

# **Fix, Develop, Keep! Net Promoter Score as a Tool for Improving Customer Experience**

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**Abstract:** The Net Promoter Score (NPS) introduced by Fred Reichheld in 2003, is widely used in the business to measure the customers' loyalty to the enterprise by enquiring their willingness to recommend the product, the service or the enterprise as a whole to their friends or colleagues. In the library world, the NPS has been used in a large scale in the National Library of Finland since 2016 on the National Finna Service of Finnish libraries, archives and museums. The three user surveys of Finna in the years 2016, 2018 and 2019 produced altogether 95,647 responses indicating a growing trend of user satisfaction as measured by the NPS. Following the idea of counting the NPS, dividing the responses to the survey in three groups: the Detractors (the most critical responses), the Passives (the neutral responses) and the Promoters (the most positive responses), the most critical points of development as well as the success factors were identified. On the basis of the surveys, measures basing on the most critical points of development were made after each survey. The NPS is included in the new standard ISO 21248:2019 (Quality assessment for national libraries).

**Keywords:** Net Promoter Score (NPS), ISO 21248, User satisfaction, Customer Experience Management (CEM)

## **1. Introduction**

### **1.1. Background of Net Promoter Score in libraries**

The concept of Customer Experience is a natural part of the discussion concerning the growing demand for non-profit organizations to show proof of their value for their clientele, for their parent organizations and for the society.

So, this concept is generally included in the strategy, vision and values of the libraries. Yet, there is variation how those abstract terms are realized as concrete targets and objectives.

Different roles of customer satisfaction, commitment and trust was analysed e.g. by Garbarino and Johnson (1999) and Moorman et al. (1992). Since then, later

research presents different types of more multidimensional models (Cohen 1999, Gustafsson et al. 2005, Keiningham et al. 2015).

The first advisory documentation concerning the evaluation of libraries' customer experience as a part of the impact of library, is the International Standard ISO 16439 "Methods and procedures for assessing the impact of libraries".

Laitinen (2019) analysed the aspects of measuring the innovations in libraries. The knowledge about the strengths as well as the points of development of the services is an important tool for the management of the libraries to produce added value for the clientele.

The Data & Marketing Association of Finland (Suomen Asiakkuusmarkkinointiliitto 2018) is using a three-dimensional approach in its annual survey to measure the customer loyalty of selected enterprises. The dimensions are:

- Willingness to recommend. How likely will the customer recommend the enterprise, brand or service to the others?
- Intention to buy. How likely will the customer continue to buy the products or services and also other products and services?
- Staying as customer. How likely will the customer remain user of a certain product or service?

The above mentioned dimensions are connected with the customer loyalty. The first of the three dimensions measuring the customers' willingness to recommend the enterprise, the brand or service to the others, seems to follow the idea of Net Promoter Score index (NPS) widely used in business – yet, being not directly comparable with it because of different scaling on the Likert scale used.

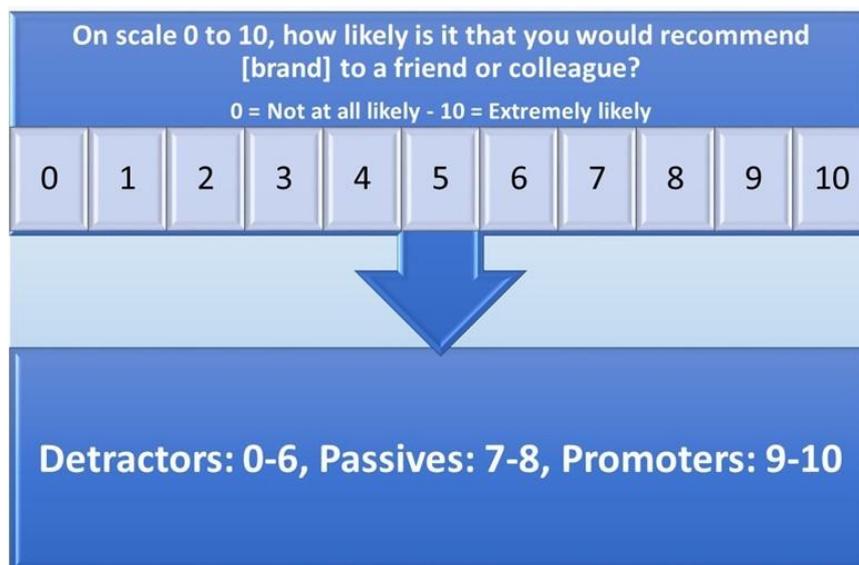
The NPS was introduced by Reichheld (2003) and adapted to be used in libraries (Laitinen 2018, ISO 21248:2019[E], 76). The idea of the NPS and its counting is shown in Figure 1.

