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Presentation Software Tools in Higher Educational Setting

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Abstract

The article deals with the issue of introducing PowerPoint alternatives (Google Slides, Prezi, Tilda, Slides, Haiku Deck) for creating animated presentations. Much remains unknown about general attitudes toward presentation software tools and other online services or users' functional demands other than editing texts, resizing and color-correcting images. Thus, we focused on users' experience, advantages and disadvantages of such tools, including the comparison amid public relations students of RUDN University and employers in various fields of industry. The survey was conducted among users of presentation software. The groups of public relations students of RUDN University and public relations professionals who were asked to participate in this study which included 93 volunteers. The online questionnaire was divided in three topics: 1) the use of presentation software (purpose, frequency of use), 2) the use of multimedia options and export formats (import of images, videos, audio content, tables), 3) the use of additional presentation software options and other properties (loading speed, animation effects, panoramic images, 360-degree videos). Moreover, the participants were invited to bring forward the proposals for presentation software in open-ended questions. The findings reveal that PowerPoint is increasingly used by the employees to create visual documents (slideshows) or handouts that are intended to be read and referenced instead of projecting. It is found that the most frequently used software is Google Slides (71%) and Prezi (24%). It is undoubtedly that the results of our study could help developers to improve online presentation tools or to create new ones.

Keywords: online presentation software, slides, presentation design, advantages and disadvantages of presentation tools.

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Introduction

Presentation programs have caused widespread discussions, especially in the field of higher education. There are a lot of studies related to the students' reaction and preferences for PowerPoint (Bartsch & Cobern, 2003; Berk, 2011; Lopukhova & Makeeva, 2018) or evaluation of students' performance (Bostock, 2005; Li, 2014), giving advice about how to create effective PowerPoint slides (Susskind, 2008; Apperson, Laws & Scepanisky, 2008; Bartsch & Cobern, 2003) or a discussion about tips for teachers making presentations in the classroom (Shwom & Keller, 2003; Amare, 2006). Nevertheless, these studies have led to an unambiguous conclusion. Moreover, there are studies about ways to enhance teaching and learning with PowerPoint (DuFrene & Lehman, 2004; Makeeva & Lopukhova, 2018), the results regarding its effectiveness are contradictory, have positive views with negative ones (Jones, 2003; Szabo & Hastings, 2000). Kaplan (2011) emphasized the role of PowerPoint in the company's strategy and its impact on organizational culture and social interaction between colleagues. But it is worthwhile to say that, there are some critical views on computer-based presentations. Authors stress negative effects on communication and underline the oversimplification of information in such presentations (Craig & Amernic, 2006).

There are hundreds of presentation apps in the market today and keeping track is getting increasingly hard. Most of them are optimized for a specific purpose. We have selected the best presentation software available on the web to shed some light on its advantages and disadvantages. As we mentioned before, PowerPoint is the most used presentation program in the market today. But still, its popularity has skidded in the past few years because of boring templates and complexity. Many users even have started the Death to PowerPoint movement. Here we summarize the top PowerPoint alternatives.

The first is Google Slides it has the basic slide presentation features, ranging from the ability to edit text and insert images, add backgrounds and YouTube videos to the ability to use layouts and colorful themes and change the timing of the transitions. Besides it has more advanced presentation tools such as the capacity to publish to the web and collaborate with colleagues effectively where each member of a team can view, edit, or comment on presentation in real time. The second tool is Prezi. It is a presentation software company founded in 2009. According to the company, as of April 2018, Prezi had more than 100 million users who had created more than 325 million public presentations that have been viewed over 3.5 billion times. Prezi is an app for creating an animated, non-linear presentations. The presentation starts zoomed out to give the big picture, then Prezi can zoom in to focus on the details. The third app is Tilda. It is a content management system which is intended for creating websites, landing pages and presentations. It enables to display high-quality images, videos and text in a fully customizable gallery. This service is a blend of smooth learning curve, flexibility and complexity, and it is also capable of exporting the result to website without being platform-locked. The fourth program is Slides and it is a platform for creating, presenting and sharing slide decks. It is the only presentation software which positioned itself as being "pixel perfect" as the editor includes a built-in grid to help with composition. The unique feature of this app is that it has a live present mode, presenter can control what viewers see, he/she can even use phone as a remote control with direct access to notes. And the last platform is Haiku Deck that promoted itself as the fastest way to create and share presentations. Users can easily import photos from Google Drive, Facebook or Instagram, share it directly to any social network or device.

Problem Statement

In the last few years presentations have become a fairly common thing of information dissemination. Such a new form of communication — the combination of audio-visual elements with vocal elements and the speaker's performance — has sweepingly spread into all fields of work over the last decades. Microsoft PowerPoint has dominated the slideshow presentation market for years. According to the last survey it dominates about 95% of the entire worldwide market. In 2018 Microsoft released version 16.0 and experts estimate that at least 1 billion computers across the planet have the program installed. Moreover, PowerPoint is used an estimated 350 times per second. However, there has been small amount of empirical evidence that confirms these figures. Countless tutorials and articles provide tips on how to create presentations and tell engrossing stories to audience. Besides today many experts are talking about new wave of presentation software, including simpler online versions of PowerPoint and Keynote. These new tools are easier to use, provide the ability to collaborate with others in real-time and allow to edit presentation on any internet-connected computer.

