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*Araştırma Makalesi*

# RANKING THE FACTORS AFFECTING THE CHOICE OF CROWDFUNDING WEB SITES WITH ANALYTIC HIERARCHY PROCESS

*Cem GÜRLER*[*]

***Abstract***

*Crowdfunding platforms determine different strategies to attract more backers and fundraiser. Although the product itself is a project in crowdfunding projects, it can be said that the platform is as important as the project. This study aims to rank the factors affecting the choice of crowdfunding web sites with analytic hierarchy process. For this purpose, four dimensions (tangibles, reliability, assurance, integration of communication) and ten criteria (usability, design, navigability, standardization, reputation, relevancy, authority, privacy, FAQ's and help, inclusion of special services) were included in the analysis. 11 people knowledgeable about crowdfunding were reached to ask pairwise comparisons. For this purpose, a survey was created. Surveys were sent and collected via email. The data used in the study were collected from three different groups: academics, backers, and a fundraiser. AHP results revealed that most important dimension was reliability. Moreover, according to the calculated general weights, the most important criterion is privacy, while the least important criterion is design.*

***Keywords:*** *Analytic Hierarchy Process, Crowdfunding, Reward-Based Crowdfunding, Crowdfunding Web Sites.*

# ANALİTİK HİYERARŞİ SÜRECİ İLE KİTLE FİNANSMANI WEB SİTELERİNİN SEÇİMİNİ ETKİLEYEN FAKTÖRLERİN SIRALANMASI

***Öz***

*Kitle fonlaması platformları, daha fazla destekçiyi ve bağış toplayıcıyı çekmek için farklı stratejiler belirlemektedir. Kitlesel fonlama projelerinde ürünün kendisi bir proje olsa da proje kadar platformun da önemli olduğu söylenebilir. Bu çalışma, kitle fonlaması web sitelerinin seçimini etkileyen faktörleri analitik hiyerarşi süreci ile sıralamayı*

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[*] Dr. Öğr. Üyesi, Yalova Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İşletme Bölümü, ORCID: 0000-0001-5127-6726, cem.gurler@yalova.edu.tr.

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*amaçlamaktadır. Bu amaçla, dört boyut (maddi varlıklar, güvenilirlik, güvence, iletişimin entegrasyonu) ve on kriter (kullanılabilirlik, tasarım, gezilebilirlik, standardizasyon, itibar, alaka düzeyi, yetki, gizlilik, SSS ve yardım, özel hizmetlerin dahil edilmesi) analize dahil edilmiştir. Kitle fonlaması konusunda bilgili 11 kişiye ulaşılarak ikili karşılaştırmalar yapılmıştır. Bu amaçla bir anket oluşturulmuştur. Anketler e-posta yoluyla gönderilmiş ve toplanmıştır. Çalışmada kullanılan veriler üç farklı gruptan toplanmıştır: akademisyenler, destekçiler ve bağış toplama. AHS sonuçları, en önemli boyutun güvenilirlik olduğunu ortaya koymuştur. Ayrıca hesaplanan genel ağırlıklara göre en önemli kriter gizlilik, en az önemli kriter ise tasarımdır.*

***Anahtar Kelimeler:*** *Analitik Hiyerarşi Süreci, Kitle Fonlaması, Ödül-Temelli Kitle Fonlaması, Kitle Fonlaması Web Siteleri.*

