



9th - 11th June 2008, The Zon Regency Hotel Johor Bahru, Johor



Session 2 : Customer Accessibility

Guest Speaker

Prof. Dr. Ahmad Zaki Abu Bakar

**(Fakulti Sains Komputer & Sistem Maklumat,
Universiti Teknologi Malaysia)**

*Topic : Customer Accessibility Through a Multiple
Perspective Framework*

*Theme: Energising and Empowering
Quality Strategies Toward the Customer
Driven Organisations*

**Organised by
Perpustakaan Sultanah Zanariah
Universiti Teknologi Malaysia**

CONFERENCE
On Customer-Focused Culture

Customer Accessibility Through A Multiple Perspective Framework

Prof. Dr. Ahmad Zaki Abu Bakar

Faculty of Computer Science & Information Systems

Universiti Teknologi Malaysia

81310 UTM Skudai, Johor

MALAYSIA

zaki@utm.my

Abstract

Customer care has become one of the major issues for many businesses, prompting many organisations around the world to define it as being made up of Courtesy, Accessibility, Responsiveness and Effectiveness. Customer accessibility is defined as the condition, opportunity, rights and the means of a customer in approaching or entering a facility or electronic system. Customer access to products, services and information can be both physical as well as virtual and there are many considerations for its implementation. As such it's design must be given great care and thought because it relates to facilitating customers to get or do what they want. A happy customer will give repeat business and stay loyal to the organisation. The Multiple Perspectives Framework can be adopted to assist in the planning of the multifaceted customer accessibility. The various issues can be classified and grouped into three perspectives under the Multiple Perspective Framework, namely Organisational (O), Personal (P) and Technical (T). To avoid focusing on only specific issues, the Multiple Perspective Framework provides a more balanced outlook so that organisational, personal and technical issues are equally addressed to provide a more comprehensive solution.

Keywords: Customer accessibility design, multiple perspective frameworks

Introduction

With tremendous progress in technology and communication becoming more pervasive, organisations around the world are under increasing pressure to deliver effective solutions at appealing prices that will produce results and benefits over shorter time frames but using fewer resources and with zero defects. It is currently still considered as a buyer's market. Customers expect and deserve quality services. With fierce global competition, customers should not have to worry about bureaucracy and long queues for service. As customers, they deserve easy, prompt, seamless access to services, products and information. The customer moment of value is when the customer wants it, where the customer wants it, how the customer wants it, and guaranteed delivery to the customer. In short, the slogan of the time is; any way, any how, any time and any form. If the service provider is not able or interested to provide such value, customers are fast to find and change to other vendors who are able to fulfil their needs.

Consumers too have become more demanding and adjusted to the quicker pace of product delivery and shorter life cycle. Customers can become fickle minded at one moment and then well informed conservative buyers at the next instance. They are now more sensitive to the changing world around them and their preferences and mood rapidly changes with time, events and market attraction. Their needs, requirements and expectations too have risen due to international exposure and availability of information through various channels. This has made the task of satisfying the customer a formidable task. As explained by McKenna (1999), organisations must prepare for the age of the never satisfied customer and deliver their services in real time. Meeting these new expectations means organisations in the public and private sectors, as a whole must have business processes that are more interoperable and integrated. Customers around the

world alike want convenient, efficient, multi-channel access to seamless services, integrated across programmes, departments and jurisdictions. At the same time, they want their service providers to be more transparent, accountable, courteous, and effective as well as able to respond immediately to whatever problems related to the service. As such, customer care has become one of the major issues for many businesses, prompting many organisations around the world to define it as being made up of Courtesy, Accessibility, Responsiveness and Effectiveness.

Customer Accessibility

Customer accessibility is defined as the condition, opportunity, rights and the means of a customer in approaching or entering a facility or electronic system. Customer access to products, services and information can be both physical as well as virtual and there are many considerations for its implementation. As such its design must be given great care and thought because it relates to facilitating customers to get or do what they want. A happy customer will give repeat business and stay loyal to the organisation. When planning to provide such facilities, provisions for people with disability, gender, different age groups and different culture bias must be given due consideration.

2.1 Physical Accessibility

Physical access to products is designed in such a strategic and logical way to make customers able to quickly notice and get to the products being promoted without much hindrance. Once they are in the promotion or product area, the concept of cross-selling and other marketing strategies can be applied to encourage the customer to buy more.

However, having customers at the premise also place many responsibilities such as the safety and security of the customers on the establishment. In case of fire, flash flood, biohazards, threats or any other emergency, customers must have clear access to exits and fire escapes. The procedures to evacuate must also be clear and effective.

Improved access to buildings for customers with disability will certainly improve access for everyone. Glare-free lighting, easy-to-read and logical signage, hand rails, ramps that provide easy access for service trolleys, baby prams and strollers, non-slip floors and stairs, service lifts, and hazard free work spaces and public access areas will be appreciated by both customers and staff alike who use the premises.

While most physical access barriers are faced by customers with mobility difficulties, the needs of customers with a range of other disabilities should also be considered. Customers with vision, hearing and cognitive impairments also experience access barriers to the physical environment.

