

Office of the Government Chief Information Officer

Web Accessibility Experience Sharing Workshop for IT Practitioners



24 May 2012

Today's Speaker

Speaker

Mr. Terry LEUNG (representative of the OGCIO)

Enquiry

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Course Outline

This workshop will cover the following –

- Morning Session (9:30a.m - 12:35p.m) :
 - Digital 21 Strategy and Inclusive Society
 - What is web accessibility?
 - Importance of Web Accessibility
 - How Persons with Disabilities Access the Web
 - International and Government Practices
 - Four Principles of making websites accessible
 - Introduction to WCAG 2.0 Guidelines
 - Introduction to WCAG 2.0 Success Criteria and details



Course Outline

This workshop will cover the following –

- Afternoon Session (2:00p.m - 5:45p.m) :
 - Design and implement with WCAG 2.0.
 - Best practices on improving web accessibility of website
 - Experience Sharing Discussion
 - Q & A



Digital 21 strategy & inclusive society

One of five key areas of 2008 Digital 21 Strategy

- ***Building an inclusive, knowledge-based society***
- bring the benefit of ICT to disadvantaged groups
- enhance their quality of life
- strengthen their capacity in engaging with the development of information society



What is Web Accessibility?

- Making website content available for ALL
- Including persons with disabilities



What is Web Accessibility?

- Web accessibility means that persons with disabilities can use the Web.



Importance of Web Accessibility

- Social Responsibility
- Legal Responsibility
- Access to Hidden Markets
- Lower Costs in Long Term



Importance of Web Accessibility

- Social Responsibility
 - Everyone has a responsibility to treat persons with disabilities the same as we treat persons without disabilities.
- Legal Responsibility
 - The Disability Discrimination Ordinance (Cap 487) has created a legal duty for organisations to ensure their services are available to everyone regardless of disability.



