User Experience Tracking and Driver Analysis to Increase the Net Promotes Score for an Internal Social Media Platform

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Abstract: An international company operates an internal social media platform for communication and collaboration between employees. Employee satisfaction for the internal social network is regularly determined by the Net Promoter Score (NPS). The determined NPS represents the central performance indicator for the platform, which is communicated to the management. The values determined for the NPS were not satisfactory in the past. From an economic point of view, high investments were made for the integration of the platform. In addition, six-figure costs are incurred annually for operation and software licenses. Therefore, the improvement of the NPS is in the focus of all participants. Through user experience tracking and derivation of driver factors it is possible to find out which factors have the most significant influence on employee satisfaction in order to identify appropriate measures to improve the NPS.

Key words: employee satisfaction; social media; management; user experience

JEL codes: M120, M50

1. Introduction

Social media platforms are increasingly finding their way into the company's internal context and are replacing the classic intranet as a top-down communication platform and as a tool for static knowledge management. The term social intranet on the basis of modern social media software brings together the communication, interaction and transaction flows of a company at a central point. For companies, this paradigm shift is associated with high investment costs in the introductory phase and in day-to-day operation. Therefore, it is necessary to measure the satisfaction of the employees in their daily work and to identify potentials for improvement.

The Net Promoter Score (Reichheld, 2003), which was developed by Fred Reichheld at the Harvard University, is used as an established, simple and sufficiently scientifically investigated key figure for the survey. The Net Promoter Score (NPS) is based on an analysis of more than 100000 customer surveys in 12 different industries. In this analysis, the correlation between company growth and the NPS could be empirically demonstrated (Paulus, 2008). An increase in NPS results in profitable growth.

By analogy, it is therefore obvious that an increase in employee satisfaction and thus an increase in NPS for the corporate social network increases growth in interaction on the platform. This growth in interaction increases

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collaboration and knowledge sharing within the organization and improves efficiency and effectiveness.

The object of investigation is the Corporate Social Network (CSN) of a German company. The Corporate Social Network is an integrated social media platform based on the Jive software (www.jivesoftware.com). The main goal for the use of this software is the networking of employees nationally and internationally. The Corporate Social Network was launched in February 2013. It currently has approximately 110,000 (as of March 2018) registered users and, with a total workforce of 220,000, has achieved a relatively high level of penetration in the company or organization. The launch of the corporate social network was accompanied by internal communication measures.

The integrated social media platform provides employees with a range of functionalities based on other social networks such as Facebook or Google+.

During registration, the software generates a profile of the employee. In addition to the general information such as contact data with photo, the employee can also add personal information such as qualifications, interests and projects. All information is voluntary. Access to the contents of the Corporate Social Network without registration is not possible. Open and closed groups can be formed for collaboration, which are created and managed independently by the employees. Numerous communities have formed in everyday organizational life. To create content, the user can use functions such as blogs, status messages, wikis and document management at features. The content can be rated, shared and commented by the community. Current events and new activities are represented on the corporate social network by the "Activity Stream". The "Activity Stream" represents an aggregation of all new activities from groups or persons. If you join or "follow" a group, its activities appear in the personal "Activity Stream". The term "follow" here means that you subscribe to the content of a person or group and would like to be informed about new activities. In a volatile medium, such as a social network, there is a risk that update information in the activity stream will flow unread in the current.

2. Methodology and Data

2.1 Objective of the Study
The aim of the study was:
- to determine the willingness to recommend on the basis of the Net Promoter Score (NPS) and to analyze geographical, age and role-specific characteristics.
- Identification of CSN-relevant user experience dimensions and derivation of driver models.