2.2 Security Accessibility

Security is a major concern of customer accessibility. Customers too should be able to do their shopping, dining, entertaining, banking or any other business at a premise without being pressured, robbed, sexually harassed or falling prey to undesirable elements. To bring a sense of security to customers, many mechanisms such as armed security personnel and close circuit cameras monitoring are commonly used.

In restricted areas, smart cards and biometric devices such as thumb and retina recognition are used to limit access to only authorised persons.

2.3 Culture Accessibility

In many countries including Malaysia where cultural diversity is the norm and various religious practices are tolerated, many products have to be segregated physically to Halal and non-Halal to appease Muslim customers who are very particular about the ingredients and placements of products based on their religious beliefs. Access to Halal and non-Halal products must be clearly marked with proper signage to avoid unnecessary wrong purchases and complaints.

In certain countries such as in the Middle East, different gender is still segregated physically to allow better service provision based on gender rather than a unisex approach as practiced in many Western countries. A time-sharing access to a common sport facility or work area for example, is one of the solutions to solve this issue.

2.4 Age Accessibility

Segregation or segmentation of access based on age is also desired especially for content access especially for books, magazines, films, radio and television programmes as well as video games. Although seen as a kind of censorship, Malaysia as in many other countries, apply content classification to enable parents and guardians to control what can be viewed by their children. As an example, the content classification code of U for films is used for a programme intended for

broad general audience and is suitable for viewers of all ages.

This means the programme contains little or no violence, no strong language and little or no sexual dialogue or situation. 18 is the classification code for viewers of age 18 and above. The programme is intended for adult viewing and may contain one or more of the following which is considered integral to the development of the plot, character or themes: intense violence and depictions of violence, graphic horror images, graphic language, mature themes, intense sexual situations and suggestive dialogue. Malaysia still does not allow the publication, distribution and broadcasting of pornographic content which are allowed in many other countries but classified as X and XXX.

2.5 **Electronic Accessibility**

Electronic business is termed as any process that a business organisation conducts over an electronic computer-mediated network. Business here does not imply just commercial but also include all businesses including those in the academic and governmental administrations; although in these sectors it could be called Academic Computing and E-government. E-business nowadays uses web technology to help businesses streamline processes, improve productivity and increase efficiencies. E-business will enable companies to easily communicate with partners, vendors and customers, connect back-end data systems and transact commerce in a secure manner.

Many governments around the world choose to provide portals as a gateway to a one-stop service centre as its implementation of an e-government. Portals are to fundamentally improve the way citizens interact with government and their communities. It is also a place to search and retrieve local and national information.

Rather than relying on employees to respond to enquiries or process requests for information, through the use of e-government, the public can "serve themselves" to a wide variety of information and services. Through e-government, citizens are able to get "online" rather than "in line" of queues and thereby increasing the efficiency with which citizens are served. A click on a web page is supposed to deliver services to the user versus the user having to find and contact each government office that processes the specific requests. The issue of opening time and physical location are no more limiting factors since citizens can access the government at any time, at any place and also by many means.

There will certainly be challenges to providing electronic accessibility. As more sophisticated systems developed, organisations will have to meet the challenge of providing dependable ways to manage electronic security. Portal security is only as good as its weakest link. Computer network security breaches are common and networks must ensure the security of correspondence and monetary transactions in order to protect customers and the organisation from computer fraud or negligent dissemination of private information to third parties.

Even if there is no security breach, what is stopping the company or its employees from disseminating customer personal information to third parties for profit or other personal gain. In such cases, there is certainly a serious concern on the intrusion of privacy for customers divulging personal information to electronic systems.

Another challenge when offering electronic access would be elimination of face-to-face contact. Traditionally, people needing information either write, telephone, fax or physically go to an office to request that information. Speaking directly with a knowledgeable employee can help focus the enquiry and provide answers to any questions that arise. Direct electronic access to information eliminates this human touch, potentially resulting in a confusing and frustrating experience for the requester especially if the portal's content structure and navigation controls were poorly designed and not customer friendly.

Another challenge would be the cost for providing the electronic services. Who should bear the cost; the service provider or the customer? If the customer is to be charged for the electronic services rendered, how are the fees set so that it is affordable, reasonable and attractive for the customer?

There are also infrastructure capacity and technology constraints. Technically, portals can be slow to respond and unable to handle demands placed upon them because of several reasons. The more searching capabilities that the portal provides to a user, the more intense and complicated the search can become. Other concerns include bandwidth requirements for data

transfers and file transfer speeds. These should be monitored to ensure customer service levels are met. Additionally, there must be the ability to expand and allow new applications and online services on to the portal. If processing speed, storage, and bandwidth become overloaded, the results will include incomplete transfers of information for searches, poor data access in browsers, and extremely slow response times. The causes of this poor functionality are not visible directly to the user but will be frustrating for them. The integrity and accuracy of the information provided are thus also questionable.

1. Customer Access Based On Multiple Perspective Framework

An open mind and forward planning should be able to minimise access problems and remove barriers for all customers. However, from the above elaboration, customer accessibility is not a single but multiple issues. The challenges may be due to the organisation or the customer but the solution can come from within the organisation, from customers or solved by third parties. The solutions too can be based on human factors or technology.

