

## **PANEL: Ethics in IT: Importance of Digital Inclusion**

### **Vivienne Conway**

Director, Web Key IT Pty Ltd  
Email: [v.conway@webkeyit.com](mailto:v.conway@webkeyit.com)

### **Amanda Mace**

Operations Manager, Web Key IT Pty Ltd  
Email: [a.mace@webkeyit.com](mailto:a.mace@webkeyit.com)

### **Justin Brown**

Associate Dean of Teaching and Learning,  
Edith Cowan University, Perth WA  
Email: [j.brown@ecu.edu.au](mailto:j.brown@ecu.edu.au)

### **David Lucido**

Sentient Hubs  
Email: [dlucido@sentient-hubs.com](mailto:dlucido@sentient-hubs.com)

### **Muhammad Saleem**

Manager, Kuwait/GCC Office, Web Key IT Pty Ltd  
Email: [mohd@gcc.webkeyit.com](mailto:mohd@gcc.webkeyit.com)

## **Abstract**

The term 'digital accessibility' could be defined as the usability of digital material for people with disabilities. Everyone in the IT industry seems to understand the importance of 'user experience' (UX), and a UX specialization is becoming increasingly sought after in the employment market. However, little real attention is paid to the need for this UX for people with disabilities, despite the increasing requirement for people to conduct their business and personal affairs 'online'. In this panel, experts will participate in a discussion regarding ethics and the inclusion requirements for people with disabilities and seniors, looking at benefits and obligations for organisations and the improved user experience for everyone. They will discuss the need for increased adherence of standards and respect for the rights of others. They will also discuss the role that professional association, standards and corporate social responsibility play in the inclusion of people with disabilities and seniors in our digital environment.

**Keywords:** digital accessibility, inclusivity, disability, inclusion, website, ethics.

## 1 INTRODUCTION

The IT industry has been a largely unregulated industry in terms of certification, affiliation, and overall claims of expertise, integrity and values. While there are organisations which developers, managers, technical staff and others involved can join, there has been little proof required for someone to declare themselves as either expert or even proficient. You could be 'CISCO Certified', 'Microsoft Certified' etc., however these are commercial and proprietary. University qualifications are not required for a developer, or any qualifications for that matter, and nothing at all for others who regularly contribute to digital content. Actually, almost everyone in business contributes in some way to digital content for their organisation, as most material important to an organisation finds its way 'online' at some point. While many individuals seek to join professional organisations such as the Australian Computer Society and the Australian Web Industry Association, others are aligning with meet-up groups and informal associations, all of which serve a very worthwhile purpose.

## 2 TARGET AUDIENCE

This panel presentation will be suitable for all audiences, but of particular interest to managers of digital platforms, senior management, and also digital development personnel. The presentation includes a broad interest group and will not be of a technical nature, but more broadly addressing IT and Ethics in the industry

## 3 IMPORTANCE OF DIGITAL INCLUSION

The problem in this scenario, is that for issues such as inclusivity, accessibility, standards adherence and others, there is no firm line in the sand of what is required by a professional, or even what qualifications a professional should possess. Each of the above organisations works to a standard or set of values. The Australian Computer Society has a set of qualifications, - Certified Technician, Certified Professional, Senior Professional and Fellow, each of which has very clear requirements, but they do not address inclusivity, accessibility and adherence to the Australian and international standards for these important issues. If you were an accountant, doctor, lawyer and many other professions, it is considered mandatory to belong to a professional organisation and adhere to their values, ethics, standards etc. This mandatory affiliation is not universally required in Australia at least for the IT industry in the area of accessibility, though it might be required by individual organisations.

When it comes to accessibility, Australia relies on the Disability Discrimination Act 1992 as its legal mandate, which is administered by Australian Human Rights Commission. Under this Act, if someone makes a complaint to an organisation (of any type, not just government) about discrimination based upon disability access issues where they cannot use material provided by an organisation (e.g. a website), and that complaint is not satisfactorily dealt with, they may take their complaint to the Australian Human Rights Commission (AHRC). The AHRC will then mediate and assist to get the issue resolved. However, if it cannot be resolved satisfactorily, and is considered by the AHRC as a verified issue, they will give the complainant leave to take civil litigation action, and may help in getting that complaint heard appropriately in court.

