

# TECHNOLOGY ACCEPTANCE IN RECRUITMENT AND SELECTION PROCESS - THE USE OF PUSH NOTIFICATIONS AND MESSAGES

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**TECHNOLOGY ACCEPTANCE IN RECRUITMENT AND  
SELECTION PROCESS – THE USE OF PUSH  
NOTIFICATIONS AND MESSAGES**

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**HSPT 495 – Hospitality Project Planning and Development**

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## **Abstract**

In today's fast-changing world, it is rather difficult to advance in something unless current trends are followed. The same statement is applied to HR department professionals and the way they do the recruitment and selection process. This paper investigated the usage of push notifications and messages, an existing but not as used information technology tool, within the context of recruitment and selection. A questionnaire was distributed to 106 college students from different year levels and study programs. This questionnaire was meant to measure different technology acceptance model variables and their effect on the attitude towards using these new information technologies. Results show that there is a positive correlation among the tested variables. Having this information, the HR professionals should try to implement these communication tools in order to be more relevant, efficient, and appealing to job candidates.

**Keywords:** technology acceptance model, push notifications, push messages, recruitment, selection

## **Introduction**

In today's fast-changing world, there are many obstacles as to how to get a job. It all starts with finding a job opening, sending a CV, then waiting for days or more likely weeks for an answer. If the answer ever comes by phone or email, there are several rounds of selection process and finally decision time before getting accepted or not. It is an excruciatingly long process which can last for months. This kind of approach is not beneficial for both employers and jobs seekers.

This kind of selection and recruitment process may have been effective before, but as more people are becoming owners of smartphones or any other devices, these methods have become outdated. Studies show that "smartphone is owned by 78% of the population, with over 6 billion smartphones and 7.8 billion people on the planet". (Statista, 2022). However, companies are not using these simple facts to their advantage, and even if they do, it is not the real extent of what this information can do.

Some of the methods which are still traditionally used in recruitment and selection are: generic job descriptions, followed by CV submissions, writing a motivational letter and so on. (Clark, 2022). We will not question these tools, rather we will try to explore whether the way these steps are communicated could improve. All these above-mentioned methods make the process longer than needed and narrows down the possible candidate pools. Especially those of graduating students. Furthermore, the use of email as the main communication tool often results in employer's email ending up in junk mail of many candidates, leaving them waiting anxiously.

The author of this paper firmly believes that we already have technological solutions that would make the whole recruitment and selection process faster, more convenient, and efficient if used right. If we take into consideration that in 2022 European companies struggled to find employees

for 1.2 million vacant positions (Gibson, 2022), then it is prompting us to rethink the process and assess solutions that would address this very issues.

Therefore, the main purpose of this study is to explore whether the increased usage of push notifications and push messages through messaging platforms will make the recruitment and selection more acceptable for graduating students.

Research question this study hopes to answer is: would students welcome the push notifications/messages more if it was easier for them to reach the employer via the system and vice versa?

