Lessons from Good Practices to Guide Universal Design Toolkits

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Lessons from Good Practices to Guide Universal Design Toolkits

Executive Summary

In 2012, the National Standards Authority of Ireland (NSAI) published SWiFT 9:2012 ‘Universal Design for energy suppliers’. This recommendatory document provides guidance to energy suppliers on how to apply Universal Design in the development of accessible and usable products and services for household customers. Subsequently, Irish Standard 373:2013 ‘Universal Design for customer engagement in tourism services’ (currently in draft format) was developed. This national specification provides an industry best practice reference on design requirements for the application of Universal Design by tourism service providers.

The Universal Design Toolkit for Customer Engagement will provide the information conveyed in SWiFT 9:2012 and the Irish Standard 373:2013 in a practical and easy to understand way. Its aim is to provide good practice guidance that will help tourism and energy service managers, developers and procurers to provide better customer service and to comply with the objectives and regulations associated with Universal Design.

This Toolkit strives to improve the usability of products and services for as many people as possible, without adding additional costs. The Toolkit will provide guidance on developing products and services that are easy to access, use and understand by all customers regardless of their age, size or range of abilities.

Customer engagement

In 2012, the tourism sector in Ireland announced that they were targeting a 2% increase in tourist numbers. Improving customer’s experience is a beneficial and powerful tool for growing businesses, this is because:

- A customer journey is a circle, not a straight line. Therefore the importance of managing the customer’s entire experience with a product or company is very important. 70% of American customers are willing to spend an average of 13% more with companies who they feel provide above-par customer service. (Echo Report. 2012).

- The number of older people (over the age of 65) in Ireland has increased by 14% since the previous census. (CSO, 2011). This is important because older people are a growing and powerful market segment, so by providing good customer service, service providers have the opportunity to target a much larger market. This is supported by the finding that the over 50s age group buy 40% more holidays than the under 30s, averaging five or six breaks per year. (VisitEngland, ‘Easy does it’).

Customer engagement touch points

Customer engagement in the energy and tourism sectors addresses a broad range of touch points. Utility providers are increasingly offering new and bigger selections of communication methods (for example, traditional phone calls, inviting customers to visit social media pages, email or online forms).
Similarly, tourism information which previously was typically provided first-hand by the tourism service provider, is increasingly sought through other communication channels such as online reviews websites, blogs, chats, and open communities focused on special interest tourism or certain destinations. This change in behaviour is epitomised by the finding that in a study 72% of participants trusted online customer reviews as much as a personal recommendation. (Brightlocals, 2012).

Different touch points are used to address different issues that customers have within a business. It was found that phone calls are the preferred method of communication for more complex issues such as billing disputes or complaints. While websites were preferred for simple issues such as obtaining information on a service.

Due to the broad range of touch points used across the tourism and energy sectors to engage with customers, it was determined through the literature review (and based on I.S. 373:2013 and SWiFT 9:2012) that the Toolkit would provide guidance under three overarching headings:

- Written communication
- Verbal communication
- Electronic and web-based communication.

**Methodology**

A three stage research strategy has been developed to ensure that the Toolkit is aligned with the needs and business objectives of tourism and energy stakeholders and their customers. The three stage research strategy includes:

1. **A Literature review:** the research outlined in this report, explores international best practice in the Universal Design of customer engagement in both the tourism and energy sectors. It also explores methods in measuring and assessing the impact of applying Universal Design in customer engagement.

   Based on the findings and recommendations from this literature review, a draft ‘Universal Design Toolkit for customer engagement’ will be developed.

2. **A Stakeholder consultation:** This will involve one-to-one interviews with key stakeholders and diverse customer users groups. This research stage is focused on gaining insight on the needs and business objectives of the key stakeholders. The interview responses will be analysed and common patterns identified. Based on this information a set of criteria will be developed which the Toolkit must meet to be a useful resource for the end users.

3. **Masterclasses:** This will involve a series of three workshops to trial, validate and refine the Toolkit with customer services stakeholder groups and service developers.

This three stage research process has been designed so that energy and tourism stakeholders, as well as their customers, play a key role in the Toolkit development.
This will ensure that from an initial stage of development, the Toolkit will be based on the needs of key stakeholders and customers.

**Key Findings**

Key findings from the literature review identified that:

- Universal Design and accessibility customer engagement guidelines were more common in the tourism sector than the energy sector.

- While the guidelines and research identified and outlined in this document are focused specifically on the energy and the tourism sector, much of the information is transferable to many industries outside of these two sectors.

- There was a general lack of specific information and guidance on the development of items, such as menu design or bill design.

- The differentiating factor in the majority of guidance documents relates to the presentation of the information, rather than the content itself.

- The key to success in the design and development of a Universal Design Toolkit for Customer Engagement is presenting the information in a way that is concise, easy to understand and apply, and presented in a logical sequence.

- The concept of ‘quality of welcome’ is of great importance; a consideration beyond just verbal communication, but which relates to the staff’s body language and attitude.

  VisitEngland.org identified that the ‘quality of the welcome’ is measured by potential visitors perceptions based on PR and recommendations, first impressions at key touch points, the feeling of warmth expressed by the people and places and ultimately customer service satisfaction leading to a desire to recommend and return.

- Many members of staff may have limited experience in communicating with customers who have specific difficulties. It is therefore important at a basic level that staff are provided with guidance on the words and phrases to use to interact with customers.

The aim of this research stage is to identify best practice for developing and implementing toolkits for Universal Design and based on this learning provide recommendations to the Toolkit author for the development of the draft Toolkit. The resultant draft Toolkit will be designed to define, apply and measure Universal Design in customer services designs.
# Table of Contents

**Context**.................................................................................................................. 2

1. **Introduction** ............................................................................................................. 2
   1.1 Methodology ........................................................................................................... 3
   1.2 Customer engagement ......................................................................................... 4
   1.3 Definition of toolkit .............................................................................................. 6

2. **Universal Design, Accessibility and Usability** ......................................................... 8
   2.1 Universal Design .................................................................................................. 8
   2.2 Usability .............................................................................................................. 11
   2.3 Accessibility ........................................................................................................ 14
   2.4 W3c web “standards” ......................................................................................... 14
   2.5 Key Findings ....................................................................................................... 15

3. **Customer engagement touch points** .................................................................... 18
   3.1 Energy sector ...................................................................................................... 18
   3.2 Tourism industry ................................................................................................. 21

**Toolkit Research** ......................................................................................................... 26

4. **Toolkit Structure** .................................................................................................... 26
   4.1 Written Communication .................................................................................... 27
   4.2 Face-to-face communication .............................................................................. 44
   4.3 Online and Electronic Communication ............................................................. 57

5. **Toolkit Information** ................................................................................................ 73
   5.1 Tools to apply and measure customer engagement ............................................. 73
   5.2 Communicating information .............................................................................. 83

6. **Communicating the Business Case** ..................................................................... 93
   6.1 Key findings ....................................................................................................... 98

**Policies, Standards & Guidelines** .............................................................................. 99

7. **National and International Policies, Standards and Guidelines** ......................... 99

**Guidelines to Toolkit Authors** .................................................................................. 102

8. **Recommendations for toolkit authors** .................................................................. 102

9. **Glossary** ............................................................................................................... 113

10. **Bibliography** ....................................................................................................... 114
Lessons from Good Practices to Guide Universal Design Toolkits

**Context**

**1. Introduction**

In 2012, the National Standards Authority of Ireland (NSAI) published SWiFT 9:2012 ‘Universal Design for energy suppliers’; providing guidance and requirements to energy suppliers on how to apply Universal Design in the development of accessible and usable products and services for household customers. Subsequently Irish Standard 373:2012 ‘Universal Design for customer engagement in tourism services’ was developed, and is currently in draft 7, with publication due in 2013. This Irish Standard provides an industry best practice reference on design requirements for the application of Universal Design by tourism service providers.

The national disability authority (NDA) has identified the need for a practical toolkit for the Universal Design of customer engagement. This toolkit will include a set of resource materials on methods and specifications that are proven to help define, apply and measure Universal Design in customer engagements.

The Universal Design Toolkit for Customer Engagement, will build on existing knowledge and research (including the NSAI SWiFT 9:2012 Universal Design for energy suppliers and I.S.373:2012 ‘Universal Design for customer engagement in tourism services’) in developing a best practice Universal Design Toolkit for Customer Engagement in both the tourism and energy sectors.

This literature review has been undertaken on behalf of the national disability authority (NDA) as part of a three stage research and development process. This is composed of an in-depth literature review, consultation with key stakeholders and a series of masterclasses. Through this research ‘the Universal Design Toolkit for Customer Engagement’ for the tourism and energy sectors will be developed, trialled and tested.
### 1.1 Methodology

This literature review draws on a range of government and private sector information, as well as proprietary databases such as Frost & Sullivan, bcc research, key note, Datamonitor and the National Standards Authority of Ireland. Search engines used as part of the research strategy included google, google scholar, google advanced search, and bing to help find existing resources for service providers in the UK and abroad.

Key search terms, synonyms and related terms for research include: accessibility, customer service, Universal Design, inclusive design, design for all, customer charter, customer experience management, customer engagement, design toolkits, inclusive design toolkits, customer touch points and customer retention policies.

Research was undertaken in best practice in Universal Design toolkits for the energy and customer sectors, both nationally and internationally. This ranged from guidance publications, online resources and training, to reports and legislative documents. Universal Design of customer services in tourism bodies and energy suppliers both nationally and internationally were researched. This included current customer engagement guidelines from Irish energy suppliers and international service providers. Toolkits and guidelines from national and international government bodies, tourism bodies and disability organisations were researched, including the national tourism board for England, tourism Queensland, Ontario ministry of community, social services and Fáilte Ireland.

This report reviewed various topics and search criteria in relation to Universal Design for customer engagements in the energy and tourism sectors. From the literature research it was found that customer engagement guidelines with Universal Design principles are more common for the tourism sector than the energy sector.

The aim of this literature review is to provide best practice strategies, approaches, resources and tools for the development of a Universal Design toolkit for customer engagement. The subsequent toolkits will guide the energy and tourism sectors so their services can be accessed, understood and used by people regardless of their age, size, ability or disability.
1.2 Customer engagement

“The purpose of a business is to create and keep a customer” Peter Drucker 1

Customer engagement is the customer’s experience of a brand, product, service, and their perception of that experience. 2 While customer engagements vary depending on the product or service offering, it is important to consider that customer service is not a series of one off interactions and dealing with complaints; it is about building relationships that are ongoing. 3

In 2003 Bernd Schmitt was given recognition for first defining customer experience management as “… the process of strategically managing a customer’s entire experience with a product or company”. This is supported by the Echo report ‘2012 Global Customer Service Barometer’, which found that 70% of American customers are willing to spend an average of 13% more with companies who they feel provide above-par customer service. 4

Customer engagement is the interaction between customers and service providers, whether the interactions have monitory or non-monitory transactions. A survey of 311 company executives by the Economist Intelligence Unit (2007) identified that the majority of the participants believed that for future growth high customer engagement was necessary. The survey also identified that low customer engagement will result in lost sales, lost opportunities and negative word of mouth (cited by Kumar et al, 2010). 5

The intent of Universal Design is to simplify tasks for everyone by making products, communications, and the built environment more usable for as many people as possible at little or no extra cost. 6

By applying Universal Design principles, organisations can produce products and services that are usable by all persons, to the greatest extent possible, ideally without the need for adaption or specialised design. Applying Universal Design to customer engagements is not just about ramps or automatic door openers. Universal Design is about understanding that people, regardless of their age, size or ability have different needs. Applying Universal Design can be as easy as asking “how can I help?” And making small changes to customer engagements so people regardless of their age, size or ability can use the service.

Lessons from Good Practices to Guide Universal Design Toolkits

The 2011 Irish Census identified that the number of older people (over the age of 65) increased by 14% since the previous census. Alongside this rapidly increasing figure, the census 2011 also identified that 13% of people in Ireland have some type of long-term difficulty, a statistic which increases significantly with age (see figure 1 below).

Figure 1 shows that impairments significantly increase with age. Difficulties with basic physical activities, pain, breathing or other chronic illness become more prevalent with age.

![Figure 1: ‘Types of impairments by age group’](source: Central Statistics Office, 2012)

The aim of this document is to conduct a literature review identifying best practise for developing and implementing Universal Design principles for customer engagement with the energy and tourism sectors.

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1.3 Definition of toolkit

The Oxford Dictionary defines a toolkit as a set of tools, used for a particular purpose or a personal set of resources, abilities, or skills.8

Toolkits are applied and used by a range of industries and sectors, for a variety of purposes and in a variety of formats; from toolkits developed by the HM Revenue and Customs to help reduce errors to the tourism business toolkit developed by Destination NSW as a resource to support tourism operators through information, helpful tools, and details of organisations to contact for further assistance.9

The purpose, format and content presented by toolkits vary from providing “a framework and best practices in measuring usage and impact” (‘toolkit for the impact of digitised scholarly resources’),10 to a more specific set of tools such as checklists, explanatory notes and cross references, linking to relevant guidance available online. (the HM Revenue and Customs’ toolkit to help reduce errors of essential information).11

Toolkits can communicate in different formats, for example ‘Small Biz Connect’ has developed a toolkit for small businesses, which communicates a large amount of its information through videos.12 In comparison NESTA’s ‘Creative Enterprise Toolkit’ is a step-by-step interactive resource.13

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Therefore in the context of this project, it is proposed that the Universal Design toolkit for customer engagement should provide a ‘step-by-step’ framework and best practice guide in the Universal Design of customer engagement, to measure usage and impact through an interactive approach.

Based on existing toolkits, the following methods of communication are suggested as part of the Toolkit.

<table>
<thead>
<tr>
<th>3 Attributes of toolkits</th>
<th>Communicating information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>• Explanatory notes</td>
</tr>
<tr>
<td></td>
<td>• Referencing relevant resources</td>
</tr>
<tr>
<td><strong>Usage</strong></td>
<td>• Tools</td>
</tr>
<tr>
<td></td>
<td>• Checklists</td>
</tr>
<tr>
<td></td>
<td>• Worksheet activities</td>
</tr>
<tr>
<td></td>
<td>• Case stories</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
<td>• Quizzes</td>
</tr>
<tr>
<td></td>
<td>• Test yourself</td>
</tr>
<tr>
<td></td>
<td>• Question sets</td>
</tr>
</tbody>
</table>
2. Universal Design, accessibility and usability

2.1 Universal Design

Section 3 of the European Communities (internal market in electricity and gas) (consumer protection) regulations of 2011, states that suppliers must apply the principles of Universal Design in the development of their products, services and communications to customers.

In 2012, the National Standards Authority of Ireland (NSAI) published SWiFT 9:2012 ‘Universal Design for energy suppliers’; providing guidance and requirements to energy suppliers on how to apply Universal Design in the development of accessible and usable products and services for household customers.

Subsequently Irish standard 373:2012 ‘Universal Design for customer engagement in tourism services’ was developed, and is currently in draft 7, with publication due in 2013. This Irish standard provides an industry best practice reference on design requirements for the application of Universal Design by tourism service providers. This standard will help tourism service providers to meet their legal obligations under the Equal Status Acts 2000-2011 and the Disability Act 2005 (where applicable).

According to the Irish Disability Act (2005), Universal Design is about ensuring that products and services can be accessed, understood and used to the greatest practicable extent possible by household customers of any age, size, ability or disability.

2.1.1 Principles and Guidelines of Universal Design

In 1997, the Center for Universal Design (North Carolina State University) developed a set of 7 Principles and 29 Guidelines which provide guidance on the general application of Universal Design when designing and procuring products and services.\(^\text{14}\)

Each of the 7 Principles of Universal Design has 4 or 5 descriptive guidelines. These principles and guidelines are used to examine existing designs, guide the design process and act as a source of information on designing more usable products and environments.

The 7 Principles of Universal Design are:  

- **Principle 1: Equitable Use**  
The design is useful and marketable to people with diverse abilities

- **Principle 2: Flexibility in Use**  
The design accommodates a wide range of individual preferences and abilities

- **Principle 3: Simple and Intuitive Use**  
Use of design is easy to understand, regardless of the user’s experience, knowledge, language skills or current concentration level

- **Principle 4: Perceptible Information**  
The design communicates necessary information effectively to the user, regardless of ambient conditions or the user’s sensory abilities

- **Principle 5: Tolerance for Error**  
The design minimises hazards and adverse consequences of accidental or unintended actions

- **Principle 6: Low Physical Effort**  
The design can be used effectively and comfortably and with a minimum fatigue

- **Principle 7: Size and Space for Approach and Use**  
Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user’s body size, posture, or mobility

### 2.1.2 Four Steps of Universal Design

SWiFT 9:2012 and I.S.373:2012 (draft 7) identified 4 steps that customers typically go through when interacting with information. Each step is associated with a Universal Design principle. These steps are:  

- **Step A: Perception**: customer uses their eyes, ears or sense of touch to perceive content. (Universal Design Principle 4).

- **Step B: Discoverability**: customer finds the information they want. (Universal Design Principle 2).

- **Step C: Understanding**: customer interprets and understands how to use this content. (Universal Design Principle 3).

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Lessons from Good Practices to Guide Universal Design Toolkits

- **Step D: Use**: customer decides how to use and act on the content presented. (Universal Design Principle 5).

Additionally SWiFT 9: 2012 and I.S.373:2012 (draft 7) have built on the 4 steps identified previously by developing “Guiding Tables”. These provide assistance in applying Universal Design principles and guidelines in the development of products and services.

The ‘Guiding Tables’ focus on 4 principles (4, 2, 3 and 5) which provide key questions to guide energy suppliers/tourism service providers through the process of basic design evaluation for usability. This approach provides a practical tool to measure and address whether Universal Design principles have been applied to the products and services supplied by tourism service providers and energy suppliers.