2.2 Sociodemographics
The following figures show the sociodemographic distribution by age, country of origin and area.

10,822 CSN registrants participated in the 2018 survey. The current sample differs significantly from the sample of the last survey in terms of the age of the interviewees. In 2018 more people over 50 years have participated.
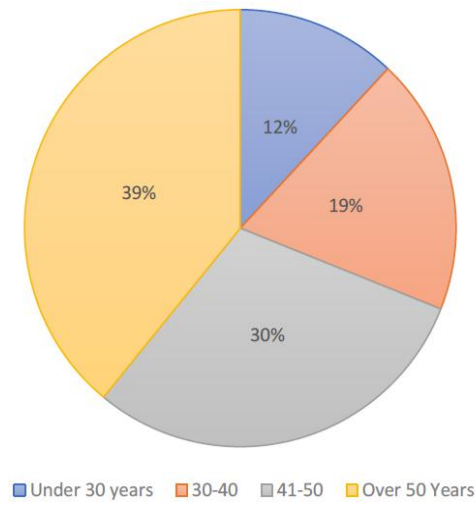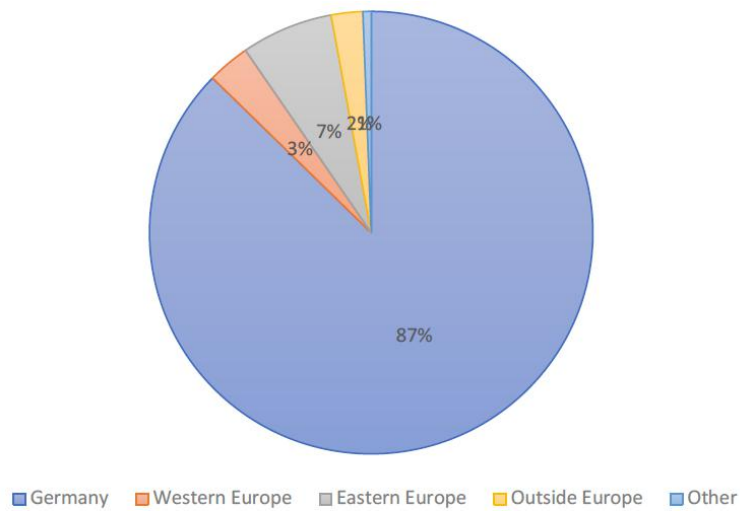
Figure 1   Age

Under 30 years   30-40   41-50   Over 50 Years

Figure 2   Country/Continent of Activity

Germany   Western Europe   Eastern Europe   Outside Europe   Other

Figure 3   Field of Work

IT   Technology   Sales   Customer Service   Finance   HR   Strategy   Marketing   Other
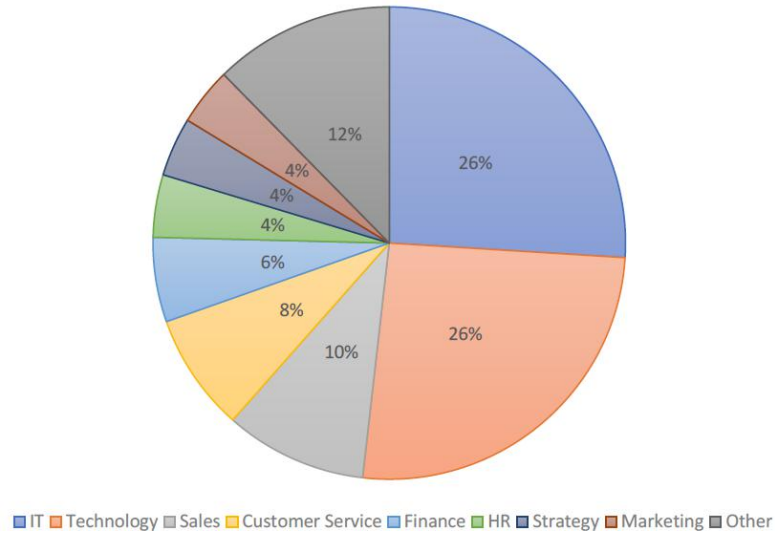
In the survey, 89% participated without management responsibility and 11% with management responsibility.

2.3 Method and Sample

- Invitation to survey via e-mail to all currently registered users (approx. 108,883 persons)
- International online survey with option for individual language selection (9 different languages)
- Average survey length approx. 20 minutes
- Survey period: 15 January-29 January 2018
- Realized sample: N = 10,822
- Response rate: 8.9%

The survey was carried out anonymously.