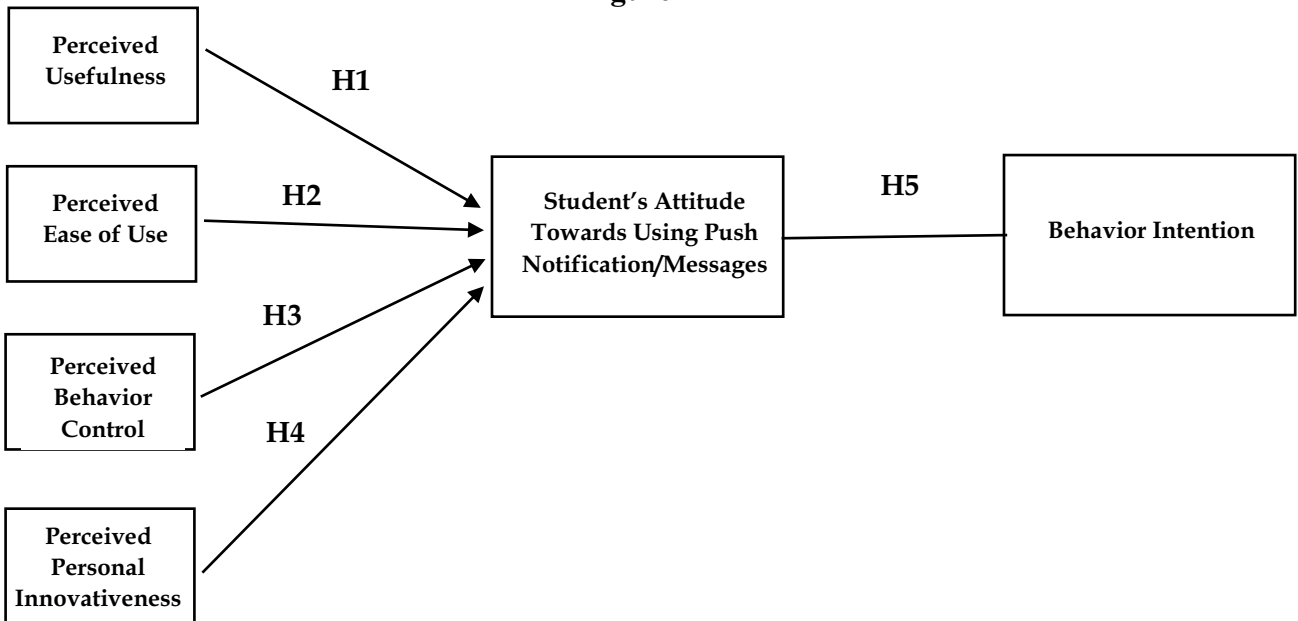
### **Model**

Since this is an area which has not been completely researched, there are few models which we deem appropriate for this topic.

“The Technology Acceptance Model (TAM) developed by Davis (1989), or technology acceptance model, posits that there are two factors that determine whether technology will be accepted by its potential users: (1) perceived usefulness, and (2) perceived ease of use. The key feature of this model is its emphasis on the perceptions of the potential user.” (Thompson, 2016).

For this study, we have decided to use a modified technology acceptance model by Austermann and Mertis (2014) Figure 1, which suits our research better, with the following hypotheses:

**Figure 1**



*Source: Author (Tweaked model of Davis (1989) and Austermann & Birte (2014))*

H1: Perceived usefulness is positively related to student's attitude towards using push notifications/messages.

H2: Perceived ease of use is positively related with student's attitude towards using push notifications/messages.

H3: Perceived behavior control is in positive correlation with student's attitude towards using push notifications/messages.

H4: Perceived innovativeness is positively related to student's attitude towards using push notifications/messages.

H5: Student's attitude towards using push notifications/messages is in a positive relationship with behavior intention (intention to use the push notifications/messages).

## **Literature Review**

Human resource departments in companies today are expected to assist a workplace when it is experiencing a rapid change within innovation and new technologies. Increased use of different hybrid models necessitates an increasing dependence on efficient HR functions and processes (SAP Insights, 2023).

Some of the new functions are connected to artificial intelligence, mobile and big data as well as cloud-based HR platforms. All of these mentioned offer a deeper understanding and effective procedures in the world of HR. These automated processes relieve HR professionals from tedious bureaucratic activities which can result in them concentrating more on important goals and problems within the company (SAP Insights, 2023).

One of the most represented technologies that we regularly use are mobile phones and related apps along with instant messages and notifications. We glance at our phones at least fifty times per day, and doing everything on the go can greatly optimize and help HR function. Integrating recruiting apps can enable HR directors to swiftly connect with qualified prospects and deal with the whole recruitment and selection process faster and easier (SAP Insights, 2023).

Businesses actively look for a varied group of candidates, making diversity, inclusion, and equity an ongoing and essential component of hiring. HR experts will need to make sure underrepresented talents are hired and that they provide a secure workplace (Srivastava, A. 2022).

For this to happen, decreasing administrative work, funding new tools and cutting-edge equipment will take precedence over everything else. Utilizing automated technologies to acquire talent and expand the pool of candidates with skills for a searched job, will save time and also improve

effectiveness of hiring. However, firstly, both sides must accept and learn of technologies that new technological era brings (Srivastava, A. 2022).

### **Technology Acceptance Model (TAM)**

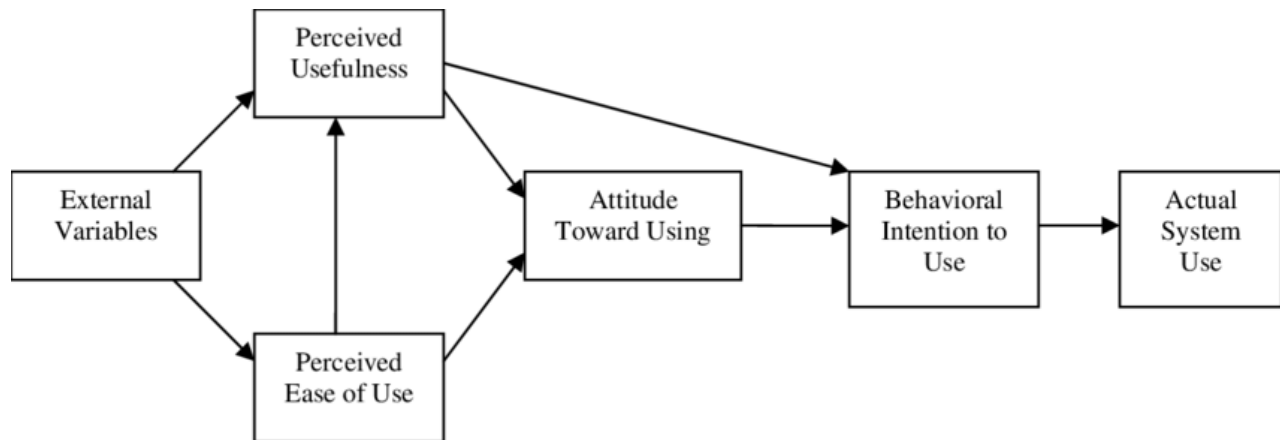
Technology Acceptance Model, better known as TAM, can help us look into willingness of students to use innovative processes through its variables. TAM “was introduced by Fred Davis in 1989 and is considered one of the most influential model to measure users’ acceptance of the new technology” (Kash and Zhen 2013). In addition to this, it is also deemed the most rigorous and most accurate when it comes to predicting user’s behavior. (Venkatesh and Bala 2008; Venkatesh and Davis 1996). Two main Technology Acceptance Model’s variables are Perceived Ease of Use (PEU) and Perceived Usefulness (PU) (Davis et al, 1989). This model also includes Behavior Intention (BI) which is the key predictor to the usage within any process or the system (Davis et al, 1989).

