

Analyze the Phenomenon of Perceived Ease-of-use and Perceived Usefulness for Consumers' Purchase Intention

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Abstract. In recent years, the worldwide smartphone market has gone from exponential growth to a downturn in the last two years, and the global smartphone market has transitioned from the incremental age to the stock era. The purpose of this study was to investigate consumers' willingness to purchase Samsung foldable screens. The major reason was that consumers were getting more sensible in their smartphone selection, the frequency of replacement of high-quality mobile phones is decreasing, and there are additional causes for smartphones' excess performance. Folding screen phones have increasingly gained popularity in recent years. Samsung, Huawei, and Motorola all debuted folding screen phones at the start of 2019, and folding screen phones started their first year of commercial production. This paper used the Technology Acceptance Model to study consumers' purchase intentions on the advantages and disadvantages of Samsung's folding screen. The research found that perceived usefulness and perceived ease of use directly affect online purchase intention. The results showed that Samsung should seek better battery capacity for folding screens and make improvements in folding screen materials to increase consumers' willingness to buy, thereby encouraging consumers to buy. This article helped to understand the impact of the advantages and disadvantages of Samsung's folding screen more fully on consumers' purchase intention.

Keywords: Samsung; Mobile phone; Technology Acceptance Model; Purchase Intention.

1. Introduction

1.1 Research Background

At present, Samsung is the global leader in folding screen mobile phones, and the rapid development of the folding screen mobile phone industry has benefited from the leadership of Samsung folding screen mobile phones. According to DSSC data, in the third quarter of 2021, Samsung accounted for 93% of the global foldable smartphone market, followed by Huawei with 6% [1].

In 2019, Samsung released the first folding-screen mobile phone Galaxy Fold, which opened the precedent for the commercial use of folding-screen mobile phones. In the past two years, Samsung has continued to iterate new folding-screen mobile phones. At present, it has formed a series of folding screen mobile phones such as the Galaxy Z Fold series, Galaxy Z Flip series, and W series, constantly leading the progress and development of the folding screen mobile phone industry. On August 11, 2021, Samsung Electronics officially launched two smartphones, Samsung Galaxy Z Fold3 5G and Samsung Galaxy Z Flip3 5G, opening a new chapter in the innovative experience of folding screen products. As the next-generation masterpieces in the folding screen category, both products inherit the outstanding quality of Samsung and bring together a strong performance, exquisite craftsmanship, and innovative features that users have longed for. At the same time, Samsung also combined the voices and expectations of folding screen users to bring breakthrough upgrades to the two products, making the new generation of folding screen products more durable and further optimizing the daily user experience. Whether it is users who love the iconic design or are looking forward to an immersive entertainment experience, the Samsung Galaxy Z Flip3 5G and Samsung Galaxy Z Fold3 5G will bring a new experience of work and entertainment that is different from the past.

Battery life is the main complaint market consumers have with the current foldable. The Galaxy Z Flip 4 has poor battery life, and the Galaxy Z Fold 4 isn't much better. The battery is smaller than comparable smartphones and has to power the overlay display and the two internal displays, the latter running at an adaptive 120Hz refresh rate [1].

Samsung still struggles to beat Apple and Google among the best camera phones, and while the company has made noticeable strides recently, the Galaxy Z Fold 3 and Galaxy Z Flip 3 didn't impress me in the photography department. The software needed some work, as I noticed that both phones had Samsung's old signature oversaturated, dreamy look.

However, although the product form innovation of foldable mobile phones attracts attention, the product contradictions brought by the foldable form have not been resolved. The first is that after folding, the internal components of the mobile phone, such as circuit boards and batteries, need to adapt to the requirements of the foldable screen and have a certain degree of flexibility. When operating the device, the internal components need to undergo a lot of bending and non-bending cycles, so the design process needs to be the internal force of the stack is balanced to avoid affecting the display effect of the screen. Judging from the product ideas of the past few years, the folding of the mobile phone lies in the hinge in the middle of the mobile phone. Through the hinge, the mobile phone can be folded with this as the center. At the beginning of the Mate X's release, more than 180 parts were stuffed into the hinge, and thus achieved a "folded" shape. Both Huawei and Samsung claim that the product has undergone rigorous durability tests.