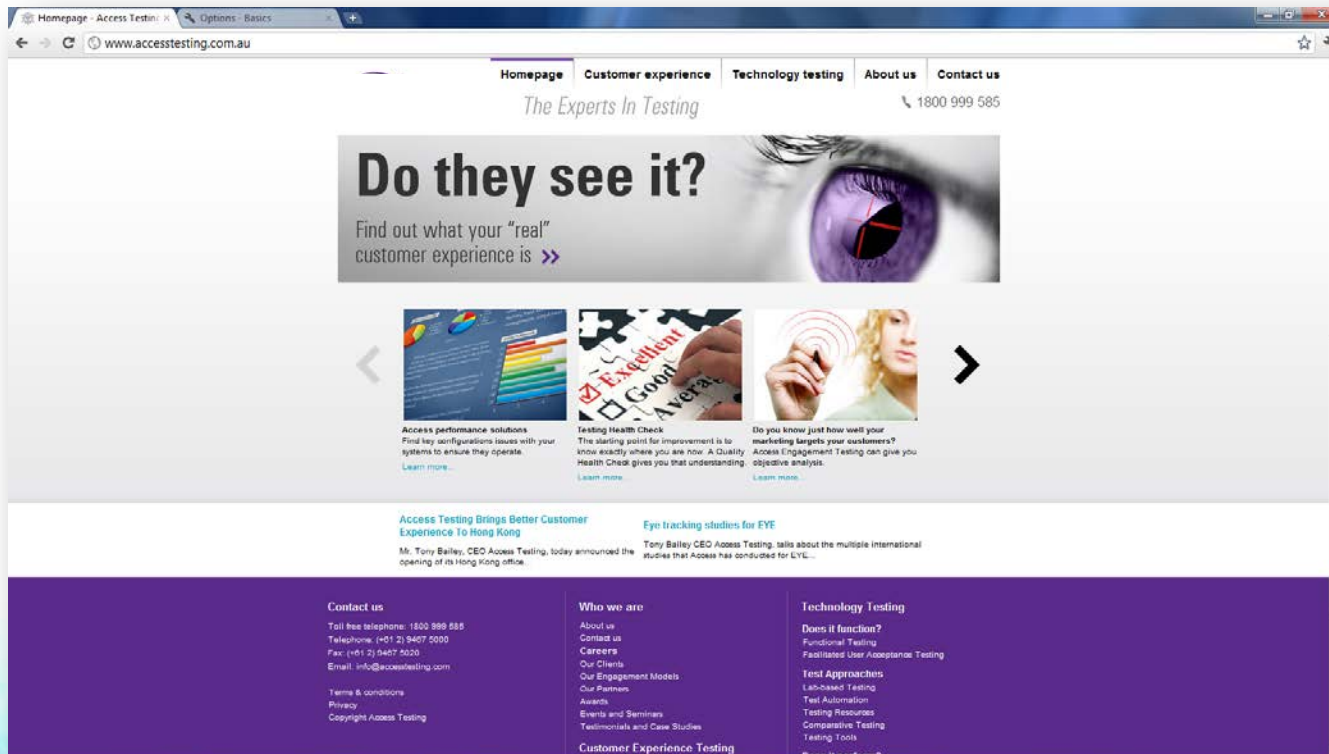
Importance of Web Accessibility

- Access to Hidden Markets
 - Effective web accessibility allows -
 - Government websites to reach more citizens and corporate websites to reach more online customers.
- Lower Costs in Long Term
 - on all website projects -
 - saves development time and money in the long term
 - websites that are easier to maintain and are compatible with different web browsers and devices such as Smart phones and Tablets



Importance of Web Accessibility

- Another Reason is that web sites are becoming increasingly complex...



The screenshot shows the homepage of www.accesstesting.com.au. The browser window title is 'Homepage - Access Testin' and the address bar shows 'www.accesstesting.com.au'. The navigation menu includes 'Homepage', 'Customer experience', 'Technology testing', 'About us', and 'Contact us'. The main heading is 'The Experts In Testing' with a phone number '1800 999 585'. A large banner asks 'Do they see it?' and 'Find out what your "real" customer experience is >>'. Below the banner are three featured articles: 'Access performance solutions', 'Testing Health Check', and 'Do you know just how well your marketing targets your customers?'. The footer contains contact information, 'Who we are', and 'Technology Testing' details.

Homepage - Access Testin' Options - Basics
www.accesstesting.com.au

Homepage Customer experience Technology testing About us Contact us
The Experts In Testing 1800 999 585

Do they see it?

Find out what your "real" customer experience is >>

Access performance solutions
Find key configuration issues with your systems to ensure they operate.
[Learn more...](#)

Testing Health Check
The starting point for improvement is to know exactly where you are now. A Quality Health Check gives you that understanding.
[Learn more](#)

Do you know just how well your marketing targets your customers?
Access Engagement Testing can give you objective analysis.
[Learn more](#)

Access Testing Brings Better Customer Experience To Hong Kong
Mr. Tony Bailey, CEO Access Testing, today announced the opening of its Hong Kong office.

Eye tracking studies for EYE
Tony Bailey CEO Access Testing, talks about the multiple international studies that Access has conducted for L'Oréal.

Contact us
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Who we are
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Our Clients
Our Engagement Models
Our Partners
Assets
Events and Seminars
Testimonials and Case Studies
Customer Experience Testing

Technology Testing
Does it function?
Functional Testing
Facilitated User Acceptance Testing

Test Approaches
Load-based Testing
Test Automation
Testing Resources
Comparative Testing
Testing Tools
How it performs?

How Persons with Disabilities Access the Web

- There are four major categories of disabilities
 - Visual Impairment
 - Physical Impairment
 - Hearing Impairment
 - Cognitive Impairment
- Also applies to people who have been temporarily injured



How Persons with Disabilities Access the Web

- Visual Impairment
 - In this case people either can't see a computer screen at all, or have difficulty seeing a computer screen.
 - It is critical that websites are designed to work with screen reading software, screen magnifiers and colours that are visible to colour blind people.



