

AUTO-ID LABS

What consumers want: a representative study about post-purchase behaviour and the appreciation of digital product assistants.

Runhua Xu
Senior Researcher
Auto-ID Labs ETH / HSG

Dr. Alexander Ilic
Director Auto-ID Labs ETH / HSG

March 2014

Table of Contents

STUDY OVERVIEW	1
SERVICES DIRECTLY AFTER PURCHASE	2
SERVICES DURING THE USE	3
SERVICES AT THE END OF USE	4
CONCLUSION	5

Study Overview

The study aims to elicit the benefits and priorities of a digital product assistant that improves the use and management of valuable personal items for consumers. Those items have been grouped into 23 different categories such as electronic gadgets, sports items and home appliances.

The study was conducted as a panel-based online survey from Jan 22, 2014 to Jan 27, 2014. In total, 1012 people in Germany participated in the survey. To ensure high quality data, only people who use advanced features (e.g. Mobile email, mobile Internet) of their mobile phones were able to complete the survey. The respondents who did complete the survey follow a census representative distribution in terms of gender and age. More than 80% of them use mobile Internet every day. Table 1.1 illustrates the demographic distribution by gender, age, net monthly income and frequency of mobile Internet usage. To focus on the target user group, only people who use mobile Internet at least once a week were included in the data analysis, which resulted in 991 respondents.

		<i>In %</i>	<i>Number</i>
Gender	Female	51.58%	522
	Male	48.42%	490
Age	18-25	14.72%	149
	26-35	19.86%	201
	36-45	27.17%	275
	46-55	25.20%	255
	56-65	13.04%	132
Net Income	> 5000	3.16%	32
	4000-5000	5.14%	52
	3000-4000	12.75%	129
	2000-3000	24.11%	244
	1500-2000	13.83%	140
	1000-1500	13.44%	136
	500-1000	11.76%	119
	< 500	5.93%	60
	No answer	9.88%	100
Mobile Internet Usage	Many times a day	64.43%	652
	Once a day	17.49%	177
	Many times a week	11.76%	119
	Once a week	2.27%	23
	Many times a month	1.98%	20
	Once a month	0.59%	6
	Few times	1.48%	15

Table 1.1: Overview of the social-demographic distribution of the completed respondents

Services directly after Purchase

To start, respondents were asked to rate how frequently they used each service on a 1 to 7 scale during the last 12 months, where 1 represents the lowest frequency and 7 represents the highest. The average rating of all the services is 3.27 with a standard deviation of 1.89.

Subsequently respondents were asked to judge the potential usage of the same services if a digital product assistant were available. The average rating of all services increased to 4.09 with a standard deviation of 1.83.

The comparison of service ratings in the above two scenarios (with and without a product assistant) is demonstrated in Figure 2.1 below. The percentage below each service name shows the increased usage when a product assistant is present.

In general, actions like 'manage invoice' and 'manage documents' are already widely conducted nowadays when a product assistant is still not available. Thus, the improvement is not large. This also shows the importance of those services. The highest increase occurs on both the 'check authenticity' service and the 'cash back' service.