Samsung has used an invisible hinge since the previous generation of the Galaxy Z Flip, and its new Galaxy Z Flip3 5G is said to be able to withstand up to 200,000 openings and closings. Huawei claims the screen and hinge can be folded up to 100,000 times, a number that may not be exceeded in the device's lifetime [1]. However, despite this, foldable mobile phones still have many problems in the user experience due to their folding design, and they are still in an immature state.

1.2 Research Gap

According to Soonkyu Jang's research on the Trend of Preventing Privacy Intrusion by Folding Phones, Screen sizes are constantly expanding and growing in the current global market [2]. Jang investigates privacy and privacy-related usability and the intention to reuse user psychology (anxiety, trust) depending on the angle of the folding screen [2]. Distortion effects are applied to make content appear as flat as possible on a folded screen to prevent issues [2]. Collapsing content on a folded screen reduces usability. Soonkyu Jang also examined the effect, of the difference in user experience content. To this end, Soonkyu Jang divides content into privacy exposure (direct private information, centralized public information) and its constituent information (image, text). Danny Ziyang Huang improved by adding questionnaires, interviews, etc., collecting feedback and needs and potential customers from all mobile phone users, and finding out the advantages, disadvantages, and problems of Samsung's folding screen [3]. The research focus is on the above optimization. The mobile phone form has been determined, and then the next time should seek the questions of the current form, and then through these questions, complete better design and optimization, which can be more suitable for people's lives. There are many future research directions. Picture technology should develop better coatings, better panel technology, and reduce damage from daily use. The second aspect of this is improving the design of the hinge or using other methods to secure the two parts of the phone to increase its durability. The third area is adapting and optimizing the app for a better experience using the phone.

1.3 Fill the Gap

To date, there has been limited research on consumer perceptions of folding screens in the context of Samsung's folding screens. Therefore, this study aims to explore how consumers perceive folding screens and how this perception determines their purchase intentions for electronic products (mobile phones). To achieve this, the Technology Acceptance Model (TAM) describes the relationship between Perceived Ease of Use (PEOU), Perceived Usefulness (PU) Attitude (Att), and Behavioral

Intention (BI), was applied and tested to understand consumer behavior with Samsung's folding screens [1]. Within TAM as a theoretical framework, this study has three goals: to examine the effects of PEOU, PU, and Att in terms of electronic technology on consumers' willingness to purchase (PI) electronic products with folding screens [1]. to compare PEOU, PU, Att, and PI levels of two consumer groups: consumers who have used folding screens and consumers who have never used folding screens [1]. Compare the relationship between the research variables of the two consumer groups. Understanding consumers' perceptions of folding screens may help increase the use of folding screens in the market, which in turn encourages the purchase of Samsung folding screen products. The results of this study can support the applicability of TAM in accepting information media and consumers' usage behavior of folding screens by empirically testing the effectiveness of TAM in non-technical media.

2. Literature Review

2.1 Identification of Technology Acceptance Model

Davis created the Technology Adoption Model (TAM) in 1989 when he employed rational behavior theory to assess the degree of user acceptance of information technologies [4].

The Technology Acceptance Model is driven by two major factors: The technology acceptance paradigm claims that system usage is determined by behavior, which is determined by use attitude and perceived usefulness. The perceived utility and convenience of use influence user attitudes. Perceived usefulness, performance, and perceived ease of use are all determined by external variables, while perceived ease of use is determined by external variables. External variables such as system design features, user characteristics (including perception forms and other personality characteristics), task characteristics, characterization, nature of development or implementation process, policy influence, organization structures, establish internal beliefs and attitudes in the technology acceptance model, intentions and differences between individuals, environmental challenges, and controllable distractor make a connection.

