

THE PERSPECTIVE OF MILLENIALS AND GENERATION Z USERS ON ONLINE INVESTMENT PLATFORMS USING PERSONA APPROACH AND USER JOURNEY

Syafira Nurilhaq Maulidya, Faried Effendy, Eto Wuryanto

Universitas Airlangga, Indonesia

*e-mail: syafira.nurilhaq.maulidya-2018@fst.unair.ac.id, faried-e@fst.unair.ac.id,
eto-w@fst.unair.ac.id

Keywords

*UX Research, User Persona, User
Journey, Affinity Diagram, Online
Investment*

ABSTRACT

Millennials and Generation Z, especially those under 30, show strong interest in digital investment but often feel uncertain due to a lack of knowledge and confidence. This study aims to explore their perspective on online investment platforms by focusing on their motivations, goals, obstacles, and needs. The research begins with Desk Research and User Interviews, which are analyzed using Affinity Diagrams to understand these key areas. Based on the findings, a User Persona is created to represent typical users, offering insights into their behaviors and preferences. Additionally, a User Journey is mapped to illustrate users' activities before and after gaining investment experience. The study identifies the 'Ardian' Persona, a Millennial who is motivated by the desire to learn, save, and generate additional income. Ardian values safe and user-friendly investment platforms that meet his needs while avoiding potential obstacles. The User Journey reveals that before gaining investment experience, users focus on preparation and self-education, while after gaining experience, they shift their focus to managing investments to achieve their financial goals. This research contributes to UX by providing two key documents: the User Persona and the User Journey. These offer a detailed view of user motivations, challenges, and needs, which can guide the design and improvement of online investment platforms to better serve Millennials and Generation Z users.

INTRODUCTION

The times will always occur in human life, in this case, digital transformation. In the financial industry, especially in the capital market industry, digital technology has also brought shifts in business models and behavior. Investment trends in Indonesia itself have increased from year to year during the 2017-2021 period with an average of 6.9% per year (Dihni, 2022). Based on a survey conducted by DailySocial and Populix, 100% of 209 respondents answered that they had used online platforms or applications to make investments, with a total of 194 people being Millennial and Generation Z respondents, especially those under the age of 30 (Nabila, 2020). In line with that, the results of the JAKPAT survey in 2022 involved 934 Millennial Generation respondents and 636 Generation Z respondents out of a total of 1854 respondents with 55% of the total respondents being vulnerable people aged 15-29 years (JAKPAT Survey Report, 2022). This simply shows that digital investment is quite attractive to young people under the age of 30 or Millennials and Generation Z. They are considered to be increasingly aware of the importance of investing early.

Despite their enthusiasm, they consistently expressed concern about their lack of knowledge and confidence about investing. They are very interested and positive about investing, but lacking in experience and knowledge (Case, 2021). This inspires the author to find out how Millennial and Z Generation users perceive the use of online investment platforms and what kind of users are identified.

User perspective means the user's point of view or how the user responds to a product. The user perspective is the focus of one of the strategies in designing a product called User Experience (Bate & Robert, 2022; Buley et al., 2024; Krueger et al., 2020; Unger & Chandler, 2023; Vila et al., 2021). In this study, the user's perspective or point of view is seen, namely the user's motivation and goals for using the online investment platform, the user experience when using the platform—whether the platform is running according to its purpose and can be used properly by users. Data from the Financial Services Authority (OJK) shows that there are at least 77 online transaction portals provided by dozens of good financial industry players e-commerce, banks, or securities (Maesaroh, 2022). From a survey by KIC and Stockbit in collaboration with Zigi.id, it was found that the Online Platform or Application (79.6%) is the most preferred platform for Millennial Generation and Generation Z investors.

The 2022 Investment Trends Survey conducted by JAKPAT provides insight that Mutual Funds are the second most popular investment product after Gold and Jewelry where 34% of 2333 respondents choose this investment product. Among the many online investment platforms that provide mutual fund products, Seeds occupy the first position (66%) as the most popular mutual fund investment application, followed sequentially by Ajaib (43%), Pluang (22%), Bareksa (22%), and OVO (20. %). In choosing an online investment platform, several things are considered by users. The majority of respondents answered that the platform had been officially registered with the OJK. Of course, these platforms need to compete by paying attention to aspects that will be considered by users who are investors in choosing an online investment platform. For this reason, it is necessary to have an in-depth understanding of users by defining a user by representing the user as an individual persona. This research refers to the article by Hidayatullah & Kusuma (2021). The approaching *person* which is applied to this research is expected to help identify the characteristics of users of online investment platforms.

