User Satisfaction Evaluation of the Electronic Student Services System (iKnow)

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Agenda

- Introduction

- Methodology

- Discussion of results

- Conclusion

User Experience

- *"Products need not only to succeed in gaining initial acceptance, but also to become objects of increased emotional value over prolonged use"*

iKnow Student Services System

- ## A complex software solution
  - used by more than 30.000 students and 3.000 staff at the Sts Cyril and Methodius University
  - a total of 76 different workflow activities previously done by administration personnel are now automated and only a few clicks away

- ## A system to store and administer student related information
  - student's records, personal files, university data

- ## A system to exchange of electronic information among all stakeholders
  - students, professors, teaching assistants, technicians, administration, university management and the Ministry of Education

User Experience with iKnow

- Yet, the question whether iKnow will fully replace the outdated Student Services Desk largely depends on good **user experience** and **acceptance** by the users

- *"Products are not merely means to achieve goals; they fulfill our need for stimulation, they evoke memories, and they provoke emotional reactions"*

    – include a broad range of fuzzy and dynamic concepts, including emotional, affective, experiential, hedonic, and aesthetic variables

Methodology

- ***Closed*** question survey with relatively huge number of participants

- ***Open*** question survey for a smaller group of students

Closed Question Survey Design

- The goal is to measure the user satisfaction with *different aspects* of iKnow
  - several general user satisfaction criteria: Accuracy, Layout, Navigation, Exception and Error Handling, Online Help

- make the survey as small as possible and applicable for great number of students, taking approximately 5-10 minutes of their time
  - closed question survey
  - 9 most essential questions

Closed Question Survey Criteria

- Accuracy,

- Layout,

- Navigation,

- Exception and Error Handling,

- Online Help

Closed Question Survey Strategy

- the way a survey question is asked can have influence on the answer
  - *NOT:* The iKnow team takes every attempt to please the students in regard to technical support. How would you rate our success in these efforts?
  - *BUT:* How would you rate iKnow's technical support?

- Lickert's scale as a method of constructing an attitude with values from 1 to 5
  - an odd number of response options favors a 'neutral' response
  - an even number of response options forces a respondent to choose one or another of the extremes

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The Closed Question Survey

ID	Question
Q1	What is your general satisfaction from the iKnow system?
Q2	How do you evaluate the support that the system gives you as a student?
Q3	Do you support future usage of this system with enhanced functionalities?
Q4	The browser you are using displays all information in a correct way?
Q5	The loading time and the response time of the system correspond to the content which is displayed?
Q6	The system has a consistent look and feel?
Q7	The messages the system communicates are clear and descriptive?
Q8	There is an easy channel available to communicate with an administrator?
Q9	The content is understandable and up to date?

Open Question Survey criteria

- New approaches
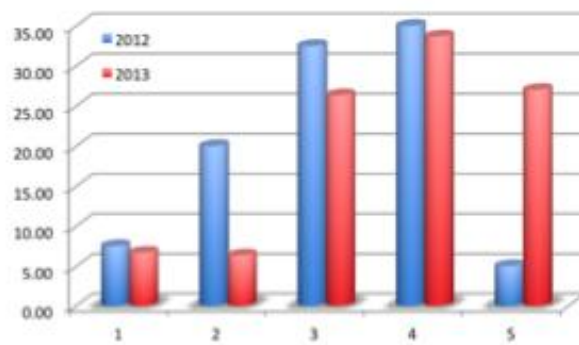- Quality assessment

The Open Question Survey

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New Approaches

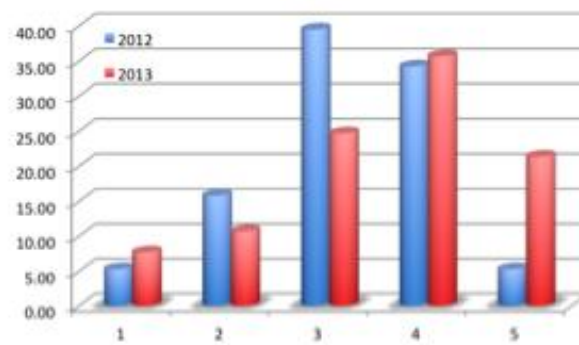| Q1	Could you share the application on Facebook using the iKnow system?
Q2	What do you think, what is that something that Facebook has, the iKnow system is missing as user interface?
Q3	What do you think, during the application, what information should be given, such as pictures, like on Facebook?
Q4	What do you think if your Facebook profile should be connected with your iKnow profile?
Q5	What do you think, if there should be an option for "Like" or "Comment" on the iKnow system, like there is on Facebook, to express yourself better?