## INTRODUCTION

Internet has led to revolutionary innovations in many fields. With exponential expansion of Internet users and services offered, the Internet's importance in both business and private sectors has expanded significantly (Baloh & Trkman, 2003). Thus, crowdfunding emerged in this environment. Crowdfunding is an alternative financing method for fundraisers in need of funds. One of the first examples of crowdfunding that the fans of the rock band Marilion pre-order an album that has not yet been recorded so that the band can perform their concert tour in the USA in 1997 (Gamble et al., 2017). Crowdfunding is described as the method of raising finances for projects or businesses by posting an online call and raising money from the crowd (Carvajal et al., 2012). There are four different types of crowdfunding: donation-based, reward-based, debt-based, and equity-based. Basically, these types can be grouped under two headings as financial and non-financial. Backers' primary motivation in debt and stock-based funding is the financial benefit they will obtain. On the other hand, the main motivation is not to obtain financial returns in reward-based and debt-based. In the former, people give money for donation and do not expect any benefit, while they have expectations in the latter. Backers sometimes get a thank you on the project's official site, sometimes a product, and sometimes a t-shirt, in return for their donations. This turns backers into prosumers on reward-based crowdfunding (Belleflamme et al., 2015). Unlike financial crowdfunding backers, who face the risk that the firm will fail and their shares would be worthless, reward backers run the risk of their money being wasted if the product is never developed and delivered (Cumming et al., 2019). Fundraisers can use the crowdfunding site to find a group of backers who will pre-purchase the product. From the fundraiser's perspective, this lowers the chance of losses. As a result, crowdfunding can be used as a prediction of future demand and as a signal for future investment possibilities (Belleflamme et al., 2010; Belleflamme et al., 2015).

It is clear that these sites are divided into different categories, and the fundraiser will make the site preference according to the crowdfunding type.

However, no matter how much the fundraisers filter the websites, there will be still plenty of alternatives. In this respect, it is a very difficult process to decide which site to present the project to. On the other hand, crowdfunding platforms aim to attract more fundraisers and funders to their sites in an area where competition is intense. Even if the project is considered more important, the website that the project is presented is also very important for the backers. In the current study, it is aimed to rank the criteria that determine the quality of reward-based crowdfunding sites in order of importance. In this context, a total of 11 people were reached and asked to make a pairwise comparison. Then, using AHP, the importance levels of the criteria will be determined. In the following section, previous studies are examined, and the methodology used in the study is discussed in detail in the next section. In the fourth section, the findings of the study are reported and the results are interpreted. In the final section, the limitations of the study are indicated.

## THEORETICAL FRAMEWORK

Regardless of the site's mission or aims, attracting and retaining visitors becomes critical since the competitor is simply a link away. In this view, a "high-quality" web site is one that satisfies the needs of both the owner and the users (Mich et al., 2003). Users can be classified into two different groups in crowdfunding sites: fundraisers and backers. Although the purposes of use of these two groups are different, what they expect from a site can be quite similar. As a result, it is critical for service providers to determine the quality elements of crowdfunding platforms. It assists service providers in identifying and focusing on the most important component, hence improving the platform's effectiveness (Pitchay et al., 2019). Also, from a fundraiser perspective, it can be stated that the platform has had an impact on the success of the project.

There are many studies in the literature for the evaluation of websites and many different criteria were used in these studies (Kapoun, 1998; Dragulanescu, 2002; Moustakis et al., 2004; Bilsel et al., 2006; Palmer, 2002; Lee & Kozar, 2006; Grigoroudis et al., 2008; Markaki et al., 2010; Lin, 2010; Tsai, et al., 2010; Kaya & Kahraman, 2011; Büyüközkan & Çifçi, 2012; Chou & Cheng, 2012; Hsu et al., 2012; Ip et al., 2012; Shahin et al., 2014; Yeap et al., 2014; Nagpal et al., 2015; Büyüközkan & Güleryüz, 2016; Büyüközkan & Göçer, 2016; Ramanayaka et al., 2018; Benmoussa et al., 2019; Özkan et al., 2020; Sharma & Dubey, 2020; Alkahtani et al., 2021; Baki, 2020; Kropivšek et al., 2021). In the current study, the following were identified as dimensions affecting the use of crowdfunding sites: tangibles, reliability, assurance, and integration of communication.

The tangibles dimension includes criteria for describing a website's visual and physical characteristics. Having well-functioning, attractive Web sites is vital (Bilsel et al., 2006). Website design quality captures tangibles, which are primarily related to the appearance of the website (Zhou et al. 2009). The tangible

characteristics of service quality appear to be some of the most essential on the web (Tsikriktsis, 2002). Since users and service providers only have a visual relationship through the Website, this dimension is included in the analysis. This dimension consists of three different criteria: usability, design, navigability.