2.2 Important Result

TAM may be used to uncover Processes of technology adoption in research models by studying the link between antecedents and outcomes. External variables include potential consumers' external aspects, such as technology usage environment, technological benefits and drawbacks, and technical qualities. Perceived utility (PU) and perceived ease of use (PEOU) are crucial notions that demonstrate how external influences impact users' views of technology and determine users' actual adoption of the technology. The subjective likelihood that a potential user's adoption of a certain application system would increase his or her work performance in an organizational context is defined as PU. Through exploratory investigation, Schultz and Slevin established that user trust in PU has a decisive influence on the decision-making process of technology adoption [5]. Furthermore, Tornatzky and Klein confirmed that PU has a major influence on innovation uptake using a meta-analytical method from a social psychology perspective [6]. PEOU is defined as "the degree to which potential users anticipate the target system to be simple". Bandura investigated the link between human conduct and psychological elements, claiming that self-efficacy and outcome perceptions impact behavior [7]. "Self-efficacy" is defined as "the ability of a person to accomplish needed tasks when confronted with predicted scenarios." Davis discovered that Bandura's self-efficacy may be used similarly to technology adoption behavior, emphasizing the relevance of PEOU [8]. Swanson verified that PU and PEOU are important in shaping user sentiments.

PEOU will affect consumers' purchase intention. The higher the PEOU, the lower the purchase intention [9]. This conclusion has been confirmed by many researchers. Fan and others When studying the influence of customers' trust and perceived value on travel website content on their purchase intention and recommendation intention [10]. TAM is used to prove that both trust and perceived usefulness can affect the purchase intention of using Japanese goods connection [10]. Both

of usability affects perceived usefulness; perceived ease of use affects trust; perceived ease of use is affected by seller image, and perceived ease of use has no significant effect on purchase intention and seller image on perceived usefulness [10]. Lu and Jin also have the same conclusion [11]. They use the analytical method of data analysis to prove that the research selects the value of the efficacy layer from the three levels of customer value, and demonstrates and examines its influence on preference [11]. Some study identified perceived ease of use as an antecedent of self-service preference [12]. It shows that the value elements of the efficacy layer have a greater impact on the user preferences of self-service technology [12]. Guo and Liu studied TikTok and concluded that the perceived usefulness of Tik Tok will positively affect consumers' purchase intention; the perceived ease of use of Tik Tok will positively affect consumers' purchase intention [13].

Some academics in Malaysia employ the Technology Acceptance Model (TAM) to explain the influence of perceived utility on influencing customers' online purchasing behavior. Hasri et al. as well as Weng Marc and Ding Hooi, discovered that perceived utility influences online purchasing intentions indirectly, which is regulated by views about online shopping [14, 15]. According to Rohaizan and Fatimah, perceived utility is the most important factor influencing Malaysian customers to purchase online [16]. Based on this discovery, online merchants may establish marketing strategies by giving content on their websites that is distinct from rivals [16].

Through Zhou Li et al. TAM took college students in Nanjing as the research object, and found that perceived ease of use positively affects college students' shopping intentions [17]. Li Yingying concluded through empirical research that the perceived ease of use of college students' mobile online shopping will positively affect their online shopping. Intention to adopt [18]. Regarding website design, Tian Zhenshi believes that perceived ease of use has a positive effect on consumer website usage intention [19], and this result is consistent with other scholars [20]. An empirical analysis was conducted on the relationship between sex and online shopping intention, and it was also found that perceived ease of use had a significant positive impact on online shopping intention [21-22].

2.3 Summary

TAM has formed the foundation of most previous research on technology acceptance, and a wealth of theoretical and empirical support has developed in its favor. TAM has two primary structures: PEOU and PU. PEOU is concerned with the ease of acquiring and using the technology, whereas PU is concerned with the user's belief that the system will increase his or her performance. First, individuals utilize or do not use systems or technologies depending on the extent they believe they will help them accomplish their work better. Second, even if potential users find a certain system valuable, they may also find it difficult to learn and operate, and the effort required to learn and use the systems outweighs the efficiency advantages of utilizing it. Other factors being constant, the less work necessary to run a system, the more effort may be dedicated to other activities, hence enhancing total job performance. This establishes a conceptual connection between both PEOU and PU. This reasoning, however, is too broad to completely explain the PEOU and PU link. By investigating a common antecedent, it attempted to establish if Samsung's folding screen may capture the attention of PU users but rather whether PEOU influences people's propensity to buy Samsung.