NPS is a statistical and measurable indicator for customer loyalty and it seems to fit together with the ideas of ISO 16439 to categorize qualitative data into numeric values, and to limit the assessment to the services that are the most relevant to the library's main goals.

In the library world, the idea of NPS has been used in a small scale by the National Library of Estonia (Välbe 2015, 2016) and by the National Library of Turkey (Inal 2018a).

For now, a large scale use of the NPS is applied by Finnish academic libraries. In 2016, the National Library of Finland implemented the NPS on the end user survey of the National Finna Service of Finnish libraries, archives and museums showing the NPS of 29.9% basing on the material of 14,478 respondents (Wunder 2017, Laitinen 2018). Since that, two more Finna user surveys using the NPS has been conducted, in 2018 (Koskinen 2018; Kovanen 2018; Luotonen et al. 2018) and in 2019 (Original material of the national Finna user survey 2019 analyzed by the author). The NPS-values of two latter surveys are reported in this paper.

Laitinen (2018) analyzed the results of user survey of the AMKIT Consortium of Finland, which coordinates cooperation among the Universities of Applied Sciences (UAS) libraries in Finland (AMKIT user survey 2017). In this survey, the aggregated NPS total of UAS in Finland was 62.7% (12,572 respondents).



**Figure 1. The Net Promoter Score (NPS) an easy and non-laborious method of assessing the customers' experience. The index is calculated by the following formula introduced by Reichheld (2003):  $NPS = P - D$ , where P = Percentage of promoters, D = Percentage of detractors.**

### **1.2. National Finna Service of Finnish Cultural Heritage Organizations**

The Finna service (finna.fi) is a national service maintained by the National Library of Finland. It is the common network service of Finnish archives, libraries and museums and it offers an entrance to more than 13 million photographs, objects, books, works of art and to other material at one go.

The amount of the material increases continuously, as well as the number of organizations joining the service with their collections. Altogether, there are already more than two hundred archives, libraries and museums along. Finna is based on an open source code and its materials can be utilised also through an open interface. The service is a part of the National Digital Library of the Ministry of Education and Culture project.

## **2. Setting up the Question and Method Description**

Following the principle of counting the NPS (Reichheld 2003, 2006), the following two questions were asked:

1. On scale 0 to 10, how likely is it that you would recommend Finna to a colleague or a friend?
2. Why did you give the rating above?

On the basis of the rating (question No 1 above), the respondents were grouped into “promoters” (rating 9 or 10), “passively satisfied” (rating 7 or 8, and “detractors” (rating 0 to 6). Cf.

Figure 1.

To find the most important points of development as well as the success factors, the open answers to the question No 2 above (Why did you give the rating above?) were grouped as follows:

- Critical issues to be fixed at the earliest convenience: something was not working, worked wrong or very poorly = Fix (f)
- Points of development: something worked but could be done better or proposal / idea to do something new = Develop (d)
- Comments recognized as success factors that should be maintained or were described as success = Keep (k)
- Critical comments that could not be placed any of the groups above (c)
- Thanking comments that could not be placed any of the groups above (t)
- General comments that could not be placed any of the groups above - “Just a comment” (j)

Some respondents gave a comment that fitted in more than one category, so they were ticked with appropriate tags.

