most significant impact on all the standards that are set on the ladder leading up to the most complex technical applications and the skills Australians need to implement, operate, and maintain them.

As an example of how successful this approach can be, we have included a case study in Appendix A describing how the Dublin Institute of Technology (DIT) partnered with Hewlett-Packard Development Company (HP), the Dublin Inner City Partnership, the Dublin City Council, and Eircom, The Digital Hub and the National Centre for Technology in Education to create a Digital Community Programme. We feel this describes how well government and private business can work together to help citizens gain skills valued by employers today, and in the future.

## Building Community Trust Through Data Privacy and Security

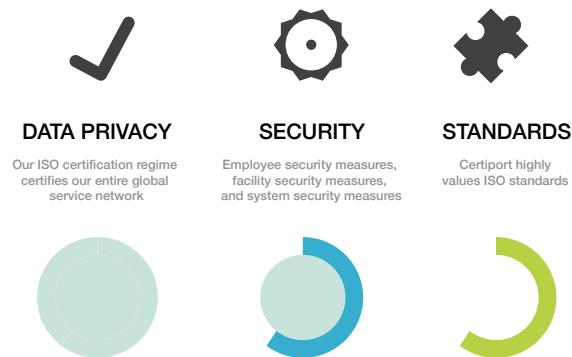
Whilst building a fundamental base on digital literacy, the Australian Government must also take a holistic approach to security in order to build trust and confidence in your ability to manage the ever-increasing volume and sophistication of cyber threats and hack attempts.

From employee security measures, facility security measures, and system security measures, the Australian Government needs to work with Australian businesses and Australians in agreeing to specific security protocols when conducting transactions. Understanding that the security of their personal information is at stake, individuals will be more willing to conduct business transactions only using the tools and communication protocols that have been deemed secure by government and the education and business sectors.

At Certiport, we have implemented a rigorous, broad scope information security programme, which is fundamental and vital to our maintaining information security for all of our clients and their programme stakeholders, including the candidates who take our tests.

To achieve this, we pursue a wide range of certifications with highly respected third-party organisations to make sure our processes are current and comprehensive. We consider every component part of our end-to-end product and service delivery as being equally important, which is why our ISO certification regime certifies our entire global service network. Moreover, we continue to extend the scope of our certification framework to incorporate new offerings.

ISO, the International Organization for Standardization, is an independent, non-governmental membership organisation and the largest developer of voluntary standards. Certiport highly values ISO standards and has achieved several, with third-party verification of our compliance to ISO standards by major auditing firms.



## ISO standards we are in compliance with include:

As an additional example of the holistic security approach we propose for the Australian Government, Certiport requires that all employees take and complete training programmes around data privacy and information security annually as well as upon their hiring. The training covers several topics regarding protection of sensitive information and new and emerging security threats. Upon completion of the training, employees must successfully pass a quiz to validate their understanding of their responsibilities with regards to data privacy and information security.

- ISO 9001, Quality Management
- ISO 27001, Information Security Management
- ISO 22301, Business Continuity
- ISO/IEC 23988, IT and Delivery of Assessments
- ISO 19011, Systems auditing
- ISO 31000, Risk Management

In addition to the annual training, employees are reminded of their information security requirements through periodic awareness campaigns. These awareness topics are communicated through email, office posters, and postings on internal websites. In summary, Certiport's holistic approach to security awareness includes:

- Employee Training: All employees have to complete initial security and information privacy training upon their hiring, and annual training thereafter.
- Employee Privacy and Security Awareness Campaigns: Throughout the year, employees receive a variety of data privacy and information security knowledge updates.
- Security Incident Plans: A detailed incident response plan is made available to managers of critical business functions. A training over the response plan is provided annually to make sure employees are aware of their responsibilities throughout the process.

Compliance with data protection laws applicable to our organisation's processing of data are also a vital part of our holistic approach. For instance, Certiport complies with the international EU-U.S. Privacy Shield. The EU-U.S. Privacy Shield Framework provides a set of robust and enforceable protection requirements for the transfer of personal data from the EU to the United States in support of transatlantic commerce.