Reliability refers to capability to provide promised service in a dependable and correct manner (Singh & Prasher, 2019). Users must be able to find the appropriate solution on websites to maximize their experiences (Lin, 2010). Liu & Arnett (2000) reported that customer satisfaction is generated via trustworthy websites. Fundraisers share their projects, perhaps the most important value they have, with these platforms. They collect money through these platforms and aim to receive the money they collect when appropriate conditions arise. Backers, on the other hand, fund the projects and want to make sure that the money goes to the right place. In order to meet the expectations of both fundraisers and backers, the reliability of a website has a very important place. This dimension consists of three different criteria: standardization, reputation, relevancy.

Assurance refers to the instillation of trust in employees and the extent to which customers feel safe (Barnes & Vidgen, 2000). Assurance is one of the most important criteria in terms of web site quality (Chou & Cheng, 2012; Baki, 2020). Moreover, assurance could increase a web site's reputation (Baki, 2020). Websites with high assurance tend to attract more users. The site will be more qualified if customers feel comfortable and trust it (Büyüközkan & Çiftçi, 2012).

Integration of communication assesses the accessibility of traditional communication media's complementing functions in comparison to digital media (Bilsel et al., 2006). Number of frequently asked questions (FAQs), help, and inclusion of special services are the criteria of this dimension. It is very important for both user groups to be able to find answers to the questions they are looking for. Therefore, this dimension was included in the study.

Dimensions and criteria used in the analysis and descriptions of criteria can be found on the Table 1.

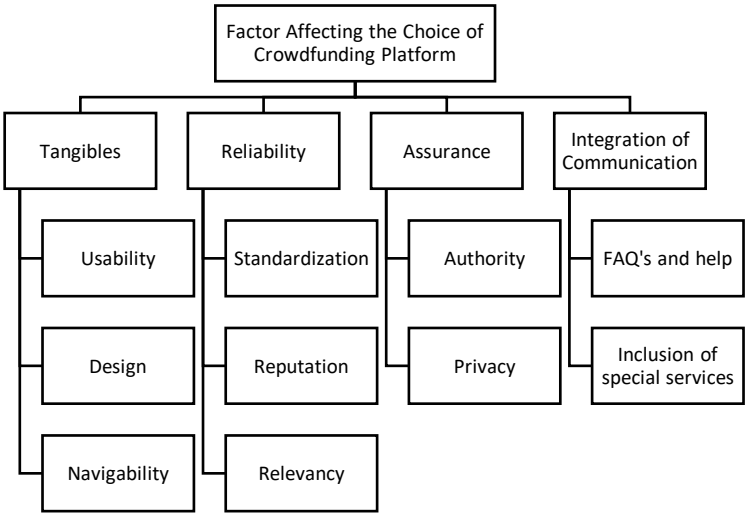
**Table 1:** Dimensions and Criteria Used in the Analysis and Definitions

| **Dimension** | **Criteria** | **Definition of criteria** |
|---|---|---|
| Tangibles | Usability (Grigoroudis et al., 2008; Markaki, et al., 2010; Kaya & Kahraman, 2011; Büyüközkan & Çifçi, 2012; Chou & Cheng, 2012; Shahin et al., 2014; Nagpal et al., 2015; Benmoussa et al., 2019; Kropivšek et al., 2021) | Ease of use of the website |
| | Design (Grigoroudis et al., 2008; Markaki et al., 2010; Lin, 2010; Büyüközkan & Çifçi, 2012) | Everything in terms of aesthetics of the site |
| | Navigability (Palmer, 2002; Lee & Kozar, 2006; Grigoroudis et al., 2008; Lin, 2010; Markaki et al., 2010; Chou & Cheng, 2012; | Ease of accessing the desired information by the user |