To assist in the planning of Customer Accessibility, the research group at the Department of Information Systems at the Faculty of Computer Science and Information Systems at Universiti Teknologi Malaysia is proposing the use of the Multiple Perspective Framework. Based on the work of Mitroff and Linstone (1993), the Multiple Perspectives Theory has mainly been used to provide critical ways of thinking involving complex problems, concerning a multiplicity of actors, various scientific

and technical disciplines, various organisations, and diverse individuals. Alinda & Hasliza (2004) uses the Multiple Perspectives Framework to review and classifies Knowledge Management literature. We believe the same Multiple Perspectives Framework can be adopted to assist in the planning of the multifaceted customer accessibility.

The various customer accessibility issues can be classified and grouped into three perspectives under the Multiple Perspective Framework, namely Organisational (O), Personal (P) and Technical (T). The O perspective mainly looks at areas of the organisations capability in managing their resource to provide customer accessibility. These issues include standards, policy, procedures, and guidelines. Barnes (2002) for example, identifies three dimensions of focus for capabilities of organisations in managing their knowledge resources, which affects customer accessibility. Enhancing performance will reduce problem-solving time, faster result, and faster delivery-cycle time. Increase collaboration will improve communication and increase staff and supplier participation. Improving customer service will provide better service and more customer focus.

The P perspective focuses on the personal issues relating to customers including their needs, requirements, demands, buying habits, income, education, hobbies, interests, culture, geographic, race, religion, age, psychographic and physical features. The main concern is on human aspects that relate to attitude and behaviour that are influenced by environment and experience as well as the manager's role in facilitating the process (Nonaka, 1991).

The T perspective focuses on the technical issues such as type of technology, system design, application development and

implementation of systems and infrastructure provision. System design issues also include techniques, architecture, models and framework for developing customer relationship management systems.

Based on the framework, a table that maps the classification of a certain customer accessibility issue in question can be developed. As an example, a multiple perspective classification for disability access is shown in **Table 1**.

Table 1: Example of Multiple Perspectives Classification of Customer Accessibility for Disability Physical Access

Classification	Organisational	Personal	Technical
Physical Access	<ul style="list-style-type: none"> - Management Policy on disability - Building Safety Standards - Building Security Standards - Customer disability requirements - Recruitment of staff with disability training - Sending of staff for training on disability handling - Policy of ratio of staff with disability training on duty 	<ul style="list-style-type: none"> - Customer profiles - Physically handicap features & requirements - Vision impaired features & requirements - Hearing impaired features & requirements - Cognitive impaired & requirements 	<ul style="list-style-type: none"> - Wide passage for wheel chair access - Ramps - Hand rails - Glare-free lighting - Easy-to-read, Clear & logical signage and markers - Non-slip floors and stairs - Service lifts - Hazard-free spaces - Non-obstructive displays

	<ul style="list-style-type: none"> - Annual budget for maintenance of facilities for the handicap - Disability awareness programme - Data collection of disability related incidents 		<ul style="list-style-type: none"> - Braille signage - Voice response lifts - Toilets with disability features - Public announcements
--	---	--	---

2. Conclusion

To be successful, organisations must be more customer-centric and try to delight their customers. Providing customer accessibility requires many considerations. To avoid focusing on only specific issues, the Multiple Perspective Framework provides a more balanced outlook so that organisational, personal and technical issues are equally addressed. From the mapping, a more detail design for customer accessibility can be made and implemented.

References

Alinda & Hasliza (2004). *A Multiple Perspectives Review Of Knowledge Management*, Literature Journal of Advancing Information and Management Studies, 1(1), 17-32.

Barnes, S. (2002). Knowledge Management Systems: Theory and Practice (Ed). *Thomson Learning, London, UK*.

McKenna, Regis, (1999) *Real Time: Preparing For The Age of The Never Satisfied Customer*, Havard Business School Press.

Mitroff, I.I & Linstone, H. A, (1993). The Unbounded Mind: Breaking the Chains of Traditional Business Thinking. *Oxford University Press*.

Nonaka, I. (1991). The Knowledge-Creating Company. *Harvard Business Review*. Nov-Dec. 96-104.

Biodata

Prof. Dr. Ahmad Zaki bin Abu Bakar, a senior professor of Multilingual Knowledge Management Systems at the Department of Information Systems, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia (UTM), has been an academic since 1977. He held many portfolios and was the Director of the university's scholarly publishing house since 2007. Prior to that he was the Dean of International Affairs and before that he was the Dean of the Faculty of Computer Science and Information Systems in 2001 to 2004. He is the Chairman of National E- Commerce Standards Committee, SIRIM and Malaysian Cyber Novelist.

Born on 29th May 1956 in Alor Star, Kedah, he holds a Ph.D. in Electrical Engineering (Artificial Intelligence.) from UTM (1989); a Masters in Engineering (Computer Engineering) from the California Polytechnic State University, U.S.A (1984); a Bachelors of Science Honours (Electronic Engineering) from Essex University. U.K. (1981); and a Diploma in Electrical Engineering (Communication Engineering) from UTM (1977).