Content Marketing Optimization: A/B Testing and Conjoint Analysis for Engagement Strategies in Jordan

Anber Abraheem Shlash Mohammad[1], Khaleel Ibrahim Al- Daoud[2], Suleiman Ibrahim Shelash Mohammad[3], Tariq Ali Samarah[4], Asokan Vasudevan[5], Minmin Li[6]

Abstract

This study will focus on three most important content marketing attributes: Headline Type, Message Tone, and Visual Design, revolving around user engagement metrics like Click-through Rate (CTR), Conversion Rate, and Bounce Rate. We then extracted data from digital marketing platforms in Jordan and performed a wide range of statistical techniques: ANOVA, conjoint analysis, and Chi-square tests to find the effect of these content features on user behaviour.Key observations indicate that headline types are informal, question-oriented, or statement-natured, these highly increase CTR and conversion but also amplify the chances of bounce rates. Similarly, message tones that are culturally fit or formal see an improvement in CTR and conversion but might lead to an increased rate in bounce rates. Similarly, visual designs.In fact, the study concludes that some of the content attributes actually serve to divert users' attention to increasing conversions while also growing the odds of users bouncing quicker, assuming the content does not meet the expectations created. That exigently underlines the need for a delicate balance between engaging content and value-driven substance. The findings provide direct actionable insights for the content marketers in order to help them optimize their strategies by aligning engaging elements with content that sustains long-term user interaction.

Keywords: *Content Marketing, Click-through Rate, Conversion Rate, Bounce Rate, Headline Type, Message Tone, Visual Design, User Engagement*

Introduction

With ever-evolving digital marketing, what captures and retains user attention is content marketing. This has become highly apparent with the absolute reliance of businesses to engage in digital outlets for reaching wider audiences. Recently, with the sudden rise in digital consumption, there's been a push by marketers to create ways that capture user interest and extend engagement into actionable forms-meaningful ones like purchases or subscriptions, for instance. With that in mind, underlining the efficiency of different elements in content marketing-headlines, message tone, and visual design-has become key to optimizing user engagement. This chapter examines the Jordanian digital market in regard to how these attributes of the content influence key engagement metrics namely click-through rate, conversion rate, and bounce rate.The importance of content marketing has increased manifold as companies realize the potential it has in shaping consumer behaviour. Content marketing is defined by its focus on the creation and distribution of relevant, useful, and entertaining content(Content marketing, 2021). It achieves a number of key positions, from raising brand awareness to driving sales directly, according to Hollebeek and Macky (2018). In today's digital age, well-crafted content can be a vital differentiator in an online marketplace of substantial overcrowding.

While the growing recognition of its importance faces up to residual variance in user behaviour that it leaves unexplained, there remains a lack of understanding about specific, nuanced effects of particular content attributes on user behaviour. This is most pronounced within the non-Western context, say, for instance, the Middle East, whose cultural and regional factors are likely to configure consumer interaction with digital

[1] Digital Marketing Department, Faculty of Administrative and Financial Sciences, Petra University, Jordan, Email: dr_sliman@yahoo.com.

[2] Department of Accounting– business school Faculties–Al Ahilya Amman University –Amman-Jordan.

[3] Electronic Marketing and Social Media, Economic and Administrative Sciences Zarqa University, Jordan, Research follower, INTI International University, 71800 Negeri Sembilan, Malaysia, Email: dr_sliman@yahoo.com, (Corresponding Author) ORCID: (0000-0001-6156-9063)

[4] Electronic Marketing and Social Media, Economic and Administrative Sciences Zarqa University, Jordan, Email: tsamarah@zu.edu.jo

[5] Faculty of Business and Communications, INTI International University, 71800 Negeri Sembilan, Malaysia, Email: asokan.vasudevan@newinti.edu.my

[6] Faculty of Liberal Arts, Shinawatra University, Thailand, Email: 1401079264@qq.com

content.Noting the increased internet penetration rate in Jordan, coupled with heightened online awareness for the populace, businesses thru themselves into embracing such content marketing strategies that would increase user interaction across varied platforms such as social media, websites, and email campaigns(Al-Khasawneh, 2009). Yet, despite increased utilization of such digital content, there is still a dearth of research conducted on the impact of specific content features on user engagement within a Jordanian context. Therefore, this research aims to fill this knowledge gap by focusing on how headline types, message framing tone, and visual design elements impact user engagement metrics, mainly comprising CTR, conversion rate, and bounce rate.

Different content marketing elements may have different effects on user engagement. Headline, message tone, and visual design might be three most relevant attributes that the content marketers change to impact users' behaviour. For example, headlines are the first thing that users encounter, and many times serve as a determining factor in the decision of a user engaging with content(Huhmann et al., 2002). Whereas an attractive headline can raise CTR by motivating the interest of users, as Jiang et al. (2019) mentioned, formal or informal and culturally fitted message tone can determine the relevance of content to the needs of users, impacting both CTR and conversion rates Lohtia et al. (2003). Finally, visual design which involves the use of images, typography, and layout-can either appeal to or turn away users, hence, it is an important component that keeps users engaged (Azimi et al., 2012).It is within this framework that the current study endeavoured to examine some of these content attributes in the Jordanian digital landscape and their driving of key engagement metrics. Jordan provides a unique case study in that its consumer behaviour combines traditional and modern influences. While all businesses increasingly implement their digital marketing strategy in Jordan, it becomes really important to be aware of how local audiences engage with different content attributes, as this will maximize user engagement and conversion.

Different studies have researched the broader scope of content marketing and its effect in engaging users. For instance, Hollebeek and Macky (2018) examined how engaging content can be designed to contribute towards the improvement of brand-consumer relationships by building trust and facilitating emotional connections(Hollebeek & Macky, 2018). They address that content must be relevant, interesting, and value-based so that users stay engaged out of their own interests for a longer term. In relation, Chakraborty et al. (2019) proved a similar hypothesis that headlines are matters of interest to the users. The authors revealed that question-based headlines are certain to realize more CTR returns since they drive curiosity among readers.Other research has pointed out the ways in which visual design can affect user behaviour. Lee and Koubek (2010) presented the relationships between web design elements and user experience, stating that minimalist and visually balanced layouts usually coincided with lower bounce rates and higher conversion rates. Similarly, Kim and Kuljis (2007) explored the effects of culturally relevant messaging, observing that messages framed to appeal to local sensibilities tended to perform better in non-Western contexts.While these studies are truly valuable, most of them focus on Western markets. There is still limited research regarding how all these content attributes affect user behaviour in the Middle East and, more specifically, within Jordan. This study shall further the existing literature by applying these concepts to the Jordanian digital market, where cultural nuances and local preferences may alter the effectiveness of content marketing strategies.