An example of these ‘Guiding Tables’ is shown in Figure 2 below. This table is for ‘Step A: Customer Perceiving Content’, and shows in the left column the guidelines for Universal Design Principle 4, and in the right column are guiding questions for evaluating usability.

**Figure 2: Guiding Table: Step A: Customer perceiving content**

<table>
<thead>
<tr>
<th>Guidelines for Principle 4</th>
<th>Does your product or service feature enable information to be easily perceived?</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a. Use different modes (pictorial, verbal, tabular) for redundant presentation of essential information.</td>
<td>Does your product or service offer the same content in a variety of different formats such as text, image, and sound or by touch?</td>
</tr>
<tr>
<td>4b. Maximize legibility of essential information.</td>
<td>Are text properties optimized according to the document design guidelines?</td>
</tr>
<tr>
<td>4c. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).</td>
<td>Are instructions, assistance and support available in written and audio format?</td>
</tr>
<tr>
<td></td>
<td>Is the help written in plain English?</td>
</tr>
<tr>
<td></td>
<td>Is the document structured in a way so that help topics can easily be found?</td>
</tr>
<tr>
<td></td>
<td>Can functional elements be easily described in written or audio format?</td>
</tr>
<tr>
<td></td>
<td>For the purpose of providing assistance in use e.g. instructions or help?</td>
</tr>
<tr>
<td>4d. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.</td>
<td>Can your customer easily change text, image size and audio volume to the extent that your product or service can be perceived by people with sensory limitations?</td>
</tr>
<tr>
<td></td>
<td>Does your product or service offer ways to interact with assistive techniques or devices for assisted communication?</td>
</tr>
</tbody>
</table>

Source: NSAI, SWiFT 9:2012.  

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2.2 Usability

Usability is the “extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use”; as defined by ISO 9241-11.

The usability measures identified by ISO 9241-11 are: 20

- Effectiveness: the accuracy and completeness with which users can achieve specified goals in particular environments
- Efficiency: the resources expended in relation to the accuracy and completeness of goals achieved
- Satisfaction: the comfort and acceptability of the work system to its users and other people affected by its use

Jakob Neilson, an expert in evidence-based user experience, builds on this definition by describing usability as a quality attribute that assesses how easy user interfaces are to use, as well as a method of improving ease-of-use during the design process.

Neilson defined usability by 5 quality attributes: 21

- Learnability
- Efficiency
- Memorability
- Errors
- Satisfaction

This is expanded on by usability.gov, a US government source on usability, which defines usability as a way of measuring “the quality of a user’s experience when interacting with a product or system—whether a web site, a software application, mobile technology, or any user-operated device”. 22

It provides the following definitions of the 5 design attributes: 23

- **Ease of learning** - how fast can a user who has never seen the user interface before learn it sufficiently well to accomplish basic tasks?
- **Efficiency of use** - once an experienced user has learned to use the system, how fast can he or she accomplish tasks?

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• **Memorability** - if a user has used the system before, can he or she remember enough to use it effectively the next time or does the user have to start over again learning everything?

• **Error frequency and severity** - how often do users make errors while using the system, how serious are these errors, and how do users recover from these errors?

• **Subjective satisfaction** - how much does the user like using the system?

While there are more definitions and opinions on the definition of ‘usability’ it was felt that the above reference terms provide a rigorous framework that addresses the key qualities of usability.

Although using different terminology, there is a close interlink between the quality attributes of “usability” and the principles of Universal Design. The relationship and overlap between usability and Universal Design have been illustrated in table 1 below.
Lessons from Good Practices to Guide Universal Design Toolkits

Table 1: Usability Attributes Vs. 7 Principles Of Universal Design

<table>
<thead>
<tr>
<th>Quality attributes of Usability 24 25</th>
<th>Corresponding Universal Design principles 26 27</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfaction</strong></td>
<td><strong>Universal Design Principle 1: Equitable use</strong></td>
</tr>
<tr>
<td>Subjective satisfaction - How much does the user like using the system?</td>
<td>The design is useful and marketable to people with diverse abilities</td>
</tr>
<tr>
<td><strong>Efficiency</strong></td>
<td><strong>Universal Design Principle 2: Flexibility in use</strong></td>
</tr>
<tr>
<td>Efficiency of use - Once an experienced user has learned to use the system, how fast can he or she accomplish tasks?</td>
<td>The design accommodates a wide range of individual preferences and abilities</td>
</tr>
<tr>
<td><strong>Learnability</strong></td>
<td><strong>Universal Design Principle 3: Simple and intuitive use</strong></td>
</tr>
<tr>
<td>Ease of learning - How fast can a user who has never seen the user interface before learn it sufficiently well to accomplish Basic tasks?</td>
<td>Use of design is easy to understand, regardless of the user’s experience, knowledge, language skills or current concentration level</td>
</tr>
<tr>
<td><strong>Memorability</strong></td>
<td><strong>Universal Design Principle 3: Simple and intuitive use</strong></td>
</tr>
<tr>
<td>If a user has used the system before, can he or she remember enough to use it effectively the next time or does the user have to start over again learning everything?</td>
<td>Use of design is easy to understand, regardless of the user’s experience, knowledge, language skills or current concentration level</td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td><strong>Universal Design Principle 4: Perceptible information</strong></td>
</tr>
<tr>
<td>The accuracy and completeness with which users can achieve specified goals in particular environments</td>
<td>The design communicates necessary information effectively to the user, regardless of ambient conditions or the user’s sensory abilities</td>
</tr>
<tr>
<td><strong>Error</strong></td>
<td><strong>Universal Design Principle 5: Tolerance for error</strong></td>
</tr>
<tr>
<td>Error frequency and severity - How often do users make errors while using the system, how serious are these errors, and how do users recover from these errors?</td>
<td>The design minimises hazards and adverse consequences of accidental or unintended actions</td>
</tr>
</tbody>
</table>

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25 ISO 9241-11: ‘Ergonomic requirements for office work with visual display terminals (VDTs) - Part 11 Guidance on usability’


2.3 Accessibility

Accessibility is defined in ISO TR 22411: 2008, 3.6 as:
The extent to which products, systems, services, environments or facilities can be used by people from a population with the widest range of capabilities to achieve a specified goal in a specified context of use.

Note 1 context of use includes direct use or use supported by assistive technology.

Note 2 term and definition adopted by TC 159 and first published in 2007.

Accessibility and Universal Design

According to Universaldesign.com, the term "Universal Design" has evolved from "Accessible Design"; a design process that focuses specifically on addressing the needs of people with “disabilities”.  

“Universal Design recognises that all people exist somewhere on a wide continuum of human ability. Everyone, even the most able-bodied person, passes through childhood, periods of temporary illness and injury, and old age. By designing for the more limited abilities on the continuum, we can create environments, products, and services that will be easier for all people to use, regardless of their abilities, age or current state of health”.  

Accessible design is a design process in which the needs of people with difficulties are specifically considered. Accessibility sometimes refers to the characteristic that products, services, and facilities can be independently used by people with a variety of difficulties. While Universal Design, is a broader concept that is defined as "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design."  

2.4 W3c web “standards”

The Web Content Accessibility Guidelines (WCAG) 2.0 provide an international set of guidelines developed by the Worldwide Web Consortium (W3C), in cooperation with individuals and organisations globally, with a goal of providing a shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

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These guidelines are the basis of most web accessibility law in the world. Version 2.0 of these guidelines, published in December 2008, are based on four principles:\footnote{WebAim. Introduction to web accessibility. Available from: [http://webaim.org/intro/]. (Accessed 13/2/13)}

- **Perceivable**: Available to the senses (vision and hearing primarily) either through the browser or through assistive technologies (e.g. Screen readers, screen enlargers, etc.)
- **Operable**: Users can interact with all controls and interactive elements using either the mouse, keyboard, or an assistive device.
- **Understandable**: Content is clear and limits confusion and ambiguity.
- **Robust**: A wide range of technologies (including old and new user agents and assistive technologies) can access the content.

### 2.5 Key Findings

There are a variety of approaches that could be used to structure and address the Universal Design for customer engagement toolkit, from the document structure and breakdown, to checklists and ‘test yourself’ sections. In previous publications this has been addressed in different ways from a simplified interpretation of the Universal Design principles, to the application of 4 steps in SWiFT 9:2012 and Irish standard 373:2012 (draft 7) which is based on 4 of the Universal Design principles but using simplified terminology from those originally developed by the Center of Universal Design.

In Table 2 below, a comparison is made between 4 approaches to the structure of the customer engagement toolkit; 5 of the principles of Universal Design, 6 quality attributes of usability, the 4 steps on interacting with information identified originally by SWiFT 9:2012 and the 4 WCAG 2.0 information guidance. 4 common steps across the approaches were selected to provide a common structure based on existing best practice.
Lessons from Good Practices to Guide Universal Design Toolkits

<table>
<thead>
<tr>
<th>Quality attributes of Usability</th>
<th>Universal Design Principles</th>
<th>SWiFT 9:2012</th>
<th>WCAG 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Principle 1: Equitable use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>Principle 2: Flexibility in use</td>
<td>Step B: Discoverability</td>
<td>Robust</td>
</tr>
<tr>
<td>Learnability</td>
<td>Principle 3: Simple and intuitive use</td>
<td>Step C: Understanding</td>
<td>Understandable</td>
</tr>
<tr>
<td>Memorability</td>
<td>Principle 3: Simple and intuitive use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective</td>
<td>Principle 4: Perceptible information</td>
<td>Step A: Perception</td>
<td>Perceivable</td>
</tr>
<tr>
<td>Errors</td>
<td>Principle 5: Tolerance for error</td>
<td>Step D: Use</td>
<td>Operable</td>
</tr>
</tbody>
</table>

33 ISO 9241-11: ‘Ergonomic requirements for office work with visual display terminals (VDTs) - Part 11 Guidance on usability’
Based on the table above, a structure was identified which was developed based on the Principles of Universal Design, the 4 steps developed by SWiFT 9:2012, Usability Attributes, and WCAG 2.0. It is proposed that the ‘4 steps’ developed by SWiFT 9:2012 will provide guidance in the development and structure of the toolkit. These steps relate to the process that customers go through when interacting with information. The definition of these steps have been expanded on to incorporate and address considerations identified in WCAG 2.0, the attributes of Usability and the Universal Design principles.

The four steps are as follows:

**Step 1: Perception:** The ability to understand information regardless of the user’s ability to see, hear or touch.

**Step 2: Discoverability:** Providing flexibility in use so that the user can find the information they want.

**Step 3: Understanding:** How easy it is for the customer to interpret and understands how to use the content; regardless of the user’s experience, knowledge, language skills, or current concentration level.

**Step 4: Use:** The design prevents from accidental or inadvertent actions, forms, controls and navigation are usable and the customer decides on how to use and act on the content presented.
3. Customer Engagement Touch Points

The Universal Design Toolkit for Customer Engagement is targeted at those who provide, develop, manage and procure customer services. The target market are end users with a need for information on recommended approaches, methodologies and specifications required to comply with the objectives and regulations associated with Universal Design.

The Toolkit will be used by both public and private organisations providing direct services to customers in the energy supply sector and the tourism sectors.

As previously mentioned, Universal Design of customer engagement is about ensuring that customer services are designed to meet the needs of all customers regardless of their age, size, ability or disability. The 2011 Irish Census identified that the number of older people (over the age of 65) increased by 14% since the previous census. Alongside this rapidly increasing figure, the Irish Census (2011) also identified that 13% of people in Ireland have some type of long-term impairment, a statistic which increases significantly with age. Over 70% of the population over the age of 70 years have some type of long term impairment.  

Providing a Universal Design Toolkit for Customer Engagement will provide Irish service providers in the tourism and energy sectors with the resources and knowledge to design, manage and procure customer services that are easy to access, use and understand by all customers regardless of their age, size or range of abilities.

For the purpose of this project two specific sectors, with diverse customers and a range of customer engagement touch points were explored, namely:

- Energy sector
- Tourism sector

3.1 Energy sector

Businesses within the energy sector include all major and minor gas, electricity and other energy suppliers in Ireland. The energy sector includes businesses that deal with individuals at a domestic level and large multinationals within Ireland.

Ireland’s demand for energy has grown by 84% over the period 1990 – 2007, and demand is projected to grow by about 24% over the period 2007 – 2020 unless significant action is taken to reduce demand and usage.  

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In 2012 the National Standards Authority of Ireland developed guideline SWiFT 9:2012; to help develop energy products and services to be accessible and usable by more customers who span the full range of size, age, physical, mental and sensory abilities. This document is currently the primary source of guidance for customer engagement in the energy sector. Energy providers in Ireland have undertaken a variety of approaches to provide accessible customer engagement ranging from internal guidance document, user friendly customer apps to offering a range of channels for customers to contact them.

Figure 2 below illustrates best versus worst service providers in a survey conducted by Econsultancy. It shows that travel firms and utilities provide a low level of customer service with a score under 15%.

Figure 2: Service Providers

![Service Providers](source: Econsultancy (2011))

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3.1.1 Energy sector touch points
Below is a typical list of energy sector touch points between the energy organisation and the customer, which requires consideration as part of the development of the Universal Design Toolkit.
Touch points include:

- Marketing and advertising
- Process needed for service connections
- Applying for a service connection
- Billing enquiry
- Queries regarding meter installation
- Access to the meter
- A meter reader calls to the customer’s property
- Access to property
- Accounting
- Customer consultation
- Customer complaints
- Dispute resolution

The SWiFT 9: 2012 ‘Universal Design for energy suppliers’ identified design requirements for three categories in clause 4, these were: 43

- Written communication
- Verbal communication
- Electronic and web-based communication systems, products and service
  - Accessibility of off-line documents
  - Mobile web content and apps/small form factor devices
  - Telephone based systems
  - Digital web-based communications

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3.2 Tourism industry

3.2.1 Tourism in Ireland

The tourism sector in Ireland announced that in 2012 they are targeting a 2% increase in tourist number following a 6% rise in 2011. This is proposed through initiatives such as ‘the Gathering’ - Ireland’s biggest tourism project undertaken by Failte Ireland. Additionally Ireland’s hosting of the EU presidency for the first six months of 2013 which will bring significant conferences and events to Dublin.

There has been significant growth in the number of tourist numbers in 2011 with an increase of 4 per cent in the number of British tourists to 2.8 million, an 8 per cent increase in tourists from mainland Europe and 5% per cent increase numbers from the us.

The impact of this has been an increase in hotel business over the past year; however this is concentrated around the cities of Dublin, cork and Galway resulting mainly from business and event tourism. Elsewhere occupancy levels are lagging behind in many seasonal hotels and resorts, particularly on the west coast of Ireland.

3.2.2 Tourism industry

6.5% of the total European SME turnover is accounted for by tourism SMEs. Almost 94% of European tourism companies employ less than 10 employees. Tourism is a very complex issue as it involves many activities and is quite different from one European country to another.

Examples of the varied range of tourism services include:

- Tourist information services
- Travel agents
- Tour operators
- Personal transportation (e.g. taxis and minicabs)
- Personal assistance (e.g. at airports)

References:


47 Vaughan, 24 July 2012


Lessons from Good Practices to Guide Universal Design Toolkits

- Destination and venue management
- Planning and managing tourist activities
- Choosing suppliers; requirements for third party
- Accommodation
- Catering
- Rental (e.g. car rental, equipment rental)
- Wellness (but not health care)
- Luggage services (e.g. storage, lost luggage, forwarding)
- Training (e.g. underwater diving)
- Tourist guides and guiding services
- Renting equipment

Tourism is a service-intensive industry focusing on the customers’ service experiences not only during their stay, but also prior and subsequent to it. Since most tourism products are booked and paid for in advance, customers have to rely on the accuracy of accessible information.  

Tourism information is typically provided first-hand by tourism service provider. However it is increasingly sought through other communication technologies such online reviews websites, blogs, chats, and open communities focused on special interest tourism or certain destinations. Evaluation of services needs to include not only touch points during the actual service period, but also within the pre- and post-service period.

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3.2.3 Tourism industry touch points

Below is a typical list of tourism sector touch points between the tourism organisation and the customer. Touch points include:

- Face-to-face
  - Welcoming all visitors
  - Information services
- Marketing, advertising, social media
- Accessibility information schemes
- Offers and pricing
- Booking, reservations, ticketing
  - Services provided by staff (including telephone services)
  - Services provided by ICTs
  - Providing personal assistance
  - Training of managers and staff
  - Complaints handling and redress
  - Monitoring and reporting performance

In the NSAI’s ‘Universal Design for Customer Engagement in Tourism Services’ (draft 7) Irish Standard for the tourism sector, the following simplified, touch point categories were identified: 52

- Written communication
- Face-to-face communication
  - Verbal communication
  - Non-verbal communication
- Electronic and web-based communication

VisitEngland’s ‘Action Plan for 2010-2020’ defined ‘key touch points’ as the interactions visitors have along their journey. These touch points predominantly were face to face, but also related to ehere visitors engage with tourism products.

The VisitEngland’s action plan outlined that key touch points include: airports, rail stations and rail travel, accommodation and attractions, shops, restaurants and bars and visitor information services. 53

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Lessons from Good Practices to Guide Universal Design Toolkits

The draft business plan for CEN workshop on ‘Guidelines for universal design of tourism services’, proposed by ENAT54 (due for completion in autumn 2013) appears to be in line with the SWiFT 9:2012’s ‘communication requirements’.