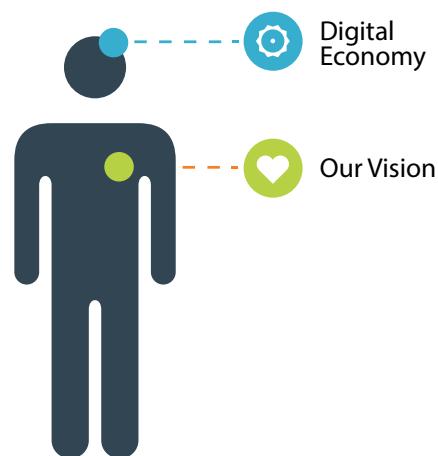
## Equipping Australians with the Skills They Need

We view the Digital Strategy Team's question about digital entrepreneurship as an incredibly timely one as well. Certiport is currently working with government and business constituents to release a programme that specifically promotes entrepreneurship in the digital economy and supporting individuals in their ability to handle the digital transformation.

Our Entrepreneurship and Small Business Certification (ESB) programme is the first in a new Certiport® Business Fundamentals Certification Programme, which will also include certification exams in business disciplines such as Digital Marketing and Finance.

The ESB exam is intended for use primarily in academic settings such as Registered Training Organisations (RTO) or TAFEs. Candidates for ESB certification will be expected to have key conceptual knowledge of entrepreneurial and small business principles.

Core concepts include entrepreneurship; recognising and evaluating opportunities; planning for, starting, and operating a business; marketing and sales; and financial management. For each core concept, the ESB exam will certify knowledge and skills on several specific objectives:



## The Entrepreneur:

- Identify the characteristics of entrepreneurs
- Given a scenario including a self-assessment outcome, identify the strengths, weaknesses, and risk tolerance the self-assessment identifies and how to compensate with services

## Opportunity Recognition:

- Identify the benefits and drawbacks of different types of opportunities
- Analyse the demand for the goods or service and opportunities in specific environments

## Starting a Business:

- Identify the purposes and value of a business plan
- Identify the appropriate legal structure, benefits and drawbacks for different legal structures
- Identify different types of licenses and regulations that are required
- Identify the benefits and drawbacks of various sources of start-up funding

## Business Operations:

- Identify key positions and human capital needs (including compensation and benefits)
- Determine how work will be completed and the skills required for performing tasks
- Identify standard operating procedures

## Marketing and Sales:

- Develop a sales strategy and identify characteristics of a successful sale
- Identify how to retain customers and develop a relationship with repeat customers
- Determine value and methods of communication including: web sites, brochures, social media, and advertising

## Financial Management:

- Interpret basic financial statements such as income statements and balance sheets
- Identify the factors that influence credit ratings and the importance of a positive credit rating
- Identify which are fixed expenses versus variable
- Identify the factors that impact the price to the customer
- Identify and analyse cash flow: accounts receivable, accounts payable, inventory, and debt
- Create a cash flow budget
- Identify the break-even point for the business

The ESB programme is only one example of how successful completion of the certification and/or others like it will allow Australians to gain digital skills and knowledge quickly and have employers validate the skills and knowledge for Australians interested in working in a skilled profession or for those who wish to work as their own boss with entrepreneurship and small business career aspirations.

By establishing and following global standards such as those established for certification by Adobe and Microsoft and supporting recognition of industry standards into the VET system, the Australian Government will help Australians gain the skills and knowledge that are the standard across the world and make it easier to translate into the Australian Qualifications Framework (AQF).

**"My recent ACA certification has given me the ability to be confident about the work I produce using Adobe software and make me feel like I have accomplished something so far in the short amount of time I have been a student at Central."**

*Warren McKenzie  
Student at Central Institute of Technology, Perth*

## Our Vision for Australia's Digital Economy

We would like to see Australia's governmental and educational infrastructure adapt over the next five years to embrace more online exchanges of training and information – from offering online books to online training opportunities to government staff to online books and schools for the public. As adults and students learn that they can access the information they need quickly from anywhere, they will become more adept at gaining their skills and knowledge, giving them the freedom to apply their skills and knowledge and work from anywhere. Easier access and greater choice for adults and students will lead them to invest in their own learning, which in turn will result in their ability to achieve better results faster.

In 10 years, we would like to see an Australia where cheaper software allows government agencies, schools, and business of all sizes to have access to the same technology, similar to the educational platforms developed for schools. This may result in better relationships between people as we encourage the technology to take on the mundane and allow people to connect to people.

In 20 years, we would like to see an Australia that utilises technology to diversify our export products so that we are not reliant on one main resource. And, an Australia that is a leading participant in setting global standards for educational outcomes and productivity and creating a workforce so productive that we compete at the highest level with the world's greatest economies.