Although Jordanian businesses generally adopt the world of content marketing, few companies have access to empirical data showing which attributes of content best capture user engagement and convert users(Al-Khasawneh, 2009). Given the lack of such empirical data, when devising content strategy, marketers often have to follow a trial-and-error approach-a reason for inconsistent results. What works in the Western market for example, a headline could very well fall on deaf ears in Jordan, while culturally relevant content, or even formal messaging, would have much more persuasive impact(Fam & Grohs, 2007).This research tries to fill this lacuna by providing data driven insights into how different content elements drive user engagement in Jordan. The core of this study is based on three key metrics i.e. CTR, conversion rate, and bounce rate, through which a marketer can drive an optimized content strategy in the Jordanian digital landscape.The conceptual framework in this study is premised on the fact that headline type, message tone, and visual design, as some of the important attributes of content marketing, function as independent variables to influence the metrics of user engagement directly. These latter metrics represent the dependent

variables in this study i.e. CTR, conversion rate, and bounce rate. The relationship occurring between these said variables will be evaluated through the combined use of experimental and descriptive types of research methodology within this research work.

This research study uses statistical methods such as A/B testing, ANOVA, and conjoint analysis in identifying the influence of these variables on engagement metrics. This study shall help give actionable insights to content marketers in implementing better strategies in the Jordanian market. By understanding how varied content attributes drive user behaviour, varied marketers can make better decisions that increase engagement and conversion rates while reducing bounce rates. With continuing complexities for businesses in the digital marketing landscape, this study adds to the growing knowledge of content marketing through regional insights and practical recommendations.

Literature Review

The current study investigates the combined impact of the content marketing attributes such as headline type, message tone, and visual design-on user engagement metrics such as CTR, Conversion Rate, and Bounce Rate in regard to digital marketing in Jordan. The literature review will generally summarize past research for comprehensive insight into how these elements actually affect user engagement. It aims to identify some of the most important findings, theories, and methodologies from the additional literature reviewed, assessing what is missing in the literature. On this basis, it assesses the contribution that this research makes. Content marketing today is one of the main ways to ensure user interaction in the digital age(Alalwan et al., 2017). Marketers use headlines, message tones, and the appearance of visual designs to maximize the power of content in capturing the attention of users and converting them(Jeganathan & Szymkowiak, 2020). This literature review will explore how the literature on each of these elements, with focuses on user behaviour and engagement, has addressed these areas and evaluate the relevance of such studies to the present research. The review is expected to unmask the specific impact of each content attribute and their interactions and point out areas of research gaps that exist in the field, especially within non-Western contexts.In the light of the above discussion, the central question guiding this review is "How do content marketing attributes such as headline type, message tone, and visual design influence user engagement metrics of CTR, conversion rate, and bounce rate in digital marketing?". Therefore, In this review, the question has been placed within the broader literature on content marketing strategies and user engagement, especially within digital markets where content consumption behaviours are fast changing. This is important because it extends existing findings to a non-Western setting in the Middle East, focusing on Jordan's emerging digital economy.

The theoretical framework for this review draws on theories of consumer behaviour, media engagement, and marketing communication. Of particular relevance here is the Elaboration Likelihood Model (ELM), which postulated that users process information either via a central or peripheral route (Yang, 2014). Engaging content, such as compelling headlines and visuals, would likely lead users down the central route, wherein engagement with the content is higher as discussed by Theiss et al. (2016). Conversely, in instances Pengnate et al. (2013) indicates that when the content fails to meet users expectations, it has a poorly designed visual aesthetic or the tone of the messaging does not match-users are able to disengage so easily, which explores the theory that peripheral cues like visual appeal also play a major driver in users' behaviours.Past studies also always confirm that headlines are very important in seizing user attentiveness, which affects the CTR and, in some instances, conversion rates. Dor (2003) raise the argument that question based headlines stir curiosity, hence having higher CTRs-a result that agrees with the results of the Jordanian study(Dor, 2003). Furthermore, informal headlines that zero in, closely mimicking the language of conversation, tend to be clicked more because they are perceived as being more relevant and friendly for the users(Kuiken et al., 2017). This could be a probability that may work both ways, though, while click rates increase, so do bounces if users fail to find the content relevant to their expectations.

The tone of the message, whether formal, informal, or culturally fitted, too, plays a major influence on the measures of engagement. Aririguzoh (2022) proved that culturally fitted messages work more appropriately in non-Western markets because users engage better with material that best represents their cultural values.

This helps explain the Jordan case particularly well, where cultural nuances greatly influence user engagement(Akour et al., 2006). With regard to that, formal tones often create a perception of professionalism that can help in increasing the conversion rates. However, a number of studies show that while such tones increase CTR and conversion rates, they may raise bounce rates as seen in Sculley et al. (2009).It has also been proven that visual factors like graphic usage, text-heavy, and minimalism play a significant role in gaining user attention. Lee and Koubek (2010) proved that minimalist and balanced web designs have a low bounce rate since users can work their way out with ease. In instances where there is overdependence on web graphics or heavy use of texts, this is tedious to users and may result in a high bounce rate as indicated by Tarafdar and Zhang (2005). That duality of visual design speaks to the complexity at its heart, while rich, detailed visuals can certainly drive clicks and even conversions, they might just as well be driving users away, should the design fail to meet those expectations regarding usability.

A major gap within the literature is the limited number of studies that have tested the performance characteristics of content attributes outside of Western contexts. While in recent times, research on the issue in general has been growing, most of that research focused on Western markets whose cultural characteristic traits might be hugely divergent with regions such as the Middle East. Jordan presents an important case for filling this gap, given the effort to study how distinctive local cultural preferences build up digital engagement. Finally, few studies have examined how the interactions of content attributes-for example, tone and visual design-jointly impact user behaviour, a gap the current study seeks to fill by using conjoint analysis and multivariate testing.Most of the reviewed studies employed quantitative methods such as, but not limited to, A/B testing, regression analysis, and conjoint analysis in measuring user engagement metrics. For example, A/B testing has been one of the most widely used methods to compare versions of content on how each performs better on CTR or conversion rate, according to Wijaya and Pramartha (2023). This study builds on the methodologies to incorporate conjoint analysis, a method to help quantify the relative importance of each content attribute with regard to driving user engagement.