When it comes to technology acceptance model itself, it was created from a theory called “Theory of Reasoned Action” (TRA) which was founded by Ajzen and Fishbein in 1975. “Theory of Reasoned Action” examines a person’s actions based on their intents. (Rauniar et al, 2004).

The way that these two models, or theories are connected is through people’s behavior and their intentions. Theory of reasoned action creates a blueprint of people’s behavior, while the technology acceptance model looks into factors which would impact someone’s acceptance of technology. (Rauniar et al, 2004).



**Figure 2**



*Source: Davis (1989)*

The first variable which is part of the revised model is perceived usefulness and it is “the extent to which a person believes using a particular system will enhance his or her job performance.” (Sun et al, 2009). This can also be connected to the thinking that anything related to technology does in fact, better individual’s performance. (Liu et al, 2010)

The way perceived usefulness is connected to this study is through students and the way they think how valuable and useful this new system of push notifications and messages will be for them in the job finding process.

The second variable is “Perceived Ease of Use” (PEU) and it can be defined as “the extent to which a person believes using a particular system will be free of effort.” (Sun et al, 2009). Simply put – if it’s easy to use, people will be more prone to using it. (Liu et al, 2010; Davis, 1989).

The same will be for this study: if students found it easy to use push notifications and messages would they be more willing to use the system.

Third variable, “Perceived Behavior Control” (PBC) can be “characterized by the description of perceived ease or difficulty a person has in performing a certain behavior.” (Ajzen, 1991)

Perceived behavior control is of extreme importance mostly because of the way it controls intentions and actions. (Ajzen, 1991). One’s confidence when it comes to their ability to do a certain action highly impacts their behavior. (Bandura et al, 1997 and 1980)

The same intention is for the research paper. If students have confidence in applying for jobs via the push notifications/message platform, would their behavior towards the new technology change.

Fourth variable, “Perceived Personal Innovativeness” (PIIT) “assumes that highly innovative persons possess certain characteristics like curiosity, searching for novel ideas (Lu et al, 2005), being able to deal with uncertainty and an increased positive attitude toward technology acceptance in general.” (Rogers, 1989; Lu et al, 2005)

With this variable we are able to look into the creativity of a person and see if the creativity and willingness to be more innovative plays an important role in using new technologies.

Fifth variable, “Attitude Towards Using” (ATT) can be presented as “a disposition that influences particular behavior of people.” (Fishbein and Ajzen, 1975). Attitude can be closely connected and is impacted by all previously mentioned variables: perceived usefulness, perceived ease of use, perceived behavior control and perceived personal innovativeness. (Austermann and Mertis, 2014)

Final variable, “Behavior Intention” (BI) “is the most important factor, according to Fishbein and Ajzen’s (1975) theory of reasoned action (TRA), which is commonly used for forecasting

behavioral intention and behaviors”. Behavior intentions are the ‘pre-steps’ which person will take or show before showing a certain behavior. (Austermann and Mertis, 2014)

### **Push Notifications and Push Messages**

It is normal to wonder how new ways of technology and communication will affect different areas of work – in this research the focus is on a job finding process.

To make implementation of new technology and new communication processes easier, it’s important to draw attention to the positive changes and aspects in technology. (Gravili and Fait, 2017). This change in technology perception would help companies attract the best minds. As previously mentioned, traditional forms of job finding process are slowly being forgotten and the new process happening is called ‘social recruiting’ (Gravili and Fait, 2017).

This process can be introduced, not just through social media such as Facebook and Instagram, but through push notifications and messages used on WhatsApp and Viber. These mentioned apps can use notifications and messages to improve the experience of the users, especially when it comes to online recruiting. (Stohy et al., 2016).