3.2.4 Key findings
Despite some general trends across all verticals, popularity of certain channels of communication varies among industries. Phone-live agents are particularly strong in telecommunications, auto insurance, and health insurance verticals. E-mail is popular within PC manufacturers, consumer electronics retailers, and online travel, while web self-service is especially popular in the online travel sector, airlines, and banking.55


The following is a summarised list of touch points that should be considered under the three communication categories:

<table>
<thead>
<tr>
<th>Communication categories</th>
<th>Examples of tourism sector touch points</th>
<th>Examples of energy sector touch points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written communication</strong></td>
<td>Written information</td>
<td>Written information</td>
</tr>
<tr>
<td></td>
<td>• Information</td>
<td>• Information</td>
</tr>
<tr>
<td></td>
<td>• Letters</td>
<td>• Letters</td>
</tr>
<tr>
<td></td>
<td>• Invoices</td>
<td>• Documents and reports</td>
</tr>
<tr>
<td></td>
<td>• Bills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Booking reservations</td>
<td>Service contracts and billing</td>
</tr>
<tr>
<td></td>
<td>• Menus</td>
<td>• Bills</td>
</tr>
<tr>
<td></td>
<td>• Tickets</td>
<td>• Contracts</td>
</tr>
<tr>
<td></td>
<td>• Documents and reports</td>
<td>• Forms</td>
</tr>
<tr>
<td></td>
<td>Enquiries/bookings</td>
<td>Marketing and advertising</td>
</tr>
<tr>
<td></td>
<td>• Forms</td>
<td>• Leaflets</td>
</tr>
<tr>
<td></td>
<td>Marketing and advertising</td>
<td>• Brochures</td>
</tr>
<tr>
<td></td>
<td>• Leaflets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Brochures</td>
<td></td>
</tr>
<tr>
<td><strong>Verbal communication</strong></td>
<td>• Reception area (welcoming)</td>
<td>• Home installation</td>
</tr>
<tr>
<td>(including over the phone)</td>
<td>• Enquiries</td>
<td>• Home maintenance</td>
</tr>
<tr>
<td></td>
<td>• Information</td>
<td>• Enquiries</td>
</tr>
<tr>
<td></td>
<td>• Enquiries and bookings over the phone calls</td>
<td>• Complaints handling</td>
</tr>
<tr>
<td><strong>Electronic and web-based communication</strong></td>
<td>• Website and online documentation</td>
<td>• Website and online documentation</td>
</tr>
<tr>
<td></td>
<td>• Emails</td>
<td>• Online enquiries</td>
</tr>
<tr>
<td></td>
<td>• Online booking</td>
<td>• Emails</td>
</tr>
<tr>
<td></td>
<td>• Webchat</td>
<td>• Webchat</td>
</tr>
<tr>
<td></td>
<td>• Social media</td>
<td>• Social media</td>
</tr>
<tr>
<td></td>
<td>• Short messaging service (SMS)</td>
<td>• Short messaging service (SMS)</td>
</tr>
<tr>
<td></td>
<td>• Interactive voice response (IVR)</td>
<td>• Interactive voice response (IVR)</td>
</tr>
<tr>
<td></td>
<td>• Apps</td>
<td>• Apps</td>
</tr>
<tr>
<td></td>
<td>• Kiosks and information points</td>
<td></td>
</tr>
</tbody>
</table>
4. Toolkit structure

Based on the customer engagement touch points identified in both the tourism and energy sectors, the following channels of customer engagement have been addressed as part of this literature review.

- Written communication
- Verbal communication
- Electronic communication
- Web-based communication

The broad nature of these categories, for example ‘Written Communication’ will encompass good practice that can be applied from energy bill design to menu design. This was identified through literature research as a good practice approach to enable the resulting toolkit to be applicable to the diverse range and needs of the end users.

As the Toolkit will address both the energy and tourism sectors, it is proposed that the structure of this Toolkit will be aligned with SWiT 9:2012 'Universal Design for Energy Suppliers' and is 373:2012 ‘Universal Design for Customer Engagement in Tourism Services’ (draft 7). The reasoning for this is that these are leading sources nationally and internationally on the Universal Design for energy and tourism service providers. Therefore it is proposed that the Toolkit will address:

- Written Communication
- Verbal / Face-to-face Communication
- Electronic and Web-based Communication

While all the guidelines and research outlined in this document are focused specifically on the energy and the tourism sector, much of the information is transferable to many industries outside of these two sectors. The overarching forms of communication are shared by the tourism and energy sectors (e.g. Written, Face-to-face and Electronic and Web-based Communication). Therefore while the specific information will differ between the sectors (e.g. Face-to-face communication plays a more dominant role in tourism service compared to the energy sector), overall good Universal Design practice and guidance through written, face to-face, and electronic and web-based communication is applicable, adaptable and transferable to the diverse range of modes of communication that fall within these three categories (ranging from energy bill design to menu design).

Universal Design good practice guidance both nationally and internationally on these communication channels have been outlined in the following sections.
4.1 Written Communication

In both the tourism and energy sectors, customer engagement is largely composed of interaction through written communication. Written communication covers a broad range of mediums including forms, leaflets, marketing flyers, emails, letters and bills. Considerations range from how the document is designed to how the information is communicated. Many people find complicated written text difficult to understand; over 22.6% of the Irish populations are “functionally illiterate”.  

Guidance on the Universal Design in providing products and services that can be used to the greatest extent possible by customers of any age, size, ability or disability, has been an area of focus in Ireland. Universal Design guidance and recommendations on written communication has been provided through sources such as SWiFT 9:2012 ‘Universal Design for energy suppliers’ and ‘Universal Design for Customer Engagement in Tourism Services’ (is 373: 2012 draft 7). Additionally there are a myriad of sources that provide accessibility guidance on written communication, an example of which is the European Blind Union’s ‘Making information accessible to all’ publication. Examples of good practice guidance on written communication is outlined below.

**SWiFT 9:2012 ‘Universal Design for Energy Suppliers’**

The National Standards Authority of Ireland’s SWiFT 9:2012 ‘Universal Design for Energy Suppliers’ is a recommendatory document based on the consensus of participants of an NSAI workshop. the SWiFT 9:2012 provides guidance to energy suppliers on how to apply Universal Design in the development of accessible and usable products and services to customers. For written communication, it recommends that organisations should communicate with the customer in “plain English”, so that the customer understands the information presented the first time they read it. 14 guidelines are presented in relation to written text and 12 guidelines are provided on document design.

Written communication recommendations are made in relation to the following four categories:

- Written text
- Structure
- Page design
- Forms


Lessons from Good Practices to Guide Universal Design Toolkits

Four steps were developed and outlined in SWiFT 9:2012, that customers typical go through when interacting with information. Each of the 4 steps is associated with a Universal Design principle. The 4 steps are:

- Step A: Perception
- Step B: Discoverability
- Step C: Understanding
- Step D: Use

I.S.373:2012 (draft 7): Universal Design for Customer Engagement in Tourism Services

This draft standard is intended for tourism service providers; it provides an industry best practice on design requirements that facilitate positive customer engagement through the provision of products and services for communication that can be easily accessed, understood and used by tourism customers.

This standard states that written communication should use plain English. When applying Universal Design in written communications, tourism service providers should:\n
- Write in clear and legible language
- Give relevant information in the right order
- Support customers in easily accessing, understanding and using this information
- Provide customers with a simple way to get further clarification

As in SWiFT 9:2012, 14 guidelines were presented in relation to written text and 12 guidelines are provided on document design in annex f. Additionally four checklists were provided on written text, structure, page design and forms; this provides a method of measuring and assessing if these guidelines have been applied to written communication across the business or organisation.

The four steps that customers experience when interacting with information (identified in SWiFT 9:2012) is applied in I.S.373:2012.

Destination NSW’s ‘Tourism Business Toolkit’

The tourism business toolkit has been designed by Destination NSW as a resource to support tourism operators by providing information, helpful tools, and details of organisations to contact for further assistance.\n
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Lessons from Good Practices to Guide Universal Design Toolkits

The tourism business toolkit consists of 2 volumes, the first volume is a guide to understanding the tourism industry, while the second volume provides guidance on ‘developing your tourism product’ including brochure design and advertising. This resource is rare in that it provides written guidance that is focused specifically on the tourism sector. Additionally rather than providing guidance on written communication in general it focuses on specific communication channels, such as ‘creating your own brochure’ (illustrated below).

**Figure 3: Guidelines on “Creating your own brochure”**

Source: Destination NSW.

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‘Guidelines for the preparation of customer charters and customer action plans’

In 2012 the Department of Public Expenditure and Reform developed ‘Guidelines for the preparation of customer charters and customer action plans’. The customer charter is a short statement describing the level of service a customer can expect from a public service organisation. This is applicable to government departments, offices, bodies, agencies etc.; therefore it is applicable to many energy and tourism bodies.

The Customer Action Plan (CAP) describes the commitments and standards set out in the customer charter. The ‘guidelines for the preparation of customer charters and customer action plans’ identified key methods for the communication of charters, that organisations might wish to consider. These include:

- Posters in public and other offices (for both customers and staff);
- Leaflets that can be sent to customers along with routine correspondence and made available in public offices;
- Website – display the customer charter prominently on the organisation’s website, at a minimum a link to the charter from the home page and any other page focused on customer service;
- Emails - a link to the charter could be included at the foot of emails;
- Pledge cards – small wallet-sized cards with the main customer service commitments and contact details;
- Publications - other publications on customer service could incorporate the customer charter; and
- Customer diversity - the charter and cap should be produced in as many formats as possible (where considered reasonable) and should be made available through a range of channels of communication. This is necessary to ensure that it is accessible to customers experiencing, or vulnerable to, poverty and social exclusion and to those covered by equality legislation.

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Lessons from Good Practices to Guide Universal Design Toolkits

The National Adult Literacy Agency (NALA)

NALA have provided a series of publications that provide comprehensive guidance to make written communication easier to read and understand. NALA highlights that providing information in ‘plain English’ is more likely to save time, money and possible frustration that might otherwise be involved in making repeated requests for information or clarifying misunderstandings. Plain English is a style of presenting information that enables a person to understand it the first time they read or hear it.

Resources of particular relevance is:

- Simply put. ‘writing and design tips’. 63
- ‘Plain English guidelines at a glance’ (a two page summary) 64
- ‘Checklist for forms’ 65
- ‘Checklist for documents’ 66

NALA: ‘Simply put’

‘simply put’ is a booklet of tips that provide guidance on making information easier to read and understand, particularly for adults with literacy difficulties. 67 The booklet composed of the following chapters, which focuses on written communication:

- Writing tips
- Checking your document
- Document design tips
- Words and phrases to avoid

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‘Simply Put’ focuses on the use of plain English, an example of which is illustrated below in a concise, easy to understand ‘before’ and ‘after’ format (see Figure 4 below).

Figure 4: Plain English – before and after examples

Source: NALA ‘Simply put’. (2008) 68

The booklet uses coloured text to identify the key guidelines, followed by explanatory text. The information is provided in a large text format that is easy to read and understand. This is further supported through the use of visuals and practical examples. Examples of these are illustrated in Figure 5 overleaf.

Lessons from Good Practices to Guide Universal Design Toolkits

Figure 5 shows an example of simply put’s easy to read layout and structure supported by practical examples.

Figure 5: ‘Simply put’ booklet.

![Image of the 'Simply put' booklet showing examples of readable typeface and everyday words]


An interesting element of the simply put is their approach to using every day words. NALA have applied the concept of using every day words to a variety of industries ranging from financial to medical, as illustrated below. This is a particularly good example of how Universal Design can be applied in all industries.

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Figure 6: Replacing technical jargon with everyday words

<table>
<thead>
<tr>
<th>Medical terms (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instead of</strong></td>
</tr>
<tr>
<td>physician</td>
</tr>
<tr>
<td>positive (test results)</td>
</tr>
<tr>
<td>post-operative</td>
</tr>
<tr>
<td>prognosis</td>
</tr>
<tr>
<td>renal</td>
</tr>
<tr>
<td>respiration</td>
</tr>
<tr>
<td>rheumatology</td>
</tr>
<tr>
<td>symptoms</td>
</tr>
<tr>
<td>therapy</td>
</tr>
<tr>
<td>trachea</td>
</tr>
<tr>
<td>ventricle</td>
</tr>
</tbody>
</table>


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Lessons from Good Practices to Guide Universal Design Toolkits

Accessability

‘Accessability’ is an accessibility handbook developed for graphic designers by the Association of Registered Graphic Designers of Ontario. The aim of this handbook is to make printed messages clearer, websites more navigable and physical environments easier to negotiate.\(^1\)

The printed section addresses the following topics:

- Typographic legibility
- Typographic readability
- Other typographic considerations

It's format consists of practical guidance, supported by visual examples, as illustrated below. An additional feature to note is that in comparison to previous examples which typically used coloured text for emphasis, accessibility uses bold font to emphasise important messages.

**Figure 7: Accessability handbook: visual layout**

![Image of Accessability handbook visual layout]

Source: RGD Ontario (2010). ²²

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Lessons from Good Practices to Guide Universal Design Toolkits

An interesting aspect to ‘Accessibility’ is that guidance is provided in greater detail and with significantly more complexity to NALA’s ‘simply put’. Due to a target market of graphic designers this is understandable, however it provides the associated technical jargon.

A good feature of this handbook is the provision of case studies are provided to illustrate good practice at the end of each chapter (see Figure 7).

**Figure 7: Example of Accessability’s supporting case studies**

The Sensory Trust ‘Accessible information - clear and large print’

The Sensory Trust produced a 2 page information sheet titled ‘accessible information - clear and large print’. This provides a quick guide to good practice in written communication in a condensed fashion.

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A particular good feature is the ‘In brief’ four key point section, presented in an eye-catching colour contrast fashion. An example of the information sheet is illustrated below.⁷⁴

**Figure 8: Sensory Trust information sheet**

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Also conform to other Clear Print guidelines concerning layout, use of fonts and images.

**Producing Large Print**

- Reading long documents, even in Large Print can be tiring for people with low vision. You should therefore reduce the length of the text as much as possible.
- If you are promoting a Large Print version of a leaflet or a brochure ensure that this is clearly displayed at the beginning or on front, in text that conforms to Large Print standards.

**Further Reading**

For more detail on Clear and Large Print see it Right - Making Information accessible for people with sight problems (RNIB, ISBN 1 85878 704 6) is available from the RNIB (www.rnib.org.uk)

For information about font sizes for signs and interpretation panels the Sign Design Guide, Peter Barker and June Freer, IMU and Sign Design Society (ISBN 1 85878 412 3) is also available from the RNIB and the Sign Design Society (www.signdesignsociety.co.uk).

This document has been set in 11.25 point APHont, a font developed by the American Printing House for the Blind.

www.aph.org/products/aphont.html

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**Source:** Sensory Trust. ⁷⁵

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Lessons from Good Practices to Guide Universal Design Toolkits

RNIB: ‘See It Right’

‘See It Right’ is a practical guide and reference for businesses and organisations, to make information more accessible. ‘See it right’ is available through a cd rom and book format.

‘See It Right’ offers useful resources, examples of best practice and checklists. It provides detailed information on ‘printed information’ specifically addressing accessibility for people with seeing difficulties or who are blind.

There are 4 specific areas addressed in the ‘printed information’ book. These are:

- Clear print guidelines
- What is large print?
- Posters
- Printed forms

The ‘See It Right’ publications provide good practice guidelines, supported by corresponding visual examples of good and bad practice, illustrated below.

Figure 9: ‘See It Right”: Examples of good and bad practice

Source: RNIB (2006)77

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Lessons from Good Practices to Guide Universal Design Toolkits

Additionally at the end of each section a checklist is provided summarising the key learning from each chapter.

**Figure 10: Clear print checklist**

![Clear print checklist](Image)

**Source: RNIB (2006).**

**The NDA’s ‘Accessibility Toolkit for Public Sector Staff’**

The Accessibility Toolkit from the National Disability Authority is designed to help organisations to make their services, buildings, information, and websites more accessible to customers with difficulties. The Accessibility Toolkit provides practical guidance on making information more accessible, such as:

- Consult customers with disabilities to find out what information they need and what formats they want
- Use clear, user-focused language

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Lessons from Good Practices to Guide Universal Design Toolkits

- Make sure that relevant staff know how to get alternative formats of information, including Irish sign language.

The Accessibility Toolkit provides examples of good and bad practice, and uses a ‘tips’ area to provide a summarised version of information required to make information more accessible. This is an alternative to the provision of checklists seen in previous good practice examples.

**Figure 11: Accessibility Toolkit**

Source: NDA Accessibility Toolkit.  

**European Blind Union: ‘Making Information Accessible To All’**

While primarily focused on accessibility rather than Universal Design, the report by the European Blind Union (EBU) called ‘Making Information Accessible To All’ provides a source of guidance focused on the accessibility of printed and electronic documents intended for a broad audience, including books invoices, letters and leaflets.  

Particular focus is placed on creating an accessible word documents, but additionally in presentations and printed documentation.  

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Lessons from Good Practices to Guide Universal Design Toolkits

While presentations are a less common method of customer engagement, it is important to consider, particularly for the tourism sector.

When giving a presentation to an audience that includes blind or partially sighted people the following considerations should be taken into account:

- Slides are a visual support for a speech. Ensure all items on the screen are referred to.
- Rather than pointing at something on the screen, name it. Additionally rather than say “this blue line shows the evolution of our monthly sales”, describe the trend shown by the graph.
- If printed handouts are distributed, pass out the digital copy on a pendrive. This allows blind or partially sighted people with a laptop to copy the file and follow your presentation easier. Alternatively email the presentation prior to the event so that blind or partially sighted people can familiarise themselves with the slides or make a large print copy.
- If a digital copy of the presentation is provided, ensure it is as accessible as possible.