In this paper, the three groups, Fix, Develop and Keep are dealt with the NPS groups.

Because of the big data mass, the analysis of the material was limited to the year 2016 and the rest of the material was planned to be analysed based on the experience of this study.

### 3. Results

The three user surveys of Finna in the years 2016, 2018 and 2019 produced altogether 95,647 responses indicating a growing trend of user satisfaction as measured by the NPS. During the examination period, the NPS value rose from 29.9% in 2016 through 43.9% in 2018 to 45.6% in 2019. The illustration of the time series and the numbers of respondents on each survey is shown in Figure 2.

The numbers of responses each year to the question "On scale 0 to 10, how likely is it that you would recommend Finna to a colleague or a friend?", are shown by group in Table 1. Each year, few respondents did not give the rating (57 in 2016, 129 in 2018 and 198 in 2019) but yet, few of them answered the open question "Why did you give the rating above?" and those responses were counted and classified according to the principle described in Chapter 2.

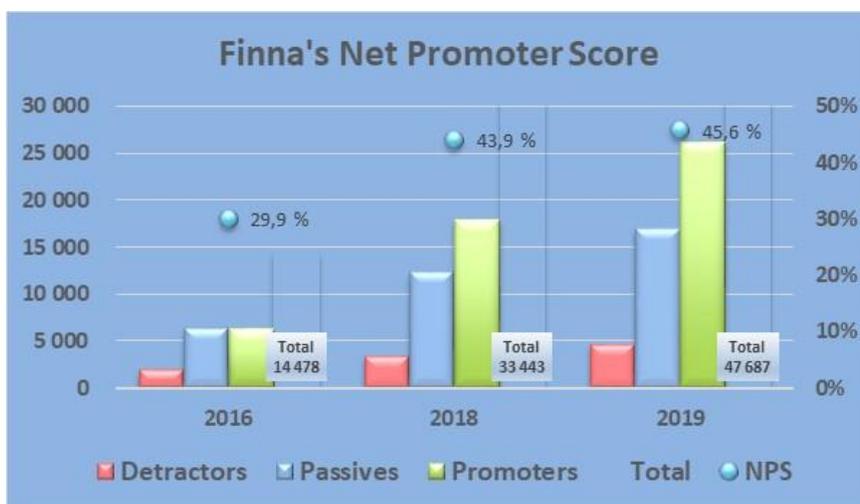


Figure 2. The NPS values and grouping of the respondents in Finna user surveys 2016-2019.

**Table 1. The numbers of respondents in Finna user surveys 2016 and their NPS grouping.**

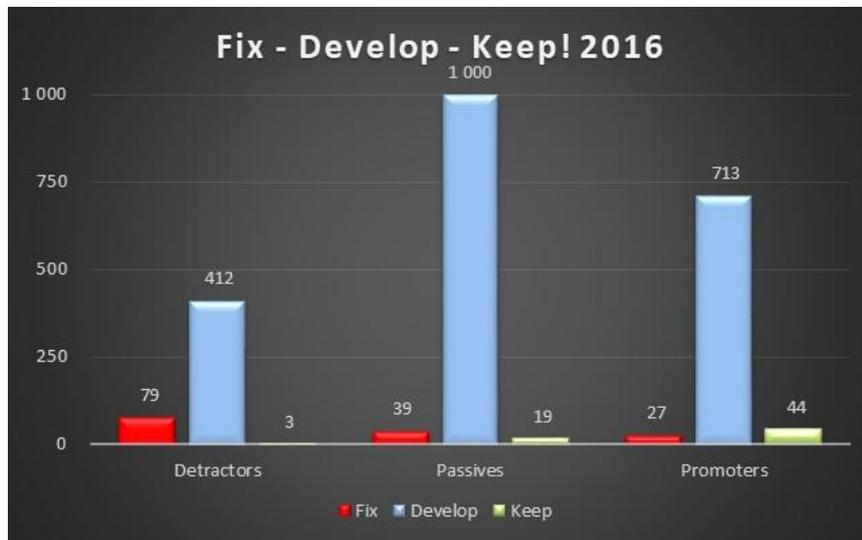
Group	2016	2018	2019
Detractors	1,925	3,239	4,502
Passives	6,294	12,276	16,929
Promoters	6,259	17,928	26,256
Total	14,478	33,443	47,687

