

## **Revolution at the Library Service Desk: A Perspective from the National Library of Iran (NLI)**

**Azam Najafgholinejad**

Assistant prof., Knowledge and Information Science,  
National Library and Archives of I.R. Iran.

[a-najafgholinejad@nlai.ir](mailto:a-najafgholinejad@nlai.ir), [najafgholinezhad@gmail.com](mailto:najafgholinezhad@gmail.com)

ORCID iD: <https://orcid.org/0000-0003-3272-9472>

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### **Abstract**

This study aimed to identify indicators and factors affecting the evolution of services at the service desks of the National Library of Iran (NLI). The method of this research is the mixed method. The survey method, brainstorming, and group decision-making were used to collect data. The statistical population of this study was 21 librarians working in the service desks of the NLI and 28 members of the NLI. MAXQDA software was used for data analysis. Qualitative analysis of the data led to the extraction of 964 primary codes that reported service factors from the perspective of two groups of librarians and users. Multiple revisions and code integration based on similarity; several categories were obtained. Guba and Lincoln criteria (credibility, dependability, confirmability, and transferability) were used for data robustness and accuracy. Service desk design indicators were identified by reviewing the literature and primary sources of reference and information services and extracted (9 indicators). Factors affecting the information service of the NLI from the perspective of librarians and users fall into four themes: information librarian, user, service, and service desk. The results of this study showed the appropriate correspondence between the service desks of the NLI and the extracted indicators. Influential information service factors from the perspective of librarians and users were also discovered in this study from the words of users and librarians themselves. Within the theme of information librarian, three sub-themes of information literacy, connecting with the user, and professional ethics; In the user theme, the three themes of user training, independence, and membership; In the theme of service desks, five sub-themes of accessibility, desk location, desk physics, name of service desk and security; And in the theme of services, three sub-themes of marketing, tasks priority and professional view of departments and services are among the factors affecting information service.

**Keywords:** Reference and Information Service, Service Desks, National Library of Iran, Design Indicators.

### **Introduction**

Resources and information are considered so vital to organizations that they liken it to the blood that flows in the organization's arteries. The blood on which the life of the organization depends. Flowing these arteries by providing users with easy access to the collection is very

important. The reference and information department in each library is a place for needs assessment, identification, guidance, retrieval, and dissemination of information for users of the organization, which aims to identify the needs of the user community, leading access to resources, provide facilities, meet needs and provide quick and easy access to information resources to support users' research goals. Here are some essential general requirements for communicating with library users:

a) *Accessibility*: Individuals tend to refer to the source or channel of information that is accessible to them and is close to them.

b) *Desirability of communication*: People pay attention to the communications that are desirable to them. Desirability is related to some external factors: physical environment and library facilities; Information content; Library human resources, communication skills, and abilities;

c) *Appropriateness to the user's goals and level of knowledge* about the "existence of the library," "the services it provides," and "its capabilities"; "The suitability of the librarian's literature to the needs and knowledge of the user", and "the librarian's knowledge and flexibility in responsibility" (Dayani, 2006).

Reference and information staff are still the “faces” of the library. In other words, they are typically the first (sometimes only) staff patrons “see”- in-person or virtually. They are “bridges” between users and library collections (Curry, 2016) and, in many cases, are the only educational resource for users to use resources and the library. It is no exaggeration to say that the service desks of the information department and their librarians are considered the mirror and showcase of the organization's totality. The exhausting efforts of other departments (collection, conservation, organization, digital, etc.) are reflected in this department. These desks and these employees are the reputations of the parent organization, and the user's judgment about the level of skill and expertise of other librarians in the organization is often based on how these staff work. Location, layout, staff, and even easy-to-find service desks in a library in the size of the NLI can affect user satisfaction. Due to the great importance of these desks, the main objectives of this study were to investigate the degree of conformity of service desks of the NLI with design indicators of reference and information desks, factors affecting information service from the perspective of librarians and users, and monitoring changes in service desks. The service desk in this study is the point of contact with users and clients in the information department. It is the same as reference and information desks and all desks that are somehow involved in providing services to users of the NLI. These include membership desk, search unit, lending desk, periodical unit, non-book (dissertation unit, non-book resources) and digital hall, public library reference desk and specialized reference desks, Iranology, visually impaired desk, and children desk. Some reference service is done on all of these desks. In this study, the physical table is considered wherever a desk is mentioned and the services provided at that desk. This study seeks to answer the following questions:

1. What is the level of conformity of the NLI's information desks with the design criteria of reference and information desks?

2. What are the information service factors of the NLI from the point of view of librarians and users?

### 3. What is the proposed service transformation plan of the NLI's information department?

Numerous studies have been conducted on the evolution of reference and information services, some of the most important of which are mentioned here.