2.4 Calculation basis of the Net Promoter Score (NPS)

In order to calculate the index from the answers of the respondents, the number scale is divided into three levels:

- Respondents who award 9 or 10 points are among the promoters who view the Corporate Social Network very positively and recommend it to their colleagues.
- Respondents who award 7 or 8 points will be considered neutral. They are regarded as so-called passive or indifferent ducks that do not recommend the corporate social network to others but would not damage its reputation through negative criticism. Therefore, they are not considered in the calculation of the Net Promoter Score.
- Respondents who award 0 to 6 points are so-called detractors. They are critical of the corporate social network and express their criticism.

To calculate the score, the percentage of detractors is subtracted from the percentage of promoters. The difference results in the Net Promoter Score, which can range between -100 and 100.
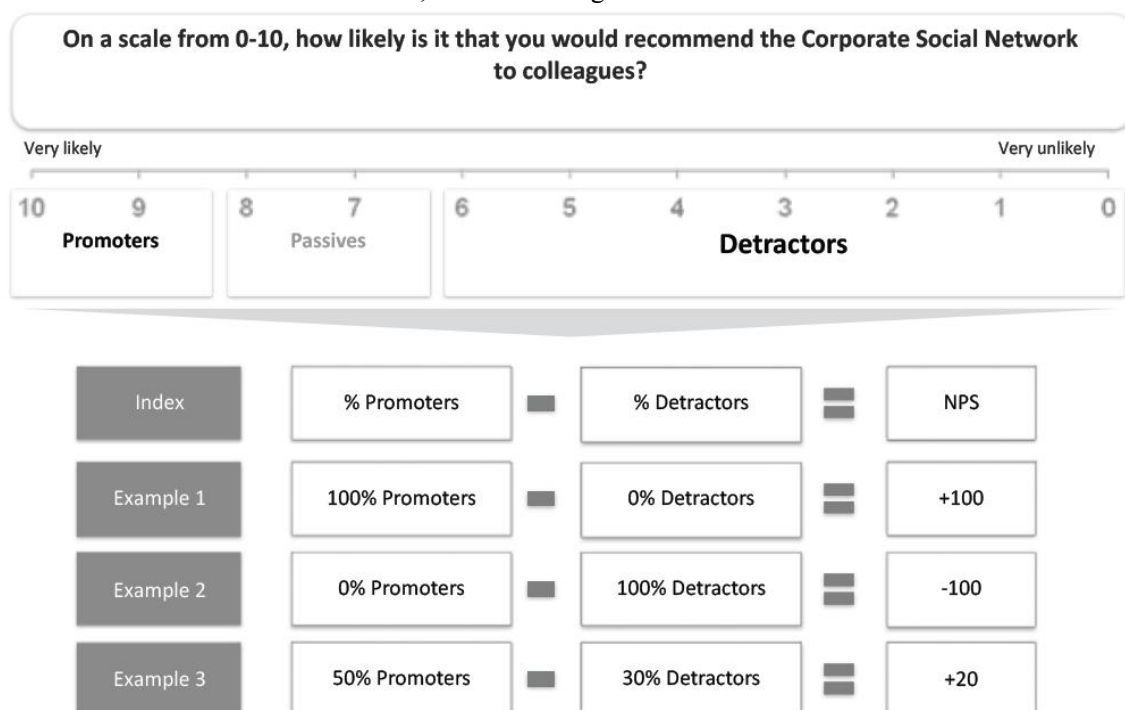

Figure 4   Calculation Basis NPS

2.5 UX-Itemset and UX-Dimensions

The UX dimensions were selected according to ISO 9241-210 and the study by Fischer, Endmann, Krokel (Fischer, Endmann, Kroekel, 2015). Items are constructed for the selected dimensions in relation to the product.

A further dimension has been added to highlight the location-independent networking with colleagues and the promotion and support of cooperation.

The selected items are queried with a 4-level Likert scale (agree, rather agree, rather disagree, disagree).