Altogether, 5,321 comments on the open question “Why did you give the rating above?” in the survey of the year 2016 were given, from which 2,342 could be counted in the tripartition Fix, Develop, Keep. Because many of the comments fitted in more than one category presented in Chapter 2 and thus were ticked with more than one tags, the “grand total” of comments was 5,578. (Table 2).

**Table 2. Sorting of answers to the open question “Why did you give the rating above?”.**

	Detractors	Passives	Promoters	No group <sup>(*)</sup>	Total <sup>(**)</sup>
Fix (f)	79	39	27	0	145
Develop (d)	412	1,000	713	6	2,131
Keep (k)	3	19	44	0	66
<b>f+d+k</b>	<b>494</b>	<b>1,058</b>	<b>784</b>	<b>6</b>	<b>2,342</b>
Criticism (c)	314	257	197	2	770
Thanks (t)	28	106	238	1	373
General	326	869	896	2	2,093
Total	668	1,232	1,331	5	3,236
Altogether	1,162	2,290	2,115	11	5,578
<sup>*)</sup> No group: The respondent answered the open question but did not give his estimate of willingness to recommend Finna on the scale from 0 to 10. <sup>**)</sup> Several comments related to the same issue are included in the total number of comment types.					

The distribution and numbers of the findings identified as the points of development (Fix, Develop) as well as the success factors (Keep) is shown in Figure 3.



**Figure 3. The distribution and numbers of the findings identified as the points of development (Fix, Develop) as well as the success factors (Keep) in each NPS group in the user survey 2016.**

The analysis revealed altogether 145 comments recognized as critical issues to be fixed at the earliest convenience (Table 2). Amongst other, the following issues were recognized as fixed on the basis of feedback:

- Logic of search functions
- Navigation in the user interface
- The color world or the user interface
- Visual appearance in general
- Problems of logging in the user account

As shown in the Table 2, the respondents were very active to give their own wishes for further development of the service: altogether 2,131 comments were recognized as proposals for development (d) at least on some degree or they were detected as issues to be cured with lower priority than the critical points to be fixed (f). The comments ticked as development needs (d) were concerned among others following issues:

- Further development of the user interface more user friendly
- Further development of précising the search results
- Wishes of more materials in the service
- Hints to take cue from some other service known by the customer

Altogether 66 comments (44 from the Promoters, 19 from the Passives and 3 from the Detractors) were recognized as success factors that should be maintained or were described as success (Keep. Table 2). Among others, the following success factors were recognized:

- Access to several databases through Finna – no need to learn several types of user interfaces
- Simultaneous focused search from several databases
- Ticking of peer-reviewed articles and making a favorite list
- Storing the searches
- Tips about the similar searches (recommendation bar)
- Logging in with the user id without need to remember the library card number
- Functionality of the renewal of loans
- Availability information on the materials

#### **4. Discussion**

As shown in

Figure 2, a bounce of NPS value was seen from 2016 (29.9%) to 2018 (43.9%). Also the number of users of the service and thus the number of respondents rose strongly, from 14.478 to 33.443 respectively.

There are probably no grounds to suppose that mere users' numerical growth would be seen at least as this much bigger satisfaction with the service. Instead, the systematic analysis of the open answers to the question “Why did you give the rating above?” given in 2016 was done.