Finally, we can define push notifications as pop-up messages that appear on the screen of a user regardless of the device or a webpage the person is using (Khan, 2021) These help companies reach their customers in a shorter amount of time. The notifications and messages can be used by the companies who are actively recruiting and with this the job-finding process would be faster and easier for both companies and potential applicants. One of the most notable advantages of these push services is the ‘real-time’ alerts which are sent to users depending on their identities, whereabouts, statuses, and feelings in the moment. (Stohey et al., 2016)

In addition, the SMS and notification services are becoming more popular and are “among the most used methods of mobile communications” (Dondyk et al., 2015). These kind of services allow third-party servers to send data to their app installed on the phone even when the app isn’t in use; and it strictly does it without knowing the contents of the message or the notification (Stohey et al., 2016).

There are a few advantages that are noticeable when it comes to push notifications and messages. The first one is responsiveness. According to Stohy, et al., (2016) using SMS, a notification is delivered in 9.8 seconds; on the other hand, implementing GCM, notification delivery takes an average of 2.1 seconds. (GCM – Google Cloud Messaging – “mobile notification center developed by Google”)

The second one is cost. This is probably one of the most important things for companies to know, and the cost usually plays the big part when it comes to implementing a new process. According to Stohy, et al., (2016) push notification system texting is practically free whether done over a cell network or Wi-Fi; their region offers SMS transmission for a cost of roughly US\$ 0.036 per message, in comparison.

### **Technology and TAM Influencing People Applying for Jobs Online**

The business world is a dynamic place. What once was popular and cutting edge in technology: sending emails, having generic job ads online; today is perceived as inconvenient and time consuming. This transition to “Electronic recruitment” has changed it all. (Garcia – Izquendo et al., 2010; PfiEFFELMAN et al., 2010).

According to Viswesvaran (2003) recruiting through online platforms changed both the way companies attract potential employees and the process of making the decisions. Many are certain that online recruiting is a quite needed method where one can acquire all the information about organization as well as the information about the job itself (Sylva and Mol, 2009). Another fact which only strengthens all that was previously said is that the job recruitment and selection process seem to be among the most exposed processes to the new technology that we see today (Kash and Zhen, 2013). Therefore, e-recruitment and online recruitment can be defined as a formal way of recruiting. (Galanki, 2002).

If this is all known in theory, then why is it not as used in practice? Maurer and Liu (2007) advocate that it's not a priority for the organizations to be aware of the factors which attract potential employees when in reality it should be.

Before proceeding into any further processes, the main thing is for the potential applicant to come across the organization webpage. Even this part is sometimes neglected by the managers and that creates a big gap. As for the guests where the reception is their first contact with the hotel, the same goes for the corporate webpage. The company webpage acts as the company's first contact point with job applicants. (Kash and Zhen, 2013). These websites have become a helping tool where a candidate comes looking for information of their potential employer (Cappelli, 2001; de Goede et al., 2011).

However, there are still some gaps to be filled. There is a high level of uncertainty connected to lack of familiarity and also slight complexity of technology (Bagozzi et al., 1992). Another common thing is that people usually have an opinion about a product or service prior to using it (Ajzen and Fishbein, 1980). This creates a big gap in the possibility to move forward and innovate, but also poses a question of what do to help close this gap.

## **Method**

The purpose of this primary research is to discover whether the students would be more willing to use new information technologies such as push notifications and push messages for a job finding process. This is measured through technology acceptance model's variables which are: perceived usefulness, perceived ease of use, perceived behavioral control, perceived personal innovativeness, their attitude towards using push notifications and push messages and behavior intention.

## **Instrument**

Within the previous information, important theory was introduced and explained. Now, we will investigate deeper into the method of this study.

Bayman (2012) argued that deductive research is the most frequently used method when aiming to show the connection between theory and research. Existing information from the theoretical model can help us develop hypotheses (Bryman, 2012; Saunders et al., 2009). Since the technology acceptance model is used for this study and is already a developed theory, this approach will be most useful.

Because the study tries to clarify the correlations of many elements towards the student's attitude and the topic of technology acceptance model is widely researched – quantitative research will be applied. Quantitative research is a useful tool for looking into, revealing, and examining correlation among different variables (Saunders et al., 2009). One of the biggest advantages is actually the measurement itself, and due to this measurement data can be reused for other purposes (Bryman, 2012).

Among different types of research, this paper will be following the explanatory path. The goal of this approach is to 'analyze and to establish causal relationships and links between variables.'

(Saunders et al., 2009) With this research, numerous correlations, PU, PEU, PBC, PIIT, ATT, and BI will be explained in the context of using push notifications and messages as a new process in recruitment and selection.