Table 1   UX Dimensions and Items

Dimension	Item set
Accessibility	The CSN enables me to access information that is important to me everywhere.
Attractiveness	The CSN looks sympathetic.
Controllability	I always know exactly what happens when I select a function./The CSN gives me clear feedback.
Expectations	The CSN meets my expectations.
First impression	I was already enthusiastic about the first contact with the CSN.
Hedonic experience	I enjoy using the CSN./I can identify myself with the CSN.
Look	The CSN has a great design.
Needs	The CSN enables me to share knowledge./The CSN gives me the feeling of being connected with colleagues regardless of location.
Surprise	The CSN surprises me with its multitude of possible applications.
Social responsibility	The CSN is open to all employees.
Trust	Overall, the CSN seems to me to be trustworthy.
Uniqueness	There is no comparable tool to CSN in my workingenvironment.
Unpleasant	Experience If I use the CSN, it'll stress me out.
Usability	The CSN is easy to use/The CSN is clearly structured/I found it easy to get started with the CSN./I always know where I am inside the CSN.
Utility	The CSN is useful./The CSN supports me in my daily work.
Networking	Through the CSN, I can get in touch with colleagues whom I would otherwise not get to know./The CSN allows completely new forms of communication with colleagues. The CSN is an enrichment for our company because it strengthens the cohesion among the colleagues.
Quality of work	The CSN enriches the cooperation within the company./Working with the CSN makes working with colleagues more productive. The open exchange in the CSN improves working routes and results./The CSN opens up new possibilities for me to find the relevant contact persons.
Further CSN Items	The CSN helps to improve communication across departments and countries. The CSN will become increasingly important for daily work in the future. I appreciate on CSN that all colleagues worldwide have access to the same content. The CSN is increasingly supported by managers. The CSN is helping to keep my company competitive in times of increasing digitalization. In CSN there is an active exchange between colleagues. The diverse content makes CSN an interesting platform. The CSN provides me with current information. CSN offers all employees a common space for exchange. The CSN enables a cross-hierarchy dialog. I can express my opinion freely in CSN. CSN enables me to access the knowledge of others.

2.6 Driver Analysis

To measure the NPS, we ask the employees the identical question ("On a scale from 0-10, how likely is it that you would recommend the CSN to colleagues?") and then calculate the NPS based on the answers to this single question.

Obviously different people give different answers to this question. These differences are called variance.

In order to be able to interpret the variance, we ask further questions about the perception of the product in relation to the user experience.

Linear regression is used to analyze the extent to which the differences in the answers to these other questions can explain the various answers to the NPS (e.g., the smaller the rating of usability, the smaller the rating of the NPS). Questions that statistically explain the different answers are grouped and referred to as "drivers". If you change the way employees respond to one of these drivers, they will also affect the NPS.
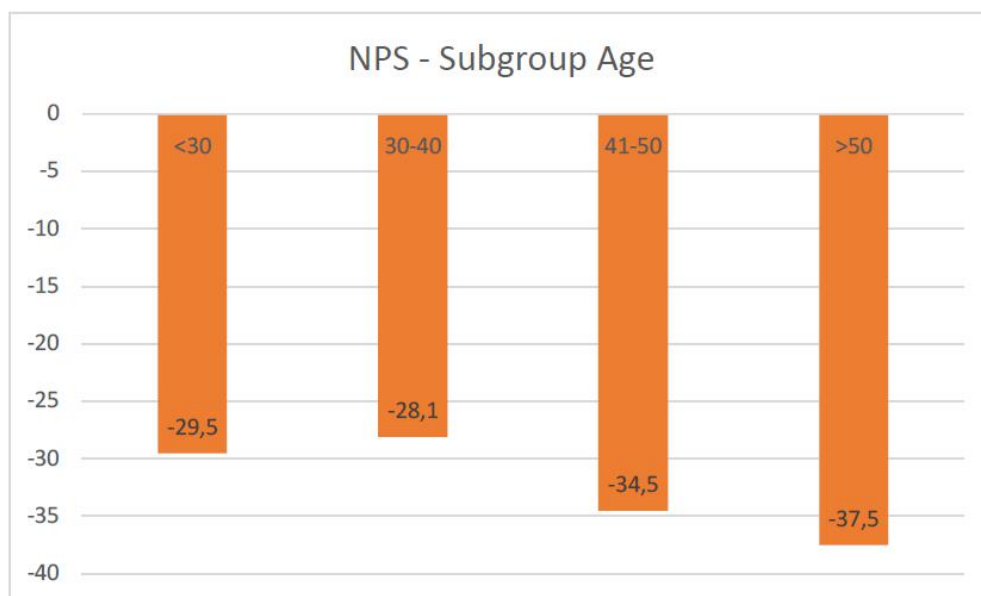
3. Results

3.1 Net Promoter Score

Overall, the Corporate Social Networks achieved a NPS of -35.9. The currently measured NPS for the CSN remains at a comparable level compared to the last survey.