This study fills the gap in literature by focusing on a Middle Eastern context, which has remained largely underexplored in digital marketing research. It goes further to enhance the state of the art of the field beyond merely examining the independent effects of content marketing attributes by including their interactions as well through more advanced statistical techniques for analysis-ANOVA and conjoint analysis. Moreover, this research highlights that enjoyable elements, such as a headline, should be aligned with the content that would justify user expectation, hence bridging the knowledge gap relationship between these elements and how they interact in leading to user engagement.

There are few Independent Variables in the study, one of the variable that we selected for the study is Headlines. Studies on the performance of headlines indicate that rewording and rephrasing may make a difference of up to manifold times in end-user engagement. According to Jiang et al. (2019), personalized headlines, especially when they include some kind of local language nuance or reference to culture, tend to attract clicks. Another variable of the study is Message Tone. The tone of the digital content plays a critical role in engaging users, better outcomes ensure the culturally relevant and contextually appropriate tones will work in this regard. Haddad (2020) confirms this in the Jordanian context that content with a conversational tone in Arabic far outperforms generic messaging. Visual design is another independent variable, It is in the visual design, layout, and use of images and culturally relevant graphics that lie the decisive factors in user behaviour. As held by the studies of Fogg et al. (2001), localized visual elements increase users' perceptions of website credibility, hence improving conversion rates and reducing bounce rates. Call-to-Action (CTA) is also considered as a variable in the study, The effectiveness of CTAs depends on phrasing and positioning, local adaptations allow for higher activity. Amer et al. (2020) report that studies using culturally resonant language in the CTA, such as Arabic phrases, outperform more generic calls in Jordanian markets. Other critical factors include the length of the content. Users in Jordan, too, have liked short content but with a lot of detail. According to Alghizzawi et al. (2024), research has shown that shorter, well-structured content has normally tended to have lower bounce rates and higher social sharing rates. Content with the right balance between being concise and lengthy has turned out to be effective in several situations concerning holding users' interests and driving conversions.

We had several dependent variable for this study as well. 1st of all Click-Through Rate (CTR). CTR is one of the most important indicators representing the level of user engagement and is directly connected with the relevance of headlines, CTAs, and message tones. Jeziorski and Segal (2009) evidence in their work that culturally relevant CTAs and headlines correspond to higher CTRs since they are more congruent with what users expects and experiences . Another variable was the Bounce Rate. A lower bounce rate reflects where users leave a webpage without continuing interaction and is usually decreased by strategies for localized content. Wang et al. (2021) agree that evidence of 'visual design' and a tone of message matching with consumers shows that the bounce rates go down. Time on page is also a variable in our study. It is indicated through research that time on page is influenced by factors of message tone, content length, and visual design. According to Al-Shamaileh and Sutcliffe (2012), Jordanian users tend to stay longer on pages with culturally relevant imagery and interactive design elements. Conversion Rate is also a considered as a variable in the study, Well, it has to do with how well the content elements, such as message tone, CTAs, and visual design, are suited for the audience. Consider, for example, the studies of Lu and Ye (2019) that evidence conversion rate increase when CTAs are in context and adapted culturally. In Jordan, Benmamoun et al. (2019) reports an increase in conversion rates when the message tone and calls-to-actions are localized, hence the importance of culturally adapted digital marketing strategies. Lastly the Social Sharing is another variable, sharing on social platforms would be informed by appealing headlines, catches of visual design, and message tone. On the contrary, studies by Ahmadi et al. (2022) denote that culturally tailored appeal in headlines and visuals has increased sharing chances on social platforms such as Facebook and Instagram.

On the basis of the literature, we developed the following hypothesis to be tested.

Primary Hypotheses

1. **Null Hypothesis (H$_0$)**: There is no significant difference in user engagement between different content marketing strategies in Jordan.

2. **Alternative Hypothesis (H$_1$)**: There is a significant difference in user engagement between different content marketing strategies in Jordan.

Additional Hypotheses:

- **H$_{01}$**: Changing the headline of content does not significantly affect the click-through rate of Jordanian users.

- **H$_{11}$**: Changing the headline of content significantly affects the click-through rate of Jordanian users.

- **H$_{02}$**: The layout of the content does not significantly impact the time spent on the page by Jordanian users.

- **H$_{12}$**: The layout of the content significantly impacts the time spent on the page by Jordanian users.

- **H$_{03}$**: There is no significant relationship between the type of call-to-action used and conversion rates among Jordanian users.

- **H$_{13}$**: There is a significant relationship between the type of call-to-action used and conversion rates among Jordanian users.
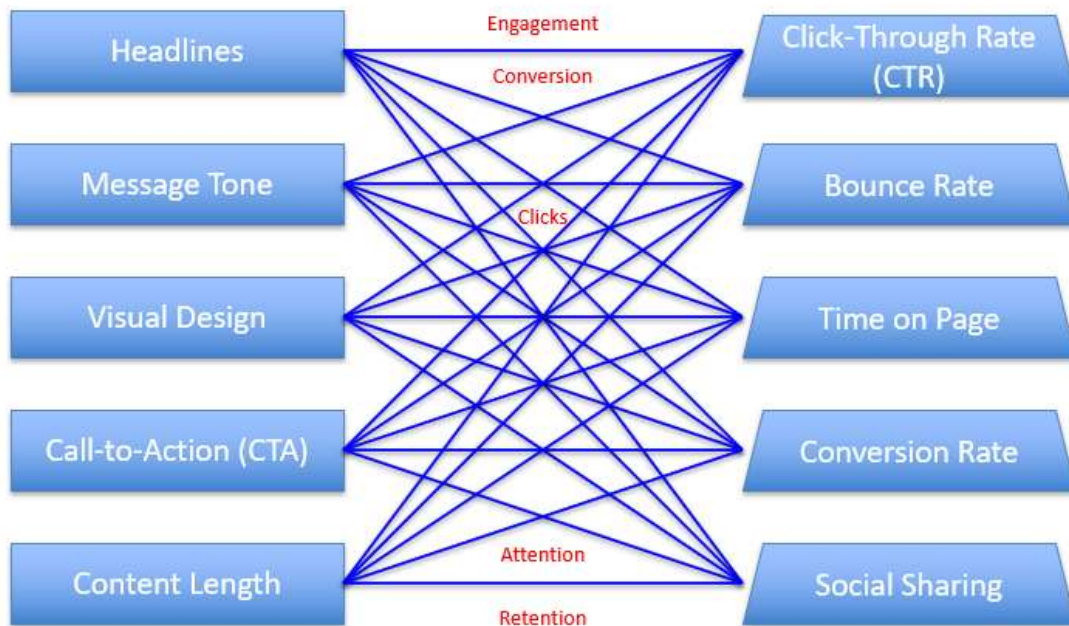
Figure 1. Conceptual Model of the Study

The conceptual model of this study visualised in figure 1 was developed around the relationship between different independent content marketing elements and the dependent user-engagement metrics among users in Jordan. The model hypothesizes that specific sets of content factors, headlines, visual design, message tone, and call-to-action elements will have a significant impact on engagement measured through click-through and conversion rates. The idea behind the conceptual model is that it provided the backbone for testing the hypothesis that changing content elements would result in measurable differences in user engagement, tailored for the Jordanian context.