3. Method

3.1 Research Design

A variety of using qualitative research methods to Samsung can get a clearer understanding of Samsung's advantages and disadvantage. SWOT analysis may be used to evaluate a scenario based on its internal and external competitive environment and circumstances. Each section is organized as a matrix, and then, using the concept of systematic analysis, numerous elements are matched and examined, and a series of matching conclusions are made from them, with the results typically being definitive. A Samsung SWOT analysis helps company executives analyze and evaluate all internal and external factors of the community and enables Samsung to compare its business and performance

with its competitors and industry. Samsung can only maintain its deterrent power in the business world by regularly reviewing the SWOT analysis and improving itself. Therefore, Samsung's SWOT analysis is very necessary.

3.2 Samsung

Samsung revealed the Youm flexible OLED plan at the CES 2013 conference, displaying a flexible OLED screen and promoting the notion of a foldable mobile phone. From the notion of a folding screen to a folding screen mobile phone took more than 5 years. And this screen is the forerunner of the folding screen. Samsung screens have also been working on folding screen mobile phones since then. The screen evolved from the initial straight screen to the 2.5D screen to the 3D curved screen, and these continually "bending" screens established the groundwork for the folding screen [23].

People aspire to enjoy a larger screen in a restricted body in 2017, and it is in such a mobile phone environment that people's desire for folding screen mobile phones is also expanding. In November, Samsung released the Infinity Flex Display folding screen solution, which is an inner folding solution with two displays that can be used simultaneously and is the forerunner of the Samsung Galaxy Z Fold. The Galaxy Z Fold, Samsung's first folding-screen smartphone, was formally unveiled in February 2019. At the time, the key issue was whether or not the smartphone could be folded. Of course, it also revealed a slew of flaws, including a slight protrusion at the fold, screen distortion, and apparent creases. The experience is hampered by trace lines, hinge dust, the inability to display even half of the screen, a splash screen, and other issues [24]. In February 2020, Samsung released the small-screen Galaxy Z Flip foldable phone, which has a flip-folding-like design, unfolding closer to a standard phone, and for the first time uses ultra-thin glass, compared to the first generation. The screen strength of the Galaxy Fold has grown, and the hinge can sustain hovering at angles of 90° and 135°, and you can stand up and snap selfies, which is also a milestone in the folding screen hinge [25]. Samsung released the Galaxy Z Fold3 and Galaxy Z Flip3 in August 2021, the former is more concerned with the screen's glass hardness, adding the S pen to make use of the huge screen, and employing the S pen to help the mobile phone attain more tablet-like functionality. The former provides a more practical functional experience to the foldable small screen, such as the addition of a secondary screen, selfies brought by free-angle hovering, hands-free calls, time-lapse photography as a tripod, and so on, giving full play to the folding form more useful functionality.

The hinge mechanism and screen of Samsung's latest generation of folding screen devices have been upgraded, significantly boosting durability and user experience. These two folding screen products have been welcomed by the worldwide market due to technical advances and lower prices than the previous two generations, and pre-orders in South Korea, the United States, and even the home market are exceptionally substantial. Pre-orders for the Samsung Galaxy Z Fold3 and Galaxy Z Flip3 in South Korea hit 920,000 units during the pre-sale period from August 17 to August 23. According to the Korea Economic Daily, Samsung's first-generation folding screen mobile phone Galaxy Fold introduced in 2019 sold just 500,000 units worldwide, while the second-generation folding screen devices Galaxy Z Fold2 and Galaxy debuted in 2020 sold only 500,000 units [26]. The Z Flip has sold roughly 1.5 million copies worldwide. Pre-orders for the Samsung Galaxy Z Fold 3 and Galaxy Flip 3 have already begun in 70 countries and territories worldwide, including China, the United States, Canada, the United Kingdom, and France. Samsung will increase the list to around 130 countries and regions in October. With such a great reaction from the market to the new generation of foldable screen mobile phones, Samsung has begun to ramp up manufacturing of foldable screen mobile phones by expanding facilities and boosting screen production capacity. This will boost the manufacturing and sales of Samsung's folding screen phones.