Australia has also adopted the European Standard EN 301549, adopting it in full and renaming it AS EN 301549. This Standard deals with the procurement of accessible ICT products and services. Use of this Standard is mandated for Australian Government procurement. In effect, it puts the requirement on a tenderer for Australian Government ICT services or products to ensure they are abiding by Australian government standards which are also the international standard, of the Web Content Accessibility Guidelines (WCAG). These Guidelines have been developed through the process of the World Wide Web Consortium (W3C). The current requirement in Australia is to meet WCAG 2.0 to at least level AA, while most countries are now moving to version 2.1. The Australian government recommends 2.1 but has not yet made this a firm requirement. Any person or organisation may stipulate in their procurement of an ICT product or service that it must comply with WCAG and/or AS EN 301549, putting the onus on the service provider to abide those requirements in order to satisfactorily complete their contract.

So, we have a legal mandate, and we have a procurement standard, so why are digital products still not accessible, and why are professional organisations not requiring some evidence of digital accessibility proficiency and ethics? In most areas of life, ignorance is not considered a sufficient excuse. It would be a poor excuse to offer ignorance of the speed limit to the police officer who wants to know why you are travelling 100 kph in a 60 kph zone – if you are driving the vehicle, you are expected to abide by the laws of the road. If you are going to operate a vehicle, construct a building, provide accounting services etc., there are rules you must abide by. Should the IT industry be any different?

In this panel session, the members of the panel will be discussing aspects of standards, professionalism, integrity and ethics in terms of digital inclusion from their different perspectives. The members represent digital accessibility consulting, academia and corporate entities and have unique perspectives on how digital accessibility activities can be transformed into 'business as usual' in their organisations, and how we can include this in teaching to those seeking to enter the IT industry. All of the panel members have a story to tell and are looking forward to sharing with the audience their perspective and some of the road they have travelled.

## 4 PANEL STRUCTURE

Dr Conway has invited key representatives from commerce, university and international business to discuss topics relating to the need for increased adherence of standards and respect for the rights of others. They will also discuss the role that professional association, standards and corporate social responsibility play in the inclusion of people with disabilities and seniors in our digital environment. The panel members will be asked questions relating to how they are dealing with the issue in their organisation, if they have managed to put it in the 'business as usual' process, and the pressing needs they see for the IT community to address. Together they will seek to find a consensus to increase the advocacy to represent the needs of people with disabilities and seniors in our digital world. The panel members will welcome questions from the audience as well as responding to questions from the panel chair.

### 4.1 Panel Members

Dr Vivienne Conway is the Director of Web Key IT Pty Ltd, and an acknowledged international expert in digital accessibility. Vivienne will cover a high-level review of the adoption of digital accessibility and ethics in IT and our obligations to people with disabilities and seniors. As a Fellow of the Australian Computer Society, member of W3C and W3C Evangelist for Australia specialising in accessibility, she will lead the panel's deliberations on these important issues by posing questions to the panel members to determine how their organisations are dealing with the issues of inclusivity and digital accessibility and attempt to draw out some key success factors of the more accessibly-mature organisation.

Amanda Mace is Operations Manager of Web Key IT and an expert in digital accessibility. She teaches the Certificate in Digital Accessibility which includes issues of ethics and business procedures for embedding accessibility. She also oversees the technical and user testing teams for Web Key IT. Amanda will look at the business perspective and how clients who demonstrate maturity use a Digital Accessibility Maturity Model to embed accessibility in their organisations. Organisations often view accessibility as benefiting only a small number of users. The 'Return on Investment' for money spent on accessibility compliance is not always obvious and requires organisations to scratch the surface. Those who embrace accessibility reduce costs, enhance their brand and extend their market reach. They also minimize their legal risk, complying with local legislative and International human rights obligations. Using a maturity model to capture where an organisation is in their accessibility journey ensures the achievements met are acknowledged and the checkpoints for improvement needed are documented and trackable. With processes, procedures and documentation in place, accessibility can be taken from hopeful concept to one practiced as part of standard operating procedure. As such, users with disabilities gain the equal access they are entitled to along with enhancing the experience for all users.

Dr Justin Brown is an Associate Professor and Associate Dean of Teaching and Learning at Edith Cowan University. He will discuss the issues surrounding teaching and embedding digital accessibility into university instructions and the skills that are required for students to successfully gain employment in IT in the future.

David Lucido Managing Director of Sentient Hubs, a new class of Decision Support Platform enabling holistic impact assessment across economic, environmental, and social dimensions. David will discuss the democratization of insights (Global to Local), and the breaking down of technical and political barriers to accelerate the achievement of Sustainable Development Goals.