After identifying who are the users of the online investment platform, User Journey takes on the role of identifying the activities experienced by users when using a service or product. User Journey can describe the problems and objectives of the project design, all activities to be carried out, and all the persons involved (Endmann & Kebner, 2016). In the research by Aziza (2021), User Journey helps see the problems that exist in users in detail and prioritize features that must be in the personal financial assistant application.

The authors would like to identify the persona and User Journey of Millennials and Generation Z users and their perspectives on online investment platforms. The research contribution of this study lies in providing valuable insights into the persona and User Journey of Millennials and Generation Z users in the context of online investment platforms. By identifying these users' preferences, behaviors, and decision-making processes, the study contributes to a better understanding of how younger generations engage with digital financial services. This knowledge can help investment platform developers improve user experience, tailor marketing strategies, and design more user-friendly interfaces, ultimately increasing platform accessibility and adoption among these key demographic groups.

METHODS

This study looks for the user's perspective including the user's motivation and goals, the obstacles experienced by the user, and the user's needs by implementing the stages namely; Desk Research, User Interview, Affinity Diagram, Persona Creation, and Drafting User Journey.

Desk Research

At this stage, the researcher conducts a literature study by collecting and analyzing information regarding motivation and goals, needs, and obstacles or problems faced by users of online investment platforms available on public platforms such as internet forms, newspaper articles, magazines, market intelligence, government reports, databases, statistics, and data sets.

User Interview

User interviewing is a common user research technique that is usually used to obtain qualitative information from either existing or potential users (Mears, 2013). At this stage, interviews with related users are carried out with the aim of finding out the perspectives and behavior of users regarding the use of online investment platforms. Prior to the interview, the list of questions for user interviews was first validated by two validators consisting of a UX expert and an expert in online investing. This research

will be conducted by taking 15 participants to be interviewed. This activity is carried out online using a conference call platform or offline face to face.

Affinity Diagram

Making an affinity diagram is an activity of grouping the data obtained into groups of similar items. Making an affinity diagram according to (Van Der Molen et al., 2017) has two main steps. Data obtained from the process desk research and user interview will be written in sticky notes. Each sticky note will contain data according to the categories specified in Table 1. Each identified point will be grouped based on similar data into small branches where these branches will form one large branch. It is this large branch that will be the representative result of the group. Each category can have more than one group depending on the context obtained when conducting interviews. These groups will be the basis of the characteristics of a persona.

Table 1. Categories of Grouping Data from Research Desk Results and User Interviews

Category	Information
Goals	The persona's motivations and goals for using the product or service
Needs	What the persona needs to achieve the goal
Actions	What did the persona do to achieve that goal.
Pain Points	Barriers and problems experienced by personas related to products or services

Persona Creation

Adapting from Cooper et al. (2007), this stage was divided into three phases that need to be carried out to make a person. The first phase carried out the description of the characteristics of the respondents for the relevant purposes. The second phase is the description of the characteristics person in the form of a short narrative with a third-person point of view. At this stage, a persona will be created that contains information data obtained from the results affinity diagram which has been made.

User Journey Creation

The preparation of the user journey is done by writing the stages that the user goes through horizontally with the phases before and after investing. Meanwhile, vertically it will contain indicators of Goals, Actions, Pain Points, and Opportunities. So that in the stages that the user goes through, the goals, actions, and troubles experienced by the user will be seen, as well as gaps for improvement that can be made. The Goals, Actions, and Pain Points indicators are obtained from the results of the affinity diagrams that have been made. As for the Opportunities indicator, it is obtained from the results of the mapping of the three previous indicators (Goals, Actions, and Pain Points) as well as the results of the affinity diagram in the Needs category.

RESULTS

Desk Research

The Desk Research stage is carried out by reading and studying literature, books, journals, and articles related to this research. In addition, looking for data and information related to user motivations and goals, user needs, and obstacles faced by users to online investment platforms, to gain additional insights into the research conducted.

Table 2. Results of Desk Research

Topic	Findings	Data Source
Motivation and Goals	a. Set up an emergency fund.	JAKPAT Investment Trend Survey 2022; KIC Investment Behavior Survey 2021; Populix Insight and Future Trends of Investment in Indonesia 2022 Survey.
	b. Additional income.	
	c. Pension funds.	
	d. Children's education funds.	
	e. Managing cold money.	
	f. Want to make short-term profits.	
	g. Other financial goals.	