3.3 SWOT Analysis

3.3.1 Strength

The advantages of Samsung's folding are excellent flexibility, good waterproofness, and Samsung folding screen mobile phone is easy to carry. Samsung Folding Screen is a freely foldable flexible

LED screen consisting of a small LED module. The foldable LED display has all the functions of the conventional LED display and can be used to display text, images, videos, video signals, and other information. Compared with other large-screen terminal LED displays, its advantages are flame retardant, waterproof and good toughness. As an LED video carrier, the flexible screen can be folded arbitrarily, which is very convenient for transportation and can also be spliced into a large display screen according to on-site needs. Screen, no steel structure, easy to install and disassemble, the folding screen is very waterproof and heat dissipation, suitable for installation and use in indoor, outdoor, and various environments. After testing, the phone can operate normally even at a depth of 1.5 meters, and users no longer have to worry about damage caused by immersion in water. In terms of flexibility, the Samsung foldable screen has PEOU, which is very convenient for users to carry, which will make consumers hang to buy and affect consumers' willingness to buy. It has good water resistance and PU and PEOU, which will make some underwater photographers buy, and daily life, if a consumer's mobile phone accidentally falls into the water, it will not affect the consumer's use. Spending a lot of time to repair the mobile phone will not affect the work efficiency due to maintenance problems, and it is also very convenient for customers to use, which will affect consumers. Purchase intent positively influences. Saving transportation costs does not have PEOU and PU, and will not affect consumers' purchase intentions.

3.3.2 Weakness

Samsung's shortcomings include a lack of battery life and capacity resulting in a heavier weight, poor brightness adjustment, and more screen failures. Since more displays require more battery power, new materials with unique manufacturing processes are expensive. Consumers may find that foldable screens aren't as bright as regular smartphones, thanks to the materials developers and manufacturers use to solve the electrode problem. Just two days after Samsung held the Galaxy Fold experience event in the United States, foreign media and some digital bloggers experienced screen failures, such as bumps, splash screens, half-screens not showing, green lines, etc. As consumers use the screen, the crease in the middle will become more obvious, and the folding screen is two screens superimposed on each other, so the overall weight of the mobile phone will also increase, which is more than twice the weight of the ordinary mobile phones, which is not suitable for female users. For the lack of battery life, the mobile phone is heavy, with PU and PEOU, because the heavyweight will affect consumers' sense of use and affect PEOU, and the insufficient battery capacity of the mobile phone will cause consumers to travel or work outside often because of insufficient mobile phone power. As a result, work is delayed, and the work safety rate and performance are reduced. Therefore, the above two aspects, will affect consumers' willingness to buy and prevent consumers from buying. The screen brightness problem has PU, which will lead to work errors caused by consumers who work outdoors and cannot see the screen clearly, so they do not choose this Samsung folding screen, thus affecting consumers' willingness to buy. The problem of more screen failures has PEOU and PU. Because of the influence of maintenance, consumers' work performance is reduced, and frequent maintenance is not conducive to consumers' use, thus affecting PI from these two aspects.

3.3.3 Opportunity

The opportunity for Samsung is that the proportion of switching users is getting higher and higher, and consumers' mobile phone consumption is becoming more and more rational, leading consumers to pay more attention to product quality and functions, and Samsung's key research and development, as well as the new folding screen, can open new opportunities and attracting a new group of consumers. Moreover, the folding screen mobile phone has entered the first year of mass production. Then, mobile phone manufacturers such as Xiaomi, OPPO, and Honor continued to enter the market, and the global folding screen mobile phone market entered a stage of scale growth. The growing market for foldable phones is expected to boost the overall smartphone market.