Methodology

Improvements in Jordan's content marketing strategies were sought in this study, therefore, it has utilized a mixture of A/B testing, conjoint analysis, and multivariate testing in an effort to recognize different content elements that affect user engagement. This research was executed in real time on Jordanian users interacting with digital content across all platforms, including websites, social media, and email campaigns. It also contained methodology comprising a conceptual model, statement of research objectives, methods of sampling, data collection methods, data analysis techniques, testing hypotheses methods, to name a few, in order for actionable insights to be provided, tailored for the Jordanian market.The primary purpose of the current chapter was to identify the optimal digital content marketing strategies in Jordan, considering how different content elements affect user engagement. The objectives were clear and data-drivento understand which content features-headline, design, tone of voice-work best with Jordanian users, assess the impact of variation in formatting on key metrics such as click-through rates, bounce rates, and time on page, how to use conjoint analyses in understanding content attribute preferences, and identification of the ideal mix of attributes that would yield maximum engagement with content. Furthermore, it sought to comprehend how various content variables-most saliently CTA placement and design-interact with one another via multivariate testing. This is to a final end of delivering actionable recommendations on an ought content marketing strategy catering specifically for Jordanian digital users through empirical analysis.

A descriptive and experimental research design was considered, combining both qualitative and quantitative methods, and thus it was used for the efficiency assessment of content marketing strategies in Jordan. The

descriptive part allowed the drawing of baseline data on user engagement metrics by analysing how users in Jordan interact with the existing content strategies on websites and social media platforms. The experimental part included A/B testing, conjoint analysis, and multivariate tests in controlled experiments to see how users react to changing content.This research focuses on Jordanian users of digitized platforms, and the method of simple random sampling was utilized to obtain a representative sample of the population. The Cochran's formula arrived at the determination of a sample size of 467 that could achieve a statistical significance level of 0.05 at 95% confidence. This approach gives more minimal bias in order to find reliable and generalizable results.

Data collection was done in real time as Jordanian users interacted with digital content. Primary data collection involved A/B testing, whereby two versions of content were exposed to the users-headlines, images, CTAs-while capturing metrics such as click-through rates, time on page, and bounce rates. Conjoint analysis engaged Jordanian users in rating various combinations of content features-tone of voice, layout, and length of content-that revealed their preferences and the impact these would have on engagement. Multivariate testing showed how different combinations of content elements-layout, CTA design, and more-engaged users. It also encompasses secondary data, which includes historic campaign data and web analytics that provide context for refinement of the existing strategy.All data were analysed using appropriate statistical tools to ensure accuracy and reliability. Testing statistical significance, the researcher employed A/B test results by running t-tests and Chi-square tests to assess if any detected difference in engagement across variants of content has a statistically significant result. Conjoint analysis used multivariate regression testing to quantify the relative importance of various different things about content, thus helping to find out which set of features had the most impact on engagement in the Jordanian market. This full-cycle approach ensured that the study would provide profound insights into users' behaviour and preferences to inform content marketing strategies for digital audiences in Jordan.

Results

The CTR analysis tested the effect of Headline Type, Message Tone, and Visual Design on user engagement using an ANOVA. These indeed had no significant influence on CTR indeed, since F-value of Headline Type ($F(3, 458) = 0.028$, $p = 0.994$), Message Tone ($F(2, 458) = 0.774$, $p = 0.462$) and Visual Design ($F(3, 458) = 1.148$, $p = 0.329$) all correspond to p-values much greater than 0.05. This implied that each of these factors, when considered individually, had no significant statistical effect at a 95% confidence level. Further determining how far the CTR would be influenced due to these attributes, a conjoint analysis using linear regression was done. The result of this was rather different and presented statistically significant effects of certain content attributes on the CTR.This observation was further supported by the conjoint analysis, which showed that changes in Headline Type positively affected CTR for both informal, $Coef = 0.065$, $p < 0.001$, question-based, $Coef = 0.069$, $p < 0.001$ and statement headlines, $Coef = 0.063$, $p < 0.001$. In simple terms, it means the more interesting or conversational a headline is, the higher the users' click-through rate will be (Figure 2).
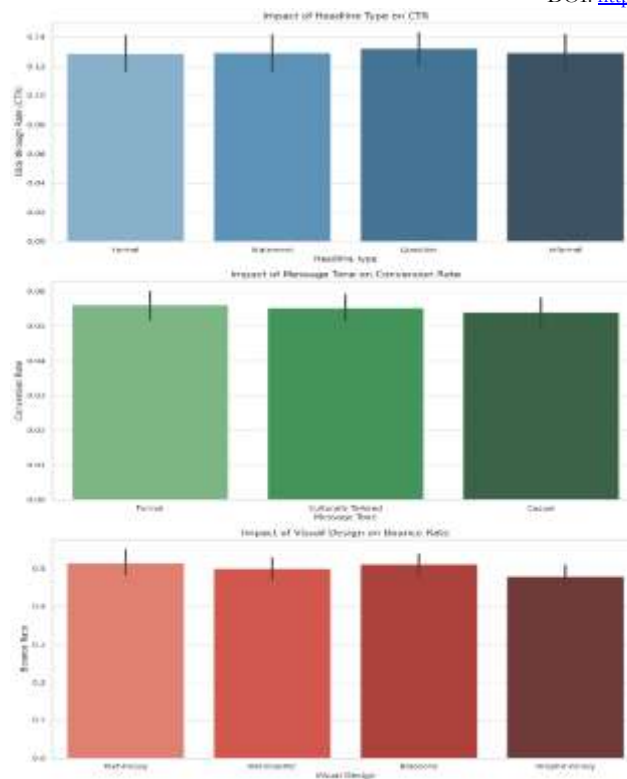
**Figure 2. Impact of Headline Type on CTR**

At the same time, the variable of Message Tone had a considerable effect, culturally tailored Coef = 0.049, $p < 0.001$ and formal tone Coef = 0.058, $p < 0.001$-particularly increased CTR. Such findings show that content framed for resonance with cultural values or erected on a formal tone-a tone of authority-alters user interaction. The analysis also revealed that the last variable, Visual Design style, does indeed have a significant influence on CTR. Text-heavy design significantly improved engagement Coef = 0.047, $p < 0.001$ as did minimalistic Coef = 0.038, $p < 0.001$ and graphic-heavy designs Coef = 0.040, $p < 0.001$, suggesting that users are attracted to content with either visual richness or information richness.Generally, though the ANOVA results showed no significant effect when factors were analysed in isolation, in this chapter, the conjoint analysis revealed that certain content elements indeed exercise a significant impact on CTR and, therefore, it is highly relevant to adopt catchy headlines, culturally appropriate tones, and diverse visual designs with a view to derive greater value from user interaction on computer-based interactive media.