Research Questions

Therefore, our main research questions are: to ask the users about their experience of using presentation programs: what kind of software do they use, how they create slides, and what functional requirements do they have?

Purpose of the Study

The aim of our study is to ask the users about their experience of using presentation programs: what kind of software do they use, how they create slides, and what functional requirements do they have?

Research Methods

The survey was conducted among users of presentation software. The groups of public relations students of RUDN University and public relations professionals who were asked to participate in this study which included 93 volunteers (29 male and 64 female). Age ranged from 20 to 27 years. Participants' could be divided into two groups: 51 students and 42 employees (72% advertising and public relations agencies; 13% media; 6% consulting; 5% healthcare; 4% IT industry). The online questionnaire was created in Google Docs Forms and consisted of 18 questions that were divided in three topics: 1) the use of presentation software (purpose, occasions, frequency of use), 2) the use of multimedia options and export formats (import of images, videos, audio content, tables, export of presentation as PDF), 3) the use of additional presentation software options and other properties (loading speed, animation effects, hyperlinks, panoramic images, 360-degree videos). Moreover, the participants were invited to bring forward the proposals for presentation software in open-ended questions. This online questionnaire includes following questions:

Part 1: Use of presentation software

When is the presentation software used?

What presentation software is commonly used?

Which presentation software is used most often?

How long do you use presentation app?

- How many times per month do they use presentation program?
- Do you satisfy with this app?
- Part 2: Use of multimedia options
 - Does the app let you import images?
 - Does the app let you import videos?
 - Does the app let you import audio content?
 - Does the app let you import tables, schemes and diagrams?
 - Does the app let you export the presentation as a PDF?
 - Does the app let you view the presentation offline?
- Part 3: Use of additional options
 - Does the app provide such additional option as animation effect?
 - Does the app provide such additional option as panoramic image?
 - Does the app provide such additional option as 360-degree video?
 - Does the loading speed of the app is faster than the others?
 - What are the main strengths and weaknesses of the app?
 - What improvements can you recommend for the app to be more effective?

Findings

When respondents were asked about the aims of using presentation programs they named a wide range of situations (see Table 1). In general, presentation software was most often used during the education and teaching process, than during meetings and talks.

Table 01. Situations of using presentation software

Answers	Employees	Students
Classes	42	51
Meetings	19	29
Private occasions	14	11
Company presentations	42	33
Conferences	42	47
Product presentations	39	51
Bidding process	27	45
Entertainment	9	17
Other	1	2

When respondents were asked about the particular presentation app, they named Google Slides (71%) and Prezi (24%). It is worth to mention that PowerPoint was also frequently mentioned (27%), because it is increasingly used by the employees to create visual documents (slidedocs) or handouts that are intended to be read and referenced instead of projecting. This picture changed when respondents were

asked about software that they use most for presentations. For this question, PowerPoint was named by 11% of the participants. It is crucial to mention that employees tended to use a slightly broader range of apps, whilst students relied mostly on PowerPoint and Prezi.

According to respondents they use presentation programs for an average of 5.5 years and about seven times per month. We used five-point Likert-type scale to assess the satisfaction with the presentation apps (1 «very unsatisfied» to 5 «very satisfied»). According to the results, there is a significant difference between users' satisfaction of PowerPoint, Slides, Tilda, Google Slides, Prezi and Haiku Deck. The four products reach values between 5.31 (PowerPoint, Slides, Tilda, Haiku Deck) and 5.59 (Google Slides). However, the most preferable app for users is Prezi (employees = 6.5, students = 6.9).

In the second part of the survey we studied the use of multimedia options and export formats of presentations. It was revealed that practically all apps let users insert and manipulate images and other content. Moreover, we explored on what do respondents focus during the presentations. Most of their time (employees = 49%, students = 36%) they spend on content than on design (employees = 26%, students = 21%), next on animation (employees = 11%, students = 9%), and the rest of the time on other activities (employees = 4%, students = 2%). Also, there were found no differences in amount of time that students and employees spent on preparation for presentations.

Another topic of survey is connected with the use of previous presentations. We asked respondents how often they use data or design from other presentations. One third of the respondents said that they have never created a new presentation based on previous one whilst another one third claimed that they always use data and design from previous presentations. A large percentage (92%) of the participants imported data from other sources or applications into a computer-based presentation. Pictures and images were imported often (57%) or even always (17%), while video or audio files were rarely used to enrich presentations. Approximately one-third of the participants frequently imported text or tables from other applications.

Concerning the export options the respondents more likely to export presentation to a PDF than to a website. In fact, 76% of the participants claimed that they had never exported a presentation as a website. Respondents also tend to print out handouts (employees = 41%, students = 39%) but rarely send the presentation by e-mail.