Necessity	<ul style="list-style-type: none"> a. An investment that is easy to disburse. b. Feel safe in doing so. c. Products and platforms that are registered and supervised by the OJK. d. Easy-to-use platform. e. Low-risk investment products. f. The investment capital required is relatively low. g. The process is not complicated. h. The payment methods provided are easy. i. An application that has all the solutions to the user's needs (one stop solution app). 	<p>JAKPAT Investment Trend Survey 2022; KIC Investment Behavior Survey 2021; Populix Insight and Future Trends of Investment in Indonesia 2022 Survey.</p>
Action	<ul style="list-style-type: none"> a. Find the most detailed information about the information needed. b. Consider all risks before investing. c. Consider your own financial condition before investing. d. Seeing the amount of profit that will be obtained. 	<p>Survei KIC Perilaku Investasi 2021; Survei Populix Insight and Future Trends of Investment in Indonesia 2022.</p>
Obstacles	<ul style="list-style-type: none"> a. Unstable internet connection. b. It takes time to understand how online investing works. c. Distinguish between legal and illegal investments. d. Confused about choosing the right application according to your needs. e. The registration/registration process requires a lot of data and time. 	<p>Multi-Asset Application Survey on Retail Investor Growth by CELIOS and PLUANG.</p>

User Interviews

The user interview stage was conducted with 15 users of the mutual fund online investment platform who have experience using the online mutual fund investment platform for 1-4 years and have used more than 1 platform. Interviews were conducted online using conference call media and offline face-to-face according to the availability of each respondent. Table 3 displays the results of the findings of information obtained from respondents in each category.

Table 3. Results of Information Findings Based on User Interviews

Category	Findings
Goals	<ul style="list-style-type: none"> 1) Want to learn new things. 2) Want to learn about investing. 3) Curious so want to learn. 4) Increase knowledge about investment. 5) Seek knowledge and experience. 6) Want to try. 7) Want to be more literate about financial management. 8) Want to have savings. 9) Want to separate the funds you have for savings. 10) Saving while getting profit. 11) Save money so that it is not easily taken.

-
- 12) Preparation of pension funds.
 - 13) Well-being in the future.
 - 14) Invest in old age.
 - 15) Prepare costs for the long term.
 - 16) Save for the long term at a leisurely pace.
 - 17) Have a target to achieve.
 - 18) Save to buy something.
 - 19) Prepare an emergency fund.
 - 20) Want money to grow.
 - 21) Get the maximum profit.
 - 22) Want to have passive income.
 - 23) Additional income.
-

Needs

- 1) Knowledge of investment.
 - 2) Knowledge of investment trends.
 - 3) Investment platform information.
 - 4) Knowledge of investment products according to risk level.
 - 5) Product information that fits the purpose.
 - 6) Get reliable information and not the fruit of FOMO from social media.
 - 7) Company information.
 - 8) Understanding of investment procedures.
 - 9) Knowledge of the right product for short term and long term goals.
 - 10) Get tips and tricks from fellow investors.
 - 11) Credible application.
 - 12) Application under OJK supervision.
 - 13) Convenient and safe application.
 - 14) Applications that have clear security, and have digital prospects in the future.
 - 15) Trust in online investment.
 - 16) Low risk product.
 - 17) Stable product returns.
 - 18) Maximum profit.
 - 19) Time efficient product.
 - 20) Practical investment made.
 - 21) No need to monitor every day.
 - 22) Withdrawing funds is fast and uncomplicated.
 - 23) Investments that are easy to make, understand, and time efficient.
 - 24) Instant disbursement application.
 - 25) Media saves money which is free of admin fees.
 - 26) Affordable investment.
 - 27) Applications that can help predict and design investment plans.
 - 28) An application that has all the solutions for user needs (one stop solution app).
 - 29) Application that provides investment recommendations according to risk profile.
 - 30) Investment product recommendations that suit users.
 - 31) Can compare products before investment.
 - 32) User friendly application.
 - 33) An application that provides features that make it easy to make investments.
-