The method of doing research via surveys which is sent to those who will respond is known as survey research. To get meaningful results, survey data is quantitatively processed after collection. Reliable research from surveys may provide companies and their HR departments with an opportunity to have big data sources. This can be used by different media companies, other businesses and even authorities to get reliable information. A sample of participants is surveyed quantitatively by using an assortment of questions according to the standard concept of a survey. Selection of participants, gathering of data and analyzing that data is all a process of the survey. This type of data collection is helpful for researchers whose intention is to inform the participants of survey of possible new trends in the world. (Survey Research: Definition, Examples and Methods | QuestionPro, n.d.)

Among many benefits that survey carries, minimal investment, reliability, and ability to conduct a survey on various different platforms are among the most important. Whether the surveys are done live or online, there is minimal investment because they are easily distributed and straightforward. This brings us to the second point of being able to conduct a survey through any platform and to also classify them in groups if needed. With this, researchers have the possibility to do surveys even in more remote places. Finally, reliability for both participants and the conductors is of major importance. Participants can be absolutely sure that their personal data won't be shared anywhere without their consent and the conductors will get a timely response for their research (Survey Research: Definition, Examples and Methods | QuestionPro, n.d.).

Therefore, the author decided to use a survey consisting of 27 items divided into 6 groups: PU, PEU, PBC, PIIT, ATT and BI. These sets of questions were close ended questions which used Likert five-point ordinal scale for the measurement where 1 is Strongly Disagree and 5 is Strongly Agree. Through these sets of questions, reliability and replicability improves since the questions can be standardized (McLeod, 2018).

Due to the questions asked, author was able to measure correlations and whether they are positive or negative. The original survey was found in a study by Austermann and Mertis (2014) whose questions originated from different authors as stated below. Questions were changed and improved to suit this study.

The perceived usefulness category consisted of six questions which measured how useful this new process might be for the students looking for a job. This set of questions was evaluated using the five-point Likert scale. The original instrument was made by several different authors: Cowen (2009), Lu et al., (2005), Chang (2004) and Nath et al., (2013) and was used by Austermann and Mertis (2014) in their study measuring the attitudes of managers towards social media being used in innovation processes.

The second group of questions related to perceived ease of use and consisted of five questions. The authors of original instruments are Chang (2004), Lu et al., (2005), Cowen (2009) and Lewis (2019). This group of questions measures how easy it is to use certain information technologies.

In order to measure the third component which is perceived behavior control, this study used a set of three questions which stem from an original study of Cowen (2009). Perceived behavior control examines the confidence of the user who is to use the new process or an app.



Fourth component – personal perceived innovativeness used set of four questions as well, created by Lu et al., (2005). Innovativeness looks into how creative and willing someone is to experiment with the new technologies offered to them.

To measure the fifth component, student's attitude towards using push notifications and messages, this study used set of five questions which originated from Chang (2005) it measures the attitudes of students and their outlook on the new technologies offered.

Finally, the sixth component is the behavior intention which are described as 'pre-steps' for the actual usage of certain technologies. This set consisted of four questions which originally stem from Lu et al., (2005) and Cowen (2009).

In addition to all of these questions, another set of demographic questions was asked. This set asked participants to fill out their gender, study program, year level and the country of origin. All of these questions were close ended questions. To get a clearer opinion from the participants, the author posed an open-ended question which asks for a recommendation to human resources when it comes to using new information technologies.

### **Sample**

The sample of this research paper comprises students who are at different year levels and at different study programs. This questionnaire was done using the Qualtrics platform and was distributed in an online form and was shared through email as well as different messaging platforms such as WhatsApp and Viber. The whole sample consists of 106 participants.

Majority of the respondents were from Croatia (64.40%) and Montenegro (12.5%). In addition to these two countries, participants of this research also originated from all South-eastern Europe, USA, Germany, Italy, Latvia, Bulgaria, Turkey, Canada, Ukraine, and Australia.

*Table 1 – Country of Origin of the Participants*

<b>Country of Origin</b>		
Croatia	68	64,40%
Montenegro	13	12,50%
Serbia	3	2,90%
Albania	4	4,60%
Bosnia and Herzegovina	1	1,00%
USA	2	1,90%
Canada	2	1,90%
Australia	1	1,00%
Germany	4	3,80%
Italy	1	1,00%
Latvia	1	1,00%
Bulgaria	1	1,00%
Turkey	1	1,00%
Ukraine	1	1,00%
Virginia	1	1,00%
Total	106	100%

*Source: Author*

Among these 106 students, the majority were female (64.15%) and 35.85% of the participants were male. Although the questions regarding gender offered another answer of being “non-Binary”, there were no participants who declared themselves through this option.

*Table 2 Participants’ Gender*

	N	%
<b>Gender</b>		
Male	38	35.85%
Female	68	64.15%
Total	106	100%

*Source: Author*

When it comes to the year level of the participants – most of them were seniors (36.8%); followed by juniors (24.5%) and then lastly sophomores and freshmen (18.9%). 0.9% of the participants were studying at some other year level such as masters.