At -25.1, managers assign a significantly higher NPS than employees without management responsibility -35.0.

3.1.1 Comparison of the Survey by Age Subgroup

The CSN achieves a significantly higher NPS among younger users (members up to 40 years of age) than among users in the two older age groups (especially compared to the age group > 50 years).

Figure 5   Result for the Subgroup Age

3.1.2 Comparison of the Survey by Geographical Affiliation

The CSN's NPS is significantly higher in Eastern Europe and outside Europe than in Germany and the countries of Western Europe.

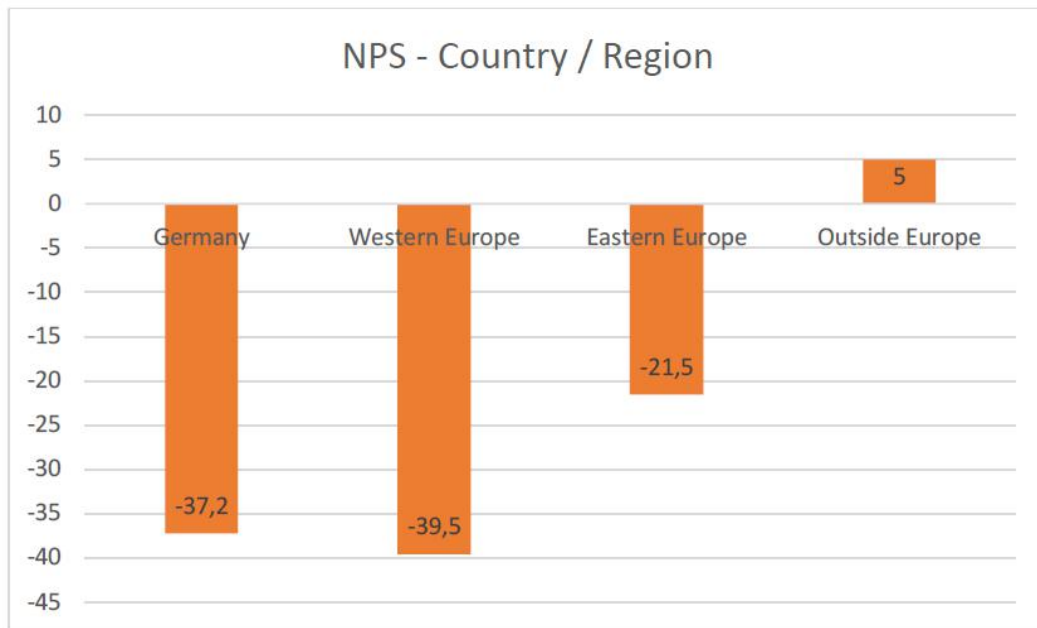**Figure 6   Results for the Subgroup Country/Region**