**"As soon as I received my ACA certification, I started job hunting. Having these certifications from Adobe gave me a distinct advantage and I was hired within a matter of days to work as junior graphic designer for a well-known printing company."**

*Renae Dawson  
Junior Graphic Designer, Roleystone*

## Government's role in achieving Australia's digital transformation

The investment the Australian Government makes in improving the digital technology available in schools will have a direct impact on business adoption of new technology, even down to the small business level.

As noted on page 25 in the report,

*At an individual business level, many Australian businesses are lagging in the sophisticated use of digital technologies. Most businesses have Internet access (95.3 per cent), about half have a website (50.1 per cent), and relatively few have a social media presence (38.2 per cent).*

In a world where the greatest employment advertiser is LinkedIn, and the largest business advertising firms are Google and Facebook, it is not surprising that, with the low business participation percentages in online services and transactions described in the report, Australian businesses are lagging behind global competitors.

Government must lead the way – the online education standards you decide to set and implement will spur business to establish them as well. This also requires the Government to take a more active role in setting educational standards and to do away with the “tick and flick” acceptance of various digital education standards set by multiple training institutions and schools to setting global industry digital education standards that have to be met by the institutions and schools before they become accredited.

Large businesses such as Microsoft and Adobe (see information at links below) are already on the path to launching digital learning initiatives that will benefit Australia. As noted on Microsoft's Australia web site, <https://www.microsoft.com/australia/about/> they donate more than \$50m of software to non-profit organisations working in Australia to help them become more productive and collaborative and deliver more innovative solutions to the communities they serve.

Microsoft is also committed to helping young Australians capture opportunity and learn skills to prepare for the jobs of the future, or even start their own business.

**"My MTA certification helped me to be awarded a very coveted position. I also became part of an elite group of students who received free training in cryptography and encrypted cloud computing; the knowledge I gained was priceless."**

*Rotola Akinsowon  
Student, University of Cape Coast, Lagos, Nigeria*

Their YouthSpark programmes in Australia vary from direct support for disadvantaged students, through to empowering youth to personally take action to change the world around them.

And, Adobe has established digital initiatives and symposiums throughout Australia, including establishing a “world first strategic partnership” with Swinburne University of Technology to assist the University in its digital transformation:

[http://www.adobe.com/content/dam/acom/au/about-adobe/newsroom/2017/Adobe\\_Swinburne\\_Partnership\\_Release\\_20March2017.pdf](http://www.adobe.com/content/dam/acom/au/about-adobe/newsroom/2017/Adobe_Swinburne_Partnership_Release_20March2017.pdf)

These examples, and many others, show that the Australian Government cannot wait to become involved in establishing standards for digital learning, certification, and recognition. The time to become involved is now.

## Summary

We hope in this brief report we have provided the Digital Strategy Team adequate information about our capabilities and our willingness to assist the Australian Government in establishing a digital transformation agenda similar to those we have mentioned in our response.

If you would like to discuss this report and how we can assist you in greater detail, please contact JB Tinker, Certiport Senior Territory Manager, using the contact information below.

## Contact Information

### JB Tinker

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## Appendix

Appendix A - “Digital Communities” Built with Certiport IC3 Bridge the Divide





## DUBLIN INSTITUTE OF TECHNOLOGY

### Location:

Dublin, Ireland

### Number of Centers:

21

### Success Metrics:

Implementing a Certiport IC<sup>3</sup> certification program resulted in:

- Personal transformation with skills that lead to better employment opportunities
- Increased government support of community employability programs
- Higher education credit for certificate holders

## “Digital Communities” Built with Certiport IC3 Bridge the Divide

**Program Offers Hope to Thousands of Irish Citizens Who Need Computing Skills and Experience to Pursue Higher Education, Find Work**

### CHALLENGE

Leading the way in technological higher education, Dublin Institute of Technology (DIT) is an accredited academic institution that confers universally accepted degrees. Several years ago, DIT began an initiative to place computers in disadvantaged inner-city schools. Forty-four schools were identified for the program, a partnership with Fujitsu Siemens Computers was established and students and teachers began receiving IT training.

Unfortunately, organizers soon discovered that when students and teachers left their classrooms and went home, they had no access to technology. As a result, the Digital Divide—the gap between individuals with regular access to technology and individuals without it—was reinforced.