Guidance for designing presentation slides is outlined in a report by the World Blind Union, which addresses the following: 83

- Font size and quantity of text on a single slide
- Font type
- Colour and brightness contrast
- Way to use figures and graphs
- Animation
- Way to orally support your slides
- Supporting handout

Guidance on presentation accessibility is additionally provided by:

- Webaim’s guide to powerpoint accessibility [http://webaim.org/techniques/powerpoint/]

Lessons from Good Practices to Guide Universal Design Toolkits

4.1.1 Key Findings

Overall it was identified that the guidance on written communication provided in general, is applicable to all industries and sectors. The general guidance provided on written text, use of plain English and document structure is designed to be applicable to materials from restaurant menus to electricity bills.

Research identified that there was a general lack of specific information on materials such as menu design or bill design. However sources, such as destination NSW’s ‘Tourism Business Toolkit’ provided guidance on brochure design for the tourism sector, which was a more specific focus in comparison to the majority of other sources which typically addressed printed materials in general, with the exception of form design.

Overall content on written guidance can be summarised as addressing the following:

- The use of plain English
- Written text (font, size etc)
- Document structure
- Document design
- Form design

Design attributes of these documents that enhanced ease of use and understanding include:

- Document text size (larger text would good spacing is easier to read)
- Plain English (using everyday language)
- Personal tone (for example ‘i’, ‘we’ and ‘you’)
- Visual examples of good and bad practice
- Practical examples (e.g. Showing how to replace technical jargon with everyday words)
- Use of colour or bold to highlight key information (e.g. Key guidelines)
- Use of case studies to give examples of good practice
- Using document layout and structure to emphasise information

Good practice written communication resources

More detailed guidance on the Universal Design and accessibility of written communication is available from the following sources:

- RNIB: ‘See it Right’ 84
- NALA: Simply Put. ‘Writing and Design Tips’. 85
- NALA: ‘Plain English Guidelines at a Glance’ 86
- NALA: ‘Checklist For Forms’ 87

Lessons from Good Practices to Guide Universal Design Toolkits

- NALA: ‘Checklist For Documents’ 88
- Rgd Ontario: ‘AccessAbility’ 89
- European Blind Union: ‘Making Information Accessible to All’ 90
- Destination NSW’s ‘Tourism Business Toolkit’ 91
- National Disability Authority’s ‘Accessibility Toolkit for Public Sector Staff’ 92

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89 The Association of Registered Graphic Designers of Ontario (RGD Ontario) (2010).
90 European Blind Union (2011). ‘Making information accessible to all’. Available online:
91 Destination NSW. ‘Tourism Business Toolkit’. Available from:
92 NDA. Accessibility Toolkit for Public Sector Staff’. Available from:
4.2 Face-to-face communication

Face-to-face communication refers to both verbal (face-to-face) communication between staff and a customer, and communication through live-telephone agents. Face-to-face communication refers to more than just verbal interaction, it refers to the “quality of the welcome” and the staff members body language.

A key issue identified in several guidance documents is that many staff members have limited previous experience of interacting with people with difficulties or specific needs. As such there is a need for specific guidance on how to interact with these customers and particularly on the language to use when referring to people with a specific difficulty (e.g. A person with a hearing difficulty rather than a person who has a hearing disability).

Echo’s ‘2012 Global Customer Service Barometer’ identified for simple inquiries, such as locating a product or checking an account balance, 38% consumers have a preference for using a company website or email, followed by speaking with a ‘real’ person on the phone (16%), using an automated voice response system on the phone (12%) and face to face (11%). For a more complex inquiry, such as returning a product or getting assistance with a product issue, 38% of consumers prefer speaking with a ‘real’ person on the phone, followed by a ‘face to face’ conversation (24%).

The ‘VisitEngland.org’ action plan outlined the importance of the visitor experience, and how it can be greatly enhanced or damaged by the quality of “welcome” at places and by people at key touch points.

VisitEngland.org identified that the quality of the “welcome” is measured by potential visitors perceptions based on PR and recommendations, first impressions at key touch points, the feeling of warmth expressed by the people and places and ultimately customer service satisfaction leading to a desire to recommend and return.

Personal welcome interactions occur at all stages of the visitor journey, from asking for directions to purchasing tickets, accommodation and food. Welcoming images and messages create a stronger sense of place, reminding the visitor of the country’s distinctive qualities and enhancing experiences.

4.2.1 Live Telephone Agents
Phone calls are the traditional method of interaction between a business and a customer.\textsuperscript{97} Customers pick up the phone and call designated customer service agents where personal interactions from one person to another occur. This is the preferred method of communication for customers making a complex inquiry such as getting assistance with a product or service issue or returning a product.\textsuperscript{98} Live agents on the phone are the primary contact channel in the utility industry. In the United States, statistics show that most customers’ issues are resolved with this method.\textsuperscript{99}

Benchmark research was undertaken by Frost & Sullivan, ‘2012 customer contact experience benchmarks— multi-channel and cross-industry’ assessed customer engagement experience in the United States.\textsuperscript{100} it identified that live phone agents are the most used contact channel (illustrated below).

**Figure 12: Use of contact channels- aggregate summary**

![Use of Contact Channels Overall—Aggregate Summary](image)

Source: Frost & Sullivan (2012)\textsuperscript{101}


Results from the North American Utility Industry found that similarly, phone-live agent is the most popular contact channel. However, following ‘phone-live agent, web-self service was found to be the most popular channel used by the utility industry’. Findings in the report suggest that customer satisfaction is reduced with non-personable contact and the possibility of sales is increased with personal contact.

**Econsultancy ‘The State of Social Report 2011’**

The Econsultancy ‘The State of Social Report 2011’ found that 39% of UK customers believe the telephone to be the preferred channel; however 48% of people say it is the most frustrating service channel (3 times more frustrating than email; 8 times more frustrating than web chat). The keys sources for frustration as uncovered by the Econsultancy report (2011) include:

- Customers being forced to repeat themselves
- Being trapped in automated self-service lines
- Having to wait too long for service
- Customer service staff not knowing a customer’s history and value

**Datamonitor’s ‘Best Practise Customer Retention in the British Energy Market’**

The Datamonitor’s ‘Best practise customer retention in the british energy Market’ report (2012) outlines key attributes that make for good customer engagement in each channel. When using a live phone agents, the attributes that customers respond well to are:

- Courteousness
- Trustworthiness
- The agent’s ability to reduce the customer effort in the process
- The agent going beyond just resolving the customer issues

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Lessons from Good Practices to Guide Universal Design Toolkits

VisitEngland’s ‘At your service’

This is reinforced by VisitEngland’s ‘At your service’ publication, which uses multiple case studies of businesses who have increased sales by improving accessibility. 107

An example of this from ‘At your service’ is: 108

“We learnt British sign language without realising it would gain us extra business. We now welcome many guests with a hearing impairment. I would advise any tourism business to consider making their premises more accessible.”
Pauline Roberts – Atlantis Holiday Apartments

TABIA ‘Tip Sheet’ on ‘What you need to know when dealing with customers with disabilities over the phone’.

The Toronto Association of Business Improvement Areas (TABIA) ‘Tip Sheet’ on ‘What you need to know when dealing with customers with disabilities over the phone’. The approach of this tip sheet provides concise, simplistic and basic tips that are applicable to all customers, but specifically focused on communicating with people with specific difficulties.

TABIA provide the following guidance on serving customers with disabilities on the phone:109

- Speak normally, clearly and directly.
- Don’t worry about how their voice sounds. Concentrate on what’s being said.
- Don’t refer to the disability, and never use phrases like “handicapped”.
- Be patient, don’t interrupt and don’t finish your customer’s sentences. Give your customer time to explain him/herself.
- Don’t try to guess what your customer is saying. If you don’t understand, don’t pretend. Just ask again.
- If you’re not certain what was said, just repeat or rephrase what you’ve heard.
- If a telephone customer is using an interpreter, just speak normally to the customer, not to the interpreter.
- If your customer has great difficulty communicating, make arrangements to call back when it’s convenient to speak with someone else.

‘Tips on Serving Customers With Disabilities’ 110
This publication is on how to ‘welcome customers with disabilities’. A general overview is provided on how to welcome customers. Specific guidance is also provided on ‘what you need to know when dealing with customers with disabilities over the phone’. 7 tips are outlined which overall are communicated in face-to-face good practice guidance, such as “speak normally, clearly and directly”.

NSAI’s SWiFT 9:2012 ‘Universal Design for Energy Suppliers’
Key learning’s for customer engagement using live telephone agents are outlined in SWiFT 9:2012. Recommendations include: 111
- Speak in a clear voice
- State the purpose of your conversation
- Be aware of your environment
  - Keep background noise to a minimum
- Slow down and encourage questions
- Be aware of people’s language and numeracy ability
- Avoid jargon
- Check for understanding
- Limit the number of messages.
  - Avoid using more than four main messages
- Where possible have a dedicated staff member for callers who need extra time (including speech difficulties)

Good practice resources
Sources of information on applying Universal Design and accessibility guidance in live telephone agents include:
- TABIA: Accessible Mainstreet-Tipsheet on ‘What you need to know when dealing with customers with disabilities over the phone’. 112
- Accessible Ontario Customer Service. ‘Tips on serving customers with disabilities’. 113
- NSAI’s SWiFT 9:2012 ‘Universal Design for energy suppliers’ 114
- I.S.373:2012 ‘Universal Design for Customer Engagement in Tourism Services’ draft 7 115

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4.2.2 Face-to-face Communication

**Accessible Ontario Customer Service. ‘Tips on serving customers with disabilities’**

This publication focuses on how to ‘welcome customers with disabilities’. A general overview is provided on how to welcome customers.

Guidance provided includes: \(^{116}\)

- Treat people with disabilities with respect and consideration.
- Patience, optimism, and a willingness to find a way to communicate are your best tools.
- Smile, relax, and keep in mind that people with disabilities want to experience helpful customer service.
- Don’t make assumptions about what type of disability or disabilities a person has.
- Some disabilities are not visible. Take the time to get to know your customers’ needs.
- Be patient. People with some kinds of disabilities may take a little longer to understand and respond.
- If you’re not sure what to do, ask your customer, “how may i help you?”
- If you can’t understand what someone is saying, just politely ask again.
- Ask before you offer to help — don’t just jump in. Your customers with disabilities know if they need help and how you can provide it.
- Find a good way to communicate. A good start is to listen carefully.
- Look at your customer, but don’t stare. Speak directly to a person with a disability, not to their interpreter or someone who is with them.
- Use plain language and speak in short sentences.
- Don’t touch or address service animals – they are working and have to pay attention at all times.
- Ask permission before touching a wheelchair or a piece of equipment.

‘Tips on serving customers with disabilities’ identified 9 types of disabilities; deaf-blind, hearing, intellectual, developmental, learning, mental health, physical, speech or language, and vision.

The publication provides tips on serving customers with specific types of difficulties. For example, in the case of a person who has a hearing difficulty, 11 tips are provided to specifically address those customers’ needs. These are illustrated in figure 13 overleaf.

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Figure 13: Face-to-face communication tips for customers with hearing difficulties

Hearing Impairments

People who have hearing loss may be deaf or hard of hearing. Like other disabilities, hearing loss has a wide variety of degrees. People who are hearing impaired may require assistive devices when communicating. They may also use e-mail, pagers, TTY telephone service or Bell Canada Relay Service.

Here are some tips on serving customers who are deaf or hard of hearing:

- Always ask how you can help. Don’t shout.
- Attract the customer’s attention before speaking. The best way is a gentle touch on the shoulder or gently waving your hand.
- Make sure you are in a well-lighted area where your customer can see your face.
- Look at and speak directly to your customer. Address your customer, not their interpreter.
- If necessary, ask if another method of communicating would be easier, for example a pen and paper.
- Don’t put your hands in front of your face when speaking.

- Be clear and precise when giving directions, and repeat or rephrase if necessary. Make sure you have been understood.
- Don’t touch or address service animals – they are working and have to pay attention at all times.
- Any personal (e.g., financial) matters should be discussed in a private room to avoid other people overhearing.
- Be patient. Communication for people who are deaf may be different because their first language may not be English. It may be American Sign Language (ASL).
- If the person uses a hearing aid, try to speak in an area with few competing sounds.

Source: Accessible Ontario Customer Services and OESC


Identical recommendations and best practice references are made in both the national standards authority of Ireland’s SWiFT 9:2012 ‘Universal Design for energy suppliers’ and I.S.373:2012 ‘Universal Design for customer engagement in tourism services’ draft 7.

In I.S.373:2012 (draft 7), it is outlined that face-to-face communication consists of both verbal and non-verbal communication.

Examples of recommendations made, include: 118

- Speak in a clear voice
- State the purpose of your conversation
- Be aware of your environment
  - Keep background noise to a minimum
- Slow down and encourage questions
- Be aware of people’s language and numeracy ability
- Avoid jargon
- Check for understanding
- Limit the number of messages.
  - Avoid using more than four main messages
- Where possible have a dedicated staff member for callers who need extra time (including speech difficulties)

European Commission’s ‘Improving Information on Accessible Tourism for Disabled People’.

In 2004 the European Commission published a document on ‘Improving Information on Accessible Tourism for Disabled People’. 119 While focused primarily on accessibility of environments, it additionally provides comprehensive, simplistic guidance to face-to-face communication for people with specific difficulties, ranging from wheelchair users to people with learning difficulties.

“Access is about the absence of barriers to the use of facilities. Although this is usually seen in terms of physical access or access to information and communication, poorly trained staff can represent a serious barrier for disabled people if they are unable to provide services in an appropriate, non-discriminatory way.


The key to providing good service is to understand that disabled people are like any customer, wanting to be treated with respect”.

5 key points are provided, with the understanding that many “non-disabled” people lack experience and understanding of “disabled” people’s needs. These are:

- It is acceptable to offer assistance to people with difficulties. Staff however, should wait until the offer is accepted and should not presume what help is required.
- Speak directly and make eye contact to the person with difficulties. If with a companion, do not speak to the person with the difficulty through their companion.
- Don’t ask what the person’s impairment is. The person will tell you if they want you to know their impairment.
- All people should be treated individually. People with similar difficulties may have different requirements, so it is important to that everyone is treated individually.
- Treat people with difficulties the same as everyone else, without being condescending or patronising.

Additionally the document provides accessibility guidance for people with specific difficulties.

For example in the case of people with seeing difficulties the following guidance is provided:

- When communicating with a blind person, introduce yourself, the people who are with you and tell the person when you are leaving.
- When providing assistance to a person who is blind, allow them to hold onto your arm. If guiding them, walk at a comfortable speed so you are not propelling them. Advise on approaching steps or obstacles.
- When helping a blind person sit down, place their hand on the back of a chair and communicate what you have done.

Similarly guidance is provided for wheelchair users, persons with hearing difficulties and persons with learning difficulties.

The guidance provided is concise, composed of a set of short numbered points and positioned in blocked coloured sections (see Figure 14 below).

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Figure 14: Example for guidance for face-to-face communication

The European Commission’s report ‘Improving Information on Accessible Tourism for Disabled People’ suggested using an induction loop system to increase accessibility. This will help customers who use a hearing aid by reducing background noise. They can be particularly useful in public situations including hotels, tourist information offices, theatres, meeting rooms and ticket counters.

The ‘Accessibility For Customers with Disabilities in Community Pharmacies’ published by the equality authority and IPU.

This report provides a source of guidance to support and stimulate quality and accessible pharmacy services for people with disabilities. This report provides a source of good practice, which is applicable to this research in relation to face-to-face communication.

This document provides key guidance written in easy to read, simple language and supports the information with local ‘success stories’. These are examples of pharmacies in Ireland which have taken steps to improve the accessibility of their service (see figure 15 below).

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Guidance is also provided in relation to specific circumstances and activities. In this particular case it relates to communicating with a hard-of-hearing customer in circumstances ranging from telephone communication, to steps to improve the accessibility of the business’ service offering (see Figure 16 below).

Source: ‘Accessibility For Customers with Disabilities in Community Pharmacies’ (2008)\textsuperscript{124}
Figure 16: Guidelines in improving accessibility

Consider your telephone communication...
- Automatic answering systems and background music cause problems for hard-of-hearing people.
- Use a fax machine or text on a mobile phone to communicate with deaf and hard-of-hearing customers. Let them know that the service is there.

Think about safety...
- Install a fire alarm that flashes as well as sounding in the case of an emergency.

Enhance staff confidence...
- Offer deaf awareness training to your staff. Deaf clubs and organisations of deaf and/or hard-of-hearing people in your area may be able to help.

The best way to improve services for hard-of-hearing people is to...
- Install a hearing loop. A loop is just that - a loop of insulated wire, hidden from sight, fixed around a designated listening area and connected to a power source, an amplifier and a microphone. When someone talks into the microphone the sound goes into the amplifier, which then sends the sound round the loop. Hearing aid users in the area of the loop who switch their hearing aids to the “T” position can then receive the amplified voice without interference from background noise being amplified too.

Loops come in all sizes. You can put a loop into your entire premises or just around key points, such as the pharmacy counter. You can also buy a portable loop that you wear round your neck, thus enabling you and your customer to move around the shop together.


This report provides an interesting approach to determine how accessible a business/organisation currently is by providing a range of open questions, that lead in to a set of actions to be undertaken to increase the accessibility of their service and the cost implications. This is undertaken in a format which anyone could answer, and is a good way of evaluating where the business currently stands in their service offering.

What works well from this document is the simplicity of the headings and key actions (identified through coloured text). This achieves an overall easy to comprehend document as the key information is easy to identify. Additionally the use of local “success stories” provide good examples of how services can be made more accessible.