In conversion rate analysis, a linear regression model assesses the influence of different content attributes on conversion rates, thus, according to the results of regression, all three elements of content significantly influence conversion rates, Headline Type, Message Tone, and Visual Design. This model is explained in greater detail by showing evidence that informal headlines (Coef = 0.026, $p < 0.001$), question headlines (Coef = 0.025, $p < 0.001$), and statement headlines (Coef = 0.026, $p < 0.001$) have a positive effect on increasing the conversion rate. This leads to the indication that not only is a catchier, more conversational headline successful at driving click-throughs, but it also commits users to complete desired outcomes such as a sign-up or purchase.

Similarly, the regression analysis showed that culturally tailored tone and formal tone have improvement in conversion rates with Coef = 0.022, $p < 0.001$ for both conditions. That means culturally framed or even business-framed messages will better drive users through to complete conversions.Text-heavy format, minimalist and graphic-heavy formats were all highly significant drivers in Coef= 0.022, $p < 0.001$, Coef = 0.017, $p < 0.001$, Coef = 0.022, $p < 0.001$ respectively from a design standpoint.Namely, this would suggest that consumers are likely to convert with either information-heavy or visually-appealing content. To be

exact, this model returned an R^2 of 0.737, meaning that about 73.7% of the variability in conversion rates can be explained by these content attributes. Generally, the conjoint analysis validated the fact that strategies regarding engaging headlines, culturally aligned tones, and creative designs inspire much more conversions online.The bounce rate analysis (Figure 3) followed a regression model showing how the rates were affected by different attributes of the content. Indeed, the findings showed that the bounce rates were strongly associated with the various elements of content analysed. For instance, informal headlines had Coef = 0.267, $p < 0.001$, question-based headlines had Coef = 0.226, $p < 0.001$, and statement headlines had Coef = 0.226, $p < 0.001$, showing higher levels of bounces. While these headline styles drive initial clicks well, they might fail in matching the expectations of users and lead to quick exits.
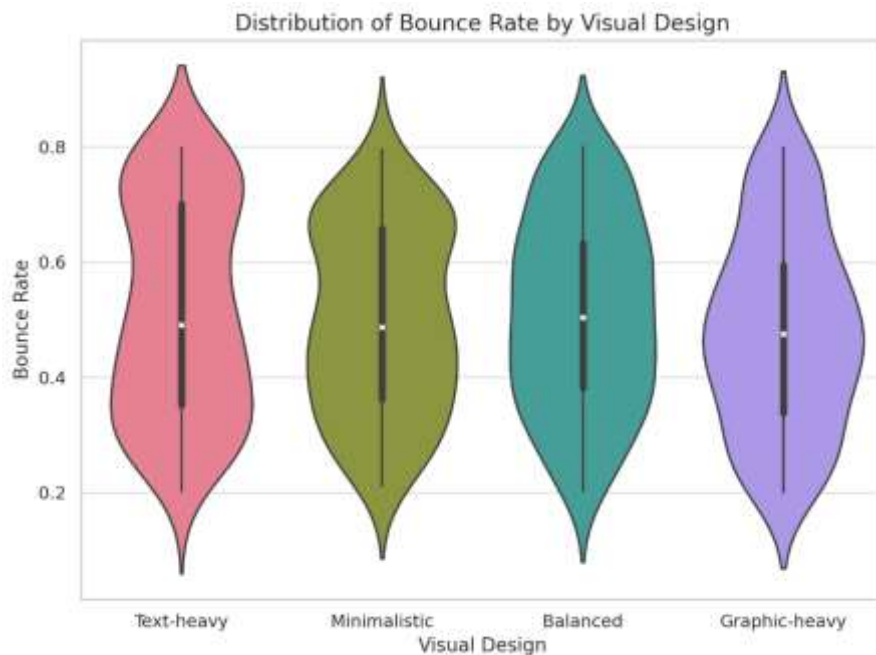
Figure 3. Bounce Rate Distribution by Visual Design

Similarly, message tone was related to increased rates of bounces, culturally tailored Coef=0.200, p<0.001 and formal tones Coef=0.204, $p< 0.001$ corresponded with more exits. This would indicate that though these tones attracted users initially, they could not hold them for too long with a bounce within a few seconds of landing. Visual design factored into the bounce rates, too heavy text-based designs Coef = 0.202, $p < 0.001$, minimalistic designs Coef = 0.185, $p < 0.001$, and graphic-heavy Coef = 0.163, $p < 0.001$ contribute to bounces themselves.

While these designs attract clicks, very rarely do they deliver on the expected content experience, and users are quick to bounce. It yielded an R^2 of 0.794, with 79.4% of the variance in bounce rates explainable by these content attributes. Surprise many of the same factors that increased CTR and conversion rates also related to higher bounce rates, underlining that content strategies must balance attraction with relevant and engaging content delivery to limit exits.
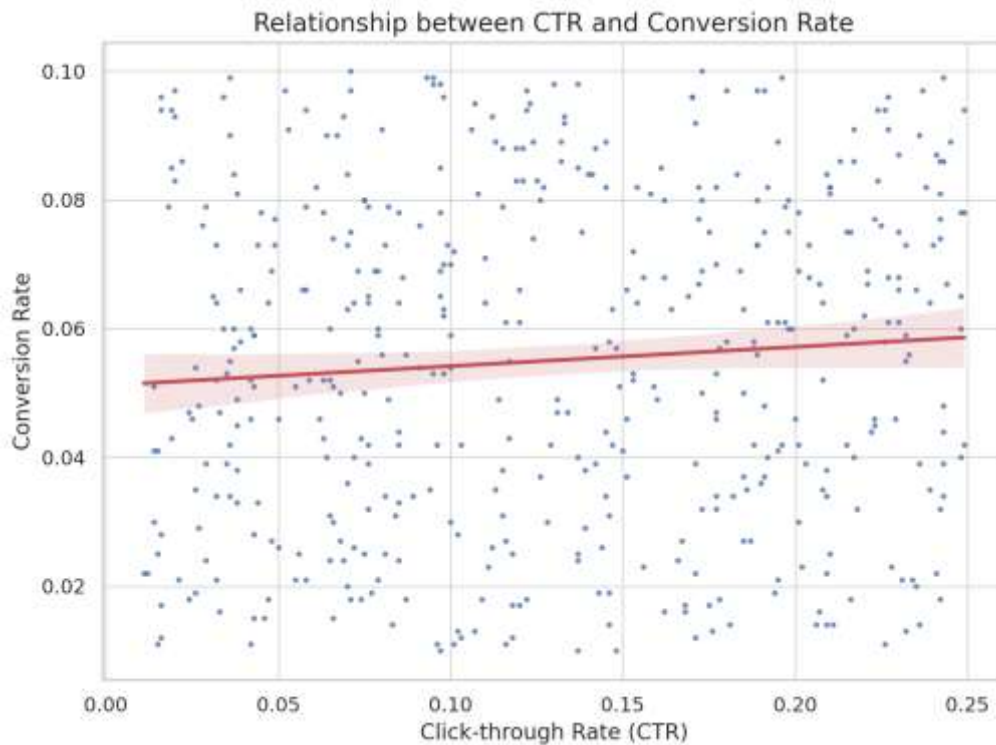
Figure 4. Relationship Between CTR & Conversion Rate