| | | |
|---|---|---|
| | Nagpal et al., 2015; Kropivšek et al., 2021) | |
| Reliability | St&ardization (Büyüközkan & Çifçi, 2012; Büyüközkan & Güleryüz, 2016) | Clarity of procedures and compliance with standards on the website |
| | Reputation (Lee & Kozar, 2006; Büyüközkan & Çifçi, 2012; Hsu et al., 2012; Büyüközkan & Güleryüz, 2016) | Recognition and awareness of the website |
| | Relevancy (Lee & Kozar, 2006; Grigoroudis et al., 2008; Lin, 2010; Markaki et al., 2010; Tsai, Chou & Lai, 2010; Yeap et al., 2014; Nagpal et al., 2015) | Ability to meet needs, broad and comprehensive knowledge |
| Assurance | Authority (Kapoun, 1998; Dragulanescu, 2002; Bilsel et al., 2006;) | Webmaster/maintainer with extensive knowledge |
| | Privacy (Lee & Kozar, 2006; Markaki et al., 2010; Kaya & Kahraman, 2011; Büyüközkan & Çifçi, 2012; Büyüközkan & Göçer, 2016; Baki, 2020) | A clear statement regarding the protection of users' privacy rights |
| Integration of communication | FAQ's & Help (Büyüközkan & Çifçi, 2012; Ip, Law & Lee, 2012; Kropivšek et al., 2021) | Availability of helps and number of FAQ's |
| | Inclusion of Special Services (Bilsel et al., 2006; Büyüközkan & Göçer, 2016; Baki, 2020) | Availability of special services (e.g., live help) |

In the current study, four dimensions are considered to rank the factors affecting the choice of crowdfunding web sites. These dimensions are as follows: tangibles, reliability, assurance and integration of communication. There are 20 criteria under these 4 dimensions. Figure 1 depicts the hierarchy of the model.

**Figure 1:** Hierarchy of the Model



## ANALYTIC HIERARCHY PROCESS

AHP provides objective mathematics to process an individual's or a group's inextricably subjective and personal preferences while reaching a choice. The AHP is used to create hierarchies or feedback networks that explain the structure of the decision environment (Saaty, 2001). Pairwise comparisons are used in the AHP technique to determine the relative relevance of elements at each level of the hierarchy. Then, at the lowest level of the hierarchy, AHP examines alternatives in order to select the optimal decision among various options. AHP allows decision-makers to convert subjective assessments into objective measurements. AHP has long been a preferred decision tool for researchers in a variety of domains due to its mathematical simplicity and flexibility (Sipahi & Timor, 2010). The steps of AHP can be summarized as follows (Saaty, 2008):

1. Define the problem and the type of information needed.

2. Structure the decision hierarchy from the top down, starting with the choice's goal, then the objectives from a wide perspective, and finally the lowest level.

3. Create a set of matrices for pairwise comparisons. Each element in a higher level is used to compare the components in the level directly below it.

4. Weigh the priorities at the level immediately below using the priorities acquired from the comparisons. Repeat for each element. Then sum the weighted values for each element on the level below to get the overall or global priority. Continue weighing and adding until the bottommost level's ultimate priorities are determined.

One need a numerical scale to perform comparisons that specifies how many times more important or dominating one element is over another one in relation to the criterion or feature being compared (Saaty, 2008). Table 1 shows the scale to be used in making the decisions. This scale's usefulness has been proven not just in numerous applications by a variety of people, but also through theoretical comparisons with a huge number of other scales (Saaty, 1990).

**Table 2:** The Fundamental Scale

| **Importance level** | **Definition** | **Explanation** |
|---|---|---|
| 1 | Equal importance | Two actions contribute equally to the goal |
| 3 | Moderate importance of one over another | One activity is favored over another by experience and judgment |
| 5 | Essential or strong importance | One activity is strongly favored over another by experience and judgment |
| 7 | Very strong importance | An activity is heavily encouraged, and its domination is evident in practice |

| | | |
|---|---|---|
| 9 | Extreme importance | The evidence that favors one action over another is of the highest quality |
| 2, 4, 6, 8 | Values in the middle of the two neighboring assessments. | When there is a necessity for compromise |

Source: Saaty, T. L. (1990). How to make a decision: the analytic hierarchy process. *European journal of operational research*, *48*(1), 9-26.