Quality Assessment

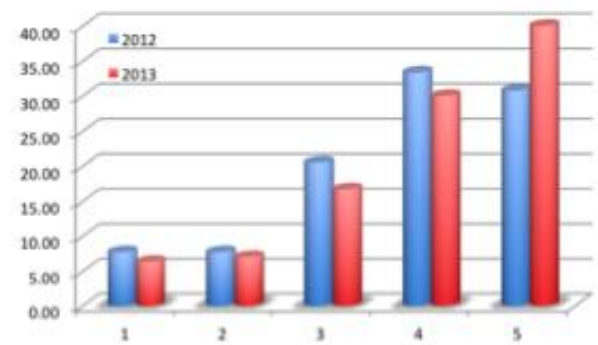| Q1	What do you think about the process of enrollment?
Q2	What remarks do you have about the steps of the enrollment application?
Q3	What do you think about the iKnow system?
Q4	What would you change in order to make the iKnow system better?

Conducting The Survey

- A total of 400 students participated in the survey in 2012 and 300 students in 2013

- Additionally, 32 participants randomly chosen for interview
  - 16 males and 16 females
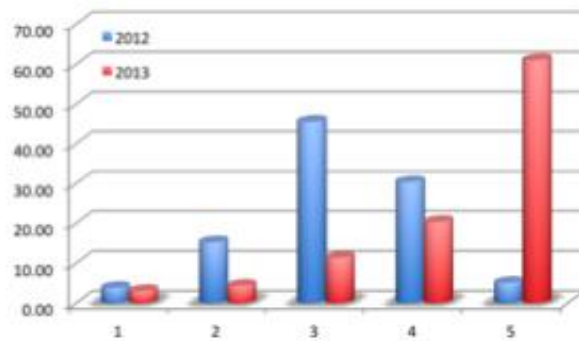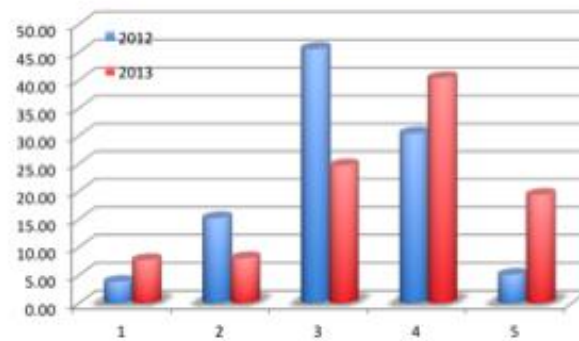 - the origin town for half of them was the town where the University is situated
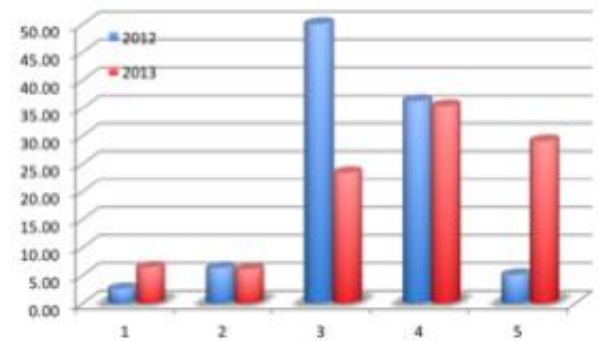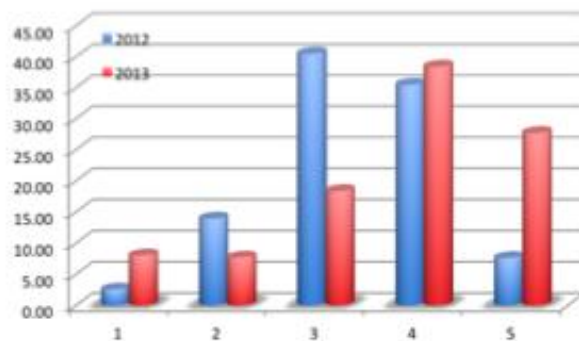
(a) Q1   (b) Q2   (c) Q3