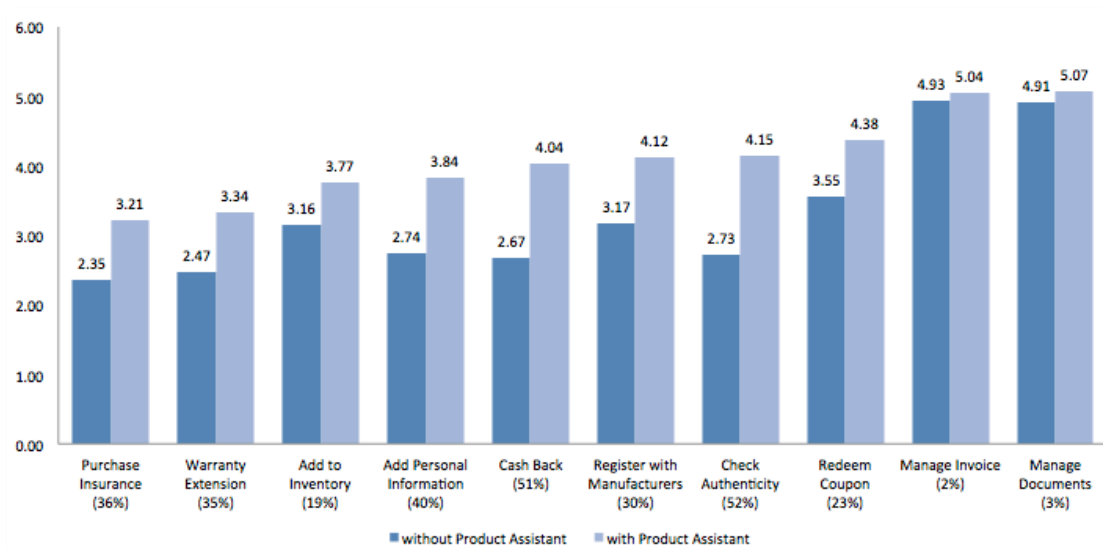


Figure 2.1: Comparison of service ratings with and without product assistant in the after the purchase phase

However, not all product categories have similar potential for the same service. For instance, purchasing insurance might be a useful service for sport items but not for books. In general, services for products in categories like toys & games, sport items, electronic devices and bags & luggage are more preferred by consumers directly after purchase.

Services during the Use

To start, respondents were asked to rate how frequently they used each service on a 1 to 7 scale during the last 12 months, where 1 represents the lowest frequency and 7 represents the highest frequency. The average rating of all services included in this phase is 3.18 with a standard deviation of 1.67.

Subsequently respondents were asked to judge the potential usage of the same services if a digital product assistant were available. The average rating of all services increased to 3.71, which is around 10% less than the average rating in the after the purchase phase (4.09). The standard deviation is 1.71.

The comparison of service ratings in the above two scenarios (with and without a product assistant) is demonstrated in Figure 3.1. The percentage below each service name shows the increased usage when a product assistant is presented.

The service 'lend with money' is the least used service in both scenarios. It is also the lowest rated one among all 29 services in the survey. However, with a product assistant, people would use this service 60% more often. This is the biggest improvement among all the services. The service 'become a trial-user' has a high rating and shows a large increase in the 'with product assistant' scenario. People's willingness to become trial-users and the absence of applications make this service a potentially useful one in the future.

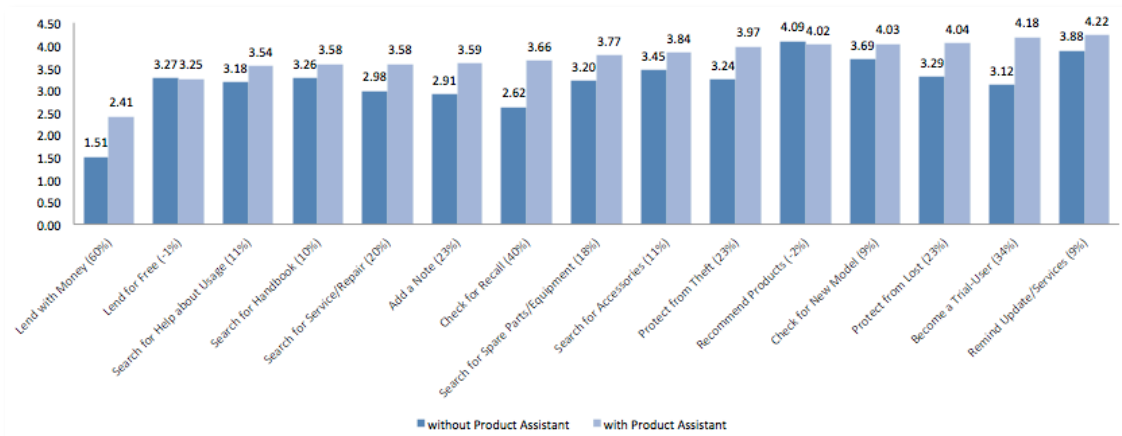


Figure 3.1: Comparison of service ratings with and without product assistant in the during the use phase

Similarly to the after the purchase phase, not all product categories have the same potential for each service. For instance, lending our products might be more appreciated for toys & games than for mobile gadgets. In general, services for products in categories like sports items, bags & luggage, clothes & accessories and electronic devices are more preferred by consumers during the usage phase.