Jackson (2002) found that reference statistics have declined over the past ten years at the Association of Research Libraries (ARL) reference desks. In this survey, the author examined whether libraries are changing their services in response to these declines. A survey was conducted of ARL heads of reference services. Results showed that reference services are responding to changes in statistics and resources by reorganizing, changing staffing levels, adding new services, and eliminating some services that are no longer useful.

In a survey, Meldrem, Mardis and Johnson (2005) report on the evolution of reference services. They describe how they moved from a traditional reference desk to a two-tiered reference system and then to a "one-stop shopping" model of providing public service. This model eliminates a physical reference desk while maintaining service for walk-in patrons. A pilot project tested the feasibility of eliminating a physical desk for reference service.

Murphy et al. (2008) describe how a revolution in customer service provision in 2002 led to an evolution of library services. When the reference and circulation desks were merged to create a single service point, responsibilities were broadened, core competencies were developed, and staff members were cross-trained. In 2005, staffing and work patterns analysis demonstrated a need to build upon the original model to utilize staff better and ensure desk coverage. Reference librarians were moved to "on call" status, technical services staff were added to the schedule, and core competencies and procedures were refined.

Mitchell, Comer, Starkey and Francis (2011) focused on reference services in the main library at Oberlin College. It traced the development of the current service model, which has evolved as the Reference & Instruction Department has anticipated, managed, and responded to changes related to increased teaching and instruction activities, shifting reference usage patterns, and changes in student research behaviors. They reported the rearrangement of furniture, equipment, and reference collection. They rebranded the desk name; they chose "Research Help" over "Reference Desk" to move away from library jargon that students do not use or understand.

In their research, O'Neill and Guilfoyle (2015) worked on the terminology of "Reference". "Reference" is a term widely understood by librarians and library workers, but is that understanding conveyed to the library user, especially in academic institutions? The Regis University Library Reference Services Department faculty were curious to discover whether their students and faculty knew what the word "reference" meant, especially since it was on the sign above their service desk and used in the name of their department. The Reference Services Department developed a survey to answer that question and others. Results from the survey were used to propose a new name for the desk, department, and librarians.

In his research entitled "Reference Desk Is Not Dead Yet" in the National Medical Library of Cuba, Arroyo (2016) engages in an intense debate on the role of the traditional reference desk in academic libraries. This paper aims to review the current significance of the reference desk for some libraries and the importance of choosing the proper reference model that fits each institution. Furthermore, it pointed out that eliminating or reforming the reference desk requires careful analysis by both librarians and administrators.

Coleman, Mallon and Lo (2016) conducted a study to examine relationships among

reference service staffing changes, reference service innovations, adoption of reference technology, library type and size, and service quality. Analysis of the 606 response sets revealed trends toward reduced use of librarians and increased use of student staff at in-person service points, widespread increases in appointment-based and self-service reference, intensive efforts to reduce demand for reference by improving library instruction, and general improvements in reference service quality.

Kubat (2021) describes the positive interaction achieved by using two screens by the librarian and the user in an academic library reference service. Besides the ergonomic benefits provided for the librarian and the user, the system's advantages regarding information transmission will be shown. This will involve explaining how the librarian's screen display is shared with the user and simultaneously allows the librarian to present additional information and announcements. All the research reported in this article shows changes and transformations in library reference services.

### **Materials and Methods**

The data of this study were obtained from two sources: 1) Reviewing the research literature and extracting service desk design indicators concerning reference and information services, and surveying the degree of conformity of information desks of the NLI with the extracted design indicators from the point of view of service desk librarians (a short researcher-made questionnaire tool); 2) meetings with service desk librarians and users: Meeting with service desk librarians with the participation of all 21 librarians of the NLI service desks and two meetings with users in two groups of 11 (members with at least two years of membership) and 18 (new registered members).

In the meetings, the author, as a facilitator, conducted the session and followed the four rules of brainstorming (forbidden criticism, free and direct comment, emphasis on the number of participants' suggestions, and consolidation and improvement of requests). First, the topic was defined and, in each meeting, following the topics, recommendations were made about the service desks, and their opinions were asked in that regard. In these meetings, several fundamental questions were raised about service desks. The facilitator took notes and recorded the words so nothing would be missed. The notes were collected and returned to them for correction and approval to increase accuracy. Finally, the facilitator categorized the suggestions. The ideas presented in the participants' meetings were screened and evaluated according to their feasibility in implementation and operational interaction with the participants.

In meetings with librarians and users, they were asked about the problems and limitations of desks, such as what issues users face in reaching service desks. Is the name of their service desk appropriate to the services they provide or not? How are desk services introduced? What do they think about librarians' uniforms? What technology or equipment do they need to improve service desks? And like these.

