

Messaging App and Customer Support Automation

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Abstract :

By the appearance of smartphones, phone calls and internet are integrated in one device. In this age, it is becoming important for companies to consider how to provide the effective customer experience (CX) using peripheral technologies via smartphone devices. In this paper, we researched the impression and empathy for virtual agent on LINE messaging service by survey.

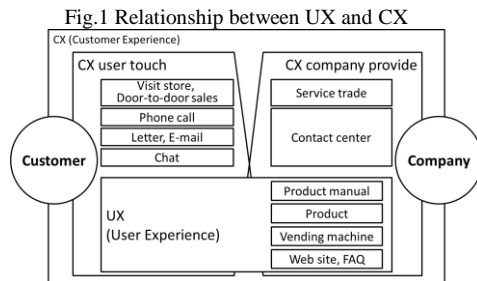
Keywords: Customer Experience Design, Virtual Agent, Smartphone, Messaging Apps

1. Introduction

In this paper, we define the relationship between user experience (UX) and CX at first. Then describe the touch point and peripheral technologies. Research the attitude with customer support via virtual agent and correct the idea on the last part.

2. CX model for companies

Now companies are required to support in various channels, phone call, website, e-mails, webchat, SNS and so on. We define the relationship between UX and CX below diagram.



3. Touch point and peripheral technologies

3.1 Messaging App

Mobile messaging apps are now one of the most important communication channels in the world.

3.2 Speech Balloon UI

With iPhone's Message app as a start, Facebook, Wechat, QQ mobile, LINE, google's Hangouts and other apps adopted this UI for their services.

3.3 LINE Business Connect Service

LINE is the biggest messaging apps and service in Japan. They opened their messaging platform to the contracted company in Feb. 2015 as "Business Connect Service." This service allowed their companies to connect their technologies, like automatic conversational system on messaging apps via API for their customer support.

4. Research and Results

We carried out attitude survey for LINE as companies' service channel at first, usability survey for the empathic impressions of two accounts which use virtual agents on their LINE business accounts. We customized web usability evaluation scales[1] for LINE service and affinity with virtual agents.

Table.1 Usability and attitude survey results (*is reverse scoring)

Usability evaluation of the service						1	2	3	4	5
Service A: fromA navi (the recruitment web service)										
Favorable impression										
1	Chat via speech balloon UI is enjoyable.				1	4	5			3.87
2	The character is so cute!				2	6	2			
3	I will talk him again!			2	4	4				
Useful impression										
4	He answers and navigates the information I want.	2	5	2	1					2.33
5	I need deeper response and correspondence.*	1	1	2	4	2				
6	Browser search is more useful for me.*		1	4	2	3				
Reliability										
7	His response was reliable.		1	4	4	1				2.90
8	His remark was in place.			2	4	4				
9	It is uneasy to connect my personal (bank etc.) account.*	2	2	2	2	2	2			
Usability										
10	Easy to understand how to use.				1	2	7			3.60
11	Easy to understand what he can answer.	2	2	3	2	1				
12	Easy to understand what for next.*			2	3	4	1			
Service B: hapi-e-miruden (the electric power companies' web service)										
Favorable impression										
1	Chat via speech balloon UI is enjoyable.			3	2	4	1			2.93
2	The character is so cute!			4	3	2	1			
3	I will talk him again!		2	4	2	1	1			
Useful impression										
4	He answers and navigates the information I want.			1	6	2	1			3.37
5	I need deeper response and correspondence.*				4	2	4			
6	Browser search is more useful for me.*	2		5	2	1				
Reliability										
7	His response was reliable.		1			5	4			3.13
8	His remark was in place.				2	3	5			
9	It is uneasy to connect my personal (bank etc.) account.*	1		3	1	4	1			
Usability										
10	Easy to understand how to use.					4	1	5		3.70
11	Easy to understand what he can answer.				4	1	4	1		
12	Easy to understand what for next.*						2	8		

5. Conclusion

Survey results shows that users have positive impression with virtual agent on Messaging apps basically. But the charm, intelligence and knowledge of the virtual agent are very important. Companies need to provide worthy virtual agent for customer support, and also required cuteness to keep in touch with their customers.

References

- [1] Kaoru Nakagawa, Toru Suda, Hideo Zempo and Keita Matsumoto, "The Development of Questionnaire for Evaluating Web Usability," 2001