Services at the End of Use

To start, respondents were asked to rate how frequently they used each service on a 1 to 7 scale during the last 12 months, where 1 represents the lowest frequency and 7 represents the highest frequency. The average rating of all services is 3.31 with a standard deviation of 1.62.

Subsequently respondents were asked to judge the potential usage of the same services if a digital product assistant were available. The average rating of all the four services is 4.10 with a standard deviation of 1.66. The two average ratings in this phase, namely 3.31 and 4.10, are almost the same as those (3.27 and 4.09) in the 'after the purchase' phase. Both are higher than those (3.18 and 3.71) in the 'during the use phase'.

The comparison of service ratings in the above two scenarios (with and without a product assistant) is demonstrated in Figure 4.1. The percentage below each service name shows the increased usage when a product assistant is presented.

The 'dispose products properly' service is the most frequently used one in both scenarios. The 'show current value' service has largest improvement with 47%, followed by the 'resell products' service with 34%. When a product assistant does not exist, people choose to hand over a product for free rather than reselling it if the product is no longer needed. Nevertheless, when an application helps to easily evaluate a product's value and resell the product, people will conversely prefer reselling the product as opposed to giving it away for free. Therefore, combining 'show current value' and 'resell products' has the potential to become a useful service and gradually change people's behaviour.

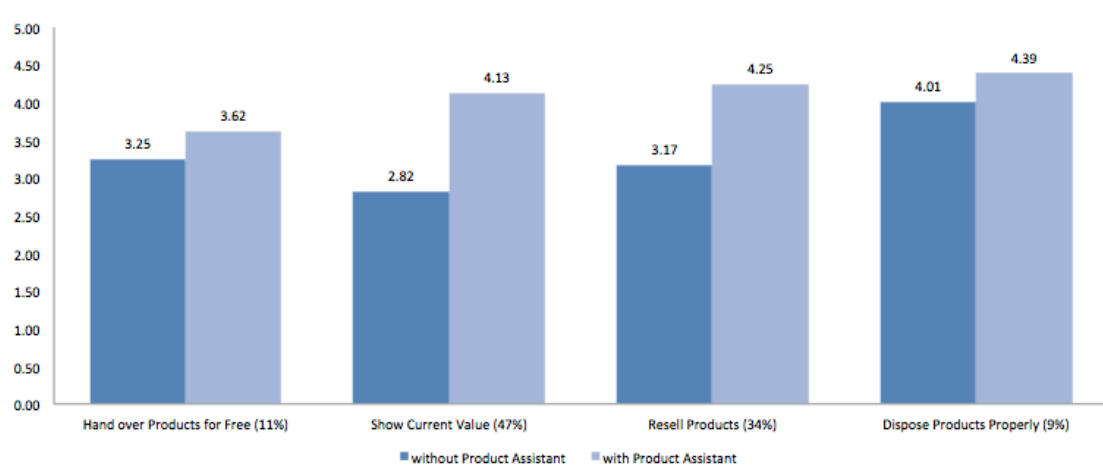


Figure 4.3: Comparison of service ratings with and without product assistant in the end of use phase

Again, not all product categories have the same potential for each service. In general, services for products in categories like media & books, toys & games, clothes & accessories and electronic devices are more preferred by consumers at the end of the usage.

Conclusion

In the study, 29 services in three different phases during a typical product lifecycle – directly after purchase, during usage and at the end of the use -were evaluated. In general, consumers will use almost all the services significantly more often once digital product assistants are available. In the first phase, directly after a consumer purchases a product, high-rated services like checking the authenticity, registering the product and bundling personal information with the product could be combined in a series of actions. During the use of a product, services that enable people to easily become trial-users, get relevant information about recalls or help people lend out their products for remuneration have great potential to be welcomed by users. At the end of using a product, services that reveal the resale value and facilitate the reselling process could be used frequently and might help to change users' behaviour.

However, results vary also depending on product categories and sub-user-groups: products from categories such as office equipment, mobile gadgets, cameras & optics, home appliances, vehicles & parts, bags & luggage, sport items, media & books, toys & games, clothes & accessories and personal valuables attract the highest service potential.