3.1.3 Comparison of the Survey by Field of Work

Among marketing employees, the CSN achieved a significantly higher NPS of -8.6 than among employees from other areas of activity.
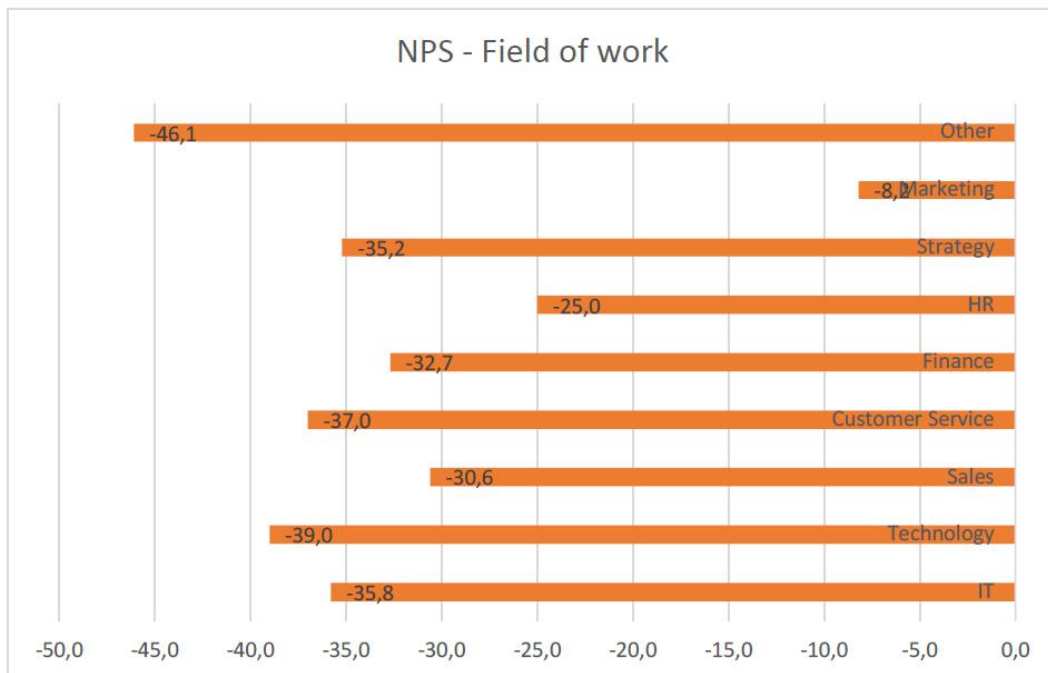

Figure 7   Results for the Subgroup Field of Work

3.2 Descriptive Analysis of the UX-Items

The following table shows the mean values in relation to the total sample:

Table 2   UX Items: Average Values of the 4-Step Scale: 1 = Agree, 2= Rather Agree; 3 = Rather Disagree; 4 = Not Agree

Item	Average
The CSN is open to all employees.	1.61
I appreciate on CSN that all colleagues worldwide have access to the same content.	1.90
CSN offers all employees a common space for exchange.	1.97
There is no comparable tool to CSN in my working environment.	2.04
The CSN enables me to share knowledge.	2.10
The CSN enables a cross-hierarchy dialog.	2.16
The CSN provides me with current information.	2.18
In CSN there is an active exchange between colleagues.	2.26
CSN enables me to access the knowledge of others.	2.26
I can express my opinion freely in CSN.	2.27
Overall, the CSN seems to me to be trustworthy.	2.29
The diverse content makes CSN an interesting platform.	2.37
The CSN is useful.	2.38
The CSN helps to improve communication across departments and countries.	2.38
The CSN is increasingly supported by managers.	2.39
The CSN allows completely new forms of communication with colleagues.	2.43
The CSN enriches the cooperation within the company.	2.46
If I use the CSN, it'll stress me out.	2.51
The CSN will become increasingly important for daily work in the future.	2.52
The CSN is an enrichment for our company because it strengthens the cohesion among the colleagues.	2.57
The CSN surprises me with its multitude of possible applications.	2.59
The CSN looks sympathetic.	2.64
The CSN is helping to keep my company competitive in times of increasing digitalization.	2.66
The open exchange in the CSN improves working routes and results.	2.67
The CSN has a great design.	2.76
The CSN enables me to access information that is important to me everywhere.	2.82
The CSN is easy to use	2.86
The CSN meets my expectations.	2.91
The CSN gives me clear feedback.	2.91
I enjoy using the CSN.	2.92
The CSN supports me in my daily work.	2.92
I can identify myself with the CSN.	2.93
I always know exactly what happens when I select a function.	2.98
I always know where I am inside the CSN.	3.04
The CSN is clearly structured	3.14
I was already enthusiastic about the first contact with the CSN.	3.23

3.3. NPS Driver Analysis with Single Items

Eighteen relevant drivers were identified that explain 64% of the variance of the NPS.