In the third part of the survey, respondents were asked to rate the importance of different additional options of presentation apps. The most significant features were fast loading time (employees = 61%, students = 73%), panoramic images (employees = 19%, students = 13%), independence from technical settings (employees = 4%, students = 6%). Surprisingly, animation effects and 360-degree videos were reported to be insignificant.

In an open-ended question, respondents were asked to name strengths, weaknesses and possible improvements of presentation programs. We received 93 responses, by using content analysis we identified several categories and assigned these answers to particular category. A software's convenience and ease of use was demanded most often in 23% of responses, followed by 16% of the responses stating that there is nothing to be improved. Other requests, listed in more than 8% of responses concerned high quality graphics, wide typewriter fonts, better layouts and templates. In whole, about 44% of the responses concerned usability aspects (efficiency, perspicuity, dependability).

Regarding the use of presentation software products, in the beginning of the article we stated that PowerPoint dominates about 95% of the entire worldwide market. However, respondents reported that they

would rather use such online services as Google Slides and Prezi. Surprisingly, the third most used program was PowerPoint but it is more often used as a slidedoc (printing handout).

It is crucial to mention that more and more new presentation programs play a significant role in the market which might be due to students' preferences who tend to explore state-of-the-art apps. Even PR professionals rely on new products in their business and stop using old school programs. Furthermore, users of Google Slides and Prezi are rather satisfied and therefore, from a marketing point of view these apps might have no urgent need for changes or upgrades.

It was found that both students and employees use presentations mostly in educational settings. Students use presentation programs during their education in university whereas employees use it in trainings or extension courses. As expected, PR professionals use computer-based presentations at meetings, conferences and trade fairs. However, we were surprised by the fact that presentation software is frequently used by both students and employees at private occasions. For instance, at birthday parties or wedding ceremony where bride and groom showcase guest photos and videos of the happy couple. So, the use of computer-based presentations in private settings has become quite common in our life.

Answers to questions concerning the creation of presentations revealed that this process is often seems to be a medley of different ideas. Users prepare slides in collaboration with their colleagues and quite often use ideas and design from previous presentations. The content of presentations is often collected with the help of other software applications (especially photos and images that are imported into slides). Concerning this issue, the differences between students and employees in our study may be explained by various job requirements. For instance, students are encouraged to work in groups and to create handouts for their presentations whereas employees have a huge amount of previous presentations and materials that they can utilize in current project.

Furthermore, it is assumed that the emphasis on the design of the presentation can be interpreted by the fact that most users are not professional designers or graphic artists, thus, they devote most of their time to visual elements and animation. It is stated that presentations often have a second life in offline mode where it is separated from the oral presentation. Our findings showcase that it could happen when presentations are printed out (handouts) or exported into a PDF-file. This continuing use of a presentation may motivate the user to make a special effort to create sophisticated graphic design. From a technical feasibility, we suggest creating well designed and easy-to-use templates to enhance the employee's production of presentations and to reduce the time spent on visual elements.

The third part of the survey clearly showcased the functional demands of the presentation apps. Among crucial aspects the loading speed and the independence from operating systems were mentioned as well. In the open-ended questions, respondents outlined ease of use and the interoperability of presentation files. A broad variety of clip art, sound effects and animation were found to be undesired. Nevertheless, a substantial number of respondents stated that they do not see any drawbacks of presentation apps and they do not need any improvements. In contrast, from the audience's point of view the presenters themselves and the design of presentations were constantly mentioned as things that are badly needed in improvements. This implies that putting much energy into a pleasant design might be essential but meanwhile it is crucial to apply energies for writing an engrossing speech.

Conclusion

Coming to the end we want to stress that our study gives background information on users' evaluations, perceptions and wishes regarding presentation programs and its usage. We collected some useful insights concerning the use and appraisal of applications. Additional analyses showcased that, on the one hand, students and employees use presentation software at different occasions, but on the other hand, most of them need the same functional requirements. It is found that the most frequently used software is Google Slides (71%) and Prezi (24%). Students tended to use a wide range of online platforms whilst employees relied mostly on Google Slides. According to findings, in spite of being the most popular presentation tool Google Slides is powerless to adjust theme colors, embed video (only links to the YouTube channel), incorporate fancy effects or 3D. Furthermore, a high percentage (89%) of the respondents import text, tables and graphics from other applications and sources into a presentation. Photos were imported more often (61%) whereas video or audio files were rarely used to embellish presentations. In an open-ended question the respondents were asked to suggest prospective improvements of presentation tools. Users desired software creators to offer a broad variety of design-templates and typefaces.

We believe that further research should investigate the surprisingly frequent use of presentation software for private occasions. The further study should also rise questions about how to improve and increase employee productivity with presentation software? How to focus preparation time on slide content? Or how to make overwhelming oral presentation?

The presentation development process appears to be a patchwork and a great amount of time is spent on decorations, design and animation effects. Therefore, we recommend giving prominence to content than to matters of visual style. It is undoubtedly that the results of our study could help developers to improve online presentation tools or to create new ones.

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