The Chi-square tests were conducted to explore the categorical associations between the content attributes and the performance metrics of interest, namely the conversion rate and the bounce rate. None of the content variables significantly related to the investigated outcome variables. For example, in the case of headline type and conversion rate, this was reflected in the Chi-square statistic 2.94, p = 0.401, hence no significant relationship, since p > 0.05. Again, the association test between message tone and conversion rate yielded a Chi-square statistic of 0.86, with an resultant p-value of 0.650. There was no significant association at p > 0.05. The last test looked into visual design and bounce rate, and it had a Chi-square statistic of 1.35, with its resultant p-value of 0.717. There is no significant relationship at p > 0.05.These results suggest that content attributes do not demonstrate significant categorical association with conversion and bounce rates, given the appearance of linear relationships in the discussed regressions. This is to say, although some variations within content may impact continuity at a continuous level of outcomes, they demonstrate no statistically significant association if treated categorically. Therefore, the consequence these content characteristics have on engagement is complex and perhaps cannot be captured in such plain nominal relationships.

These findings from various analyses indicate that the content attributes Headline Type, Message Tone, and Visual Design play a significant role in the key engagement metrics of CTR, Conversion Rate, and Bounce Rate. For instance, in the case of Headline Type, informal, question-based, and statement headlines believe in driving clicks and conversions. But they also tended to raise bounce rates, indicative of the fact that while headlines featuring these words might attract users, they cannot hold their interest. In terms of Message Tone, culturally tailored and formal generated more engagement and conversions. Yet, they were also related to higher bounce rates, indicating the possibility of mismatch between expectations created by the users and content being delivered. In Visual Design, visually rich or text-heavy designs worked best for CTR and conversions. However, if the content wasn't met according to expectation, it often resulted in quick exits.These findings show that marketers must find a balance with the content strategies. While the elements should be engaging enough to attract the users, the content also needs to deliver value to them in order to reduce bounce rates and increase conversions. The nature of the content should keep alive user interest throughout their interaction, meeting expectations and the value proposed.

The hypotheses tested, for CTR, H_{01}-There is no importance in the difference in CTR from headline type, H_{11}-There is a difference. The ANOVA results yielded $F(3, 458) = 0.028$ with a p-value of 0.994, thus, the null hypothesis was not rejected, and it stated that no significant difference in CTR exists just based on headline type. However, this result was contradicted by the Conjoint Analysis, which yielded that indeed headline types (informal, question-based, statement) singled out by their headline type had an important influence on the CTR with respective p-values < 0.001. That is to say, from the fact that ANOVA did not show any overall significant difference, under the alternative hypothesis H_{11}, particular headline styles do provoke engagement.

For the Conversion Rate, the following hypotheses were tested: H_{02}, indicating no significant relationship between the message tone and conversion rate, and H_{12} that there is a significant relationship. Conjoint Analysis showed significant p-values (< 0.001) for message tone culturally tailored and formal, hence significantly affecting the conversion rates. Therefore, the null hypothesis in this respect was refused, meaning the message tone significantly influences user conversion and consequently confirming the alternative hypothesis (H_{12}). For Bounce Rate, it was hypothesized that, H_{03}, there is no significant effect of visual design on bounce rate, and H_{13} there is a significant effect. Regression of the data indicated that all types of visual designs-text-heavy, graphic-heavy, and minimalistic-had a very significant effect on bounce rates, which had a p-value of less than 0.001. Therefore, the null hypothesis has now been rejected. Thus, the alternative hypothesis, H_{13}, would support the fact that visual design has a significant impact on bounce rates. Chi-square Tests of Categorical Relationships The following hypothesis was tested, H_{04}: There is no significant association between headline type and conversion rate, versus H_{14}: There is a significant association between headline type and conversion rate. The Chi-square test yielded $\chi^2(3) = 2.94$ with a p-value of 0.401, hence, one fails to reject the null hypothesis (H_{04}), and there is no significant association between these two variables when treated categorically.

Conjoint Analysis showed that headline type is a significant determinant of CTR, message tone affects conversion rate, while visual design impacts bounce rate. The ANOVA analysis did not yield a headline type as having a significant difference in CTR, while Chi-square analysis resulted in non-significant categorical relationships across the content attributes for all engagement metrics such as conversion rate. These findings provide a holistic understanding of how specific content attributes drive user behaviour-or a lack thereof-within very obvious and differing effects on CTR, conversion rates, and bounce rates in many analyses.

Discussion

Impact of Headline Type on Engagement Metrics

In this respect, headline type proved to be a determining influence in the analysis for both CTR and Conversion Rate, while in several cases contributing to Bounce Rates. Specifically, it was found that casual and question headlines raise CTR significantly, thus confirming earlier studies in marketing that such headlines easily attract users' attention. That said, the importance of question headlines follows the theory that questions inspire curiosity and engagement from the user. Statement headlines also fared very well in CTR and conversion rates, which would indicate that users similarly respond to authoritative or direct messaging. This headline type has been associated with increased bounce rates, though. This can be explained with the hypothesis of expectation mismatch-the user clicks on these catchy headlines but bounces out straightaway if the content does not live up to the promise or appeal of the headline or vice versa. What this finding suggests is that the attention-catching headlines, though needed by marketers to drive clicks, need to ensure further in line with the user's expectations to reduce bounce rates.