*Table 3 – Participants’ Year Level*

<b>Year Level</b>		
Freshmen	20	18,9%
Sophomore	20	18,9%
Junior	26	24,5%
Senior	39	36,8%
Other	1	0,9%
<b>Total</b>	<b>106</b>	<b>100%</b>

*Source: Author*

Lastly, participants of this study were also asked to provide the name of their study program. Therefore, the results were the highest when it came to Hospitality and Tourism Management students (44.86%); next were students from International Business program (34.58%) and Web and Mobile Computing (14.95%). Again, to capture the whole scope and the choices of our participants, an option ‘other’ was presented in the questionnaire as well. A small number of participants chose this option (5.6%) and within this number, there were students from Finance programs, Culture Management, Actuarial Science and Data and Architecture programs.

*Table 4 – Participants’ Study Program*

<b>Study Program</b>		
HTM	48	44,86%
WMC	16	14,95%
IB	37	34,58%
Other	5	5,6%
<b>Total</b>	<b>106</b>	<b>100%</b>

*Source: Author*

## Results

Looking at the variable of perceived usefulness, we notice that a good portion of participants agree with the fact that introducing this kind of communication technology within the job searching process would be beneficial and useful. There are some who disagree; thus, we have lower results recorded ( $M= 3,94$ ;  $SD=0,73$ ). The next variable has deemed the highest results. Perceived ease of use of new communication tools is deemed by the majority of participants as easy to navigate and to learn about ( $M=4.28$ ;  $SD=0.66$ ). The third variable, which is perceived behavior control, also recorded some high results. Participants strongly believe they would be able to confidently use this communication tool without any obstacles and that they possess the knowledge of how to use it ( $M= 4.18$ ;  $SD= 0.76$ ). The lowest results that were recorded belong to the fourth variable – perceived personal innovativeness. This shows that participants believe creativity and innovativeness doesn't have to be a requirement to use push notifications and push messages as a communication tool ( $M=3.73$ ;  $SD= 0.81$ ). Student's attitude towards using push notifications and messages is the fifth variable and has also recorded high results. Participants think of this tool positively and believe using it would be a wise idea ( $M= 4.06$ ;  $SD= 0.82$ ). Lastly, the behavior intention has lower results and is the second lowest variable ( $M=3.85$ ;  $SD= 0.86$ ). This can show us that although the theoretical part may seem perfect, in practice is a bit different, and some may struggle to adopt it and use it frequently while others would adopt it immediately.

Table 5 – Descriptive Statistics

	Min	Max	Average	SD
Perceived Usefulness	1,33	5	3,94	0,73
Perceived Ease of Use	1,6	5	4,28	0,66
Perceived Behavior Control	1,67	5	4,18	0,76
Perceived Innovation	1,5	5	3,73	0,81
Attitude Towards Using	1	5	4,06	0,82
Behavioral Intention	1	5	3,85	0,86

Source: Author

The main purpose of this research paper was to test correlations among six variables and to confirm or reject the stated hypotheses. The first hypothesis that we established was:

*H1: Perceived usefulness is positively related to student's attitude towards using push notifications/messages.*

Testing the assumption of perceived usefulness being positively correlated with student's attitude showed a highly significant correlation coefficient ( $r= 0.65$ ,  $p<0.01$ ) which confirmed the H1 hypothesis.

*H2: Perceived ease of use is positively related with student's attitude towards using push notifications/messages.*

The assumption of perceived ease of use being positively correlated with student's attitude has been proven. Coefficient of 0.45 ( $p < 0.01$ ) present us with a significant correlation between these two variables. Thus, confirming the hypothesis.

*H3: Perceived behavior control is in positive correlation with student's attitude towards using push notifications/messages.*

Hypothesized positive correlation between perceived behavior control and student's attitude deliver the results of 0.39 ( $p < 0.01$ ) and slightly weaker correlation. Being confident about using push notifications and messages increases the positive attitude towards using it. This confirms our hypothesis.

*H4: Perceived innovativeness is positively related to student's attitude towards using push notifications/messages.*

Fourth hypothesis resulted in a significant relation between the perceived personal innovativeness and student's attitude ( $r = 0.52$ ,  $p < 0.01$ ), confirming the hypothesis. How people look at innovation and creativity does, in fact, increase the positive attitude of wanting to use something new.

*H5: Student's attitude towards using push notifications/messages is in a positive relationship with behavior intention (intention to use the push notifications/messages)*

Fifth and final hypothesis assumed positive correlation between student's attitude towards using push notifications and messages and behavior intention. Results were the highest among all hypotheses with a coefficient of 0.85 ( $p < 0.01$ ) and with this confirming our last hypothesis. The more positive attitude there is, the bigger the intent on using push notifications and messages as a communication tool.

Results and findings show that all five hypotheses were proven with strong correlation coefficient where the p-values is less than 0.01.

