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# The Transformation of Reference Services in Hamzah Sendut Library, Universiti Sains Malaysia

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#### **Abstract**

Beginning in the year 2008, Universiti Sains Malaysia (USM) is fortunate to be selected to lead the Accelerated Program for Excellence (APEX) and Research University (RU) agenda. Hence, the USM Hamzah Sendut Library, through reference librarians had to strengthen the public services especially in facilitating the reference services for customers. Since then, reference librarians assigned to Reference and Research Division (RRD), have had to take the challenge to change the traditional services and expect the transference on customer demands. The reference librarians have to review the quality of current reference services and explore additional services that meet the customers' expectation for long period. This study aims to discover the reference services trend at RRD, after the APEX agenda was implemented. The study also investigates whether the services provided fulfill the requirements of the customers. Next, the study also aims to identify the additional services that could be implemented in RRD. The study collected and analyzed the reference enquiries retrieved from the library system within 6 years of APEX establishment. The reference enquiries were based on the interview conducted between RRD librarians and the customers. The main focus of the analysis was the types of customer questions to search the key necessity of customers' needs. Based on that, the important components of customer demand were identified. After that, Blue Ocean Strategies (BOS) was applied to identify the additional services needed in USM's Library. The findings revealed that the trend on customer demands for reference services evolved into various patterns. This study shows that the reference librarians need to stay alert on the changing trend and prepare to reform the services accordingly in order to sustain customer trust and expectations on the reference services

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#### 1. Background of study

#### 1.1. APEX and RU agenda in USM

The Research University (RU) agenda was drafted by Awang et al. (2004) with the aim of enhancing the capabilities of selected universities for traditional to fully focussed research activities. Scholars and students were encouraged to exchange ideas and conduct research in a conducive environment, nurture exploration to discover new knowledge, create wealth, and lead to improve their quality of life. The universities involved were Universiti Sains Malaysia (USM), Universiti Malaya (UM), Universiti Teknologi Malaysia (UTM), Universiti Putra Malaysia (UPM), and, Universiti Kebangsaan Malaysia (UKM). These universities were under the Malaysian Research Assessment (MyRA) every three years, to measure the RU's performance based on specific predetermined criteria; one of which is to research publication performance, under MyRA Section C: Quantity and Quality of Research (Ismail, 2011). All five university libraries, including Hamzah Sendut Library, took part in MyRA by providing analysis of bibliometric's data for their research publication performance, as well as by developing awareness programs to enhance scholarly publishing.

Meanwhile, the Ministry of Education (MOE) Malaysia carried out an Accelerated Program for Excellence (APEX) agenda, which began in 2008. This agenda is one of seven National Higher Education Strategic Plan (NSHEP) thrusts, which aims to empower Malaysian of Institutions Higher Education as a world hub of excellence. The MOE chose Universiti Sains Malaysia (USM) to uphold the agenda by implementing global best practices in seven segments. These segments are, accounting for governance, leadership, management, teaching, Research and Development (R&D), enrolment, and fund raising programs. Consequently, USM needed to transform their teaching and learning programmes and their Research and Development (R&D) activities, by strengthening the internal and external services provided to produce quality results that were equitable, accessible, available and affordable (Ramli, 2012). This transformation process included the Hamzah Sendut Library as an internal service department that supports APEX University customer's information needs and learning spaces.

#### 1.2. Reference service in Hamzah Sendut Library

Hamzah Sendut Library sustained traditional roles in terms of providing two service sections. The first service section provides technical support, such as purchasing, managing, and indexing information packaging resources; especially books and research databases. Meanwhile, the second service section focuses on handling customer services within the library, such as providing comprehensive learning spaces, borrowing and returning of books, and notably, a reference service that was handled by the Reference & Research Division (RRD). The traditional reference service consists of two segments.

- First, facilitating customer's information retrieval. This segment emphasizes the reference librarian's role as fact finders and search strategists for customers. The reference librarians also have to assure that customers are able to obtain accurate, complete, relevant and timeliness information through information literacy skill training.
- Second, creating current-awareness services. The purpose of this segment is to publicize the library's products and services to customers. Customers are kept informed of the latest news and announcements related to their research subjects.