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4.2.3 Key findings
Overall the guidance identified in face-to-face and telephone communication typically consisted of similar recommendations and guidelines. The research identified that guidance was not typically sector specific, but rather general good practice guidelines that are applicable and adaptable to both the energy and tourism sectors.

The differentiating factor in these guidance documents related to presentation of the information, rather than the content itself.
Key design features that made the guidelines easier to understand were:
- Colour text to emphasise key guidelines
- Use of case studies or ‘success stories’ to identify good practice. The use of local stories was particularly impactful.
- The use of visuals to illustrate good and bad practice
- The use of practical examples (e.g. Preferred words and phrases to use) to demonstrate good practice
- Examples of how to make services more accessible
- Providing concise, simplistic good practice ‘tips’

There were several key findings in the area of face-to-face communication.
VisitEngland’s action plan has emphasized the importance of ‘welcoming’; a consideration beyond just verbal communication, but which also relates to the staffs’ behavior and attitude. This plays an important role, particularly in providing tourists with a good and memorable customer experience, from being welcomed at the airport to purchasing food in a restaurant.

Additionally research identified that many members of staff may have limited experience in communicating with customers who have specific difficulties it is therefore important at a basic level that staff are educated preferred words and phrases to use to describe the person’s difficulty. Additionally it is important to outline good practice in serving customers with difficulties, for example staff may be unaware that standing with their back to a light may cause difficulties for a person with seeing difficulties. Research presented to approaches to providing guidance; the first referred to general good practice guidance that would make interaction between the customer and staff member easier for everyone. The second approach was the provision of guidance on interaction with customers with specific difficulties, for example a person who is blind or a person with learning difficulties. The benefit of this, for example in the case of a restaurant owner who’s customer is blind, specific guidance would be available on how in improve the customer’s experience.
Good practice resources
Sources of information on applying Universal Design and accessibility guidance in face-to-face communication includes:

- Accessible Ontario Customer Service. ‘Tips on serving customers with disabilities’. 126
- VisitEngland’s ‘At Your Service’ 127
- European Commission’s ‘Improving Information on Accessible Tourism for Disabled People’. 128
- NSAI’s SWiFT 9:2012 ‘Universal Design for Energy Suppliers’
- I.S.373:2012 ‘Universal Design for Customer Engagement in Tourism Services’ draft 7
- ‘Accessibility For Customers With Disabilities in Community Pharmacies: Some practical advice’ 129

4.3 Online and Electronic Communication
The UK Ofcom 2009 report on consumer experience identified that 7% of the UK population, and about 20% of people with disabilities, have difficulty using a computer.

4.3.1 Interactive Voice Response (IVR)
Interactive Voice Response (IVR) is the automated system that tries to solve customer queries before directing them to a customer service agent. Research has identified that 60% of customers speak to a live agent during their IVR interactions, suggesting that IVR could have been used just as a method to make contact with a live agent.130

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In contrast to the positive findings, public response to interactive voice response finds that customers are less willing to use communication channels that cost money (particularly premium rate numbers). Call queues can cause unnecessary frustration as being kept on hold also means additional charges.\(^{131}\)

The Centre for Excellence in Universal Design have developed ‘Guidelines for Telecoms Accessibility’ addressing telecommunications devices and services delivered via Interactive Voice Response (IVR) systems. \(^{132}\) Following the guidelines, and in particular priority 2 (outlined below) will make IVR systems easier to use and will include more people with cognitive difficulties or multiple difficulties. \(^{133}\)

- Allow sufficient time to accommodate the slowest users
- Ensure that the user interface and task flow is similar across different functions and remains the same across repeated visits
- When deploying more than one version of a device, ensure that the user interfaces are similar
- Ensure that videophones allow simultaneous text dialogue
- Do not require users to remember a fixed supplied pin
- Provide for users with multiple impairments

4.3.2 Short Messaging Service (SMS)
Short messaging service or text messages as they are more commonly known can be used by businesses as a method of customer service.

A report by Echo found that American customers are not fond of using text messages as a channel of consumer engagement. The report identified that only 7% of consumers prefer to use text message for a simple enquiry dropping to 4% for a more difficult enquiry such as a complaint. \(^{134}\)

However, text messages have been used to great success by telecoms companies to top up mobile phones easily such as O2 Ireland and Vodafone. \(^{135}\) they have also been used by many service providers as an additional customer engagement to remind customers of upcoming bookings and appointments. This is a very quick and cheap way to give customers extra attention without adding to staff workload.


SWiFT 9:2012 provides key guidance and recommendations for customer engagement using short messaging service, such as: 136

- Do not use text speak (txt-spk)
- Limit all text messages to 160 characters
- Use identifying acronym (e.g. NDA) to identify your service at the start of all texts.
- If the customer requirements are unclear ask the customer to choose from list of options
- When conversation is finished, end the sms with closing phrase eg. No need to reply
- Do not put or seek sensitive information in an sms

4.3.3 Email
Email (electronic mail) is the instant transfer of information direct to a recipient over the web. The purpose of emails in customer engagement is to respond to a customer’s query or request for purchase.

Customer service through email is the preferred communication channel by customers with a simple straightforward inquiry such as checking a price. 137 ‘the state of social report 2011’ undertaken by Econsultancy found that email was the preferred contact channel for 44% of consumers, however an issue was raised that only 33% find it to be the most effective channel.138

Key attributes for email engagement include speed of response, the ease to understand the response, the ability by service providers to resolve issue quickly and professionally.

A key source of guidance in applying Universal Design principles when using email was outlined in the national standards authority of Ireland’s SWiFT 9:2012 guideline document: 139

- Use everyday words
- Write for your audience
- Be personal
- Keep sentences short
- Use clear formatting
- Avoid splitting words between two lines

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RNIB’s ‘See It Right - Electronic Information’ provides guidance so that people with sight problems can maximize their use of emails.

Guidelines include:

- Plain text format emails are used. Rich text (rtf) and html format emails embed the senders visual display settings and override the recipients
- *bold* or _underline_ symbols are used to surround text you want to give emphasis to rather than italics, capital letters or underlining
- An effective and meaningful subject line is used. Giving the reader an immediate feel for the content of the email
- Effective and meaningful file names are used for any attachments.
- The body text of an email mentions if a document is attached in different formats

Sources of information for applying Universal Design guidance when communicating through email includes:

- RNIB’s ‘See It Right’ – Electronic Communication
- NALA’s ‘Writing and Design Tips’
- NALA’s Plain English Style Guide
- NCBI’s ‘Make It Clear’
- I.S.373:2012 (draft 7)

4.3.4 Web Chat

‘Customer Contact Experience Benchmarks Report’ (2012) identified web chat with a live agent as the least popular method of customer engagement by utility providers. This is supported by the ‘2012 Global Customer Service Barometer’ report findings on US industries and Frost & Sullivan’s report on customer service in energy industries the USA which identified web chat as ranking bottom for customer service enquiries.

Figure 17 below shows a web chat box for telecoms company O2 Ireland. Accessible through the website, web chat is offered for customers from 8.30 to 22.00 Monday to Sunday.

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**Figure 17: Web chat box.**

![Web chat box](image)

(Source: O2 Ireland).

### 4.3.5 Web self service

Web self-service is a business’s website, online documentation and online presence. It provides a system that allows users to perform routine tasks over the internet without requiring live interaction. Web self-service is a tool commonly used for purchasing in the tourism sector, ranging from booking accommodation to purchasing tickets. Additionally it is a key source of information from restaurant menus to hotel brochures. It is less commonly used for purchasing in the energy sector, rather it is primarily used as a source for gaining information, such as looking at account information online or browsing service offerings.

Findings from Echo’s ‘2012 Global Customer Service Barometer’ identified that a company’s website is the preferred method of engagement alongside email for a simple product or service enquiry such as checking availability of a service.\(^\text{144}\) While Frost & Sullivan’s report on customer service focuses on the utility industry, it was found that only 21% of customer interactions are through web self-service.\(^\text{145}\) This suggests that web self-service does not provide adequate information on services to customers.

Customers can be unaware of the services that a business can offer. Explaining services clearly and asking questions to identify a customer’s requirement makes the organisations or business’ services more accessible and usable to potential customers.


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By applying Universal Design principles in the design of a web self-service, businesses make their services easier to access, use and understand by all customers regardless of their age, size, ability or disability. An example of how this can be applied is by using plain English rather than technical jargon and providing clear pricing with no hidden costs. These types of changes benefit all users.

By developing websites aligned with Universal Design principles, businesses are more visible to search engines, the website is 50% faster to navigate and maintenance costs are reduced.  

Key sources of guidance for applying Universal Design principles in customer engagement using web self-service is outlined below:

- Content should be understandable
- Content should be operable from keyboard or touchscreen
- Provide ways to ease navigation
- Provide enough time to allow users to use content
- Make pages appear in predictable ways

Guidance is also provided based on the Web Content Accessibility Guidelines (WCAG) 2.0, states that information content should be:  

- Perceivable (usable regardless of a person’s ability to see, hear or touch);
- Operable (forms, controls and navigation are usable);
- Understandable (the content and interface are clear and easy to comprehend);
- Robust (content can be used reliably by a wide range of devices).

Oracle’s ‘Best practices for web self-service user interfaces’

Oracle’s ‘Best practices for web self-service user interfaces’ provides ten best practices for web self-service user interfaces, which are expanded on in detail in this white paper. These customer-centric recommendations are aimed at improving the usability and effectiveness of web self-service offerings. Examples of these are:

- Make it easy to find
- Make it easy to use
- Understand your customers’ issues
- Provide clear and readable content
- Deliver a personalized experience
- Ensure accessibility

CEUD’s ‘Universal Design for ICT’

‘Universal Design for ICT’ encourages the development of ICTs that are usable and accessible to the widest range of people.\textsuperscript{149}

The interfaces to ICTs, in particular application software and websites, have the potential to offer high levels of flexibility of use to the user than can be easily achieved within building or product design. The following examples show the flexibility that ICT interfaces have to meet a person’s specific requirements.\textsuperscript{150}

- A universally designed website can enable users to change the onscreen text size and colour.
- A website with a flexible design will work on different platforms including mobile phones, portable devices with smaller screens or devices such as assistive technologies used by people with disabilities.

The Centre for Excellence in Universal Design’s ‘Guidelines for ICT accessibility’ provides the following guidelines for web accessibility:\textsuperscript{151}

- Provide a text equivalent for every non-text element
- Ensure that information does not rely on colour perception
- Avoid causing the screen to flicker
- Provide an auditory description of the visual information in multimedia presentations
- For multimedia, ensure that timing of alternative descriptions is synchronised with the presentation
- Use the clearest and simplest language appropriate
- Identify language changes in text

The centre for excellence in Universal Design recommends the use of the Web Content Accessibility Guidelines 2.0 from the Web Accessibility Initiative (WAI). The guidelines for web accessibility are composed of 3 priorities. These guidelines cover all information and services delivered via the world wide web or using html, including web sites and online applications.


4.3.6 Self-service kiosks

Kiosks which range from ATM’s to tourist information stations provide all manner of interactive services—from purchasing and printing boarding passes at an airport to accessing and exploring tourist information. Self-service kiosks, specifically for the tourism sector, improves traveler experience by making travelling easier, quicker and more enjoyable.  

The Centre for Excellence in Universal Design’s (CEUD) ‘Guidelines for public access terminals’ provide guidelines on information kiosks, ticketing vending machines, information displays, point of sales customer card payment systems. This is addressed under 2 priorities.

Priority 1: Following priority 1 will ensure that the terminal can be used by most people with impaired mobility, vision, hearing, cognition and language understanding. These guidelines include:

- Ensure that all operable parts are reachable by people of all heights and people sitting in a wheelchair or buggy
- Ensure that displays are within sight of people of all heights and people sitting in a wheelchair or buggy
- Ensure that controls are adequately sized and sufficiently spaced to be operated by people with limited dexterity
- Ensure that operation requires minimal strength, grip and wrist twisting
- Ensure that the terminal can be operated using only one hand
- If using a touchscreen or contact-sensitive controls, do not require that it is touched by a body part
- Ensure that users with restricted or no vision can use all functions of the terminal.
- Ensure that all outputs can be perceived by users with restricted or no vision.
- Ensure that all outputs can be perceived by users with restricted or no hearing.
- Use the simplest language possible for instructions, prompts and outputs and, where possible, supplement it with pictorial information or spoken language.

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- If using cards, ensure that the card can be inserted into the card reader in its correct orientation without requiring vision.
- If using biometric identification, provide an alternative access security mechanism for users who do not possess the required biological characteristic.
- Do not cause the screen to flash at a frequency of above 2Hz.
- When installing the terminal, ensure that users can get to it along an unobstructed path and operate it from a stable position.
- Ensure that an equivalent service is available through an accessible channel for users who cannot use the terminal.

Priority 2:
Following priority 2 will make it easier to use and will include more people with cognitive impairments or multiple disabilities.  

- Allow sufficient time to accommodate the slowest users.
- Provide a way for the user to cancel the whole transaction at any point and retrieve any items they have inserted.
- Ensure that the user interface and task flow is similar across different functions and remains the same across repeated visits.
- When deploying more than one version of a terminal, ensure that the user interfaces are similar.
- Do not require users to remember a fixed supplied pin.
- Provide for users with multiple impairments.
- Provide training or assistance for new users.
- Ensure privacy and security during use.

4.3.6 Social media
Social media employs web and mobile based technologies to support interactive communication between organizations, communities, and individuals.

As a source of information, social media is becoming more important. Surveys have demonstrated that in 2010, 67% of participants trusted online customer reviews as much as a personal recommendation according to Brightlocals ‘Local Consumer Review Survey 2010’. This rate increased to 72% in a 2012 survey by the same organization.

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To offset the labour required to implement premium levels of customer service, utilities are continuing to turn towards social media. Using internet based applications as customer service channels can be very quick to implement and cost effective. Social media can help businesses reach a growing number of consumers, including those who find call centres stressful.  

New forms of customer engagement such as social media and customer referral websites (e.g. Tripadvisor) allows customers to post uncensored feedback online about a business. This has changed the way businesses communicate with customers. A report by Echo for American express (2011) found that American customers are using mobile apps more than 10 times a day. Additionally 78% of the interview participants used mobile apps for customer service purposes and an increasing number of customers have used an app to buy a product.

Media access Australia has developed guidelines on social media to cater for people with a broad range of needs since the advent of social media in 2009. It provides guidance focused on making social media applications more accessible to customers, with a specific focus on providing step by step support for customers using applications.

Social media channels should have specific functions. The following are the major social media channels that can be used by businesses to engage with customers:

**Twitter**

Twitter is an online social networking service and microblogging service that enables users to send and read text-based messages of up to 140 characters, known as "tweets". Twitter can be used by businesses to:

- Broadcast messages
- Develop conversations with customers

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158 (Wright & Hinson, 2008)
Facebook
Facebook is a social networking service. Users must register before using the site, after which they may create a personal profile, add other users as friends, and exchange messages. Additionally, users may join common-interest user groups.

Facebook can be used by businesses for:
- Customer collaboration and sharing
- Promotions
- Developing conversations with customers

Youtube
Youtube is a video-sharing website on which users can upload, view and share videos. It contains user-generated video content, including movie clips, TV clips, and music videos, as well as amateur content such as video blogging and short original videos. Youtube can be used by businesses for:
- Product support videos
- Customer/partner training

Accessible options for Youtube video viewing are available at [http://icant.co.UK/easy-youtube/]. This offers a user friendly interface for users with low vision.

Wikipedia
Wikipedia is an online free-content encyclopedia that people can edit and contribute to articles. Wikipedia can be used by businesses for product and service education.

Tripadvisor
Tripadvisor.com is a travel website that assists customers in gathering travel information, posting reviews and opinions of travel-related content and engaging in interactive travel forums. Tripadvisor can be used by businesses and customers to:
- Find reviews on services
- Respond to reviews

Boards.ie
Boards.ie is an internet forum based in Ireland. It is considered one of the largest indigenous Irish websites online and can be used to:
- Develop conversations with customers
- Respond to reviews

Each social channel can be chosen depending on the services offered and where the organization/business’ customer currently finds information online about their services.

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Lessons from Good Practices to Guide Universal Design Toolkits

In great Britain ‘SSE’ is successfully using twitter as a customer service channel, responding quickly to queries and making it clear who is manning the channel and at what times, thus reassuring followers’.  

**Figure 18: Energy company SSE using twitter to communicate with customers.**

In the British and Irish energy sectors there has been a move by energy companies to become more involved in social networking sites for customer engagement. This can be seen on Facebook and twitter where the companies such as Bord Gáis, Electric Ireland, British gas, EDF energy and EON are using social networking sites to engage with their customers.

In particular new energy suppliers are using social media as a tactic to differentiate themselves. Using customer service as a marketing strategy has advantages for the customer as it offers the customer different ways of communicating with the service provider. Utilities providers are increasingly offering new and a bigger selections of communication methods (for example, traditional phone calls, inviting customers to visit social media pages, email or online email form). This can be seen in the significant increase in social media as a customer engagement tool, additionally this is supported in the report ‘Best Practice Customer Retention in the British Energy Market’.

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Lessons from Good Practices to Guide Universal Design Toolkits

Figure 19: Irish energy supplier Airtricity’s website offers 3 different contact methods on their website. Contact methods are by phone, email and post. It also offers a frequently asked question box on the contact page to filter out customer queries that may have already been answered on the website.

**Figure 19: Airtricity contact details**

The provision of a choice of communication is in line with the 7 Principles of Universal Design outlined in the document SWiFT 9:2012 Universal Design for Energy Suppliers. It states that products and services should accommodate a wide range of individual preferences, abilities and provide choice in methods of use.