Naturally, the sums of the issues to be cured (Fix), as well as the sum of development points (Develop) introduced in Table 2 contain several comments concerning partly the same issues. Because a vast number of criticism concerned the user interface, many usability improvements were made during the years 2017 and 2018, before the survey of 2018:

- Appearance reform of the user interface
- A map choice was added to the Finna Street photograph service
- More attention was paid to the mobile interface
- Improvements of handling the registered users' own information were made

The information from earlier user surveys is utilized for service design and the improvements of the system continue to guarantee the even better user experience, and the results of the surveys of 2018 and 2019 are also being used.

It is not surprising that most about the critical comments to be fixed (Fix) were given by the Detractors or that the most information of the success factors (Keep) were given by the Promoters. Also, the fact that the majority of the neutral development ideas (Develop) were given by the Passives was in accordance with the expectations. (Figure 3.)

Naturally, all of the three groups were supposed to give valuable information concerning the points of development and the success factors as well as the issues to be cured through their open answers, which also came true as seen in Table 2 and in Figure 3.

Because the most hectic development of the service was done after the survey of 2016, it seems logical that the change of the NPS value was not as drastic from 2018 to 2019 as it was from 2016 to 2018.

At present, the NPS is included in the International Standard ISO 21248:2019 (Information and documentation. Quality assessment for national libraries), thus giving the back to the idea of categorizing the qualitative data into classes that may be assigned numeric values as recommended in the International Standard for Methods and procedures for assessing the impact of libraries (ISO 16439:2014(E); 5.6.3). The idea is to answer the libraries' need to find easy and non-laborious methods of assessing the customers' experience.

So far, the Finnish academic libraries (The National Library of Finland and the UAS libraries of the AMKIT Consortium) seem to be the only ones widely utilising the NPS in their user surveys. The National Library of Estonia (Välbe 2015, 2016) applies it in more detailed and targeted surveys with much smaller material. The idea of the NPS was also used in the heuristic user survey of the web site of the National Library of Turkey but the NPS value was not counted because the sample size was not enough to get generalizable data (Inal 2018b).

To make the NPS index still more generally known and to encourage the large-scale use of it, it is important to consider including it also in the International Standard for Library Performance Indicators, ISO 11620 on its next revision cycle.

When developing the modern services, the customer orientation is even more important part of the development of the service than earlier. Finna, being a network service that picks up the material for the information seeker from the collections of all types of the cultural heritage organizations, not only from the library collections, breaks the "traditional" linking between the library collection and the user; the user of the service may not even notice where the information he received came from.

This also casts new types of challenges for the measuring of the services and their value and especially the cultural heritage organizations' ability to prove

their impact in the positive customer experience of the users. This point, so to say “closes the circle” and the line of thought returns to the above mentioned recommendation of the International Standard ISO 16439 to assign the qualitative data as numeric values.

This must be done to enable the other idea of measuring the impact of the library: bringing the qualitative data (the results of user surveys) next to the conventional statistical information about the library. For the future development of library statistics both on the local (the library) and the national level, the above-mentioned idea should be applied also in the published versions of the library statistics in addition to the internal reports.

This would increase the openness of the reporting and give the decision-makers, financiers and the general public clear information about the operation and value of the publicly financed organisations as the libraries are.

There is left the fundamental question: “How good is good?” In Reichheld’s (2003, 2006) material, the typical NPS value was between 5% and 10%, but as seen on the basis of the Finna user surveys and those made by the AMKIT consortium, in the public sector organizations the values tend to be much higher.

It is important to take into account that despite the similar counting of the NPS, it would be misleading to compare the public and business sectors. So, adapting the idea of the NPS in the public sector, the cultural heritage organizations should determine their own NPS levels on the basis of experience, and learn how to segment the customers according to the information needed to guarantee the service level and a good customer experience of their key customer groups.

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