*Table 6 -Correlation Between Variables*

	Attitude Towards Using Push Notifications and Messages	Behavioral Intention
Perceived Usefulness	0,64**	-
Perceived Ease of Use	0,45**	-
Perceived Behavior Control	0,39**	-
Perceived Personal Innovativeness	0,52**	-
Attitude Towards Using	-	0,85**

*Source: Author*

### **Discussion**

The main purpose of this research projects was to look into and investigate how students would potentially act towards new job finding and communication tools and would these new tools make the recruitment and selection process easier. The results collected could be used by both employers and potential employees in order to make the whole job-finding process more efficient. Employers could understand better what it is, which draws in more applicants who are ready for work and are skilled. Another useful piece of information the results would bring is how to speed up the process of recruitment and selection and in what kind of innovation employers should invest in order to be able to follow the trends and be on the top. Although the research question concerned students mainly – the response which we got from our participants tell us how willing they are to use technology of the new age. Consequently, potential applicants can be connected with their ideal employers much faster through the communication tools of push notifications and push messages. They would be reached by employers through the app or the add-in via chrome or safari and would

get job offers and updates in a simple notification and message. All in all, HR departments as well as potential applicants could utilize the push notifications and messages and the results gotten in order to help themselves in the whole job finding process.

Despite the advantages of push notifications and messages a questions arises – why isn't this tool used more if it is that simple to operate? The author of this paper believes that the reason for this might be due to not being able to adapt. People, especially those who have been working for a long time within the company, or are simply older, do not welcome change easily and believe that the traditional way of recruiting and selecting and using email as a mean of communication are still the most efficient.

In the end, the research paper investigates how variables from this paper affects students looking for a job if new information technologies such as push notifications and messages were introduced.

The first hypothesis presented a significant positive correlation between perceived usefulness and student's attitude towards using push notifications and messages. Within this hypothesis we looked into the belief of participants and how they think this innovation would better their performance (Liu et al, 2010). This belief relied solely on the fact that when using a newly founded communication tool and it proves efficient as well as useful, the attitude of a student would be extremely positive. Due to this, they would use the tool more.

Going into more detail, there was one particular question related to looking for jobs more efficiently which had the highest level of disagreement among students within the category of perceived usefulness. One of the reasons for this, which seems most obvious, is that most participants are used to traditional ways of communication during the recruitment and selection process. Another reason can be due to not possessing enough information or knowledge about this



particular communication tool and they might be skeptical. Perhaps schools and companies could invest more in teaching students and anyone else, of different ways to acquire a job, instead of continuing to rely on CVs and emails. The world is changing rapidly and keeping up with the change can help immensely to stay on top. All in all, the more useful students perceive the new tools, whether they just be a communication tool or an actual app, the more positive attitude they will have when thinking of using it. The author urges everyone to remember that simplicity and usefulness go a long way.

The second hypothesis presumes that the perceived ease of usefulness of push notifications and messages is positively related to student's attitude towards using them. This hypothesis is confirmed since the relationship between two variables is statistically significant. Meaning, when a certain app, program or a tool is easy to use, it will affect student's attitude making it more positive when it comes to using an actual tool (Davis (1986) and Liu et al., (2010)). Again, the lowest results within this category were connected to relevance and timely response push notifications and messages would give to the users. There are at least two reasons as to why exactly this questions received the most disagreement from participants. First one could be connected mainly to education and the information they have regarding these new information technologies. Participants may not have been exposed to these notifications and messages as much to be able to learn of their benefits. The second one can be due to their belief that there is no relevant information to be received through these medians. Although this particular questions resulted in the lowest agreement level, all other within this category had high results which tells us that if this new tool, is easy to use and easy to learn when it comes to using, then the attitude of students will be much more positive.

The third hypothesis assumes that perceived behavior control is positively correlated with student's attitude towards push notifications and messages. Ajzen (1991) looked at it as a very important factor when it comes to the impact it had on one's behavior. Although this correlation coefficient yielded the lowest score among all of five hypotheses and shows a weaker correlation (0.39), it didn't have any significant oscillations within the category as it was the case with previous categories. The questions in this category revolved mostly around how confident participants are when it comes to implementing new information technologies and tools. Comparing the results of PBC with those of Austermann and Mertis' study (2014), some differences are visible. In their study, the hypothesis regarding PBC was completely refuted and not seen as an important factor as Ajzen (1991) predicted, while in this research paper PBC did have the lowest correlation coefficient but it wasn't refuted.