This is also supported in Baidya’s report ‘Social Media in Customer Care’ (2012) whereby persons of varying difficulties should have a choice of methods of communication to select based on best fit to their limited ability.

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Social media is becoming a significant resource to socialize and network. Surveys show that 69% of people trust online customer reviews as much as personal recommendations. The increase in social networking sites and allowing customers to engage with a business publically is advantageous for the customer. Customers who are happy or unhappy with services will post their experiences online, visible to all on the social sites.

Businesses both in the energy sector and in the tourism sector have no choice but to address the new form of customer engagement as their customers are already discussing their services online. Companies who do not provide adequate clear information force customers to turn to social media to find the information from other customers. Feedback on these unmonitored sites can have both a positive or negative effect for businesses if not addressed appropriately (for example complaints can be made public). Telecoms provider O2 Ireland has managed to minimize their exposure of complaints by redirecting enquiries to another social media that doesn’t publically post all comments, boards.ie.

Websites such as Facebook and twitter are being used more and more by the energy industry to answer questions or requests for information online or for notifications; while sites such as Tripadvisor allow customers to leave reviews of their experiences with service providers.

The ‘Social Media in Customer Care’ report (2012) identified that some of the emerging social media tactics on the benefits of social media and how to use it, includes:

- Acknowledge the outcomes of conversation
- Determine skill sets, training and policies. Agents must have exceptional comprehension and writing abilities and be knowledgeable in the use of social media.

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167 (Greater London Authority)
168 (Krishna Baidya, 2012)
169 (Wright & Hinson, 2008)
170 (O2, 2012)
171 (Krishna Baidya, 2012)
4.3.7 Apps in customer service
An app is an application software for mobile devices.

One third of customers use mobile devices to access company websites. This trend is expected to continue in the next 2-3 years.\textsuperscript{172}

The ‘Think Beyond’ iPhone app makes Bord Gáis energy (BGE) the first utility company in Ireland to deliver such a service to its customer base. ‘Think Beyond’ is Bord Gáis Energy’s way of thinking ahead to the ‘smart home’ and it begins with an iPhone app that allows customers to check account balances, billing dates and transaction history for electricity and gas consumption.\textsuperscript{173}

Figure 20 illustrates a demonstration of Bord Gáis meter reading app on how to enter the meter reading and information on gas safety in the home.

\textbf{Figure 20: ‘Think Beyond’ app.}

(Source: Bord Gáis).

\textsuperscript{172} (Kuberacka, Anna, 2012)
\textsuperscript{173} (Silicon Republic, 2012)
4.3.8 Key findings
This literature review investigated the different touch points where the customer engages with the service provider. Touch points include:

- Written communication
- Face-to-face and over-the-phone communication
- Electronic and web-based communication
  - Interactive voice response (IVR)
  - Email
  - Web chat
  - Website and online documentation
  - Short messaging service (SMS)
  - Social media in customer service
  - Apps in customer service

Web and electronic-based communication covers a broad range of topics. This section discusses the customers’ expectations from the various touch points. Each touch point has a different importance and can provide a different function for the service provider and customer depending on both the ability of the customer, communication channel and the level of customer engagement required by the business.

It was discovered that the best use of touch points (specifically social media), is not to use all available options but to use selected touch points. For example, a business in the tourism industry would find it useful to get customer insights using TripAdvisor and focus on face-to-face customer engagements when customers visit their business. In comparison, businesses in the energy sector may find it useful to contact customers quickly using twitter to inform them of supply changes while using written documentation to send formal documents such as billing information.

Different touch points are used to address different issues that customers have within a business. It was found that phone calls are the preferred method of communication for more complex issues such as billing disputes or complaints. While websites were preferred for simple issues such as obtaining information on a service. All businesses should provide a choice of touch points for every customer engagement within their business to meet the Universal Design guidelines as documented in the research found in this chapter.
5. Toolkit information

5.1 Tools to apply and measure customer engagement

The key to the success in implementing a Universal Design Toolkit for Customer Engagement throughout a business is through staff awareness. A Universal Design Toolkit sitting on the desk of the managing director or the head of human resources is of no benefit to the end user of the service, the customer, unless the information and its benefits is passed on to front line staff and also the back room staff whose decisions may also have a knock on effect to the front line customer staff engagements. The Universal Design Toolkit must be presented and communicated in a way that is practical, useable and accessible to all.

The research undertaken identified current approaches and tools which help apply and measure Universal Design in customer engagement. This section looks at different tools and methods to apply the Universal Design toolkit in a logical, easy to understand sequence.

Five approaches used for guidance in applying customer engagement were explored, these included the use of:

- Checklists
- Questionnaires
- Graphic flow charts
- Top tips
- Interactive courses
5.1.1 Checklists

A checklist is a list of to-do criteria that can be used to allow businesses to easily see progress as they tick boxes to fulfil the criteria of the toolkit.

An example of ensuring that the toolkit is implemented can be seen in the SWiFT 9:2012 where supporting Checklists have been developed on 4 elements of written communication, namely: 174

- Written text
- Structure
- Page design
- Forms

These checklists are composed of questions, with an optional ‘yes’ or ‘no’ tick-box responses.

Checklists provide a concise, simple method of self-assessing compliance with the recommended good practice. By providing ‘tick-box’ responses, it quickly identifies areas that need to be worked on by the business or organization.

Additionally these checklists can be distributed to the relevant departments within a business. So the graphics designer who is approving layout for leaflets or booklets can be given the checklist that relates to create leaflets or booklets. Checklists are beneficial as they provide the key information to be applied in a clear, concise way.

Figure 21: An example of a ‘Page design’ checklist from the SWiFT 9:2012. 175

<table>
<thead>
<tr>
<th>Page design</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the font size at least 12 point or ideally 14 point?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Is the font type clear?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Is text aligned to the left?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Is text at least single space?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Does it avoid underlining, groups of italics and unnecessary capital letters?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. Are images, charts or blocks of colour, if any, clear and relevant to the text?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. Does the text contrast effectively with the background?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. Is splitting words between two lines avoided?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. Is the layout consistent and logical? Are recurring features used?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. Does the paper have a matt finish?</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Lessons from Good Practices to Guide Universal Design Toolkits

RNIB’s ‘See It Right’ is a practical guide and reference for businesses and organisations, to make information more accessible. At the end of each section a ‘tick-box’ checklist summarising the key learning from each chapter. This is provided in a simplistic, concise fashion. (See Figure 22 below)

**Figure 22: Clear print checklist**

From a psychological perspective, the benefit of having a single tick-box is that it doesn’t provide a ‘no’ option. Therefore the checklist isn’t completed until all the boxes are ticked.

### 5.1.2 Questions

Question sets can be used to assess progress made in applying Universal Design Principles. It provides a measurement for staff to assess whether they have addressed all the set guidelines.

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Lessons from Good Practices to Guide Universal Design Toolkits

The SWiFT 9:2012 document identifies 4 steps associated with Universal Design principles. These steps are:177

- **Step A: Perception:** Customer uses their eyes, ears or sense of touch to perceive content. (Universal Design Principle 4).
- **Step B: Discoverability:** Customer finds the information they want. (Universal Design Principle 2).
- **Step C: Understanding:** Customer interprets and understands how to use this content. (Universal Design Principle 3).
- **Step D: Use:** Customer decides how to use and act on the content presented. (Universal Design Principle 5).

SWiFT 9: 2012 has built on the 4 steps identified previously by developing “Guiding tables” to provide assistance to energy suppliers in applying Universal Design Principles and Guidelines in the development of their products and services. The tables focus on 4 principles (4, 2, 3 and 5) which provide key questions to guide energy suppliers through the process of basic design evaluation for usability.

**Figure 23: Guiding table with key questions**

<table>
<thead>
<tr>
<th>Step B: Customer finding relevant information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guidelines for principle 2</strong></td>
<td>Does your product or service features enable your customers to find information easily?</td>
</tr>
<tr>
<td>2a. Provide choice in methods of use.</td>
<td>Does your product or service offer different routes (audio and visual) to find and identify content that enables effective use of the product or service?</td>
</tr>
<tr>
<td>2c. Facilitate the user's accuracy and precision.</td>
<td>Is the content presented in a clear, concise and well structured way? Does the way the content is presented make it easy for your customer to understand and use it in the way it was designed?</td>
</tr>
<tr>
<td>2d. Provide adaptability to the user's pace.</td>
<td>Does your product or service give the user enough time to complete a task or allow them if needed, to easily increase the time allowed?</td>
</tr>
</tbody>
</table>

Lessons from Good Practices to Guide Universal Design Toolkits

As part of the development of accessible tourism in the run up to London 2012, VisitEngland generated a set of templates/checklists for businesses in the hospitality sector for both frontline staff and managers. VisitEngland’s question-set has a particular focus on “disability awareness” and face to face customer engagements.\(^{178}\) This approach differs from the SWiFT 9:2012 ‘Guiding table’ which is specifically focused on questions around the Universal Design of products and services.

Figure 24: VisitEngland’s template is formatted in a way to question and test the staff by asking the service designers to think more about how they plan to meet the needs of their customers.

**Figure 24: Extract from accessibility awareness template for front line staff.**

| 1 - Key skills and knowledge required by front line staff in order to meet the needs of customers with a disability |
|---|---|
| 1. Demonstrate an understanding of the importance of excellent customer service skills for disabled customers: |
| 1. What we mean by disability (e.g. impairment, disability etc.) |
| 2. Importance of disabled customers to UK tourism |
| 3. Create awareness of the National Accessible Scheme (NAS) |
| 2. Demonstrate an understanding of specific disabilities: |
| 1. Ability impairment (This includes learning difficulties) |
| 2. Hearing impairment |
| 3. Visual impairment |
| 4. Mobility impairment |
| 3. Demonstrate knowledge of using appropriate language when referring to customers with disabilities (e.g. using the correct terminology) |
| 4. Demonstrate how to communicate effectively with disabled customers (e.g. listening skills) |

(Source: visitEngland)\(^{179}\)

Both checklists and question sets are intended to be an aide memoir to assist in the application of Universal Design Principles to customer engagement. The intention is that these sources of information will be a useful reference point against which any customer service developer, manager or procurer can plan and measure their training needs and delivery.\(^{180}\)

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5.1.3 Graphic flow chart

Graphic flow charts provide a visual image to illustrate a process. This is an important consideration as people like information presented in different ways, and often may find an image supporting the text will help to understand the process both easier and quicker.

This similarly applies to ‘customer journey maps’; many businesses would find it more difficult to list all types of customer engagements, compared to visually mapping out the customer engagement process. VisitEngland developed a simple route map which maps out their engagement channels. The three key customer engagement areas according to VisitEngland include:

- Customer service and training
- Information, marketing and communication
- Facilities

This focus on three key areas is also reflected in the strategic directions plan for Western Australia as detailed in ‘Access All Areas’ report. Figure 25 visually illustrates a customer engagement flow chart highlighting key areas for tourism businesses to improve access in the UK.

Figure 25: Customer engagement map

Source: VisitEngland


5.1.4 Top tips
By providing a summarised, concise version of key ‘tips’ (similar to a checklist), it provides the business or organisations with the key guidelines. For any additional information the user can read the explanatory notes in the main body of text. Alternatively key tips/guidelines are often emphasised using colour in the main body of text (for example in RNIB’s ‘See It Right’).

The national disability authority’s ‘accessibility toolkit for public sector staff’ presents key information as ‘top tips’ for each section. These pieces of information are highlighted in an eye-catching box on the website which captures concise, key learning presented in a checklist fashion.

Figure 26: Top tips for making your information more accessible.

5.1.5 Interactive courses and elearning
Interactive courses can provide an alternative method of measuring and assessing the businesses understanding of Universal Design and accessibility.

VisitEngland and DisabledGo have developed an interactive online disability awareness course specifically focused on tourism businesses in the UK. It was initiated as part of the preparations for London 2012 Olympics and Paralympics. It offers businesses the opportunity to allow up to 5 members of staff participate in the course online for £15 per person and receive an official certificate on completion.

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The course consists of six modules, which can be completed online at the user’s convenience; the whole course takes around one to two hours to complete. The training starts with an introduction to disability, and then looks at different types of impairment, before offering practical advice on providing an accessible service and acceptable language to use when communicating with disabled customers. The final section talks through the legal obligations of tourism businesses under the Equality Act (2010). Progress can be saved throughout the course, allowing the user to log off and complete it over several hours or days, if necessary.

Following successful completion of the course a certificate is made available for download, and each user’s account remains active, allowing them to log in at a later date to refer to the course material; sections can also be printed out for every-day reference.

Figure 27: VisitEngland’s online disability awareness course website.

The provision of online awareness training offers businesses the opportunity to track if staff have, not only read provided materials on Universal Design awareness but check if they have taken it on board through online course testing. This ensures that staff understands the reasons and benefits of the training. This is not possible with a printed document like the checklist as it is easy to bypass the learning and simply tick all the boxes. The online course also provides staff and businesses a sense of achievement for partaking in the course by providing a certificate when they have completed the course. The secondary benefit of this is that businesses that have completed the course can use the official certificate in marketing material to tell future customers that they have done the course and are disability aware.
Lessons from Good Practices to Guide Universal Design Toolkits

The advantage of an online format is that it is easily accessible nationally. The interactive nature is more engaging than a standard printed document or an informative website as there is incentive to continue through the information on the website.

5.1.6 Key findings
The key to success in the design and development of a Universal Design Toolkit for Customer Engagement is by presenting the information in a way that is concise, easy to understand and apply, and presented in a logical sequence. A variety of research documents were explored as part of this area of research in order to identify best practice approaches for presenting and applying the key learning.

Five approaches of applying customer engagement learning were explored. These approaches included:

- **Checklists**
  A checklist is a list of to-do criteria that can be used to allow businesses to easily see progress as they tick boxes to fulfil the criteria of the toolkit. From a psychological perspective, the benefit of having a single tick-box is that it doesn’t provide a ‘no’ option. Therefore the checklist isn’t completed until all the boxes are ticked.

- **Question-sets**
  Question sets are intended to be an aide memoir to assist in the application of Universal Design principles to customer engagement. The intention is that these sources of information will be a useful reference point against which any customer service developer, manager or procurer can plan and measure their training needs and delivery. Approaches to questions-set differed based on whether the questions were focused on applying Universal Design principles to products and services, or whether the focus was addressing the needs of people with difficulties. For the purpose of the toolkit it is important that that focus remains on Universal Design rather than accessibility.

- **Graphic flow charts**
  Graphic flow charts provide a visual image to illustrate a process. This is an important consideration as people like information presented in different ways, and often may find an image supporting the text will help to understand the process both easier and quicker.

- **Top tips**
  By providing a summarised, concise version of key ‘tips’ (similar to a checklist), it provides the business or organisations with the key guidelines. For any additional information the user can read the explanatory notes in the main body of text. Alternatively key tips/guidelines are often emphasised using colour in the main body of text (for example in RNIB's ‘See It Right’). This successfully catches the users’ attention; however the use of plain English and short phrases are important factors to consider.
Interactive courses
Interactive courses can provide an alternative method of measuring and assessing the businesses understanding of Universal Design and accessibility. The provision of online awareness training offers businesses the opportunity to track if staff have, not only read provided materials on Universal Design awareness but check if they have taken it on board through online course testing. This ensures that staff understands the reasons and benefits of the training. This is not possible with a printed document like the checklist as it is easy to bypass the learning and simply tick all the boxes. The online course also provides staff and businesses a sense of achievement for partaking in the course by providing a certificate when they have completed the course.

While the overall approaches differed, in essence the key attributes of the five approaches focused on:

- Conveying the information in a logical sequence and manner, that is easy and quick to understand
- Using short, concise sentences to summarise actions
- Avoiding the use of jargon
- Avoiding too many steps in applying the learning. This reinforced the message that the process and key learning was user friendly and easy to apply
- Presenting the information in a user-friendly way that is logical and easy to apply by the service providers, managers and procurers
5.2 Communicating information

This section identifies the best approach to communicate and demonstrate how to apply Universal Design in customer engagement. This research explored how customer characteristics and capabilities could be communicated in an engaging, interactive fashion.

The overall aim of this section was to identify different approaches that would allow people, the service providers, managers and procurers to see a situation from a different perspective and show examples that can then help them understand the information being presented and how they can apply to their own business.

Research was undertaken into the areas of personas, case studies, scenarios and use cases to identify the most effective way to communicate learning and good practice to organisations and businesses.

Case studies

Case studies are stories which take place over a specific period of time which gives a business, industry, person or project example of the topic being discussed. The content within a case study typically contains information about company objectives, strategies, challenges, results and recommendations. The objective is to consider the problem and work out appropriate strategies to solve the problem and apply them to the real situation.

Highlighting the issues from the end users perspective using real life case study examples can help illustrate to service providers considerations that may need to be considered when dealing with customers with specific impairments. The benefit of this approach is it illustrates the benefits and impact that the Universal Design of customer engagements would have on the business as a whole. It can help senior management better understand the benefit of implementing an accessible customer engagement strategy can have on their business.

This is supported by the use of business case studies in VisitEngland guide to improving accessibility for customers\(^\text{185}\). The following example is a short positive case story about accessible tourism accommodation in England:

Kim and Terry Lord run ‘The Ramblers’, a six bedroom 4-Star guest house near Mapplethorpe on the Lincolnshire coast. They speak to all their visitors and with a specific focus on improving their customer experience. An example of this approach is that some visitors with arthritis find a full size kettle too heavy, Kim and Terry therefore also provide travel kettles as an alternative.