Actions

- 1) Learn through YouTube, social media, and the internet.
 - 2) Find out and ask people who are more expert.
 - 3) Participate in webinars on investing.
 - 4) Read online books about finance.
 - 5) Look for definitions of difficult terms on the internet.
 - 6) Learn the operation of the application by looking at youtube and the internet.
 - 7) Read application guide and view youtube tutorials.
 - 8) Sharing with fellow investors to expand connections.
 - 9) Looking for information about investment management.
 - 10) Learn while investing with small capital.
-

- 11) Self-taught development.
 - 12) Choose an investment platform and product.
 - 13) Choose a suitable investment product according to your goals.
 - 14) Research suitable investment products.
 - 15) Look for investment products according to the funds you have.
 - 16) Invest according to the risk profile.
 - 17) Create several portfolios that fit your goals (short and long term).
 - 18) Compare the applications that will be used.
 - 19) Setting targets and creating strategies.
 - 20) Define specific goals.
 - 21) Consider the risks before investing in a particular company.
 - 22) See the annual return from the company's annual report.
 - 23) Issuer research that does not give a loss.
 - 24) Choose issuers whose profit value is high.
 - 25) Analyze the percentage of profits obtained.
 - 26) Monitor returns and movements of invested capital
 - 27) Consistent investment on a regular basis.
 - 28) Installing an auto-debit feature so that investment routines are automatic.
 - 29) Increase the capital to be invested.
 - 30) Selling portfolios when in need of emergency funds.
 - 31) Disburse money when the desired target has been reached.
-

Pain Points

- 1) Confusion of information sources.
 - 2) It's hard to understand the basics of online investing.
 - 3) Difficulty getting information based on facts.
 - 4) Confused about choosing the right investment management and product..
 - 5) Difficulty doing self-taught.
 - 6) Difficulty learning new terms.
 - 7) Tempted by the plunge investment trend.
 - 8) Concern for security.
 - 9) Feel free to invest.
 - 10) Lack of information regarding the details of the existence of capital.
 - 11) Not ready to face losses.
 - 12) Unexpected loss experienced.
 - 13) Difficulty choosing the right issuer.
 - 14) Difficulty analyzing issuers.
 - 15) Difficulties in operating investment applications.
 - 16) The interface is not comfortable to look at.
 - 17) Layered security but it becomes inconvenient because you need to enter the password many times.
 - 18) CS is not quick to respond.
 - 19) The application cannot analyze the rise and fall of profits.
 - 20) Less information that the app provides.
 - 21) Issuer options are limited.
 - 22) Mutual fund investment profits are not how big.
 - 23) Lack of enthusiasm when investing because the returns you get are small.
 - 24) Disbursement is not instant.
 - 25) The process of disbursing funds is quite long.
 - 26) Old account verification.
 - 27) Not routinely paying attention to the issuer's ups and downs chart.
 - 28) Less consistent and not routine.
 - 29) Less diligent in managing the portfolio.
 - 30) Platform maintenance.
 - 31) Technical error when using the application.
 - 32) Slow application loading.
 - 33) Feeling that the funds that need to be prepared are not enough.
 - 34) Difficulty dividing money to invest.
-

Affinity Diagram

Data grouping activities using the Affinity Diagram technique aim to obtain conclusions from the researches that have been carried out. Affinity Diagram is made to compile and group the results of the Desk Research stage and the User Interview stage to determine the information needed according to categories, namely Goals, Needs, Actions, and Pain Points. Table 4 is the result of the Affinity Diagram that has been created.

Table 4. Affinity Diagram Results for Each Category

Category	Affinity Diagram Results
Goals	<ul style="list-style-type: none"> • Want to learn about investment and finance. • Prepare investment savings for the goals you want to obtain.
Needs	<ul style="list-style-type: none"> • Understanding, knowledge, and information regarding investment matters. • A safe and credible application. • Low risk investment. • Economical investment in terms of time and cost. • Applications that are easy to use and meet user needs.
Actions	<ul style="list-style-type: none"> • Studying and seeking knowledge and information through various media. • Planning investment activities. • Manage investments regularly. • Make withdrawals or disbursements of investments that have.
Pain Points	<ul style="list-style-type: none"> • Difficulty learning about investments and getting reliable information. • Concern about security and risks that may be experienced. • Difficulties in choosing the right issuer. • Applications that are difficult to use and don't meet your needs. • Lack of consistency in making and managing investments. • Technical constraints.