The meeting with the librarians at each service desk lasted at least 2 hours. The meeting was held with each user group for eight hours in two 4-hour sessions. MAXQDA software was used to analyze the meeting data. Qualitative analysis of meeting data with librarians and users led to the extraction of 969 initial codes. Several categories were obtained with multiple revisions and code integration based on similarity. Guba and Lincoln criteria (credibility, dependability, confirmability, and transferability) were used for data robustness

and accuracy. Long-term engagement with interview and peer review data was used to gain credibility. Another researcher reviewed and validated the participants' coding and citation steps for dependability. Confirmability was achieved through repeated reviews and exchange of transcripts of interviews, themes, and sub-themes identified by the author to confirm agreement on the decisions.

**Results**

More than 80% of the librarians working at the service desks of the NLI had a bachelor's degree or higher, and more than 90% of the librarians working at these desks had more than ten years of work experience. According to the qualification requirement for membership in the NLI, the members who participated in the meetings were also in both master's and doctoral degrees.

**Q1.** What is the level of conformity of the information desks of the NLI with the design criteria of reference and information desks?

The design indicators of reference and information desks were identified by reviewing the literature and primary sources of reference and information services to answer this question. Nine important indicators were extracted in this study, and to validate them, the group decision-making method and the judgment of reference and information experts of the NLI were used by 15 people. These indicators were presented in the form of a short questionnaire (9 questions, 7 Likert options) to librarians working at service desks who participated in the meetings to assess the compliance of their service desks with these indicators. Cronbach's alpha was calculated using the SPSS software (0.82). Table 1 shows the extracted indicators and the prioritization of reference indicators for designing reference and information desks in the NLI using the Friedman test.

*Table 1*

*Indicators for designing reference and information desks and Friedman test results for prioritizing indicators*

Indicators	Average Rank
The degree of distinction and specificity of the service desk	6.71
The appropriateness of the location of the service desk	6.62
The degree of accessibility and visibility of the service desk	6.48
The degree to which the name of the service desk is familiar with the user's literature	5.12
Marketing of the desk services (informing about the services and introducing them)	4.52
Comfort and pleasantness of the space (separate and quiet part for reference interview)	4.48
Branding rate (famous among other organizations)	4
Distinctiveness and specificity of desk staff (e.g., clothing)	3.83
environmental signs that guide the user to the service desk	3.24
Test value: 41.71	Degrees of freedom: 8
	significant: 0.01

The test value (41.71) and its significance (0.01) significantly differ between the nine desk design indicators of reference and information desks. In other words, comparing the two ranks of the means, it should be said that the indicator of distinctness and specificity of the service desk (with an average of 6.71) has the highest average, and the indicator of the exact signs

leading to the desk (with an average of 3.24) has the lowest average.

A One-sample t-test was used to determine the degree of conformity of the desk with the indicators (Table 2). The purpose of this test is to compare the expected average with the actual average. The actual average of design desks for reference and information desks in this study was 32.52. We calculated the expected average by multiplying the number of items (9 items) by the middle of the spectrum (3.5), and the expected average was 31.5.

We referred to the value of the t-test (0.437) and its significance (0.66) and concluded that there is no significant difference between the actual and expected mean. In other words, comparing the two averages, it should be said that although the actual average is slightly higher than the expected average, its value is not very significant. It can be said that the actual average and the expected average are at the same level in terms of design indicators of reference and information desks in the NLI.

Table 2

Sample T-test results

Expected average	Real average	T-test value	Degrees of freedom	significant
31.5	32.52	0.437	20	0.667

**Q2.** What are the information service factors of the NLI from the point of view of librarians and users?

As stated before, qualitative analysis of meeting data with librarians and users led to the extraction of 969 initial codes. Multiple code revisions and integration based on similarity were achieved in several stages, themes, and sub-themes. The four themes related to librarians had 14 sub-themes, and the codes related to user interviews had four main themes and 14 sub-themes. These factors are examined in two sections: librarians (546 primary codes) and users (301 primary codes). Figure 1 shows the themes and sub-themes of service factors from the librarians' point of view:

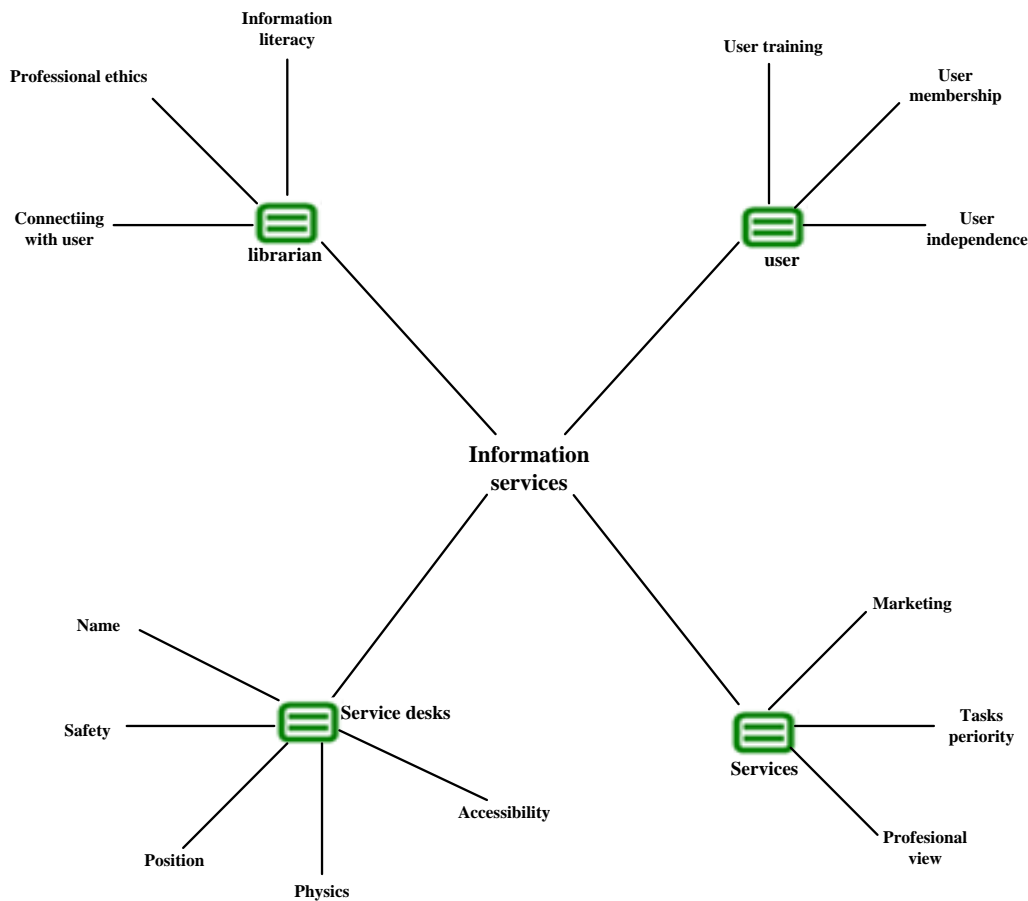


Figure 1: Themes and sub-themes of service factors from the perspective of librarians

See the themes, sub-themes, and examples of librarians' quotes for information service at the NLI in Table 3.

Table 3  
Themes and sub-themes of service factors: Information Librarian

Theme	Sub-theme	Examples of quotes	
Librarian	Information literacy	Researcher Librarian	"It is important for librarians to be a researcher in specialized sections such as Iranology and reference section".
		Teaching user training courses	"User' training by librarians Increase user trust in librarians' literacy".
		Connecting with foreign users	"In the field of Iranology, it is important for librarians to be familiar with and fluent in different languages".
		Familiarity with literacy related to the department	"Each department and each service desk requires its literacy", "During the shift, highly knowledgeable librarians should be at the desks".
	Connecting with user	interest	"Librarians should be willing to help their peers and users".
		Librarian personality traits	"It is essential that librarians are extroverted, open-minded, and welcoming to the users." "Sitting at a desk and hiding behind it prevents the librarian from communicating with the user".
	Professional	Paying attention	"Ethics comes first, and staff literacy comes next".

Theme	Sub-theme		Examples of quotes
	Ethics	to professional ethics in service	
User	User training	learning programs	"Due to the complexity of the library system and its software, training is essential at the beginning of membership", "It is important to teach the rules and regulations and introduce the various services of the NLI", "Insufficient information of users about work processes due to lack of training, causes user dissatisfaction".
	Membership	Targeted membership	"Membership in the NLI is not purposeful, and user degree is the criterion", "Some members refer to the library not to use the resources available here, but only to use the space and reading rooms".
		Work process in the membership section	"The non-electronic membership process is problematic in some cases and takes a lot of time and energy from staff and members".
	User independence	User independence in using the services	"In using the services of the NLI, the independence of the user is not ensured", "The architecture and complexity of the NLI building are such that a visually impaired person cannot identify the route even with ten visits", "Printed and electronic guides are needed for researchers".
		User involvement in the design	"In the Library, services have been designed for the Sighted people, not to the visually impaired themselves, so that they can see and be able to provide services to the blind", "In the accessibility of the blind section, it was necessary to use the opinions of the blind".
Service desks	Accessibility	Environmental and orientation guides	"Members often wander to find the reference librarian's desk", "The panel of the Iranology Hall is the "research center of Iranology and Islamology", and the name of the library has not been mentioned".
		Visibility	"In some halls, no attention has been paid to the issue of visibility of the service desk", "The public library Loan counter is in a space where, due to the shelves in front of it, users cannot easily see the Loan counter".
		librarian differentiation	"There is no specific distinction or characteristic for the librarian", "Even though the librarian is in the hall, the members do not recognize him/her".
	Position	Refreshing	"For an important part such as the membership unit, which is the first part of the user's encounter with the NLI, making the desk pleasant and using the latest technologies should be a priority", "The pillars in the halls reduce the pleasantness of the space due to the neutral color combination", "maquette of popular children's characters can refresh the children's room".
		Reference interview	"Unfortunately, due to the noise production and the proximity of the librarian's desk to the members' desk, in some halls, there is not much opportunity for in-depth reference interviews".
		Temperature and ventilation of the hall	"The cooling and heating of the halls and the problems of the air conditioners create problems for the user and the librarian in the halls".
	Physics	Suitability to provide services	"Some users do not distinguish that the desk is for librarian", "Membership desks are not suitable for staff, and sometimes it is difficult for the user to see the