In detail, traditional reference services in the Hamzah Sendut Library emphasize the reference librarian's role as personal assistants and consultants to supply scholarly documents for academic needs. Reference librarians also provide quick answers for trivial questions asked by hundreds of customers. They are required to teach customers using printed reference material; especially indexes and abstracts. However, this practice has evolved over time. The traditional reference service has shifted into a digital reference service. Bradford, Costello, and Lenholt (2005) mentioned that digital technology has brought online sources that provide easy access for customers to retrieve research information; and thus, printed reference material has become obsolete. From 2002 onwards, customers at USM were delighted to use online sources; especially Scopus and Web of Science databases, as a replacement for printed indexes and abstracts. However, the number of customers physically visiting the Hamzah Sendut Library slowly decreased over several years. Customers were less engaged with the reference librarians, and in 2007, only 218 customer enquiries were received by the reference librarians (Md Shaari, 2008).

The reference service has also evolved in designing its current-awareness program to promote the latest library acquisitions and services. The librarians in RRD traditionally published newsletters to lecturers' mailboxes and school notice boards. The librarians also use the telephone as a prominent communication tool to connect with lecturers and students. However, the rise of social media technology has changed the way people connect. The growth of such technologies has forced the reference librarians in RRD to change their promotion approach.

On the whole, this shows that the majority of researchers are comfortable using virtual guides to locate research information on their own - using internet access; especially through Google's search engine - and fewer requests for support from reference librarians. Moreover, Ian et al. (2008) study shows that the Google generation is expanding and they are much more dependent on social networks to obtain virtual guides and information. However, a different situation exists in the University of Malaya's Library. Abu Bakar (2014) found that customers insist on using the reference counter; even though the reference service is influenced by new information technologies. Their customers sent enquiries through a digital platform as a starting point for their appointment. Then, the customers came to the library to solve their enquiries. These situations occurred due to a smart engagement in social media by the reference librarians.

Therefore, the reference librarians in RRD should realize that there is still hope to make reference librarians' roles sustainable; especially in terms of facilitating customer's information retrieval. Reference librarians should begin to strategize solutions to transform the approach of information literacy skill programs. The reference librarians in RRD need to remove the "wait-at-the-counter" approach and start collaborate more closely with parties outside of the Hamzah Sendut Library. Reference librarians should develop creative an awareness campaign about the importance of learning literacy skills at the Hamzah Sendut Library. As mentioned by Minsoo (2015), it is important to develop high information literacy skills among customers, so they will be able to retrieve authentic facts, relevant full-text scholarly articles, and good sets of data simultaneously, and without difficulty. Hence, the reference librarians in the RRD should allow their customers to be aware of the services offered.

Social media is a strategic and important platform to create current-awareness of services; in terms of marketing library products and services. However, the reference librarians still question whether the social media approach is suitable for the Hamzah Sendut Library or is a physical approach more appropriate. Reference librarians should also try to strengthen their liaison program. A liaison program should aim to build coalitions and develop close relationships between customers and librarians in support of any current-awareness service.

## 1.3. The adoption of USM Blue Ocean Strategies (BOS) in reference service

USM has adopted the Blue Ocean Strategies (BOS) as a major tool to transform their organisation from the top to bottom, in terms of university resources, department services and staffing capabilities. BOS is based on the lifelong research of Kim and Mauborgne (2005), on 150 strategic moves, spanning over one hundred years and thirty industries. Ramli (2012) emphasized that all USM departments and divisions must be responsible for understanding and executing BOS to support the APEX mission. This proclamation was also directed at the RRD, Hamzah Sendut Library. The reference librarians were involved in outlining the USM Library BOS roadmap since the implementation of the first APEX phase in 2008. At that time, the idea of new virtual reference services was introduced to enhance online engagement with customers 24 hours a day, through online chat and tutorials (Jamilah Hassan Basri, et al. 2011). However, RRD did not support the APEX requirements enough. Six years later, and RRD still needs to create new strategies to support the second phase of the APEX agenda; as demanded by USM top management (Osman, Ibrahim, Koshy, & Muslim, 2014).

# 2. Objectives of the study

The objectives of the study are:

- To identify the reference service trends at Reference and Research Division (RRD), Hamzah Sendut Library after APEX and RU agenda are initiated.
- To propose the new additional services that could be implemented in RRD.

#### 3. Methodology

Customer enquiries indicate data representation for the reference service trends. Enquiries contained numerous questions asked by customers and answers provided by the reference librarians. Data also included the educational level of customers, time spent solving the customers' problems, and type of communication mode used by the customers. This study intends to identify reference trends after the APEX and RU agendas were initiated. The reference trend was identified by examining 2,161 enquiries using a content analysis method. The 2,161 enquiries were captured between 2009 and 2014; which is the same time that the APEX first phase was implemented.