How Persons with Disabilities Access the Web

- Visual Impairment

An audio is played 



How Persons with Disabilities Access the Web

- Visual Impairment



關於香港 幫助 政府機構 網上服務 表格

我的政府一站通 流動/無障礙瀏覽 RSS 我的自訂色彩 A A A English | 简体 | 其他語言 ▼

GovHK 香港政府一站通

本港居民 商務及貿易 非本港居民 青少年 輸入查詢字串

2011年9月30日 星期五 熱門搜尋： 招聘、\$6000、商業登記

2011-12 施政報告

行政長官 施政報告 及財政預算案 公眾諮詢

2012-13 財政預算案

\$6,000計劃 施政報告及財政預算案公眾諮詢 2011年區議會選舉 課內課外的學習資源

你想找什麼？

- 入境事務
- 通訊及科技
- 文化、康樂及運動
- 就業
- 房屋及社會服務
- 稅務及應課稅品
- 保健及醫療服務
- 運輸及駕駛事務

我想...

- 使用「稅務易」服務
- 預約申請旅行證件
- 申請政府工
- 找政府網站和聯絡資料
- 預約申領香港智能身份證
- 找婚姻登記的資訊

登入 MYGOVHK 我的政府一站通

想知道我的政府一站通?按此了解更多

28°C 85% [下午1:05] 天氣預報

空氣污染指數

- 一般監測站: 20 - 40 輕微至中等
- 路邊監測站: 41 - 47 中等

How Persons with Disabilities Access the Web

- Physical Impairment
 - It is important to make buttons large and not place important items too close together
 - Also ensure the website works with assistive technologies such as voice control software.



How Persons with Disabilities Access the Web

- Hearing Impairment
 - If information is being conveyed by audio, you will need to ensure an alternative way to access this information is provided.
 - Provide a text transcript of audio content or subtitles on the video.



How Persons with Disabilities Access the Web

- Cognitive Impairment
 - Although they don't require any special tools to use websites they may find the content of websites more difficult to interpret than average persons.
 - This should be kept in mind when organisations are writing content for their websites.



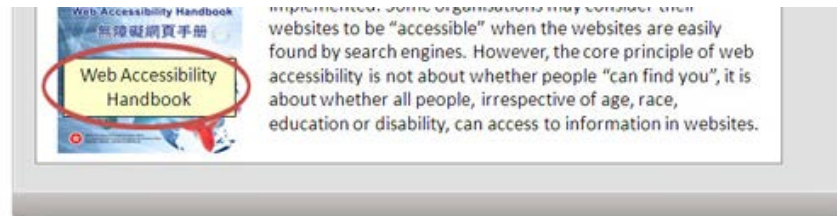
How Persons with Disabilities Access the Web

- Common concerns of Persons with Disabilities in accessing website?

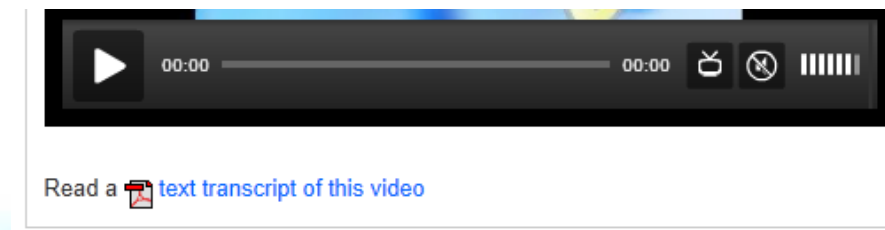


How Persons with Disabilities Access the Web

- No Alternatives for Non-text Information
 - Images should contain descriptive text alternative that effectively describes the image.



- Video content should include text transcripts that can be interpreted by screen reading software.