- The CSN enriches the cooperation within the company.
- If I use the CSN, it'll stress me out.
- The CSN enables me to share knowledge.
- The CSN is clearly structured
- The CSN is easy to use
- I was already enthusiastic about the first contact with the CSN.
- The CSN looks sympathetic.
- The CSN has a great design.
- The CSN meets my expectations.
- The CSN gives me clear feedback.
- The CSN provides me with current information.
- I always know exactly what happens when I select a function.
- I always know where I am inside the CSN.
- Through the CSN, I can get in touch with colleagues whom I would otherwise not get to know.

1. I can identify myself with the CSN.
2. The CSN is useful.
3. The CSN supports me in my daily work.
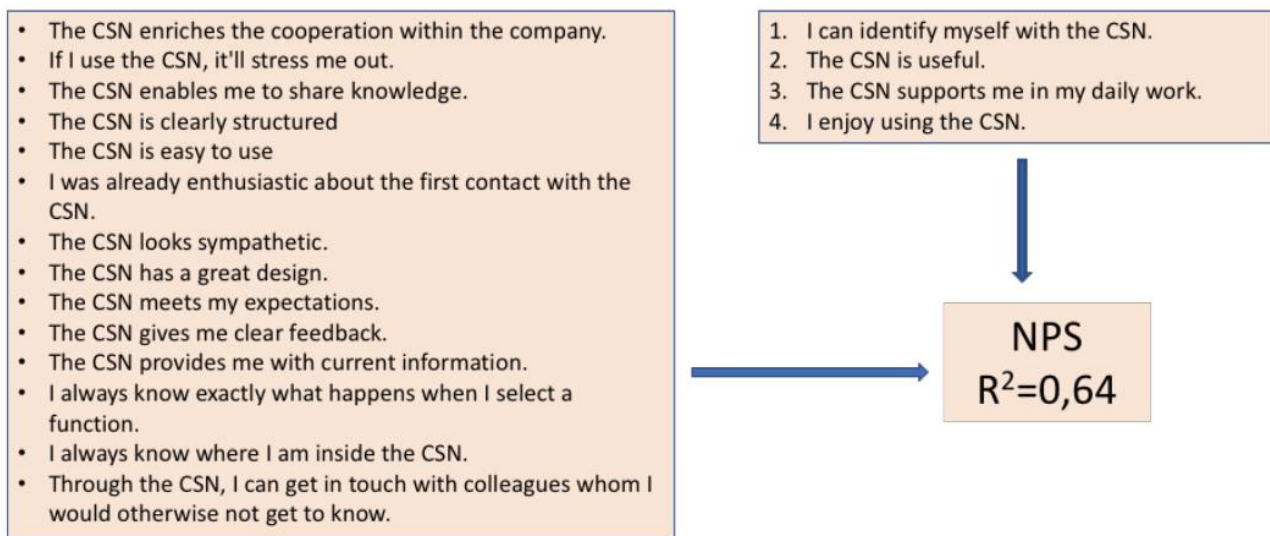4. I enjoy using the CSN.

NPS
$R^2 = 0,64$

Figure 8   Weighting of Drivers

In particular the identification with the CSN as well as the perceived usefulness, support with the everyday work and the fun with the use of the TSN are relevant drivers for the recommendation readiness. These 4 drivers alone have the same strong influence as the other 14 drivers of the model.

4. Discussion and Conclusions

With regard to the last survey from 2017, no significant improvement of the NPS was achieved.

Looking at the results of the driver analysis, it became clear that the main potential for growth lies in the areas of utility and hedonic experience. Identification with the CSN should therefore be strengthened. Positive emotions must be aroused in the employee with regard to the product. Employees should enjoy working with the CSN and perceive belonging to the large CSN community as a positive experience. In integrating the CSN in its daily work, the benefits of the social network should be emphasised. Training and communication measures were to be used to illustrate practice-relevant application examples in everyday working life. To support the measures, multipliers such as CSN ambassadors and community managers should be involved and play an active role in the campaigns.

The results of the User Experience survey correspond essentially with the main drivers for the NPS. In addition, it should be noted that the lack of information architecture in the CSN makes it difficult for users to operate and navigate and should be a particular focus of the training measures.

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