All enquiries were collected on physical forms located at the RRD office. Enquiry data was input into the library's online system. Then, the enquiry data was extracted and converted into a Microsoft Excel file. After that, content analysis was conducted. In reviewing the reference service trend, four aspects were focussed on to identify:

- First, identify the customer's category.
  - To find the highest education level background frequency of customers that used the reference service.
- Second, identify the favourite type of questions.
  - To find the most frequently asked questions received by the reference librarians.
- Third, identify the time spent resolving customers' enquiries.
  - To find the ability of the reference librarians to resolve customer' enquiries, of more or less than 1 hour.
- Fourth, identify the favourite communication method selected by the customer.
  - To find whether a physical counter service was still relevant or whether digital platforms were more favourable for customers.

After the reference trend was identified, the four BOS visualizing strategy steps were applied to present new additional Reference & Research Division services.

## 4. Findings and discussion

## 4.1. The trends of reference service after APEX and RU agenda initiated

# 4.1.1. The category of customers

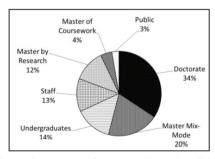


Fig. 1. The category of customers in 2009 until 2014.

As shown in Figure 1, the data indicates that the highest educational background frequency of customers that used the reference service in Hamzah Sendut Library during APEX and RU implementation was doctorate (PhD) students (34%). This shows that the PhD students favoured seeking help from the reference librarians over all other customers. However, postgraduate students from Master Mix-mode program (20%) used the reference service more than Master-by-Coursework students (4%) and Master-by-research students (12%). However, specific target customers needed more attention, such as undergraduates (14%), staff (13%), and the public (3%); were found to be less confident using the reference service.

#### 4.1.2. The favourite type of questions

As shown in Figure 2, customers frequently requested help from the reference librarians to organize citations (32%) compared to others. This shows that many customers still faced difficulties in organizing citations, even though bibliography manager software, such as EndNote, Mendeley, and Zotero, were available. However, customers frequently requested help to get full-text documents (30%) and the reference librarians found that there were three contributing reasons for this. First, the customers did not know the right technique to download digitally or locate the documents physically. Second, the library failed to provide sustainable access for documents due to internet connection interruptions or unresponsive database servers. Third, document issues or volumes were unsubscribed. Meanwhile, there were apparently new types of questions that had to be addressed, such as bibliometrics (2%) and research publications (3%).

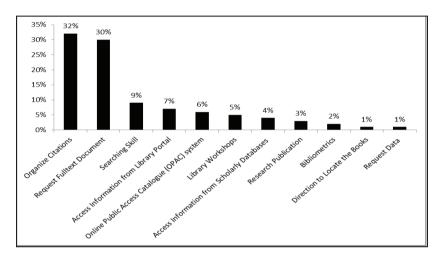


Fig. 2. Type of questions asked in 2009 until 2014.

#### 4.1.3. The time spent resolving customers' enquiries

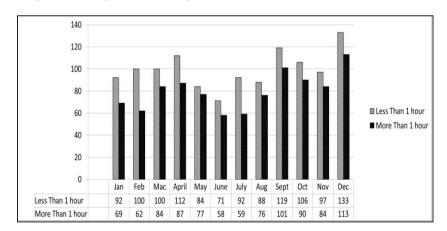


Fig. 3. The time spent resolving customers' enquiries in 2009 until 2014.

The frequency of time taken to resolve customer enquiries was recorded each month to evaluate the reference librarians' performance. 'Less than 1 hour' indicated that the reference librarian was able to resolve enquiries promptly. Meanwhile, 'more than 1 hour' indicated that the reference librarian experienced difficulties and needed

more time to resolve enquiries. As shown in Figure 3, customer enquiries 'in less than 1 hour' was higher; with an average of 100 enquiries per month; compared to 'in more than 1 hour' with an average of 80 enquiries per month. Moreover, the most enquiries recorded was in December (246 enquiries) compared to other months. The study found that customers often made enquiries at the end of the year for a reason. In December, students struggled to finish their assignments and research work before their submission deadline. The same trend was also recorded in April (199 enquiries). Meanwhile, the second peak month was in September (220 enquiries). Although thousands of fresh students joined the library orientation programme in September, recorded enquiries were lower than that of December.