The fourth hypothesis described correlation between personal perceived innovativeness and student's attitude towards push notifications and messages. This variable was added to the model of Austermann and Mertis (2014), and it investigated into innovativeness of managers and assumption that if they wanted to use new technology outside of their job, that they would be more willing in implementing new technologies within their job. The same was done with the sample of students. This assumption was built on a notion that the more students are willing to try out something new in their private lives, the easier it would be for them to implement them in their professional lives. One item from this category with the highest level of disagreement was being first to explore new information technologies. It is usual that most people will not explore newly introduced tools if they are not properly introduced to them or are skeptical about them, especially if they are related to technology. Another reason could be that we simply still do not have all of the innovative tools that, for example, companies in the western countries use. Again, when it

comes to comparison of results between this research and the one of Austerman and Mertis (2014). PPI in their paper was refuted and also characterized as completely insignificant, while in this paper it was proven with high significance. This is due to different samples and their paper looking into manager's attitude and this paper looking into student's attitude.

The fifth and final hypothesis was made on the assumption that the more optimistic a student's attitude is towards using push notifications and messages the higher their behavior intention will be. Behavior intention is defined as 'pre-steps' meaning anything prior to actually using new communication tool (Fishbein and Ajzen, 1975). Among all of the hypotheses, this one yielded the highest result and highest correlation coefficient with a strong p-value. The distinction between those of a higher agreement level and lower agreement level can be highlighted by one of the questions which did receive lower level of agreement and that is the one connected to frequently using push notifications and messages. This could be due to lack of education, not having anything of the sort on our employment market or perhaps some participants do not have a highly positive attitude towards intending to use push notifications and messages.

In addition to all of the hypotheses, the author would also like to highlight the positive and negative comments which the participants have provided. Some of the positive ones mentioned how crucial it is to follow the trends and stay relative. There were also mentions of avoiding emails for any quick interaction since they do not connect well with the fast-paced life of today's society and that there should be more suitable means of communication.

On the other hand, there were no strictly negative comments, but rather some advice and do's and don'ts. One advises on testing push notifications and messages, to see whether this is doable, and whether it is actually useful for the companies. Another comment stated that HR departments should offer it, but to not use it as an only tool.

Looking at both types of comments, it is noticeable that there is still slight skepticism present which can be due to lack of knowledge or inflexibility.

Besides, all of the mentioned results, the author of this paper also wanted to understand whether there are any sorts of correlations when it comes to gender, year level and study level with all of the other variables. The answer to this question is that there is not any relevant significance between them, except that seniors were more prone to answer positively – probably due to their year level and experience they have gathered. While when looking at study program, the only information we get is that the highest number of participants was in hospitality or business – this result was to be expected since these branches are the one changing the fastest and leading this fast-paced life.

In conclusion, these results can give greater insight for companies and their HR departments on how to be more approachable and desirable to their potential applicants as well as how to attract them easily – by speaking their language of innovation. Implementing a prototype version, education alongside the trainings, or simply introducing something new while still having traditional ways of communicating could change the minds of people to be more positive towards change and to make the transition as painless as possible.

### **Limitations**

One of the limitations can be connected to the factor of time. Since the period of research has been limited, data might not be able to be generalized as much. In addition, the results gotten are only a screenshot in this particular moment and could be subject to change due to a difference in the attitude of the students if this study was done over a longer period of time. The second limitation concerns research approach and inability to control the participants. Since the questionnaire was sent by email and shared through messaging platforms such as WhatsApp and Viber, the author

wasn't certain whether the participants have enough knowledge and information regarding the topic in question. However, to make it more understandable, there was an introduction part which thoroughly described the purpose of the paper and the questionnaire as well. Another limitation which might arise is that more females participated in the survey than men, meaning there was unequal gender distribution among the sample and perhaps it could have resulted in some gaps or differences.

### **Conclusion**

The author of this research paper improved an already existing model, to be able to collect needed data and test the hypotheses through variables. The used model was based on Davis's TAM and Austermann and Birte's extended TAM. The model consisted of six factors which were PU, PEU, PBC, PPI, ATT and BI. Its main purpose was to understand and describe any existing correlation between the mentioned variables and student's attitude, and finally the effect the attitude has on behavior intention. Because the focus was on students and their attitude towards new information technologies, they were asked to be participants in the questionnaire of this study. In addition, the existing gap was closed with this focus. Finally, all five hypotheses were accepted and provided deeper insight into the attitude of students and how the variables such as efficiency, easiness, confidence, and innovativeness of oneself affect their attitudes. Consequently, the hypothesis regarding the attitude and the behavior intention yielded the highest and strongest correlation, meaning that the attitude significantly improves intention of integrating new information technologies within the recruitment and selection process. Four hypotheses had strong correlation while the correlation regarding PBC was slightly weaker.

There remains a question for further research – what should be done in order for new information technologies to be accepted faster and should companies and schools implement training or courses to make the transition easier.

Finally, the student's attitude is a very important part of this paper, and additional information on what motivates me to apply for jobs more, what means and tools, in their everyday lives could be an enormous help. This help could be used by companies and their HR departments in order to learn what motivates the generation which will soon make up more than half of the workforce.

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