How Persons with Disabilities Access the Web



Say "NO" to Computer Viruses
Dialogue Script (in PDF format)
Duration: 3:11
WMV Format (16.8MB) | MP4 Format (8.37MB)

The sequence of dialogue script are the same as the sequence in the video content itself.



I guess we should take good care of ourselves too



But many of my teammates got sick and



Videos on Information Security - Say "NO" to Computer Viruses (Dialogue Script)

- On: Many colleagues got sick lately.
- Po: That's so true. I guess we should take good care of ourselves too.
- On: Bye now. Take care!
- On: Chuen, are you sick too?
- Chuen: No, I'm not. But many of my teammates got sick and I'm wearing a mask just to avoid being infected. You know, if I get sick, I can't come to the office and do my job.
- On: Your preventive measure against virus is really stringent and proactive. But have you done enough to protect your computer from computer viruses?

How Persons with Disabilities Access the Web

- Small Font Sizes or Insufficient Colour Contrast

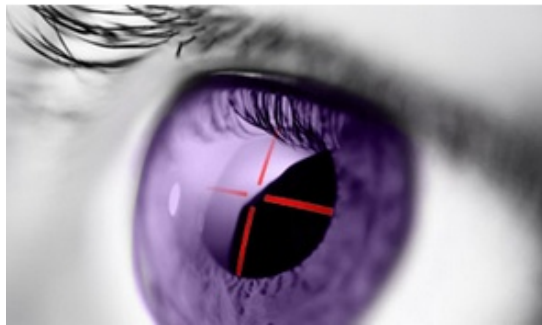
Do they see it?

Find out what your “real”
customer experience is >>



How Persons with Disabilities Access the Web

- Unable to Skip Inaccessible Adobe Flash and Moving Objects



How Persons with Disabilities Access the Web

- Websites with background Audio



How Persons with Disabilities Access the Web

- Complicated Web Site infrastructure

Customer experience

Are your customers engaged?

Customer Engagement Testing

Eye Tracking

Customer Experience Consulting

Can your customers use it?

Competitor Benchmarking

Usability Testing

Accessibility

Expert Reviews

Mobile Internet

Information Architecture

Access Testing

Options - Basics

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Homepage Customer experience Technology testing About us Contact

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Access performance solutions
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ONLINE SHOPPING



Testimonials and Case Studies

Here's a sample of what our Customers say about us. For more detail, please contact us directly.



"EYE, as an international out-of-home media company, has now been working with Access Testing for a period of 4 years. Access Testing has proved to be the right partner. Like EYE, its drive to be at the front of the pack and not a straggler at the back of the pack has seen us together."

Contact us

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Technology Testing

Does it function?
[Functional Testing](#)
[Facilitated User Acceptance Testing](#)

Test Approaches
[Lab-based Testing](#)
[Task-based Testing](#)

SOCIAL MEDIA

How Persons with Disabilities Access the Web

- Difficulties in Accessing PDF Documents
 - Text content in PDF documents created by using scanners is generally not accessible.
 - Avoid scanning when preparing PDF documents if the text-based sources are available.
 - Or process by Optical Character Recognition (OCR) software after scanning.



International Standards

- The Web Content Accessibility Guidelines (WCAG) have been developed over the years by the World Wide Web Consortium (W3C) consisting of people from industries, disability organisations, government, and research labs from around the world

<http://www.w3.org/WAI/>



International Standards

- The Guidelines consist of four parts

4 Principles

```
graph TD; A[4 Principles] --> B[12 Guidelines]; B --> C[61 Success Criteria]; C --> D[Many Techniques]
```

12 Guidelines

61 Success Criteria

Many Techniques

International Standards

- Conformance Level "A"



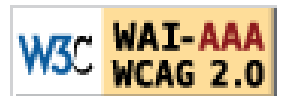
- All Level A success criteria are satisfied

- Conformance Level "AA"