Persona

Personas function to provide fictional characters that represent real users. In creating a persona, the information needed is general information consisting of name, age, gender, image or photography and a brief narrative about persona investment behavior. General information data is obtained from the results of the respondent's profile at the User Interview stage, except for names and pictures/photographs that will be made fictional. According to [12], writing personas may involve descriptions or fictional elements outside of the data collected. Then Goals, Needs, and Pain Points information for Goals, Needs, and Pain Points information is obtained from the results of the Affinity Diagram.

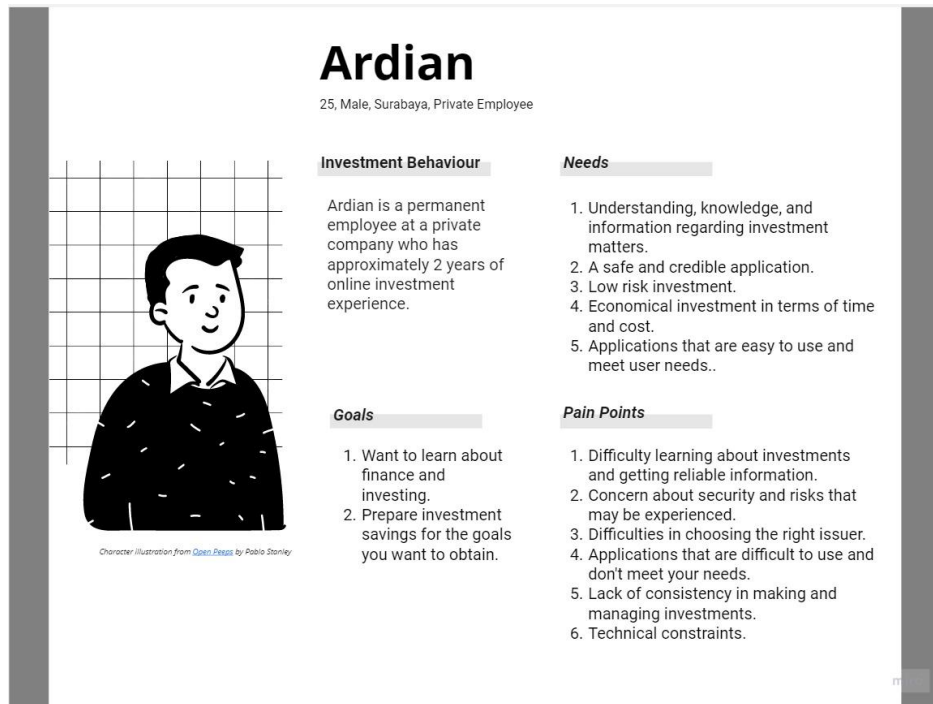


Figure 1. Millennial Generation User Persona and Z Online Investment Platform.

User Journey

Based on the results of the Affinity Diagram analysis that has been made, it can be mapped out the goals, activities, and obstacles experienced by users starting from the stage before having investment experience and ending with the stage after having investment experience. These two stages are horizontal indicators on the mapping of the User Journey as User Journey Phases. Then the Goals, Actions, and Pain Points categories are included as vertical indicators in the User Journey mapping. Followed by the Opportunities indicator obtained from the results of information analysis from the results of the Affinity Diagram in the Goals, Needs, Actions, and Pain Points categories. The User Journey mapping in figure 2 describes the user experience of the Millennial and Z Generation Online Investment Platforms around goals, needs, activities, and obstacles before having investment experience and after having investment experience.

Phase of Journey	Before having investment experience	After having investment experience
Goals What are the goals and motivations of the users?	Want to learn about finance and investing	Prepare investment savings for the goals you want to obtain Want to have additional income
Actions What do users do?	Studying, seeking knowledge and information through various media Planning investment activities	Manage investments on a regular basis Make withdrawals or liquidation of investments that are owned
Pain Points What are the troubles or obstacles experienced by users?	Difficulty Learning about investing and getting reliable information Concern about security and risks that may be experienced Difficulty in choosing the right issuer	Applications that are difficult to use and do not meet the needs Less consistent in making and managing investments Technical constraints
Opportunities What can be provided to help users?	Provides articles on everything that can help investment activities Provide investment plan recommendations Helps in comparing products and issuers Provide security assurance information from formal institutions	Provides milestone information for the goal to be obtained Provide information on the development of capital owned Simplify the process of disbursing funds Provides regular reminder alarms to invest Periodic system maintenance

Figure 2. User Journey, Millennial Generation Users, and Z Online Investment Platform.