However, with the ever-changing smartphone market, the latest trends can become obsolete in an instant. By leading the way with great creative products like foldable phones, Samsung could achieve massive economic development. This product is suitable for the target customer group and can be

used to ensure the best customer retention rate. As the world shifts to 5G, Samsung has the ability and skills to capitalize on this opportunity by launching new 5G devices and leading new mobile phone market trends. Samsung is already in active business talks with EU operators about the use of new 5G technology, which will be combined with Samsung's folding screen technology, to launch new products. When consumers need a portable large-screen mobile phone or tablet, the folding skin and bones can satisfy the customer's Perceived ease of use, thus affecting the PI, so that customers will pay more attention to folding screen products and innovations, to purchase folding screen mobile phones. For consumers who want to improve work efficiency, Samsung's folding screen can simultaneously meet customers' writing requirements and have better vision and editing capabilities than other mobile phones when editing other documents. At the same time, Samsung also pays more attention to customer proposals and designs mobile phones. The structure meets the specific needs of users, changes the writing template and different modes of mobile phone use according to the requirements of consumers, improves work efficiency, positively affects PU, improves the work efficiency of customers, and makes customers pay more attention to Samsung folding screen products. The higher the perceived ease of use, the more positive the attitude toward use. It will be applied to PI.

3.3.4 Threats

The apparent crease of Samsung's foldable screen caused a lot of problems, and it still hasn't improved after the problem. Samsung's rivals are eliminating hinge clearance. The hinge has been a major pain point for Samsung. It must be durable enough for everyday use, yet slim enough not to be too big or thick. Because of this, there is always a gap between the two halves of the folded panel. It's designed to let dust and fine particles roll from side to side without damaging the display, but Samsung's top domestic rivals are closing that gap entirely. Xiaomi mix fold2 is better than Samsung at this point.

Consider Oppo's Find N. Its broad, solid form replaces Samsung's tall, narrow appearance. The external monitor appears to be a stand-alone gadget, rather than a supplement to the large screen buried inside. It even adopts the Find X5 Pro's elegant, roomy appearance. During usage, the Find N folds practically flat, with scarcely a noticeable crease. The Mix Fold 2, Xiaomi's succeeding foldable, was introduced in China a day after Samsung's debut. The Mix Fold 2 is planned to feature an exterior display large enough to stand on its own, like Oppo's products. Xiaomi has managed to make the folding phone slimmer than the Galaxy Z Fold 4. The screen folding gap of the folding screen, it will affect the consumer's PEOU, which will reduce the consumer's PI. Frequent damage to the folding screen will affect the user's work efficiency. The PU is negatively affected, thereby affecting the PI.

4. Results & Discussion

4.1 Results

Samsung's folding screen mobile phone is very portable and can be folded at will is easy to carry and has good heat dissipation, which will not overheat the screen. And Samsung will formulate the internal layout of the mobile phone according to the individual requirements of customers, which is convenient for consumers to use and portable. However, the battery life of Samsung's folding screen is insufficient, resulting in the heavy weight of Samsung's folding screen mobile phone, which is not friendly to female consumers, and Samsung has not completely solved the problem of folding screen creases, making the mobile phone screen uneven, and Samsung's folding screen on the screen protector. Mobile phone users should also pay attention to the fact that the folding screen is more prone to defects after being bumped.

4.2 Discussion

According to the above analysis, consumers will consider the maintenance time caused by whether the folding screen is easily damaged, whether the use of Samsung folding screen mobile phones will

facilitate their office, life, and other aspects of use, and then consider whether to buy Samsung folding screen, it can be seen from this point that PEOU will affect consumers' purchase intention. When many consumers saw the evaluation of Samsung's folding screen on the Internet, because of its folding marks and other consumers' feedback after buying it, they chose not to buy Samsung's curved screen after the maintenance and weight of Samsung's folding screen. screen, it can be seen that PEOU affects consumers' purchase intention.

Samsung can design the user layout according to the characteristics of customers, so that users can use it more conveniently, thereby improving work efficiency and improving work performance. It can be seen from this that PU affects consumers' purchase intentions.

According to the above SWOT analysis, in the case of the highly saturated mobile phone market in recent years, innovative new mobile phone folding screens need to change the folding screen crease problem, and then innovate to find new materials, looking for hinged folding screens that are different from competitors. , Using relatively soft large-screen LED screen materials, and increasing the material hardness to a certain extent, can enable Samsung to seize opportunities in the mobile phone market to earn greater profits.