To accommodate one person’s condition they were asked to move the bedroom furniture around. They didn’t make an issue of it and rearranged the room to suit. Now that visitor stays with them four times a year and Kim and Terry have welcomed two other families directly from her recommendation. For just 10 minutes of their time their business has gained over £1,000 from that one satisfied visitor.\(^\text{186}\)

The use of images to portray the customer case to businesses is also important as it gives examples of how the information in the toolkit can be applied. Images can be used as part of the case studies, scenarios or personas or on their own to highlight a key point.

**Figure 28: VisitEngland: ‘At Your Service’.** An example of an image showing how making a physical alteration like adding a ramp can make a business more accessible to wheelchair users and also to parents with buggies.

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Personas

A persona is an in-depth description of a person or a number of persons in order to allow the reader to better understand the person or persons and subsequently to better understand that person’s lifestyle and needs.

A persona is typically a fictional person who represents a major user group, which typically incorporate the characteristics that are most representative of customer groups. Personas are often used to illustrate the end users’ goals and needs by designing and using a manageable set of personas that represent the needs of many users.

The ‘Inclusive Design Toolkit’ website identified the use of a set of personas as a training tool. They provide an example of how a set of personas could be used; the characteristics of these personas varied greatly based on:

- The variation in capability between the different personas
- The influence of lifestyle and life stages
- The aspirations for each persona, and motivations to access different customer engagement channels
- The position of each persona within a family or social network

Each of these factors will impact on the persona character approach to, and interaction with different types of customer engagements.

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Figure 29: Example of a set of personas
This image illustrates the relationships between the four generations in this set of personas.

Below is an example of a real persona, David Kent, it allows you to get an insight into David’s personality and get an idea of how he lives with his ability and the issues he comes across. This case study persona would help suppliers understand that David’s limited ability is not reason enough for him not to partake in the same activities as anyone else:

“I’m a 52-year-old blind man, and I’ve used a guide dog for 33 years. I’ve travelled a lot, independently and with my dog or other people. I've been to Toronto, because my sister lived there and I have friends all over southern Ontario. It's the only place where I would travel alone, because I know it so well. For travel to be really enjoyable, the ability to be independent is the most important thing.”

The US and Canada are really good options for blind people, because the infrastructure is there, the built environment is easy to navigate – the road crossings, pavements and so on, and they are a lot more savvy with disability and vision impairment. They know about guide dogs so there aren't many access issues. It’s heart-breaking that even in the UK, with the equality commission, there can be problems, and sometimes those ignorant of the law won’t let guide dogs in.”

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Lessons from Good Practices to Guide Universal Design Toolkits

**Figure 30: David travelling in Indonesia meeting an elephant.**
Dave Kent, engagement officer for the London team for guide dogs.

(Source: Kent, 2012)

David is one of several case studies used in a series of articles in the guardian newspaper using real life case studies to tell stories about people with disabilities experiences travelling\(^{191}\). Other good examples of personas can be found in Travability’s inclusive marketing toolkit\(^{192}\).

**Video personas**
Videos can be used as a method to portray the advantages of applying Universal Design for customers and business providers. ‘Be.Accessible’ in New Zealand use videos to provide guidelines and directions on how to use their website and draw attention to the accessible features of their service. They also use videos to explain people and real personas that can help businesses get a better understanding of some of the people that may be using their services and the limitations that they may encounter.

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Scenarios
A scenario is a short story about a specific user with a specific goal or need. Scenarios are the questions, tasks, and stories experienced by users. Typically, the most common scenarios are identified to demonstrate a task or activity; for example, a scenario could be used to illustrate issues when engaging with customers, such as if an older person is unable to read the restaurant menu because the text is too small. Scenarios can be used beneficially to connect with the service provider by providing a situation they can relate to.

Usability.gov, the US Government website on usability has identified three levels of scenarios. The first is ‘goal or task-based scenarios’. These scenarios state only what the user wants to do. Scenarios at this level do not include any information on how the user goes about completing the scenario.

Example: Mary is going on holiday next week to London and she wants to check if there will be any travel issues for her as a wheelchair user.

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Lessons from Good Practices to Guide Universal Design Toolkits

The second type of scenario is ‘elaborated scenarios’. These scenarios give more details of the end users’ stories. Scenarios at this level give the service designer, manager or procurer a deeper understanding of their users’ needs.

The third type of scenario is ‘full scale task scenarios’. These scenarios include the steps to accomplish the task. A full-scale scenario typically identifies all the steps that a specific user takes today to accomplish the task.

An example of the use of a full scale scenario can be found in Shawn Henry’s book ‘Just Ask’.195 Below is an excerpt from a scenario in the book:

‘Kim and her mother both have Alport Syndrome, a genetic condition that has led to significant hearing loss. Kim’s mother, who wears hearing aids in both ears, prefers to use tty for phone calls when she can. Kim is sitting outside the classroom building, and since she has a digital wireless phone and portable tty, she can call her mother from anywhere. She plugs the cable into the hands-free jack on the cell phone and into the jack on her portable tty and turns on her cell phone. Kim checks to see if "t" shows on the display, indicating that tty mode is already on, but she sees that it is not on. To set her phone to tty mode, Kim presses ##889 and then presses the menu-ok button. She then highlights "save phone #" and presses menu-ok. Next she highlights "accessibility" and presses menu-ok. Finally she highlights "tty on" and presses menu-ok. Kim dials her mother’s number. Kim can tell by the light pattern on the tty that the phone has dialled and is ringing.’

Graphic storyboard scenario

Below is an example of scenario provided as a graphic storyboard. The storyboard is a tool derived from the cinematographic tradition; it is the representation of use cases through a series of drawings or pictures, put together in a narrative sequence. The service storyboard shows the manifestation of every touch points and the relationships between them and the user in the creation of the experience.

The benefit of storyboards is the ability to capture engagement between the customer and service provider. By providing visual engagement scenarios it is easier to understand and communicate concepts such as ‘welcoming’ – which could be illustrated visually by body language in addition to the conversation between the customer and supplier.

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Figure 32: Storyboard.
This image shows the customer journey through the Argos shopping experience from approaching the business, purchasing the product to leaving the premises.

(Source: Thinkpublic) 196

196 (Szebeko, 2009)
Lessons from Good Practices to Guide Universal Design Toolkits

Use case
A use case is a description of how users will perform tasks and activities, in this specific context as part of service engagement. Use cases walk through a simple use case example describing a sequence of interactions between a customer and a service provider. This can provide a good method of identifying good or bad practice during a specific customer engagement process. The use case is composed of two main parts:

- The steps a user will take to accomplish a particular task or activity.
- The way the service provider should respond to a user's actions.
- A use case begins with a user's goal and ends when that goal is fulfilled\(^{197}\).

Each use case captures:
- The customer
- The interaction (what does the customer want to do?)
- The goal (what is the customer's goal?)

Key findings
Literature research was conducted to identify the best approach to communicate and demonstrate how to apply Universal Design for customer engagement in customer services. This research explored how customer characteristics and capabilities could be communicated in an engaging, interactive fashion.

Research was undertaken into the areas of personas, case studies, scenarios and use cases. Within these areas methods of conveying case stories and personas through mediums such as photographs, graphics, videos and storyboards were explored.

The literature review identified different approaches that would allow service providers, managers and procurers to see a situation from a different perspective that would help them understand the information being presented and how they can apply to their own business. These approaches are outlined below:

- **Case stories**: Case stories can provide an impactful tool to demonstrate good and bad practice. It can be used particularly well as an inspirational tool using good practice in local businesses that the service provider can relate to.
- **Personas**: Personas can be used to create extreme samples of customers that are applicable to both the energy and tourism sectors. These can be used in conjunction with approaches such as storyboards or scenarios to demonstrate good and bad examples of customer engagement.
- **Use case**: Use cases walk through a simple use case example describing a sequence of interactions between a customer and a service provider. This can provide a good method of identifying good or bad practice during a specific customer engagement process.

- **Storyboards:** The benefit of storyboards is the ability to capture engagement between the customer and service provider. By providing visual engagement scenarios it is easier to understand and communicate concepts such as “welcoming” – which could be illustrated visually by body language in addition to the conversation between the customer and supplier.

- **Scenario:** A scenario is a short story about a specific user with a specific goal or need. Scenarios are the questions, tasks, and stories experienced by users. Typically the most common scenarios are identified to demonstrate a task or activity; for example a scenario could be used to illustrate issues when engaging with customers, such as if an older person is unable to read the restaurant menu because the text is too small. Scenarios can be used beneficially to connect with the service provider by providing a situation they can relate to.
6. Communicating the business case

A key consideration in the success of the Universal Design toolkit is the importance of establishing a strong business case. The business case is typically built on two perspectives:

- The benefit it will bring to the customers
- The benefit it will bring to the business

Jeneanne Rae’s article in the BusinessWeek ‘New thinking about consumer marketing’ (2009) is summarised by the quote:198

“People don’t want a quarter-inch drill; they want a quarter inch hole.”

This article focuses on the need for businesses to be focused on meeting their customers' needs. The points made in this article strongly outline considerations that should be addressed as part of building the business case in applying the Universal Design toolkit.

The key recommendations from the article include:

- All products and services should fall into the category of getting a job done, solving a problem and filling a need. Companies need to expand their thinking, to be more solution-centric.

- The easy availability of information on the internet allows customers to form opinions from countless sources. Conversations on Facebook, e-mail and discussion boards steer customers well before businesses have had a chance to pitch their product or service. This means that customers must search out their customers sooner.

- Businesses need to understand that a customer’s journey is a circle not a straight line. It is important that businesses continue their conversation after the first sale, giving the customers reasons to keep them involved.

- The information revolution has connected people in powerful ways; it's never been easier for customers to find the opinions of others to validate their product and service choices.

Lessons from Good Practices to Guide Universal Design Toolkits

In an interview on ‘Accessible tourism development and marketing’, Ivor Ambrose, Managing Director of the European Network for Accessible Tourism outlines the importance of motivating businesses to be more accessible:

“The example of leadership shown by VisitEngland should be followed by other National Tourist Boards (NTOs). If NTOs do not encourage their destinations to make services more accessible, businesses will continue to under-perform as demand in this sector is inevitably going to increase in the coming years due to demographic ageing”.

An example of the strong business case that VisitEngland presents in driving and motivating service providers can be seen in their ‘Easy does it’ publication. This booklet outlines the business case with a clear, compelling introduction: 199

“If building your business matters, take 60 seconds to read a section of the visitor journey in this booklet”.

It makes the point that tourism businesses with improved usability appeal to a wider range of visitors. The key point however is that it’s not just people with difficulties that benefit, it’s older people, families and practically all customers in one way or another.

‘Easy does it’ outlines key statistics to justify why tourism business should apply the guidance outlined in the document. Examples of which include: 200

- The over 50s buy 40% more holidays than the under 30s, averaging five or six breaks per year. (Professor Richard Scase, 2005, Global Remix).
- More than five million over 55s visited Britain from overseas. This represents one in six of inbound visitors. This upward trend is set to continue.
- The UK market is aging. It is estimated that by 2025 more than a third of the UK’s population will be over 55.

These statistics would provide a strong business case and justification in why tourism businesses should apply the guidance provided by VisitEngland. Additionally ‘Easy does it’ provides a section called ‘it’s a legal requirement’ which provides strong legal motivation of why businesses should apply the guidance. While the content of this section is serious, it is written in a personal and casual way.

VisitEngland’s ‘At your service’ presents the business case in a unique and visually interesting way (illustrated below).

**Figure 33 ‘See it right’ business case**

Now more than ever before, you want to run an effective and efficient business. Your limited time and available cash have to add value and put more money in the bank. Because that’s what businesses are all about, right?

**Imagining yourself in the television programme Dragons’ Den**

Standing in front of the investors you put forward a pitch for surplus investment in your tourism business.

**Investor 1:** 23%? How are you going to do that?

**Investor 2:** What do you propose?

**Investor 3:** You’ve achieved a lot already, at little or no cost to the business. For example, I’ve completed an access statement using a free online tool provided by VisitEngland.

**Investor 4:** I can see you’ve looked into this market carefully. What comes next?

**You:** Pretty much everything I’ve investigated will increase my opportunities to win more business. First off, I want to make my website more accessible which will also increase my Google ranking. I want to put in a ramp which will be good for elderly people or anyone using wheelchairs or pushing a buggy.

**In the beginning**

Imagine being offered a loyal, growing market which makes you stand out from your competitors. Be honest; you’d be interested in that market wouldn’t you?

There are many reasons for businesses to become more accessible. This booklet is a starting point to guide you. To reap the business benefits outlined here forget your assumptions. Be open to the opportunities available to you. Gain confidence and a share of this lucrative and growing market.

**Hungry for business?**

Disabled people have the desire, the means and the time to travel. Travelling can be for leisure or business. Nothing new there then. The main difference is that disabled people tend to stay longer than average (3.6 nights as opposed to 3 overall) and to spend more than average (£173 compared to £365 overall). Many prefer to travel at off-peak times.

They present a compelling business case titled ‘in the beginning’:

Imagine being offered a loyal, growing market which makes you stand out from your competitors. Be honest; you’d be interested in that market wouldn’t you?

So why do many tourism businesses overlook improving their accessibility?

Disabled people have the desire, the means and the time to travel. Travelling can be for leisure or business. Nothing new there then.

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The main difference is that disabled people tend to stay longer than average (3.6 nights as opposed to 3 overall) and to spend more than average (£173 compared to £168 overall). Many prefer to travel at off-peak times.”

The second page of the business case takes a slightly different approach; highlighting what a business risks losing by not adopting and embracing accessibility in their business.

**Figure:34 ‘See it right’ business case**

*Source: VisitEngland ‘At your service’. 203*

While the Universal Design Toolkit will not be focused on accessibility, the same structure and argument can be made in Universal Design. The section outlining ‘the bottom line’, is particularly powerful in motivating the service provider. It provides the service provider with the challenge to:

“Find three no cost business improvements that you can action in the next 30 days from the ‘Easy does it’ business guide”.

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203 VisitEngland. ‘At your Service’. Available from:  
Lessons from Good Practices to Guide Universal Design Toolkits

The European Blind Union’s publication ‘Making information accessible to all’ (2011) identified the following justification for applying their guidance: 204

- Making information accessible is not more expensive or more complicated. It only requires some awareness and probably a shift in your production process and staff getting used to it.
- Accessibility not only benefits the blind and partially sighted. For example an accessible website will rank higher in search engines, accessible documents are easier to maintain, update and convert into other formats.

A similar approach is used in NALA’s ‘Simply put-writing and design tips’. 205 This publication provides a ‘what are the advantages of using plain English?’ section. This section clearly outlines the advantages that using plain English to service providers. Examples of these points include:

- Plain English increases the chance that everyone will understand your message, which saves time and avoids misunderstandings.
- Plain English makes good business sense. Studies have shown that when you use plain English, your reader can better understand your information. Organisations want to communicate well with their customers and customers want information that is quick and easy to understand.
- When you write your material clearly, people can make informed judgements. Most people do not want to be forced to read material more than once to understand the message and decide what to do next.

This approach works well in clearly outlining the advantages to businesses of applying the guidance when communicating with their customers.

In comparison with the examples provided above, the ‘Accessibility for customers with disabilities in community pharmacies’ (M. Gilbert, 2008) focuses on driving adoption of the guidance provided, by heavily outlining the legal requirements that businesses must meet. 206 This is in contrast to the documents outlined above where legal requirements are part of, but are not the main driver in motivating service providers to adopt the guidance provided.

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6.1 Key findings

Based on the research undertaken, a key finding was that in order to motivate a business manager or owner to use the Universal Design Toolkit, it is important that:

- They understand what Universal Design is.
- They see the value for their business in applying the Universal Design Guidance.

While the approach in establishing a business case in the documents researched varied between different authors and agencies, examples of good practice characteristics are outlined below:

- The use of statistics in establishing the business case.
  For example, the over 50s buy 40% more holidays than the under 30s, averaging five or six breaks per year. (Professor Richard Scase, 2005, Global Remix).

- The use of legal requirements to motivate compliance.

- The use of friendly, personal language.

- The provision of a list of benefits in applying the guidance provided.
  A good example of this can be seen in NALA’s ‘Simply put-writing and design tips’.

- The use of appealing visuals and layout which highlights the important information.
  For example, in VisitEngland’s ‘at your service’ the section outlining ‘the bottom line’, is highlighted in the red section to attract the attention of the reader to its importance.

- The use of ‘bottom line’ statistics or challenges. For example, VisitEngland’s ‘At your service’ challenges the end user to find three no cost business improvements that can be acted on in 30 days from the ‘Easy does it’ business guide.

Overall the findings were that while the approach varies between publications, VisitEngland’s ‘At your service’ and ‘Easy does it’ has led the way in establishing the business case and motivating businesses to apply guidance on accessibility. It is proposed that these sources will heavily influence the establishment of a business case for the Universal Design Toolkit.
Policies, standards & guidelines

7. National and International Policies, Standards and Guidelines

This chapter aims to provide an overview of the international and national standards, policies and guidelines which are focused on customer engagement in the tourism and energy sector. Specific focus was placed on standards, policies and guidelines which address the concept of the Universal Design.

The research has been addressed as an overview on policies and legislation around the rights of people with disabilities, followed by an overview of the tourism and energy sectors in Ireland and the relating national standards and recommendatory documents.

International level
The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) 2006 recognises that every person must be empowered to participate in society and to live life to their fullest potential. This universal, legally binding standard ensures that the rights of persons with disabilities are guaranteed. The UNCRPD sets an international benchmark for the human rights of disabled people. Ireland has signed but not yet ratified the Convention.

EU Directives and regulation
In Europe, the Amsterdam treaty (1997) provides European Union laws against discrimination. The introduction of Article 13 states:

“Without prejudice to the other provisions of this treaty and within the limits of powers conferred by it upon the community, the council, acting unanimously on a proposal from the commission and after consulting the European parliament, may take appropriate action to combat discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation.”