If a set of n attributes is to be compared pairwise based on their relative relevance weights, where $a_1$, $a_2$, …, $a_n$ represents the qualities and $w_1$, $w_2$, …, $w_n$ represents the weights the general structure of this matrix would be as follows (Tzeng & Huang, 2011):

$$A = \begin{bmatrix} a_{11} & \dots & a_{1j} & \dots & a_{1n} \\ \vdots & & \vdots & & \vdots \\ a_{i1} & \dots & a_{ij} & \dots & a_{in} \\ \vdots & & \vdots & & \vdots \\ a_{n1} & \dots & a_{nj} & \dots & a_{nn} \end{bmatrix}$$

Where $a_{ij} = {}^{1}/_{a_{ji}}$ and $a_{ij} = {}^{a_{ik}}/_{a_{jk}}$. It's worth noting that in most real-life scenarios, $w_i/w_j$ is unknown. As a result, the AHP's task is to identify $a_{ij}$ such that $a_{ij} \cong w_i/w_j$. Consider the following weight matrix (Tzeng & Huang, 2011):

$$W = \begin{array}{c} \\ w_1 \\ \vdots \\ w_i \\ \vdots \\ w_n \end{array} \begin{array}{c} \begin{array}{ccccc} w_1 & \cdots & w_j & \dots & w_n \end{array} \\ \begin{bmatrix} w_1/w_1 & \dots & w_1/w_j & \dots & w_1/w_n \\ \vdots & & \vdots & & \vdots \\ w_i/w_1 & \dots & w_i/w_j & \dots & w_i/w_n \\ \vdots & & \vdots & & \vdots \\ w_n/w_1 & \dots & w_n/w_j & \dots & w_n/w_n \end{bmatrix} \end{array}$$

When W is multiplied by w, the result is (Tzeng & Huang, 2011)

$$W = \begin{array}{c} \\ w_1 \\ \vdots \\ w_i \\ \vdots \\ w_n \end{array} \begin{array}{c} \begin{array}{ccccc} w_1 & \cdots & w_j & \dots & w_n \end{array} \\ \begin{bmatrix} w_1/w_1 & \dots & w_1/w_j & \dots & w_1/w_n \\ \vdots & & \vdots & & \vdots \\ w_i/w_1 & \dots & w_i/w_j & \dots & w_i/w_n \\ \vdots & & \vdots & & \vdots \\ w_n/w_1 & \dots & w_n/w_j & \dots & w_n/w_n \end{bmatrix} \end{array} \begin{bmatrix} w_1 \\ \vdots \\ w_j \\ \vdots \\ w_n \end{bmatrix} = n \begin{bmatrix} w_1 \\ \vdots \\ w_j \\ \vdots \\ w_n \end{bmatrix}$$

or

$$(W - nI)w = 0$$

The solution of this equation is an eigenvalue problem. So, the comparative weights can be calculated with the eigenvector $w$ found on the basis of $\lambda_{max}$satisfying the $Aw = \lambda_{max}w$ equation. Here $\lambda_{max}$ is the largest eigenvalue of

the matrix A. The eigenvector $w$ is obtained by the equation $(A - \lambda_{max} I) = 0$ with respect to$\lambda_{max}$ (Tzeng and Huang, 2011; Yıldırım and Önder, 2015).

A certain amount of matrix consistency is required for the evaluation (Franek & Kresta, 2014). For this purpose, the consistency index (CI) should be calculated as follows (Saaty, 1977):

$$CI = \frac{\lambda_{max} - n}{n - 1}$$

If the matrix is entirely consistent, then CI equals zero (Franek & Kresta, 2014). The greater the number of pairwise comparisons, the greater the likelihood of inconsistency. Therefore, Saaty (1980) suggested to calculate the consistency ratio (CR), using CI and random index (RI):

$$CI = \frac{CR}{RI}$$

**Table 3:** Random Consistency Index

| n | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| RI | 0 | 0 | 0.58 | 0.90 | 1.12 | 1.24 | 1.32 | 1.41 | 1.45 | 1.49 |

It's considered acceptable if the consistency ratio is less than 0.10 (Saaty, 1980). The RI values according to the matrices of different sizes are shown in Table 3. For a trustworthy outcome, the C.R. should be less than 0.10 as Saaty (1980) mentioned. Tzeng & Huang (2011) indicated that this value can go up to 0.20.