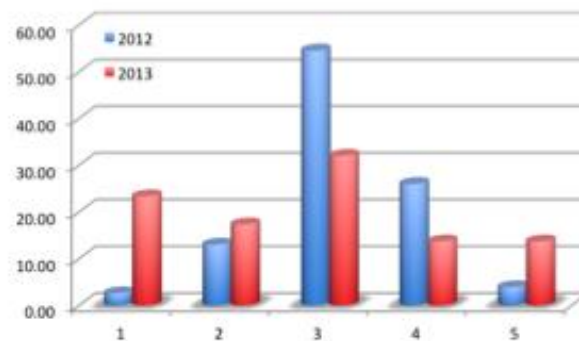(d) Q4   (e) Q5   (f) Q6
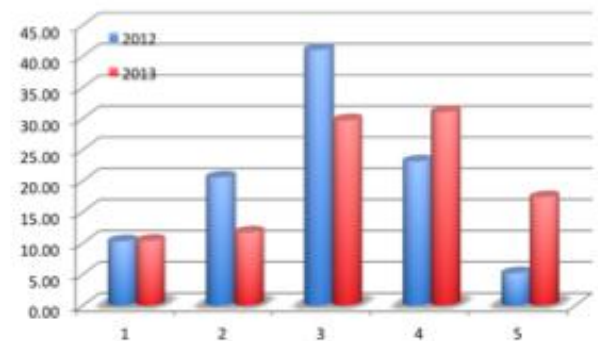
(g) Q7   (h) Q8   (i) Q9

Statistics for the closed questioned survey

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Question	avg. 2012	avg. 2013	st.dev 2012	st.dev 2013
Q1	3.10	3.68	13.81	12.65
Q2	3.18	3.52	16.07	11.27
Q3	3.72	3.90	12.22	14.72
Q4	3.18	4.32	17.82	23.93
Q5	3.18	3.56	17.82	13.52
Q6	3.35	3.75	21.71	13.23
Q7	3.32	3.70	16.99	13.17
Q8	3.16	2.77	21.45	07.79
Q9	2.92	3.33	13.86	09.80
Average	**3.23**	**3.61**	**16.86**	**13.35**

Discussion

- the standard deviation is small, meaning that answers were convergent
(no huge discrepancies in provided answers)

- a shift from *neutral* to *positive* attitude

- normal distribution with average above neutral (middle) point

Open Question Interview Results

- *"... All in all I'm satisfied with this tool, although personally I'd change few things. ..."*

- *"It's a very useful and effective website, which makes the university application process much easier. Furthermore it is a student-friendly tool and it's accessible ..."*

- *"... personally think that the aesthetic part of the system is overwhelming..."*

- *"... It's a bad idea to include pictures in the electronic application. The most impressive thing was the ranking of the student programs. ... "*

- *"I do not really have any remark about how to make the iKnow system any better. It is good as it is. And also I think it would be a great idea to connect it to Facebook since the youth, now, spends a lot of time on it. ..."*

- *"...I really like this system because I could fetch all the information I needed online, and there was no need for me to go to my university, which is great for the students who live far away. ..."*

- *"Personally I find the iKnow system useless, it just wastes my time when I am obligated to write the application on hand again. And also, the design on the site should be enriched. ..."*

Discussion

- Having in mind the critical approach by the students, especially since all of them were highly IT-literate and keen on using social networks at least 3 hours per day on average, we argue that the system is well adopted by the students and that they see the benefits in using the system further.

Conclusion

- iKnow has survived the initial roll out and is now in exploitation phase (second year)

- iKnow resulted with a successful implementation
(even though, worldwide, there is a low success rate of implementation of complex systems such as this one)

- the students have positive or neutral attitudes about the system

- iKnow will fully replace the outdated Student Service Desk

Future Work

- continue to realize user satisfaction measurements

- realize a more comprehensive evaluation

- suggest software improvements for iKnow, based on survey results