Role of Message Tone in User Engagement

The findings indicate that the message tone-whether it was culturally tailored or formal-played a great role in CTR and Conversion Rate. Users responded to content which represented cultural values or at least sounded professional. This is very relevant for markets like Jordan, where cultural context and

professionalism mean much, and users are prone to spend more time with content reflecting such values. But again, similar to headline types, message tone also showed an association with higher bounce rates, this is to imply that even though culturally aligned or formal tones worked for attracting users, scoring attention with the substance of the content may not be enough. It is thus important that marketers not only focus on how to capture the users' interest through tone but deliver value with the content, aligning with the tone.

Influence of Visual Design on User Behaviour

Also, the visual design played a huge role in influencing CTR and CR. Besides, text-heavy, minimalistic, and graphic-heavy designs perform much better in comparison with balanced designs, thus, the probability of clear and focused visually rich content capturing users' attention and converting does exist. However, the same designs resulted in high bounce rates, which meant that though it may be an attractive line for users, they may not be able to hold their attention for quite a while. Maybe users are attracted to the appeal of a design upfront, but once they cannot find indicative value or substance in the content, they leave. This therefore calls for marketers to balance between making it visually appealing and developing relevant content that will make users stay longer.

Lack of Significant Categorical Associations (Chi-square Tests)

The Chi-square tests did not reveal any statistically significant association of the content attributes, such as headline type or message tone, with engagement outcomes like conversion rate when treated as categorical variables. That suggests that although headline types and message tones drive engagement metrics when measured on a continuous scale-as was the case with the conjoint analysis-their effects are less clear-cut when considered on a categorical basis. In other words, this would mean that practically some headline types or message tones could affect the user's engagement, but most likely, their relationship is not only some categorical linkage.

Comparison of Results Across Analytical Techniques

These various analytical results give an interesting comparison: taken individually, ANOVA results showed that headline type, message tone, and visual design did not affect, statistically, CTR. In the case of the conjoint analysis, though, this showed significant effects of the mentioned attributes at CTR and conversion rate, respectively. This points to the fact that, even while their individual effects may not be visible in aggregate, the respective headline types, tones, or designs are meaningful in their contributions. Thus, this emphasizes the importance of using several analytical approaches in order to understand how different content attributes function to influence engagement. Taking into consideration that ANOVA is insignificant, whereas in the regression model it is significant, this already means that these variables should be taken into consideration as an interdependent impact in decision-making processes and not separately.

Practical Implications for Content Marketers

These findings can, therefore, be converted into some practical recommendations for the content marketers looking to optimize their approach to engagement use various forms of attractive headlines-discretionary, interrogative, or statement headlines-just make sure the subsequent content delivers on the promise of the headline to avoid bounces. Adjust message tones for intended audience-culture and professional. For instance, in Jordan's markets, culturally relevant or formal content appeals better, once more, the tone and relevance of the content is a key issue. Invest in clear and neat-looking designs that will make users enter a site, but focus on substance over form to keep your users longer. The designs must be good to see, too, while giving clear, meaningful information to users' expectations. Direct your focus towards holistic creatives that marry creative headlines to culturally appropriate messaging and substantive visual content in cohesive campaigns, which maximize initial engagement and long-term retention.

Limitations and Future Research Directions

While this study provides valuable insights, a few words of limitation are warranted the research was limited to Jordan, so generalizing these findings might be difficult across other markets. Further studies could try to find how such relationships would vary across different settings, both culturally and regionally. It also rested on data gathered over a total set of platforms, user behaviour may depend on which platform the user is working on-threatening either a social media site or a website. Further research would be able to delve into how content performs differently across the different digital channels. Another direction for future research could investigate exactly how the various attributes of content interact with each other-for example, how tone and visual design together influence engagement-to develop fine rewed strategies for content optimization.

Conclusion

It also explored the headline type, message tone, and visual design impacts on several key user engagement metrics, Click-through Rate, Conversion Rate, and Bounce Rate. Using different statistical methods of analysis, including ANOVA, conjoint analysis, and Chi-square tests, the current study has reported in detail how these content elements affect user behaviour. Headline Type greatly influences CTR as well as conversion rates. Among informal, question headlines, and statement headlines, all of them brought greater involvement. Still, on the other side, these headline types had a very strong connection with increased bounces, too, which may indicate a lack of deeper interest beyond the click itself. Messenger Tone, especially the culturally diversified and formal tones of voice, worked very well for both CTR and conversion rates. Similar to headline types, though, they drove higher bounce rates, too, which really drives home the point that matching content tone with user expectations will help you keep their attention. The most significant problem was visual design, which had the strongest power of influencing the users' behaviour. Text-heavy and graphically heavy, minimalistic designs increased CTR and conversion rates while on the other hand being associated with high bounce rates. These findings, therefore, show that some of the content attributes, while successful in driving initial user engagement and conversion, could at the same time be increasing the bounce rate for users whose expectations are not met once they click on the link. Marketers should, therefore, pay more attention to striking a balance between catching users' attention and value-driven content for decreased bounce rates and increased user retention altogether. The present study indicated that a holistic approach is required in content marketing, where captivating headlines, relevant messaging, and attractive design elements work together to attract and retain users. Taken together, these results set the course for future content marketing strategies to have a data-driven recruitment framework that aims to optimize digital campaigns for better short- and long-term engagement outcomes.

References

Ahmadi, I., Waltenrath, A., & Janze, C. (2022, April 29). Congruency and Users' Sharing on Social Media Platforms: A Novel Approach for Analyzing Content. Taylor & Francis, 52(3), 369-386. https://doi.org/10.1080/00913367.2022.2055683

Akour, I., Alshare, K A., Miller, D S., & Dwairi, M A. (2006, October 18). An Exploratory Analysis of Culture, Perceived Ease of Use, Perceived Usefulness, and Internet Acceptance: The Case of Jordan. Taylor & Francis, 5(3), 83-108. https://doi.org/10.1300/j179v05n03_04

Al-Khasawneh, A. (2009, January 1). Arabia online: internet diffusion in Jordan. , 1(4), 396-396. https://doi.org/10.1504/ijsss.2009.026511

Al-Shamaileh, O., & Sutcliffe, A. (2012, November 26). Investigating a multi-faceted view of user experience. , 4, 9-18. https://doi.org/10.1145/2414536.2414538

Alalwan, A A., Rana, N P., Dwivedi, Y K., & Algharabat, R. (2017, May 25). Social media in marketing: A review and analysis of the existing literature. Elsevier BV, 34(7), 1177-1190. https://doi.org/10.1016/j.tele.2017.05.008