The European Treaty, permits the European Council to provide for measures to combat discrimination based on disability. Subsequently it has been expressed in a variety of other forms, such as the Charter of Fundamental Rights and, in the European Commission communication ‘Towards a barrier free Europe for people with disabilities’ (European Commission 2000a).\(^{207}\)

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Lessons from Good Practices to Guide Universal Design Toolkits

**National**
The Equal Status Acts 2000 to 2011 promotes equality and prohibit discrimination across nine equality grounds (disability, age, gender, civil status, family status, sexual orientation, race, religion and membership of the Traveller community). The Acts apply to people who buy and sell a wide range of goods and to those who use or provide a wide range of services-this would include both service and tourism service providers. Employers are also liable for the actions of employees if they discriminate against a customer / service user.

The Disability Act (2005) is designed to progress and support the participation of people with disabilities in everyday life. It establishes a statutory basis for supporting the provision of disability specific services and improving access to mainstream public services. The Disability Act (2005) defines Universal Design as:

1. the design and composition of an environment so that it may be accessed, understood and used
   i. to the greatest practicable extent,
   ii. in the most independent and natural manner possible,
   iii. in the widest possible range of situations, and
   iv. without the need for adaptation, modification, assistive devices or specialised solutions, by any persons of any age or size or having any particular physical, sensory, mental health or intellectual ability or disability, and

2. means, in relation to electronic systems, any electronics-based process of creating products, services or systems so that they may be used by any person.

**Tourism Sector:**
In relation to standards specifically

ISO/TC 228 ‘Tourism and related services’ provides standardisation of the terminology and specifications of the services offered by tourism service providers, including related activities, touristic destinations and the requirements of facilities and equipment used by them, to provide tourism buyers, providers and consumers with criteria for making informed decisions.

Irish Standard 373:2013(currently in draft format, but due for publication in 2013) is a voluntary standard will also help tourism service providers to meet their legal obligations under the Equal Status Acts 2000-2011 and the Disability Act 2005 (where applicable).

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Energy Sector

Section 3 of the European Communities (Internal Market in Electricity and Gas) (Consumer Protection) Regulations of 2011, states that suppliers shall apply the principles of Universal Design to:

a) All products and services offered or provided to final customers
b) Communications with final customers.

In Ireland, both the private and public sectors are legally required to provide a standard of service to all customers, which does not exclude or discriminate. Universal Design promotes compliance with this national legislation.

The legal obligations on Energy suppliers are expanded in S.I. No.463 of 2011, which strengthened requirements around codes of practice and services to vulnerable customers. It also puts an obligation on suppliers to apply the principles of Universal Design in the development of their products, services and communications to customers.

In 2012, the National Standards Authority of Ireland (NSAI) published SWiFT 9:2012 ‘Universal Design for energy suppliers’. This recommendatory document provides guidance to energy suppliers on how to apply Universal Design in the development of accessible and usable products and services for household customers.

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209 European Communities (Internal Market in Electricity and Gas) (Consumer Protection) Regulations of 2011, Section 3.
Guidelines to toolkit authors

8. Recommendations for toolkit authors

This literature review explored the relationship between usability, accessibility and Universal Design to identify a good practice structure for the toolkit. Research was undertaken into customer engagement touch points in the energy and tourism sectors, international best practice in the Universal Design of Customer Engagement in both the tourism and energy sectors and good practice in measuring and assessing the impact of applying Universal Design in Customer Engagement.

The Universal Design Toolkit for Customer Engagement is targeted at those who develop, manage and procure customer services. The toolkit will be used by both public and private organisations providing direct services to customers in the energy supply sector and the tourism sectors.

Universal Design of customer engagement is about ensuring that customer services are designed to meet the needs of all customers regardless of their age, size, ability or disability. The 2011 Irish Census identified that the number of older people (over the age of 65) increased by 14% since the previous census. Alongside this rapidly increasing figure, the Irish Census (2011) also identified that 13% of people in Ireland have some type of long-term impairment, a statistic which increases significantly with age. Over 70% of the population over the age of 70 years have some type of long term impairment. 210

Based on the findings and recommendations from this literature review, a draft ‘Universal Design Toolkit for Customer Engagement’ will be developed which will be a practical resource to help businesses apply Universal Design to their products and services. It is proposed that the Universal Design Toolkit for Customer Engagement should provide a ‘step-by-step’ framework and best practice guide in the Universal Design of customer engagement, to measure usage and impact through an interactive approach.

Providing a Universal Design Toolkit for Customer Engagement will provide Irish service providers in the tourism and energy sectors with the resources and knowledge to design, manage and procure customer services that are easy to access, use and understand by all customers regardless of their age, size or range of abilities.

8.2

8.1 The role of Universal Design
Based on the literature research and analysis, it is recommended that the following four steps are used as a structural part of the toolkit. The 4 steps are as follows:

- Step 1: ‘Perception’: the ability to understand information regardless of the user’s ability to see, hear or touch.
- Step 2: ‘Discoverability’, providing flexibility in use so that the user can find the information they want
- Step 3: ‘Understanding’, how easy it is for the customer to interpret and understands how to use the content; regardless of the user’s experience, knowledge, language skills, or current concentration level.
- Step 4: ‘Use’, the design prevents from accidental or inadvertent actions, forms, controls and navigation are usable and the customer decides on how to use and act on the content presented.

8.2 Customer engagement touch points
It is recommended that the following channels of customer engagement should be addressed in the toolkit.

- Written communication
- Verbal communication
- Electronic communication
- Web-based communication

The broad nature of these categories, for example ‘written communication’ will encompass good practice that can be applied from energy bill design to menu design. This was identified through literature research as a good practice approach to enable the resulting toolkit to be applicable to the diverse range and needs of the end users.

As the toolkit will address both the energy and tourism sectors, it is proposed that the structure of this toolkit will be aligned with SWiFT 9:2012 ‘Universal Design for Energy Suppliers’ and is 373:2012 ‘Universal Design for Customer Engagement in Tourism Services’ (draft 7). The reasoning for this is that these are leading sources nationally and internationally on the Universal Design for energy and tourism service providers. Therefore it is proposed that the Toolkit will address:

- Written communication
- Face-to-face communication
- Electronic and web-based communication

8.2.1 Written communication
The literature review undertaken identified that the guidance on written communication provided in general, is applicable to all industries and sectors. The general guidance provided on written text, use of plain English and document structure is designed to be applicable to materials from restaurant menus to electricity bills.
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Based on the literature review findings, recommendations for the content on written guidance can be summarised as addressing the following:

- The use of plain English
- Written text (font, size etc.)
- Document structure
- Document design
- Form design

It is recommended that the toolkit author considers the following good practice attributes in the design of the toolkit to enhance ease of use and understanding:

- Document text size (larger text would good spacing is easier to read)
- Plain English (using everyday language)
- Personal tone (for example ‘I’, ‘we’ and ‘you’)
- Visual examples of good and bad practice
- Practical examples (e.g. Showing how to replace technical jargon with everyday words)
- Use of colour or bold to highlight key information (e.g. Key guidelines)
- Use of case studies to give examples of good practice
- Using document layout and structure to emphasise information

**Good practice written communication resources**

More detailed guidance on the Universal Design and accessibility of written communication is available from the following sources:

- RNIB: ‘See it Right’
- National Adult Literacy Agency (NALA): Simply Put. ‘Writing and design tips’.
- NALA: ‘Plain English guidelines at a glance’
- NALA: ‘Checklist for forms’
- NALA: ‘Checklist for documents’
- The Association of Registered Graphic Designers of Ontario (RGD Ontario): ‘AccessAbility’
- European Blind Union: ‘Making Information Accessible to All’
- Destination NSW’s ‘Tourism Business Toolkit’
- National Disability Authority’s ‘Accessibility Toolkit for Public Sector Staff’

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8.2.2 Face-to-face communication

The literature review identified that guidance was not typically sector specific, but rather general good practice guidelines that are applicable and adaptable to both the energy and tourism sectors.

The differentiating factor in these guidance documents related to presentation of the information, rather than the content itself. Therefore key recommendations relate to the design features that made the guidelines easier to understand were:

- Colour text to emphasise key guidelines
- Use of case studies or ‘success stories’ to identify good practice. The use of local stories was particularly impactful.
- The use of visuals to illustrate good and bad practice
- The use of practical examples (e.g. Preferred words and phrases to use) to demonstrate good practice
- Examples of how to make services more accessible
- Providing concise, simplistic good practice ‘tips’

There were several key findings in the area of face-to-face communication. VisitEngland’s action plan has emphasized the importance of “welcoming”; a consideration beyond just verbal communication, but also relates to the staffs’ behavior and attitude. It is recommended that this should play a key role in the toolkit.

The literature review identified that many members of staff may have limited experience in communicating with customers who have specific difficulties it is therefore important at a basic level that staff are educated preferred words and phrases to use to describe the person’s difficulty. Therefore it is recommended that the toolkit should outline good practice in serving customers with difficulties.

Research presented to approaches to providing guidance; the first referred to general good practice guidance that would make interaction between the customer and staff member easier for everyone. The second approach was the provision of guidance on interaction with customers with specific difficulties, for example a person who is blind or a person with learning difficulties. It is recommended that a Universal Design approach should be adopted, in order to make products and services easy to understand, use and access by all customers to the greatest extent possible regardless of age, size, ability or disability.

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Good practice resources
Sources of information on applying Universal Design and accessibility guidance in face-to-face communication includes:

- Accessible Ontario Customer Service. ‘Tips on serving customers with disabilities’. 220
- NSAI’s SWiFT 9:2012 ‘Universal Design for Energy Suppliers’
- I.S.373:2012 ‘Universal Design for customer engagement in tourism services’ draft 7
- ‘Accessibility for customers with disabilities in community pharmacies: Some practical advice’ 221
- VisitEngland’s ‘At your service’ 222
- European Commission’s ‘Improving information on accessible tourism for disabled people’. 223

8.2.3 Electronic and web-based communication

Website
Extensive Universal Design and accessibility awareness guidelines already exist on website design. Based on good practice identified, it is recommended that user friendly examples are used to illustrate good and bad practice, so that it is easily understood by all. This will help make the toolkit a fully comprehensive document that demonstrates how Universal Design principles can be applied to all areas of customer engagement.

Apps
In the toolkit, it is recommended that there will be a section allocated to provide best practice information on apps in the energy and tourism industry.

Accessibility focused apps could also be used by businesses to provide additional information and services specifically for those with difficulties e.g. UCD in Dublin have launched an app with built in high contrast map to help students, staff and visitors get around campus.

The app should be easy to navigate, and all information should be provided in a clear and easy to understand format. App should be fast to load. Graphics and display should be uncluttered and consider that it will be used on a small screen device.


Email (html & plain text)
Service providers should be able to respond quickly and efficiently to customer email inquiries. They should compose responses in a chat like simple and easy to understand text speak. Technical talk and shorthand should be avoided to avoid confusion. Staff should ensure emails are responded to in a timely manner. Delays to resolving customer queries should be called out to customers and a guideline response time highlighted.

Web chat
Include guidelines on how to address customers and assess customers’ needs. Service providers should be knowledgeable courteous and professional at all times. Staff should be proficient in English grammar. Responses should be timely and efficient. Service providers should go above and beyond addressing the customers’ issues by asking what else they can do to be of help.

Social media sites
Include guidelines on how to operate and manage a social media channel in line with Universal Design Principles. Pre-existing sites such as twitter and Facebook already align with international web accessibility guidelines, however staff training on manning these sites in accordance with best practice for accessibility and usability should be considered.

Digital text message communications (SMS)
SMS messages can be used to communicate short messages to customers. Messages should be clear and simple and grammatically correct. Text speak shorthand should not be used. Messages should be restricted to 160 characters.

Interactive voice response (IVR)
The Toolkit should include guidelines to help develop IVR systems to provide clear instructions to direct customers to correct information. Recordings should be knowledgeable courteous and professional at all times. System should endeavour to reduce the effort required from the customer during the process. The most accessed information should be available early on in the interaction. This includes giving an option to be directed to a live agent should the customer require.

In the development of the toolkit, these forms of communications should be considered, however more detail will be required and case study examples similar to the more user friendly guideline documents as referenced throughout this document.
Lessons from Good Practices to Guide Universal Design Toolkits

Examples include Travability, VisitEngland & the Equality and Human Rights Commission all of which use case studies to help portray the requirements successfully in a clear and simple manner. The documents include a mixture of informative text, statements of facts to support the documents objective and graphics and images to help portray the message.
8.3 How to assess and measure the application of the Universal Design Toolkit

The key to success in the design and development of a Universal Design Toolkit for Customer Engagement is by presenting the information in a way that is concise, easy to understand and apply, and presented in a logical sequence. A variety of research documents were explored as part of this area of research in order to identify best practice approaches for presenting and applying the key learning.

Five approaches of applying customer engagement learning were explored. These approaches included:

- **Checklists**
  A checklist is a list of to-do criteria that can be used to allow businesses to easily see progress as they tick boxes to fulfil the criteria of the toolkit. From a psychological perspective, the benefit of having a single tick-box is that it doesn’t provide a ‘no’ option. Therefore the checklist isn’t completed until all the boxes are ticked.

- **Question-sets**
  Question sets are intended to be an aide memoir to assist in the application of Universal Design Principles to customer engagement. The intention is that these sources of information will be a useful reference point against which any customer service developer, manager or procurer can plan and measure their training needs and delivery. Approaches to questions-set differed based on whether the questions were focused on applying Universal Design principles to products and services, or whether the focus was addressing the needs of people with difficulties. For the purpose of the toolkit it is important that that focus remains on Universal Design rather than accessibility.

- **Graphic flow charts**
  Graphic flow charts provide a visual image to illustrate a process. This is an important consideration as people like information presented in different ways, and often may find an image supporting the text will help to understand the process both easier and quicker.

- **Top tips**
  By providing a summarised, concise version of key ‘tips’ (similar to a checklist), it provides the business or organisations with the key guidelines. For any additional information the user can read the explanatory notes in the main body of text. Alternatively key tips/guidelines are often emphasised using colour in the main body of text (for example in RNIB’s ‘See it right’). This successfully catches the users’ attention; however the use of plain English and short phrases are important factors to consider.
• **Interactive courses**
  Interactive courses can provide an alternative method of measuring and assessing the businesses understanding of Universal Design and accessibility. The provision of online awareness training offers businesses the opportunity to track if staff have, not only read provided materials on Universal Design awareness but check if they have taken it on board through online course testing. This ensures that staff understands the reasons and benefits of the training. This is not possible with a printed document like the checklist as it is easy to bypass the learning and simply tick all the boxes. The online course also provides staff and businesses a sense of achievement for partaking in the course by providing a certificate when they have completed the course.

While the overall approaches differed, in essence the key attributes of the five approaches focused on:

• Conveying the information in a logical sequence and manner, that is easy and quick to understand
• Using short, concise sentences to summarise actions
• Avoiding the use of jargon
• Avoiding too many steps in applying the learning. This reinforced the message that the process and key learning was user friendly and easy to apply
• Presenting the information in a user-friendly way that is logical and easy to apply by the service providers, managers and procurers
8.4 Communicating the customer case

Literature research was conducted to identify the best approach to communicate and demonstrate how to apply Universal Design for customer engagement in customer services.

The literature review identified different approaches that would allow service providers, managers and procurers to see a situation from a different perspective that would help them understand the information being presented and how they can apply to their own business. These approaches are outlined below:

- **Case stories:** It is recommended that the toolkit author uses case stories to highlight best practice examples in applying Universal Design in customer engagement as a source of inspiration and aspiration. It is proposed that these case stories would be specifically be from local Irish businesses that the target market could associate with and see the impact that accessible customer engagement brings specifically in terms of revenue and increase in customer base.

  It is also proposed that case studies may be used to highlight how sample personas might interact with customer service providers in both the tourism and the energy industry.

- **Personas:** A persona is typically a fictional person who represents a major user group, which typically incorporate the characteristics that are most representative of customer groups. Personas are often used to illustrate the end users’ goals and needs by designing and using a manageable set of personas that represent the needs of many users.

  It is recommended that the toolkit author uses personas to help the target market identify and associate with the potential situations they may encounter and guidance in demonstrating both good and bad practice in customer engagement.

- **Use case:** Use cases walk through a simple use case example describing a sequence of interactions between a customer and a service provider. This can provide a good method of identifying good or bad practice during a specific customer engagement process.

- **Storyboards:** The benefit of storyboards is the ability to capture engagement between the customer and service provider. By providing visual engagement scenarios it is easier to understand and communicate concepts such as “welcoming” – which could be illustrated visually by body language in addition to the conversation between the customer and supplier.
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- **Scenario:** A scenario is a short story about a specific user with a specific goal or need. Scenarios are the questions, tasks, and stories experienced by users. Typically the most common scenarios are identified to demonstrate a task or activity; for example a scenario could be used to illustrate issues when engaging with customers, such as if an older person is unable to read the restaurant menu because the text is too small. Scenarios can be used beneficially to connect with the service provider by providing a situation they can relate to.
9. Glossary

**Toolkit**
An assembly of tools and resources based on methods and specifications.

**Universal Design**
The concept of designing all products, services and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life.

**Customer engagement**
The combination of the multiple interactions that happen between service provider and customer. They can be customer led or provider led and can happen on or offline.

**Customer service**
Customer service is the provision of service to customers before, during and after a purchase. A series of activities designed to enhance the level of customer satisfaction.
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Universal Design is the design of a building or place, products, services, or information/communication technologies so that they can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size, ability or disability.