#### 4.1.4. The favourite communication mode selected by the customer

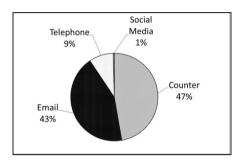


Fig. 4. The favourite communication mode selected by the customer in 2009 until 2014.

Customers communicated with reference librarians through multiple platforms. As shown in Figure 4, the favourite communication mode was over the counter (47%). This shows that a physical mode was still relevant and received the highest response overall. The study also found that customers preferred a physical approach to solve problems, because of the fast action and direct feedback received. However, close behind were e-mails (43%). The e-mail platform was the most popular digital communication mode compared to telephone (9%) and social media (1%). The study found that customers chose to communicate with reference librarians via e-mail, because e-mail features allowed them to send large digital files.

#### 4.2. Fulfilling the requirements and creating new additional services for customers

After finding the reference trends, the study implemented BOS by executing the four (4) processes to propose new additional services for customers.

As shown in Figure 5, the processes are visual awakening, visual exploration, visual strategy fair, and visual communication. In the visual awakening process, the study identified that the reference services;

- Lacked promotion to the USM and public communities.
- Lacked online learning.
- Lacked creating public relation programmes.

Next, the six paths identified in the visual exploration process:-

- Looked at opening the reference service for the public.
- Looked at developing strategic groups among reference librarians from other institutions.
- Looked at shifting the promotion of reference service to their influencers.
- Looked at enhancing research support consultation activities.
- Looked at engaging with other departments to share knowledge broadly.
- Looked at strengthening 24/7 services through social media platforms.

Next, a new value curve was sought to Eliminate, Reduce, Raise, and Create (ERRC) steps in visual strategy fair process to:-

 Permanently eliminate counter duty for reference librarians in order to give more time to being involved in extensive liaison programs.

- Reduce promoting reference services using printed newsletters and posters in supporting a green environment campaign.
- Raise engagement with current- and non-customers through social media platforms.
- Create Strategic Programs in Research Support Service (SPiReSS).

Finally, the executions of the strategies are outlined in the visual communication process:-

- First, counter organization hurdles, which consist of:-
  - Cognitive hurdles prepare mental blocks from reference librarians and support staff.
  - Resource hurdles reference librarians have to face limited resources to implementing new services.
  - Motivational hurdles obstructions faced by reference librarians and support staff to act in tandem with the new strategies.
  - o Political hurdles reference librarians have to overcome obstacles from political forces.
- Second, formulating a strategy process by:-
  - Changing the job descriptions of reference librarians and support staff.
  - o Changing the reference service work procedures.
  - o Establish an execution plan for the Strategic Programs in Research Support Service (SPiReSS).

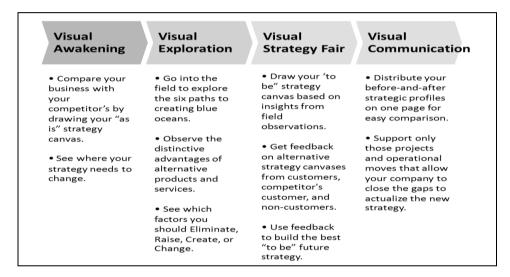


Fig. 5. The four steps of visualizing strategies (Chitchai, 2008).

#### 5. Conclusion and recommendations

The study revealed significant findings, that the reference service in Hamzah Sendut Library is still required by customers. The study shows that the majority of doctorate and postgraduate students are the most frequent customers that request help from the librarians to facilitate their research work; especially in managing citations. Moreover, many customers request help from reference librarians to download scholarly documents from databases. However, this finding is not good for customers; as they face difficulties finding the correct sources, which delays their research work. It is necessary to further research this issue to find strong solutions that can counter these difficulties. Furthermore, social media is not yet favoured by customers to send enquiries. Customers prefer to come physically to the Hamzah Sendut Library or use email. Reference librarians are still capable of efficiently solving customers' enquiries in less than one hour. However, the adoption of BOS includes effective approaches for transforming reference services to suit APEX and RU agendas. Through BOS, the establishment of Strategic Programs in Research Support Service (SPiReSS) was discovered. This new reference service can potentially attract more customers to come to the library. Nevertheless, reference librarians have to sustain implementing extensive research, in order for future study to develop 'state-of-the-art' reference services to attract more customers.

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