Theme	Sub-theme		Examples of quotes
			reception staff monitor screen".
	Name	Matching the name of the hall with the user literature	"The <i>reference</i> word does not communicate well with the user", "The Persian equivalent of the <i>digital hall</i> is not tangible for the user".
	Safety	Security	"The traffic route is not suitable for the People with visual impairment, and there is no Tactile Paving for them", "There are several pillars in the Hall of the visually impaired, and the blind may be hit and damaged by these pillars", "Securing the stairs in the children's hall is essential for using the lower hall".
Services	Marketing	Announce and introduce services	"Information about services is mostly provided orally by librarians", "There is no specific marketing mechanism for different services".
	Tasks Priority	Priority of affairs at service desks	"Ancillary tasks assigned to the reference section will avoid the main responsibilities of the service", "It is better to do current work with ordinary librarians and specialized work with expert librarians".
	professional view	Special attention to special services	"A professional view of the departments, especially from the manager, can be a good achievement for the department", "As things got more specialized, users also get better answers and are more satisfied".

The information service in the NLI is also affected by various factors from the users' point of view. The qualitative analysis of the users' interview data led to the extraction of 546 initial codes. After multiple revisions and integration of codes based on similarity in several stages, finally, like the librarians, four main themes and 14 sub-themes were extracted. You can see these themes and sub-themes in Figure 2.