The weight of the Samsung folding screen mobile phone is too large because Samsung folding screen mobile phone uses a large LED screen, so in terms of power, compared with ordinary mobile phone batteries, if you want to have the same screen usage time, you need to add a larger capacity battery, so Samsung can upgrade and improve the battery capacity, using the same mobile phone board size to upgrade the battery capacity, which can make the phone lighter, more portable and more convenient for more users to use.

However, given the constantly evolving smartphone industry, the current trends might quickly become outmoded. Samsung can accomplish tremendous economic development by leading the way with excellent innovative items like foldable phones. This product is appropriate for the target client group and may be utilized to maximize customer retention. As the globe moves to 5G, Samsung has the expertise and capabilities to capitalize on this opportunity by introducing new 5G products and setting new market trends inside the mobile phone industry. Samsung is already in commercial discussions with EU carriers about using the new 5G tech, which will be paired with Samsung's folding screen technology to offer new goods.

Samsung can also avoid visual obstruction in the use of folding-screen mobile phones. After the folding screen is unfolded, one cannot ignore the hinge area, which may cause an unclear display due to problems such as crease reflections. on the left or right side of the screen. The same is true for the display position of Toast.

5. Conclusion

This article conducts research in the context of the saturation of the modern mobile phone market and the rise of folding screen phones. Research on the perceived usefulness and perceived ease of use for consumers of Samsung's folding screen in terms of the advantages and disadvantages of mobile phones. This paper explores the impact of perceived usefulness and perceived ease of use on consumers' purchase of Samsung folding screens. Research shows that perceived usefulness and perceived ease of use are important factors driving Samsung's folding screen consumers to actively purchase folding screen products. Organized through articles on the impact of perceived usefulness and perceived ease of use on consumer purchases. Using SWOT, the Samsung folding screen is used to analyze the influence of the advantages and disadvantages of the folding screen on consumers' purchase intention, as well as the opportunities and threats of the folding screen. It is concluded that perceived usefulness and perceived ease of use have an impact on consumers' willingness to buy folding-screen mobile phones. In terms of portability, innovation, waterproofness, and flexibility Samsung's folding screen have a positive impact on consumers' purchase intention, and it harms consumers' purchase intention in terms of screen brightness, screens easily damaged, and small battery capacity.

The information obtained from this study will help consumers make prudent decisions when purchasing Samsung foldable phones. In addition, it will help consumers understand the environment of the folding screen mobile phone market and the current maturity of folding screen development technology, as well as consumers' views and considerations on factors affecting their purchase intentions when purchasing Samsung folding screen mobile phones. In addition, it can help Samsung develop a marketing strategy to attract more consumers to buy. And it can enable Samsung to produce the expected results and profits for consumers to buy folding screen products.

Given that only two variables, perceived usefulness, and perceived ease of use, are presented, additional research should examine other factors that influence purchasing decisions via mobiles, such as product technology and subjective norms. And did not pass the research survey for a large number of research users, because of the time problem, which led to this aspect, should additionally study the experience of a large number of users to conclude. In addition, considering the saturation of the entire mobile phone market, since there is no analysis of the new technologies studied by other high-tech mobile phone companies such as iPhone and their dominance in the mobile phone market, follow-up research should focus on these two. A detailed analysis is carried out to draw some relevant conclusions.

Researchers in the same industry can revise and extend the author's influence on the influence of PEOU and PU on consumers' willingness to purchase Samsung folding screens, conduct a lot of analysis on user experience surveys and the Internet's evaluation of Samsung folding screens, and iPhone's. The dominance of the mobile phone market is analyzed, how will it affect the development of Samsung's folding screen and the impact of the development of other folding-screen mobile phones on Samsung's folding-screen mobile phones.