CONCLUSION

The study reveals that users' motivations for using Online Investment Platforms are to learn about investment and finance, and to prepare investment savings for their goals. However, they face challenges such as learning about investments, security concerns, choosing the right issuer, difficult applications, lack of consistency in investment management, and technical constraints. Users expect a safe, credible application, low-risk investments, and efficient time and cost management. Persona Ardian, a profile of Millennial and Z generation users, provides a User Journey that outlines activities before and after an investment experience, as well as gaps in opportunities. The study focuses on mutual funds as the most popular type of investment in digital investment. Further research could expand the scope to other types of investments. The findings are expected to provide valuable insights into user experience on Online Investment Platforms for millennials and Z generations.

REFERENCES

- Aziza, R. F. A. (2021). Analisis Kebutuhan Pengguna Aplikasi Menggunakan User Persona Dan User Journey. *Information System Journal*, 3(2), 6–10. <https://doi.org/10.24076/infosjournal.2020v3i2.420>
- Bate, P., & Robert, G. (2022). *Bringing User Experience to Healthcare Improvement*. CRC Press. <https://doi.org/10.1201/9781846197086>
- Buley, L., Natoli, J., & Garrett, J. J. (2024). *The User Experience Team of One: A Research and Design Survival Guide*. Rosenfeld Media. <https://books.google.co.id/books?id=iXcMEQAAQBAJ>
- Case, J. (2021). *Millennials and Gen Z are a growing force in investing. The market needs to catch up*. <https://fortune.com/2021/11/18/millennials-genz-investing-markets-wealth-transfer/>
- Cooper, A., Reimann, R., & Cronin, D. (2007). About Face 3: The essentials of interaction design. In *Information Visualization* (Vol. 3, Issue 3).
- Dihni, V. A. (2022). *Realisasi Investasi Indonesia Naik Terus dalam 5 Tahun Terakhir*. <https://databoks.katadata.co.id/datapublish/2022/03/31/realisasi-investasi-indonesia-naik-terus-dalam-5-tahun-terakhir>
- Endmann, A., & Kebner, D. (2016). User Journey Mapping – A Method in User Experience Design. *I-Com*, 15(1), 105–110. <https://doi.org/10.1515/icom-2016-0010>
- Hidayatullah, A. R., & Kusuma, W. A. (2021). *PENGGUNAAN USER PERSONA UNTUK EVALUASI PENGALAMAN PENGGUNA LMS DAN MENGIDENTIFIKASI KEBUTUHAN PERANGKAT LUNAK*. 2(1996), 6.
- JAKPAT Survey Report. (2022). *2022 Investment Report*.
- Krueger, A. E., Pollmann, K., Fronemann, N., & Foucault, B. (2020). Guided user research methods for experience design—A new approach to focus groups and cultural probes. *Multimodal Technologies and Interaction*, 4(3). <https://doi.org/10.3390/mti4030043>
- Maesaroh. (2022). *Masa Depan Platform Investasi Digital di Tangan Para Milenial*. <https://katadata.co.id/maesaroh/indepth/620fac8e5e112/masa-depan-platform-investasi-digital-di-tangan-para-milenial>
- Mears, C. (2013). *User Interviews – The Beginner’s Guide*. <https://theuxreview.co.uk/user-interviews-the-beginners-guide/>
- Nabila, M. (2020). *Survei DailySocial dan Populix: Investasi Reksa Dana Terpopuler di Indonesia*. <https://dailysocial.id/post/survei-dailysocial-populix-investasi-reksa-dana-terpopuler-indonesia-2020>
- Unger, R., & Chandler, C. (2023). *A Project Guide to UX Design: For User Experience Designers in the Field or in the Making*. Pearson Education. <https://books.google.co.id/books?id=wsHWEEAAAQBAJ>
- Van Der Molen, P., Maas, A. H., Chen, W., Van Pul, C., Cottaar, E. J. E., Van Riel, N. A. W., Hilbers, P. A. J., & Haak, H. R. (2017). Identifying user preferences for a digital educational solution for young seniors with diabetes. *Diabetes Spectrum*, 30(3), 182–187. <https://doi.org/10.2337/ds16-0023>
- Vila, T. D., González, E. A., Vila, N. A., & Brea, J. A. F. (2021). Indicators of website features in the user experience of e-tourism search and metasearch engines. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(1). <https://doi.org/10.4067/S0718-18762021000100103>