Alghizzawi, M., Alzghoul, A., Alhanatleh, H., Omeish, F., Abdrabbo, T., & Ezmigna, I. (2024, January 1). Short video marketing and consumer engagement: Mediation effect of social sharing. Growing Science, 8(3), 1379-1386. https://doi.org/10.5267/j.ijdns.2024.4.005

Amer, F., Buragohain, D., & Suryani, I. (2020, March 31). Responding Strategies to Greetings and Invocations in Jordanian Arabic in CCCS Interactions: A Socio-Pragmatic Study. European Scientific Institute, 16(8). https://doi.org/10.19044/esj.2020.v16n8p62

Aririguzoh, S A. (2022, March 23). Communication competencies, culture and SDGs: effective processes to cross-cultural communication. Palgrave Macmillan, 9(1). https://doi.org/10.1057/s41599-022-01109-4

Azimi, J., Zhang, R., Zhou, Y., Navalpakkam, V., Mao, J., & Fern, X Z. (2012, October 29). Visual appearance of display ads and its effect on click through rate. https://doi.org/10.1145/2396761.2396826

Benmamoun, M., Singh, N., & Sobh, R. (2019, June 1). How Advertisers Can Target Arab E-Consumers More Effectively. Advertising Research Foundation, 59(2), 171-184. https://doi.org/10.2501/jar-2019-022

Chakraborty, R., Kharat, A., Khatua, A., Dandapat, S K., & Chandra, J. (2019, January 1). Predicting Tomorrow's Headline using Today's Twitter Deliberations. Cornell University. https://doi.org/10.48550/arxiv.1901.09334

Dor, D. (2003, March 25). On newspaper headlines as relevance optimizers. Elsevier BV, 35(5), 695-721. https://doi.org/10.1016/s0378-2166(02)00134-0

Fam, K., & Grohs, R. (2007, September 18). Cultural values and effective executional techniques in advertising. Emerald Publishing Limited, 24(5), 519-538. https://doi.org/10.1108/02651330710827979

Fogg, B J., Marshall, J., Laraki, O., Osipovich, A., Varma, C., Fang, N., Paul, J., Rangnekar, A., Shon, J., Swani, P., & Treinen, M. (2001, March 1). What makes Web sites credible?. https://doi.org/10.1145/365024.365037

Haddad, S A A. (2020, January 1). Conversational Implicature in Jordanian Arabic Offers. , 16, 64-75. https://doi.org/10.34103/argumentum/2020/5

Hollebeek, L D., & Macky, K. (2018, December 17). Digital Content Marketing's Role in Fostering Consumer Engagement, Trust, and Value: Framework, Fundamental Propositions, and Implications. SAGE Publishing, 45, 27-41. https://doi.org/10.1016/j.intmar.2018.07.003

Huhmann, B A., Mothersbaugh, D L., & Franke, G R. (2002, January 1). Rhetorical figures in headings and their effect on text processing: the moderating role of information relevance and text length. Institute of Electrical and Electronics Engineers, 45(3), 157-169. https://doi.org/10.1109/tpc.2002.801634

Jeganathan, K., & Szymkowiak, A. (2020, November 9). Social Media Content Headlinesand Their Impact on Attracting Attention. , 1/2020(10), 49-59. https://doi.org/10.7172/2449-6634.jmcbem.2020.1.3

Jeziorski, P., & Segal, I. (2009, January 1). What Makes Them Click: Empirical Analysis of Consumer Demand for Search Advertising. RELX Group (Netherlands). https://doi.org/10.2139/ssrn.1417625

Jiang, T., Guo, Q., Chen, S., & Yang, J. (2019, October 28). What prompts users to click on news headlines? Evidence from unobtrusive data analysis. Emerald Publishing Limited, 72(1), 49-66. https://doi.org/10.1108/ajim-04-2019-0097

Kim, H S., & Kuljis, J. (2007, June 1). Cultural Manifestations on Website Design. , 19, 251-256. https://doi.org/10.1109/iti.2007.4283779

Kuiken, J., Schuth, A., Spitters, M., & Marx, M. (2017, February 2). Effective Headlines of Newspaper Articles in a Digital Environment. Taylor & Francis, 5(10), 1300-1314. https://doi.org/10.1080/21670811.2017.1279978

Lee, S., & Koubek, R J. (2010, January 25). The effects of usability and web design attributes on user preference for e-commerce web sites. Elsevier BV, 61(4), 329-341. https://doi.org/10.1016/j.compind.2009.12.004

Lohtia, R., Donthu, N., & Hershberger, E K. (2003, December 1). The Impact of Content and Design Elements on Banner Advertising Click-through Rates. Advertising Research Foundation, 43(4), 410-418. https://doi.org/10.1017/s0021849903030459

Pengnate, S., Sarathy, R., & Arnold, T J. (2013, January 1). Centrality of Visual Aesthetics in the Online Context: An Assessment and Empirical Evidence. Springer Science+Business Media, 593-600. https://doi.org/10.1007/978-3-642-39232-0_64

RAFollow, H. (2021, June 1). Content marketing. https://www.slideshare.net/hemnathRA1/content-marketing-249431509

Sculley, D., Malkin, R G., Basu, S., & Bayardo, R J. (2009, June 28). Predicting bounce rates in sponsored search advertisements. , 1325-1334. https://doi.org/10.1145/1557019.1557161

Tarafdar, M., & Zhang, J. (2005, October 1). Analyzing the Influence of Web Site Design Parameters on Web Site Usability. IGI Global, 18(4), 62-80. https://doi.org/10.4018/irmj.2005100104

Theiss, S K., Burke, R M., Cory, J., & Fairley, T L. (2016, November 7). Getting beyond impressions: an evaluation of engagement with breast cancer-related Facebook content. AME Publishing Company, 2, 41-41. https://doi.org/10.21037/mhealth.2016.10.02

Wang, X., Li, Y., Cai, Z., & Liu, H. (2021, June 14). Beauty matters: reducing bounce rate by aesthetics of experience product portal page. Emerald Publishing Limited, 121(8), 1848-1870. https://doi.org/10.1108/imds-08-2020-0484

Wijaya, I K S., & Pramartha, C R A. (2023, January 26). Implementasi A/B Testing sebagai peningkatan pengalaman pengguna pada aplikasi masterfish diukur dengan Conversion Rate. , 12(1), 153-153. https://doi.org/10.24843/jlk.2023.v12.i01.p17

Yang, S. (2014, December 13). An eye-tracking study of the Elaboration Likelihood Model in online shopping. Elsevier BV, 14(4), 233-240. https://doi.org/10.1016/j.elerap.2014.11.007