References

- [1] Terry, Braden "Beginning of the New Smartphone Era," Marriott Student Review: 2019, Vol. 3: Iss. 1,
- [2] Soonkyu Jang. User Experience Research on Utilization of the Folding Screen on a Foldable Phone for Privacy Protection. Visual Communication Design. 2021.
- [3] Proceedings of the 2021 International Conference on Public Relations and Social Sciences (ICPRSS 2021).
- [4] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," 1989 (de Boer 2003), vol. 13, pp. 319 - 340.
- [5] R. L. Schultz, D.P. Slevin. Implementation and Organizational Validity: An Empirical Investigation: Institute for Research in the Behavioral, Economic, and Management Sciences.1973.
- [6] Nomsa Mndzebele International Journal of Computer and Communication Engineering, Vol. 2, No. 4, July 2013.
- [7] Bauer R. A. Consumer behavior as risk taking dynamic marketing for a changing world [M]. Chicago: AmeriGcanMarketingAssociation, 1960.
- [8] Cox D F, Rich S U. Perceived risk and consumer D. G. sion. making: the case of telephone shopping [J] Journal of Marketing Research, 1964.
- [9] Jarvenpaa S L, Todd P A. Consumer reaction electronic shopping on the world. Wide. Web [J]. InternaGtional Journal of Electronic Commerce, 1964.
- [10] Li Na, Zhang Ning, Luan Zhenzeng. Integrated research on the influencing factors of consumers' online shopping intention from multiple perspectives——Based on Meta and SEM analysis [J]. Business Economic Research, 2018 (21): 40 - 42.
- [11] Susanto A, Lestari P, Hidayatulloh S, et al. Factors affecting college students. Trust in online shopping transactions [C] 2019 7th the International Conference on Cyberand IT Service Management (CITSM), 2019.
- [12] P. Bradford, M. Porciello, N. Balkon and D. Backus, "The blackboard learning system: the be all and end all in educational instruction", Journal of Educational Technology Systems, 2017, vol. 35, pp. 301 - 314.
- [13] Y Su, J Liu, L Du - Pattern Recognition and Image Analysis, 2018.
- [14] Yafen Tseng et al., International Journal of Environmental Research and Public Health, 2022.

- [15] Jing Miao, Wang Fanghua, Zhou Ying. Research on the dynamic model of consumers' online purchasing behavior perceived risk[J]. *Industrial Engineering and Management*, 2005 (6): 28 - 32.
- [16] Wang Yanling, Zhang Guangsheng, Li Quanhai. E-commerce platform based on technology acceptance model Taiwan's adoption behavior and influencing factors [J]. *Enterprise Economics*, 2020 (3): 132 - 137.
- [17] Tian Zhenshi. Research on influencing factors of consumer online shopping based on TAM [J]. *Mountain Journal of East Business University*, 2015, 29 (1): 68 - 75.
- [18] Boxwood. A Study on Influencing Factors of College Students' Online Shopping Intention——Taking Shandong Province College students as an example [J]. *Economic Research Guide*, 2016 (14): 92 - 93.
- [19] Yuliharsi, K. D. Ku Amir, and I. M. Aminul, "Factors Affecting Customers' Purchase Intention to Shop Online," *International Journal of Marketing Research*, 2011, vol. 3, pp. 128 - 139.
- [20] L. Weng Marc and T. Ding Hooi, "Electronic Shopping: An Analysis of Technology Acceptance Models", *Modern Applied Science*, 2012, vol. 6, pp. 49 - 62.
- [21] R. Rohaizan and O. Z. Fatimah, "A study on factors influencing online shopping in Malaysia", presented at the 5th International Conference of the Asian Academy of Applied Business (AAAB), Phnom Penh: UTHM Institutional Repository, 2011.
- [22] Zhao Mingyue, Wu Zhengcheng. A Study on Influencing Factors of College Students' Mobile Online Shopping [J]. *Modern Marketing (Information Edition)*, 2019 (11): 202 - 204.
- [23] Jiang Liting. An Empirical Study of Consumers' Purchase Intention in the E-commerce Environment [J]. *E-commerce*, 2020 (4): 43 - 44, 47.
- [24] Liu Dan, Samsung folding screen mobile phone quietly launched [J]; *Computer and Network*; 2019 - 17.
- [25] Chen Xiaoping; Samsung's Strong Return [J]; *21st Century Business Review*; 2019 - 05.
- [26] Jia Jinghua, Samsung "folded" on the other side of technology, business and innovation, "Computer Application Digest" 2020 Issue 5, pp. 18 - 19.