### SOLUTION

Without access to government funding or tax dollars, DIT partnered with Hewlett-Packard Development Company (HP), the Dublin Inner City Partnership, the Dublin

City Council, Eircom, The Digital Hub and the National Centre for Technology in Education to create the Digital Community Programme. The program identified 10 of the most seriously disadvantaged schools and communities. In these areas, unemployment was as high as 87 percent, crime was excessive, illiteracy and lack of education was prevalent and individuals suffered from low self-esteem.

After each sponsoring organization assigned a senior-level, decision-making representative to serve on the Digital Community Programme board, a committee approached the communities to learn how members of the communities felt they could be serviced. “We turned the design back to the communities and asked what they wanted, rather than telling them what we thought they should do,” said program manager Peter Byrne. “We needed their support and ideas to ensure they would use our services and engage in the opportunity we were providing them.”

*"To influence the next generation is key to the whole thing. There is no other approach like this. We must engage people on their terms, not tell them what to do. They need to be consulted about what they want, and we need to be able to provide jobs to people who really need them and wouldn't get them otherwise."*

**Peter Byrne**  
Program Manager  
Dublin Institute of Technology

Learn more about IC3 Certification.  
Visit [www.certiport.com/IC3](http://www.certiport.com/IC3)  
or call today at **1-800-488-9371**



Soon, six Digital Community Programme centers were set up in apartments provided with heat and electricity by the Dublin City Council, state-of-the-art computer equipment contributed by HP and broadband service provided by Eircom. Basic courses focused on keyboarding, computer usage and Internet usage were scheduled to slowly build the skills included in the three Certiport Internet and Computing Core Certification (IC3®) exams—Computing Fundamentals, Key Applications and Living Online.

As the program grew from 10 to 21 centers, Byrne said both the number of courses available and the participants wanting to attend them increased. "In some centers, we do not have enough capacity for those wishing to participate," he reported. "In 2007, 1,900 people attended courses, including participants of all ages—six to 76."

Each center is accredited through DIT to allow participants to earn university credit through the European Credit Transfer System. IC3 is worth five credits, and an accompanying teacher-training course is worth an additional two credits. "Individuals can transfer their credits to any third-level institute in Europe and use them toward degrees and as a pathway to their chosen fields of study," Byrne said.

## RESULTS

After seeing the value of the Digital Community Programme in Dublin, Irish government officials, including Prime Minister Bertie Ahern, T.D. and President Mary McAleese's husband, Dr. Martin McAleese, have engaged loyalists and republicans to eliminate violence, promising to implement the Digital Community Programme in other areas as part of peace process.

Indeed, Byrne said government support has been helpful. President McAleese attended a Digital Community Programme graduation in 2006, at which 54 certificates

were awarded to participants. In 2007, Minister Éamon Ó Cuív, of the department of community, rural and Gaeltacht affairs witnessed the conferral of 58 certificates. In 2007, 121 individuals graduated from the program.

On an individual level, Byrne has seen lives transform, stories he finds "hugely satisfying." Speaking of his experiences working with single mothers, drug abusers and individuals with prison convictions, Byrne has met a number of individuals who have accomplished personal and professional goals through the Digital Community Programme, which has now expanded to 21 centers in Dublin and surrounding areas.



One young woman left school at age 14 and had five daughters before attending courses at a Digital Community Programme center. She now teaches courses for the program, and, following her example, all of her daughters want to attend college.

"To influence the next generation is key to the whole thing," Byrne said. "There is no other approach like this. We must engage people on their terms, not tell them what to do. They need to be consulted about what they want, and we need to be able to provide jobs to people who really need them and wouldn't get them otherwise."

### ABOUT CERTIPORT

Certiport is the leading provider of certification exam development, delivery and program management services which include practice tests via MeasureUp® delivered through an expansive network of over 12,100 Certiport Authorized Testing Centers worldwide. Certiport manages a sophisticated portfolio of leading certification programs including: the official Microsoft Office certification program, the Microsoft Technology Associate certification program, the Adobe® Certified Associate certification program, the CompTIA Strata™ IT Fundamentals, the Autodesk Certified User certification program, the Intuit QuickBooks Certified User certification program and the Internet and Computing Core Certification (IC3®). For more information, please visit [www.certiport.com](http://www.certiport.com).