- All Level A and AA success criteria are satisfied

- Conformance Level "AAA"



- All Level A, AA, and AAA success criteria are satisfied

<http://www.w3.org/WAI/WCAG2-Conformance.html>



International and Government Practices

- In latest version (Version 2.0) there are three Levels of conformance -

Level A 25 success criteria	Level AA +13 success criteria	Level AAA +23 success criteria
Basic	Recommended	Ideal

Level AA Conformance



International Standards

- “W3C provides conformance logos for Web Content Accessibility Guidelines (WCAG) 2.0
 - Content providers can use these logos on their sites to indicate a claim of conformance to a specified conformance level...

<http://www.w3.org/WAI/WCAG2-Conformance.html>



International and Government Practices

- Many economies are adopting WCAG 2.0 AA guidelines for public facing websites

GOVERNMENT	DEADLINE
New Zealand	June 2010
Canada	July 2013
Singapore	December 2013
Australia	December 2014

International and Government Practices

- United States
 - Section 508 requires that electronic and information technology that is developed by or purchased by the Federal Agencies be accessible by persons with disabilities.
 - Section 508 provides accessibility standards for all information technology.
 - Computer software, hardware, and documentation are all covered by Section 508.



International and Government Practices

- United Kingdom
 - The Equality Act came into force in October 2010, replacing the Disability Discrimination Act (DDA) in England, Scotland and Wales.
 - The Act is 'anticipatory', which means you cannot wait until a disabled person wants to use your services. You must think in advance (and on an ongoing basis) about what disabled people with a range of impairments might reasonably need.



HKSAR Government Practices

- HK Government has been implementing web accessibility guidelines since 1999, based on a version of W3C WCAG
- HK Government websites, except archive materials, are required to conform to W3C WCAG 2.0 Level AA by 2013
- Encourage quasi-government and public service organisations to take corresponding action



Four Principles of Making Websites Accessible

- Principle 1: Perceivable - Information and user controls must be presented to users in ways they can perceive.

Text Alternatives



The image shows the cover of the 'Web Accessibility Handbook'. The top half features the text 'Web Accessibility Campaign' and '無障礙網頁運動' (Web Accessibility Campaign) in purple and blue. Below that, it says 'Making Web Content Available for All' and '上網無障礙 障健任通行'. The bottom half features the title 'Web Accessibility Handbook' and '無障礙網頁手冊' in blue and white. The cover art includes a globe, a person with a wheelchair, and other accessibility icons.

This Handbook is designed for senior executives and managers to better understand the importance of web accessibility and show how it can be successfully implemented. Some organisations may consider their websites "accessible" when the websites are easily found by search engines. However, the core principle of web accessibility is not about whether people "can find you", it is about whether all people, irrespective of age, race, education or disability, can access to information in websites.

Four Principles of Making Websites Accessible

- Principle 2: Operable – User control components and navigation must be operable by user.



Four Principles of Making Websites Accessible

- Principle 3: Understandable - Information and the operation of user interface must be understandable.

Error Suggestion

[Home](#) > [Community Initiatives and IT Services](#) > Web Accessibility

5 errors are found

Web Accessibility Suggestion Box

Name : Please provide your name.

Telephone Number : Please provide your telephone number.

(Please provide country/area codes if outside Hong Kong)

E-mail Address : Please provide your e-mail address.

Suggestion / Comment : Please provide your suggestion/comment.

Enter the characters in the image Please enter the characters in the image.

Four Principles of Making Websites Accessible

- Principle 4: Robust – Content must be robust enough for reliable interpretation by a wide variety of web browsers, media players and assistive technologies.



Four Principles of Making Websites Accessible

- Within each of these principles are a range of guidelines focusing on different types of content
 - For example: WCAG 2.0 Guideline 2.1
“Keyboard Accessible: Make all functionality available from a keyboard.”
 - We will look at these examples in the latter part.