Muhammad Saleem is the Manager of the Web Key IT office in Kuwait which services the Middle East operations. Muhammad is also a PhD Candidate at Edith Cowan University, having completed a Master's Degree which examined digital accessibility of e-government services in the Middle East. Muhammad will look at international implications of digital accessibility. He will discuss how digital accessibility is being adopted in Middle East and the implications of language on update of international standards.

## 5 REFERENCES

### PRESENTERS

**Dr Vivienne Conway** is the Director of Web Key IT Pty Ltd., which she founded in 2011. She is an internationally-recognised digital accessibility professional, researcher and public speaker, always advocating for the inclusion of people with disabilities and seniors in our increasingly digital world. Her vision is to enable full digital access for persons with disabilities and senior citizens. Vivienne and her team at Web Key IT assist organisations with web-based programs and information to meet the needs of people with disabilities as well as to understand their legal requirements for website accessibility and develop the tools needed to meet the internationally recognised website standards. Vivienne is also interested in the nexus between accessibility and security – the need to protect the privacy of individuals while making digital content as accessible as possible.

Vivienne is an ardent advocate for the effective recognition of the needs of people with disabilities and their inclusion in our digital society. She completed her PhD in IT (website accessibility) at Edith Cowan University. She is a Fellow and a Certified Professional (Snr) member of the Australian Computer Society. She is active in W3C and the working groups, where Web Key IT is a member and is one of the two Australian W3C Evangelists, tasked with promoting W3C involvement in Australia.

**Amanda Mace** is the Operations Manager at Web Key IT, Her role at Web Key IT includes providing accessibility consultation, training, website and document auditing, document remediation and project management. Amanda has presented at several conferences and events on both the practical implications and technical solutions for accessible digital products. She was also selected as a judge in the Accessibility category for the Australian Web Awards as well as judging in the Australian Access Awards. As an active member of two W3C working groups, the Accessibility Guidelines Working Group and the Education and Outreach Working Group as well as the Silver Taskforce, Amanda continues to contribute standards and guidelines to ensure a more accessible future for all.

**Associate Professor Justin Brown** states: My current role is Associate Dean (Teaching and Learning) in the School of Science at Edith Cowan University. I have a passion for learning and teaching, with my earlier research and PhD focussing on e-learning. In 2010 I became interested in digital accessibility, and in the years since I have seen then the challenges involved in improving accessibility in the commercial, public and education sectors. As a person with lived experience of a physical disability, I am keen to be involved in practical accessibility outcomes, especially in the higher education context.

**David Lucido** is Managing Director of Sentient Hubs, a new class of Decision Support Platform enabling holistic impact assessment across economic, environmental, and social dimensions. Sentient Hubs has been nominated as a finalist in the Best New Disruptive Platform category by ACS - the Professional Association for Australia's ICT sector. It's an Open Convergence Platform (100% technology neutral and vendor agnostic) built on 30 years of UWA environmental research and the latest data science. Notably, Sentient Hubs accelerates and democratise insights, making it easier and faster for Government, Corporates and Citizens to anticipate impacts via easy-to-use, contextualised dashboards:

- Understand when, where and how to deploy resources in a more sustainable way.
- Accelerate insights across economic, environmental, and social dimensions.
- Visualise and quantify complex impacts and inter-dependencies.

**Muhammad Saleem** states: I have been working as a web developer for 10 years. my specialty is managing, developing and auditing websites. I am a PhD candidate at Edith Cowan University With master's degree in computer science by research, major in Web accessibility for e- Government websites in the Gulf region. I am also the manager of the Web Key IT office in Kuwait which services the Middle East operations. I have volunteered with the Kuwait Blind Society and Abeer2 mentally disabled center. my passion is to educate developers and designers in the Middle East to implement accessibility features on their websites. I also head up the W3C Office for the GCC Region. I am keen to support the government of Kuwait to adopt international guidelines into Kuwaiti digital accessibility framework in Arabic language.

**Copyright:** © 2019 Conway, Mace, Brown, Lucido & Saleem. This is an open-access article distributed under the terms of the [Creative Commons Attribution-NonCommercial 3.0 Australia License](https://creativecommons.org/licenses/by-nc/3.0/au/), which permits non-commercial use, distribution, and reproduction in any medium, provided the original author and ACIS are credited.