## RESEARCH FINDINGS, DISCUSSION AND CONCLUSION

A total of 11 people knowledgeable about crowdfunding were reached and asked to make a pairwise comparison (see Appendix). For this purpose, a survey was created. Surveys were sent and collected via email. The data used in the study were collected from three different groups: academics, backers, and a fundraiser. The fundraiser's project has been reached its goal. The average age of the participants in the study is 33, and the median is 31. Descriptive statistics of the participants can be seen in Table 4.

**Table 4:** Descriptive Statistics of the Participants

| | | Frequency | Percent |
|---|---|---|---|
| Group | Academic | 5 | %45.5 |
| | Backer | 5 | %45.5 |
| | Fundraiser | 1 | %9.0 |
| Gender | Female | 4 | %36.4 |
| | Male | 7 | %63.6 |
| Education level | Bachelor | 3 | %27.2 |

| | | | |
|---|---|---|---|
| | Master | 3 | %27.2 |
| | PhD | 5 | %45.5 |

A group can analyze weights using one of three approaches: consensus, vote or compromise, and geometric or arithmetic mean of individual judgements. The most popular method for groups to set priorities is the geometric mean (Melón et al. 2008). Because it preserves the reciprocal property in the combined pairwise comparison matrix, the geometric mean seems to be the only rule that is uniquely suitable for combining judgements in the AHP (Saaty, 1989). Therefore, to reach a common structure from the answers of the people participating in the research, a single pairwise comparison matrix was obtained by taking the geometric mean. The relative weights for all the dimensions and criteria and global weights for all criteria are shown in Table 5. While relative weight is determined for a single dimension/criterion, global weight is determined by multiplying the weight of the dimension by the weight of the relevant criteria.

**Table 5:** Relative Weights of Dimensions and Criteria

| **Dimensions / Criteria** | **Relative weights** | **Global Weight** | **Rank** |
|---|---|---|---|
| Tangibles (CR= 0.001) | 0.102 | | 3 |
| Usability | 0.584 | 0.060 | 6 |
| Design | 0.138 | 0.014 | 10 |
| Navigability | 0.278 | 0.028 | 9 |
| Reliability (CR= 0.06) | 0.445 | | 1 |
| Standardization | 0.156 | 0.069 | 4 |
| Reputation | 0.443 | 0.197 | 2 |
| Relevancy | 0.401 | 0.178 | 3 |
| Assurance | 0.361 | | 2 |
| Authority | 0.182 | 0.066 | 5 |
| Privacy | 0.818 | 0.295 | 1 |
| Integration of communication | 0.092 | | 4 |
| FAQ's and Help | 0.346 | 0.032 | 8 |
| Inclusion of Special Services | 0.555 | 0.051 | 7 |

The inconsistency ratios were examined after all matrices were obtained. All ratios were in the range of 0 to 0.06. Because these values were less than 0.10, all the matrices were found to be consistent.

According to the results, dimensions were ranked as reliability, assurance, tangibles and integration of communication, respectively. In other words, the most important dimension for users is reliability. Reliability is followed by assurance, tangibles and integration of communication, respectively. Fundraisers present their

projects to these platforms and expect platforms to ensure the security of their projects. They also want to receive the money collected at the end of the project period. On the other hand, backers hope to ensure payment security, ensure that the funds they provide reach the project owner and receive the award at the right time. Thus, it can be stated that the most important feature on a crowdfunding platform is reliability. Moreover, users care more about security than platform design.

When the criteria are ordered according to global weights, privacy is the most important criterion and design is the least important variable. After privacy, reputation, relevancy and standardization were ranked respectively and these criteria constitute the reliability dimension. Global weight results support relative weights results. Security (reliability and assurance) is much more important appearance of platform. Moreover, it can be concluded that integration of communication is important from tangibles. It is undeniable that the design of a platform is important. However, platforms should perhaps prioritize issues such as live help, help center, number of FAQs before design.