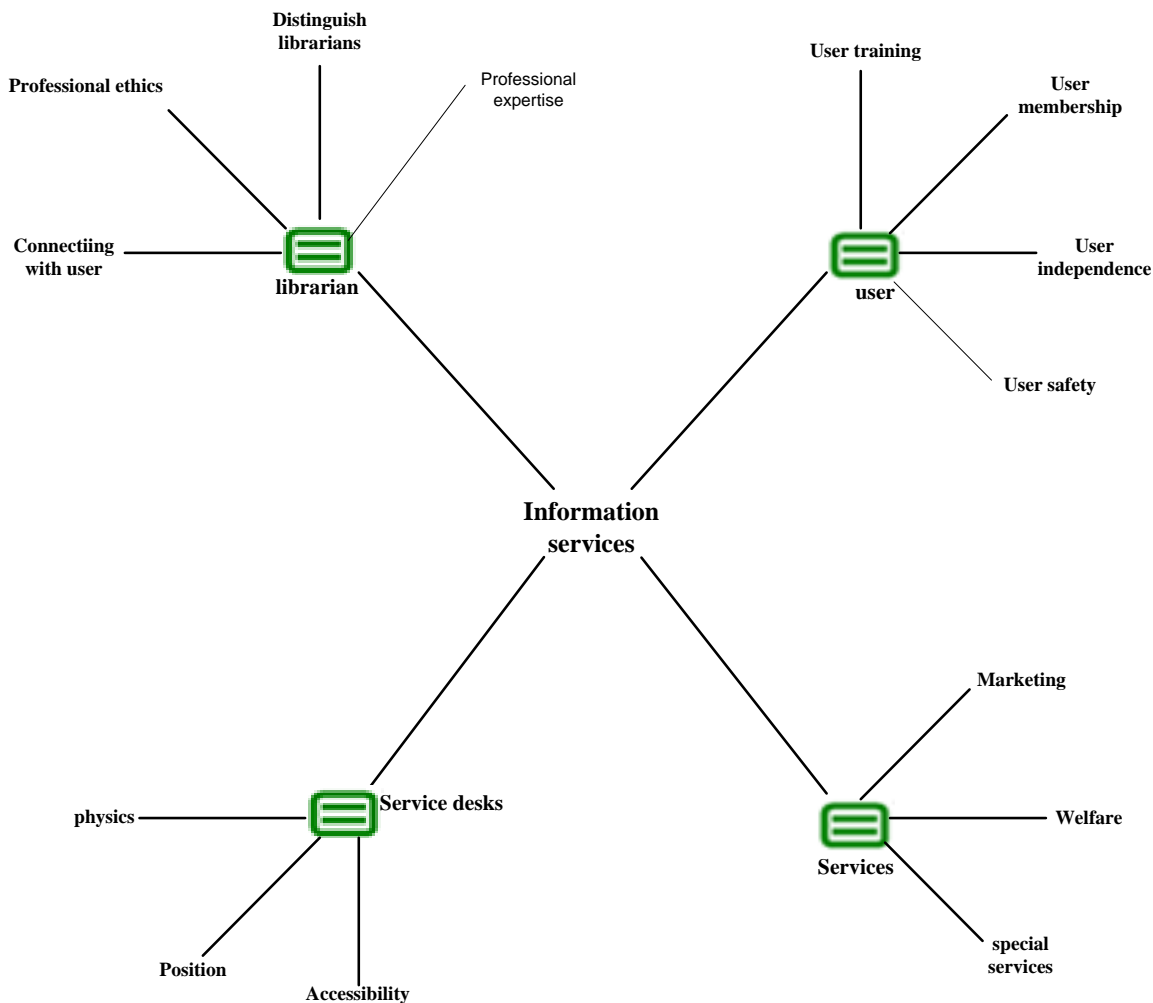


Figure 2: Themes and sub-themes of service factors from the perspective of users

See the themes, sub-themes, and examples of user quotes about service factors in the NLI in Table 4.

Table 4  
Themes and sub-themes of service factors: user perspective

Theme	Sub-theme		Examples of quotes
Librarian	librarian differentiation	Distinguish librarians from users	"It is not possible to identify librarians with users", "Everyone who approaches the reference desk is thought to be in charge of the desk", "There is no uniform or distinction for librarians".
	Mental pattern	Negative mental patterns of users towards librarians	"Reference librarians do not have enough knowledge to choose a reference book if this is the minimum they should specialize in", "Are librarians literate enough to answer specialized questions"?
	professional expertise	Lack of knowledge about the function and duties of reference librarians	"I do not know exactly what the people behind each desk do", "When I want to tell them about the problems or issues I encounter in the library, I'm afraid that it is not their job and they will be bothered".

Theme	Sub-theme		Examples of quotes
		Lack of expertise	"Booksellers know the sources better than librarians. When I go to the bookstore, the sellers, who are mostly open-minded, can easily introduce the source to me according to my taste and desire, and they know the content of the books well".
	Professional ethics	Observance of professional ethics by librarians	"Service desk librarians should care about each user. Maybe No one comes in an hour, but they should value the one user who is likely to visit", "Paying attention to librarian appearance is important given the dignity of the workplace".
User	User training	Library literacy training	"It seems necessary to hold an introductory tour of the NLI."
		Research Literacy Training	"The NLI should cover the weakness of other scientific institutions such as universities by looking at where research should be done, what research is needed by society, what the country's questions are, and moving in that direction".
		Cultural programs	"The conditions and facilities of the NLI allow for the best possible cultural programs", "The use of Monitors located in the library area is suitable for cultural programs", "The facilities used in the NLI should implement the slogan of saving (for example, the use of Taps with Electronic Automatic Sensor to prevent water loss)".
	user independence	Guides and brochures	"After membership, the continuation of the route is based on other user guides".
		Environmental guides	"Most participants considered it necessary to have environmental guides in the membership unit to familiarize new members with the facilities and services of the NLI".
	Membership	Targeted membership	"Degree-based membership has led most members to see the NLI as a space to study for university entrance exams and prepare for semester exams".
	Security and safety	Facilitate traffic	"Why aren't members allowed to enter the NLI through the staff door?", "Members' doors are heavy and can be a problem despite the materials in the user's hands".
		Pay attention to the physical health of users	"E-entrance gates endanger the health of users, and several participants spoke about their experiences with physical injuries".
		Respect for the dignity of users	"It should be important to value each user." "These are not ordinary people of the community; they are people who have completed part of their education".
	Special services	Promoting the scientific status of researchers	"If the NLI wants to be a place for researchers, it must provide the necessary facilities and conditions for the researchers", "Database sharing is one of them".
Formation of research cores		"The condition of this work is available in the NLI. They should allow members to talk to each other in an interactive atmosphere", "Having a place called the "Think Room" is a good space for this", "If I know who is researching my subject in the library, or if he has a specialty that is in line with my research, I will consult him".	
Providing		"It is crucial to be aware of the latest sources on the	

Theme	Sub-theme		Examples of quotes
Services		selective dissemination of information and current information services	subject of my research".
		Research skills training	"Information literacy training or research literacy is a priority for the NLI".
		Expanding the spirit of research	"These members who come here are a huge human resource.", "The NLI should look at researchers as an opportunity and use this power and expertise to achieve its goals through planning".
	Marketing and Awareness	Awareness of services and facilities	"Recognizing the simplest services and facilities and using them in the NLI requires extra effort", "It takes much time to find out about services", "Sometimes I get embarrassed to ask a question of the staff behind the desk because I do not know exactly what questions can be asked of them".
		Awareness of specialized services	"I only refer to reference librarians for problems such as broken lamps or tables and chairs, and I had no idea they could help me with my research".
		Information tools	"Monitors located in the library area should be used to inform library services", "Content displayed on these monitors provides news that is not for the user", "Guidelines and brochures are essential at the beginning of membership".
	Welfare	Library outdoor welfare services	"I travel half an hour from home to the library, taking into account the traffic, but I spend between half an hour and three-quarters of my time every day finding parking and walking to the library", "The lack of navigation guides on Library Boulevard, the lack of guides to identifying the NLI exits to adjacent highways was problematic in the early days".
		Library indoor welfare services	"Informing about welfare, including bank and shop, welfare, including the cost of members' restaurant meals and increasing their tables and chairs, monitoring the cleanliness of toilets, constantly monitoring the light and ventilation of halls, and paying attention to space and making the organization's interior spaces happy in a library the size of the NLI is essential".
	Service desks	Position	"It is difficult to observe the reference desk in the Humanities Hall", "The location of the desks in the halls (reference desks) is not suitable for long interviews and conversations due to its proximity to the members' seats".
		Physics	"In the early days of membership, I did not know these desks were for staff, and I used them as a searching desk", "Some search desks for the disabled and those in wheelchairs are not suitable at all".
Accessibility		"The architecture of the building and the complexity of the building necessitate environmental guides and signboards", "Signboards are few and invisible	

Theme	Sub-theme	Examples of quotes
		because of their golden color, which is almost the same color as the building's façade".
	Environmental guides outside the library	"The signboards of other cultural buildings located in the neighborhood are many times more than the signboards of the NLI", "NLI guideboards are not distinct and do not attract attention".

**Q3.** What is the proposed service transformation plan of the NLI's information department?

We wrote a proposed service transformation plan based on the participants' suggestions we collected in the interview. Librarians' suggestions fall into six themes. See these themes and the target departments in Tables 5 and 6 for librarians and users:

Table 5  
Suggestions provided by librarians

Themes	Suggestions	Departments
Equipment and technology	Book delivery kiosk	Delivery of borrowed books from the public library without entering the library
	Providing an independent desk and system for the disabled and special people	Information and search unit
	IVR	To communicate with different library units
	Scanner and copy set	Membership unit
	Independent search system in each hall	Public library and specialized halls, non-book hall, children's hall
	Notification monitor for knowing of the lending process	Specialized lending desk
	Systematic monitoring of computers located in the digital hall	Digital hall
	Tactile Paving for visually impaired users	Blind unit
Membership	Electronic numbering	Membership
	Electronic membership	Membership
	Information interview in the Membership unit (To introduce and inform the rules and regulations)	Membership
Space	Prepare a croquis of the sections	Membership
	Change the location of the membership unit to increase the accessibility of members to different sections of the library	Membership
Resource Management Software (Rasa)	Rasa training	All units
Offer new services	Electronic document delivery services	Digital hall
	Electronic guides and QR codes	Membership unit and search unit
	Preparation of path finders	Reference halls
	Lending reservation system	Specialized lending unit, public library lending

Themes	Suggestions	Departments
New service desk	Telephone reference desk	Search unit
	information desk	Entrance to specialized halls
	Membership reference desk	Before the membership unit for targeted membership
	Non-book reference desk (dissertation)	non-book unit
	Centralized reference desk	Specialized reference halls (book librarian)

From the users' point of view in two focus groups, suggestions in several themes were briefly extracted. See the suggestions they made in Table 6.

Table 6

*Suggestions provided by users*

Themes	Suggestions
Equipment and technology	core and full-text databases
	Increase Internet bandwidth
	Allocation of extra Internet traffic for researchers
	Launching databases of members, researchers, and their researches
	Preparing a database of these suggested topics
New services	Formation of research cores and using users' knowledge and expertise
	Forming study circles and directing studies and research
	Changing users' study tastes
processes	Review work processes and simplify them
Marketing	Informing about services and facilities
	Informing on the statute and the duties of the NLI
	Informing about the rules, job descriptions, and responsibilities of the library
The macro role of the NLI	Attempts to influence at the macro level due to the political position of the library
	Consultation with organizations involved in the preparation and operation of standard public libraries in the city
	Consultation with other libraries and universities to complete the collection of resources and facilitate services through projects such as interlibrary loan
Other suggestions	Plan to form a union council for users for their demands
	More accurate assessment and periodic and targeted needs assessments of members' information and research needs
	The gradual change of the library approach to the research approach
	Collaborative solutions
	Efforts to fulfill the slogan of the NLI: "the Second House of Researchers"
	Strengthening the spirit of research through the material and spiritual incentive systems
	Paying attention to the space and making the internal spaces of the organization pleasant
	librarian uniform or distinctive badges and features for them
	Holding an exhibition of new resources

### Discussion

There are several factors to consider when setting up a service desk in any library. One of the most essential factors in designing any service desk is the accessibility and visibility of that desk (Larason & Robinson, 1984; O'Neill & Guilfoyle, 2015; RUSA, 2013; Dayani, 2006), the distinction and specificity of service desks, and Appropriate signs and boards with specific and appropriate letters in the library location, Distinction of librarians (Massey-Burzio, 1998; RUSA, 2013), Appropriate position of information desks for users (Crooks, 1983; O'Gorman & Trott, 2009 Quoted in: Deineh, Middlemas & Morrison, 2012; Alijani, 2009; Larason & Robinson, 1984); Efforts to promote the position of reference and information services (Jenkins, 2001; Sutton, Bazirjian & Zerwas, 2009), familiarity of the section names with the common literature of users (O'Neill & Guilfoyle, 2015; Dayani, 2006), "timeliness" of services (Dayani, 2006), maintaining the user's independence through precise signs and symbols leading to different sections of the library or environmental guides and self-guides (O'dwyer & Sua, 2015), comfortable and pleasant atmosphere (Curry, 2016; Larason & Robinson, 1984; Schmidt, 2011), Marketing and Introducing the services (Sutton, Bazirjian & Zarvaz, 2009; Jenkins, 2001; Bamigbola, 2013; Schmidt 2011, Arehkeshan, 2010), and Branding (Singh, 2004; Matuozzi, 2009, Pinar, Trapp, Girard & Boyt, 2014) are influential factors. The results of this study showed the appropriate correspondence between the service desks of the NLI and the extracted indicators. Factors of effective service from the perspective of librarians and users were also discovered in this study from the brainstorming meetings of users and librarians themselves, and the suggestions presented in these meetings, some of which are easily accessible, can transform service.

Qualitative analysis of meeting data with librarians and users led to the extraction of some initial codes. The four main themes related to librarians had 14 sub-themes, and the codes related to user interviews had four main themes and 14 sub-themes. Four main themes on librarians were *Librarian* (Information literacy, Connecting with the user, Professional Ethics); *User* (User training, User Membership, User independence); *Service desks* (Position, Physics, accessibility, Name, Safety); *Services* (Marketing, tasks priority, professional view). Four main themes related to users were *Librarian* (librarian differentiation, professional expertise, mental pattern, Professional ethics); *user* (User training, User Membership, User independence, Security and safety), *Services* (Special services, Marketing and Awareness, Welfare); *Service desks* (Position, Physics, Accessibility).

The analysis of the interview data of librarians and users shows that there is harmony and compatibility between the views of both groups because the content of the themes and sub-themes extracted in each group are similar. This consensus among librarians and users shows the sensitivity of the proposed topics. It is expected that the information department in the National Library of Iran, inspired by these findings, will pay special attention to the expected commonalities and take quick action to resolve the reported obstacles and problems. Two groups of librarians and users presented valuable suggestions to improve the services of service desks in the National Library of Iran. Considering the findings of the meetings and the suggestions offered by both groups, the improvement of the services of the Information Department of the NLI, in many cases, does not require a high budget and can be implemented by changing the approach and paying attention to it. However, some suggestions require planning and budgeting.

### Conclusion

A library's main objective is to meet its users' information needs in the best possible way; for this purpose, it makes policies and strategies. A library should provide patrons with an appropriate collection, services, and facilities to satisfy them. Adequate access of users to services and attention to information service factors in libraries improves users' access to library services and increases satisfaction. There are several important factors in designing any service desk. Nine important indicators were extracted in this study, as well as the degree of conformity of information desks of the NLI with the extracted design indicators from the point of view of service desk librarians surveyed. The information service factors of the NLI from the point of view of librarians and users (in brainstorming meetings) were also extracted. They were asked about the desks' problems and limitations and presented some suggestions. Changing services in libraries requires several essential points:

**Looking from the outside:** Applying the outside view and looking at the problem from the outside makes the service optimized and strengthened. In designing services, the opinion of the user community can be surveyed, and their opinion can be applied to each of the themes discussed in this research.

**Criticism:** Debate, discussion, readiness to accept and believe in challenges from users, consultants, and experts, and not being indifferent to the opinions and suggestions of the target community are among the tools that ensure the development of services.

**Experience:** Testing or experimenting with up-to-date services and activities and modeling successful organizations, providing ongoing research teams that monitor service-related issues and providing results to the organization, and the involvement of this data in the organization's decisions and policies, Provides the basis for the growth and efficiency of the organization.

**Policy:** Preparing clear policies requiring different departments to follow these policies and motivating human resources as the most critical organizational asset in developing and changing these policies can promise to fulfill the library's mission. This policy can guide the provision of standard services of the highest quality.

### Endnote

1. Interactive Voice Response

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