In the literature, studies on the characteristics of crowdfunding websites are quite limited. The majority of the studies focus on projects. In addition, the author could not find a study conducted on platforms in Turkey. From this point of view, the originality of the study can be shown by the fact that the study was conducted both in Turkey and on platforms.

## LIMITATIONS AND FUTURE RESEARCH

The most important limitation of the study is the dimensions/criteria used in the study. In future studies, the study can be developed using different criteria. In addition, in the current study, questionnaires were collected from academics, funders and fundraisers. By collecting separate questionnaires from backers and fundraisers, the differences between the expectations of these two groups can also be examined. Moreover, the current study is based on a small sample of experts, and they were all from Turkey. In the future studies, the number of experts can be increased and expert opinions from different countries can be included.

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## APPENDIX

The aim of this study is to determine the importance of the features of crowdfunding websites. Examples of crowdfunding sites are www.kickstarter.com, www.indiegogo.com, www.fonlagogo.com. Some indicators were determined in accordance with the purpose of the study.

This survey was created in order to determine how important the specified website features are. The importance of these performance indicators in team success will be determined by comparing the criteria in the questionnaire.

In the survey questions, it is requested to determine the importance levels of the criteria according to each other by comparing each criterion with each other. The scale showing the degree of importance ranges from 1 to 9. The values in the scale and their definitions are given in the table below. Please consider this scale when rating.

Please start answering the questions after reviewing the sample answers below.

| **Importance level** | **Definition** | **Explanation** |
|---|---|---|
| 1 | Equal importance | Two actions contribute equally to the goal |
| 3 | Moderate importance of one over another | One activity is favored over another by experience and judgment |
| 5 | Essential or strong importance | One activity is strongly favored over another by experience and judgment |
| 7 | Very strong importance | An activity is heavily encouraged, and its domination is evident in practice |
| 9 | Extreme importance | The evidence that favors one action over another is of the highest quality |
| 2, 4, 6, 8 | Values in the middle of the two neighboring assessments. | When there is a necessity for compromise |

Question: Which of the reliability indicators is more important than the other when considering crowdfunding websites?

Example answers:

1. Person thinks that criterion X is more important than criterion Y. In this case, the answer would be as follows.

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Criteria X | (9) | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Criteria Y |

2. Person thinks that criterion Y is moderately more important than criterion X. In this case, the answer would be as follows.

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Criteria X | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | (3) | 4 | 5 | 6 | 7 | 8 | 9 | Criteria Y |

3. Person thinks that criterion X and criterion Y are equally important. In this case, the answer would be as follows.

| Criteria X | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Criteria Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Which of the following indicators is more important than the other when considering crowdfunding websites?

Tangibles: Refers to the graphic design and ease of use of the website.

Reliability: It is the ability to convince the customer of the accuracy of the service offered by the website and the guarantee that the service will be delivered as promised.

Assurance: The comfort and confidence that customers feel when dealing with a website has revealed this criterion.

Integration of communication: It shows features such as the number of frequently asked questions (FAQ), live help.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tangibles | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Reliability |
| Tangibles | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Assurance |
| Tangibles | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Integration of Communication |
| Reliability | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Assurance |
| Reliability | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Integration of Communication |
| Assurance | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Integration of Communication |

Considering the **tangibles** of websites, which of the following indicators is more important than the other?

Usability: Ease of use of the website

Design: Aesthetics and graphic design of the site

Navigability: Ease of navigating the site means quick access to needed links

| Usability | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Design |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Usability | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Navigability |
| Design | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Navigability |

Which of the following indicators is more important than the other when considering the **reliability** of websites?

Standardization: Clarity of procedures on the website

Reputation: The reputation of the site

Relevance: Clear service delivery on the website and building trust in people

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Standardization | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Reputation |
| Standardization | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Relevance |
| Reputation | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Relevance |

Which of the following indicators is more important than the other when considering the **assurances** of websites?

Authority: Knowledgeable site administrator/provider

Privacy: Ensuring the security of the website and the confidential information of customers

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Authority | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Privacy |

Considering the **integration of communication** of websites, which of the following indicators is more important than the other?

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FAQ's and help | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Inclusion of special services |

Age:

Gender:

Education level: