Optimizing Strategies of Live Streaming Platform for Marketing

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Abstract
Live streaming has gained immense popularity in recent years, and it has become an essential tool for marketers to promote their products or services. However, with the increasing number of live streaming platforms, it has become difficult for marketers to optimize their strategies for live streaming especially in China due to its rapid growth of live streaming marketing. This paper aims to study the optimizing strategies of live streaming platforms for marketing. This study analyzes the data collected by online questionnaire related to live streaming marketing, and optimization strategies to identify the key factors that optimize the strategies of live streaming platform for marketing by quantitative and deductive research based on live streaming platform in China, and first proposed the "Five-dimensional Unity Model" for optimizing live marketing platforms, which consists of five strategies including "Define the Target Audience, Promote the Live Stream, Create Engaging Content, Use High-Quality Equipment, and Analyze Metrics" for optimizing live marketing platform.
Keywords: SMEs, Live-streaming Platform, Live Streaming Marketing, Optimization Strategies, the Five-dimensional Unity

Introduction
Live streaming has become a popular way of consuming and sharing information in recent years especially after the outbreak of the COVID-19 in 2020, with the global live streaming market expected to reach $184.3 billion by 2027 (Grand View Research, 2021). Live streaming platforms such as *Douyin*, *Kuaishou* and *Diantao* in China have become an essential channel for brands to reach consumers and promote their products. In November 2020, Alibaba

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reported that its *Diantao* (Taobao) live streaming platform generated nearly $3 billion in sales during its 11.11 Global Shopping Festival. Other platforms in China's important live streaming commerce include *Baidu*, *JD.com*, and *Douyin*, which is China's version of *TikTok* (Nguyen, 2021), are also deeply exploring the live streaming market. The research method includes a literature review, methodology, data analysis, and results. This paper explores the strategies that can be used by SMEs to optimize their live streaming platform for marketing purposes. We conducted data collection and SPSS method mainly focused on percentage, mean scores, standard deviation, and frequencies, and found the perceived five hypotheses are related to optimize live streaming marketing platform. Our findings suggest that businesses can optimize their live streams by "the Five-dimensional Unity" model including "Define the Target Audience, Promote the Live Stream, Create Engaging Content, Use High-Quality Equipment, and Analyze Metrics" for optimizing live marketing platforms.

Literature Review

Live streaming platforms have gained significant popularity in recent years. Platforms such as *Douyin*, *Kuaishou*, and *Diantao* have become go-to destinations for users seeking live entertainment and engagement. These platforms have also become popular marketing tools for businesses, enabling them to reach a wider audience and engage with users in real-time. What needs to be stated clearly is that this research does not aim to summarize more live streaming marketing strategies, but focuses on the optimization and improvement of the live streaming marketing platform, thereby promoting SMEs and live-stream sellers to better conduct live streaming marketing activities. Live streaming video refers to video content in real-time over the internet, which allowing viewers to watch and interact with the content as it is happening. Compared to traditional business models, live streaming offers a more affordable and efficient alternative option for both businesses and consumers. Live streaming offers a convenient and accessible way to shop from the comfort of their own homes. By watching a live streaming, consumers can interact with the streamers, ask questions about the products, and get a better understanding of how the products work. This real-time interaction can create a sense of trust between the consumer and the business, leading to increased customer loyalty and satisfaction. Based on this, the literature review aims to explore the current state of knowledge regarding optimizing strategies of live streaming platforms for marketing purposes.

Live streaming possesses the features of immediate engagement and genuine on-site experience. To begin with, live streaming offers a fresh avenue for brand promotion. (Dedeoğlu et al., 2020). In the age of live marketing, the crucial factor is producing superior content (Liu et al., 2020). During live broadcasts, viewers are able to witness the live interaction between the products and the hosts, as well as engage in discussions with other shoppers to share their consumption experiences. This type of personalized shopping guidance is not typically available through traditional e-commerce methods (Wang & Fang, 2021). Strategies will differ among the organizations using it, but all strategies should address four components: Content, Equipment, Production, and live streaming (Gilbert, 2019). Live streaming platforms can optimize marketing outcomes by leveraging influencers (Whitler, 2021) and key opinion leaders (KOLs) to promote products or services. KOLs (Whitler, 2021) have established a strong following and credibility among their audiences, and can help to build brand awareness and trust through endorsements and product demonstrations. Moreover, partnering with KOLs (Whitler, 2021) can also help businesses to tap into new markets and audiences. Technical quality and reliability during live streaming events need to

be ensured. Technical issues such as buffering, poor video quality, or lag can negatively impact audience engagement and lead to a loss of interest. Therefore, businesses must invest in high-quality equipment (Gilbert, 2019) and platforms to ensure smooth and uninterrupted streaming experiences. There is no denying that a consistent internet connection results in higher quality audio and video (Kaltura, 2018). As stated by Wasen (2017), engaging the audience can be achieved by posing questions to them. One effective method is to conduct polls and prompt the audience to participate in discussions (Wasen, 2017). Live streaming is a popular method for broadcasting videos in real-time that enables interaction and content sharing with a wide target audience (Yousukkee & Wisitpongphan, 2021). Defining the target audience in live streaming refers to identifying the audience group for whom the live stream content and style is intended. The target audience can be specific age groups, people with specific interests, people from specific regions or cultural backgrounds, etc. By defining your target audience, you can better understand your viewers, provide them with content they're interested in, and build a stronger relationship with them.

Methodology
Theories Used in This Paper
According to previous research, several theories and frameworks that can be applied to live streaming marketing strategies. The Technology Acceptance Model (TAM) (Marangunić & Granić, 2015) is a theory within the field of information systems that explains the process by which users accept and use technology. Fred Davis' Technology Acceptance Model (TAM) (Marangunić & Granić, 2015), which was introduced more than 32 years ago, has become a prominent model for studying the factors that influence users' acceptance of technology (Marangunić & Granić, 2015). This theory suggests that people's acceptance of new technology is determined by two factors: perceived usefulness and perceived ease of use. Therefore, businesses need to create live streaming content that is perceived as useful and easy to access. Kelman's social influence theory(Kelman, 1974) proposes that individual behavior is influenced by three social processes, namely compliance, identification, and internalization, as outlined in 1974 (Kelman, 1974). This theory suggests that individuals' attitudes and behaviors are influenced by their social networks. Online marketing strategies should aim to leverage social influence by creating content that encourages users to share with their networks and engage in conversations about the brand. The social exchange theory (Cook & Rice, 2013) suggests that people engage in relationships and interactions based on the expectation of mutual benefits. In online marketing, businesses can use incentives, such as discounts, exclusive content, or loyalty programs, to encourage customers to engage with their brand.

The deductive research approach utilizes quantitative methods to establish causal relationships among variables based on existing theories or hypotheses (Saunders & Lewis, 2012). This approach views theory as a primary source of knowledge and applies deduction to test empirical evidence (Yeomans, 2017). This paper conducted data collection and used quantitative methods SPSS mainly focused on percentage, mean scores, standard deviation, and frequencies, and found the perceived five hypotheses are related to optimize live streaming marketing platform.

Hypotheses
According to previous research and theories used in this paper, the researcher highly focused on three WeChat groups created by one of SMEs owners who successfully takes live streaming

platforms as marketing strategies, the total sample size of these SMEs owners in two WeChat groups are 426, all of whom are engaged in live streaming marketing. The questionnaire was sent to the WeChat group through the group owner, and the group owner was requested to set a reminder mode to inform all business managers to participate in completion of questionnaire. The formulation and distribution of the questionnaire complied with the relevant requirements of the Academic Ethics Committee. The questionnaires are consists of questions as Define the Target Audience, Promote the Live Stream, Create Engaging Content, Use High-Quality Equipment, and Analyze Metrics, personal information like gender, education background, age, etc. So, we can have the hypotheses conception below:

- *H1: Define the Target Audience is highly contributing to optimize the strategies of live streaming platform for marketing.*
- *H2: Promote the Live Stream is highly contributing to optimize the strategies of live streaming platform for marketing.*
- *H3: Create Engaging Content is highly contributing to optimize the strategies of live streaming platform for marketing.*
- *H4: Use High-Quality Equipment is highly contributing to optimize the strategies of live streaming platform for marketing.*
- *H5: Analyze Metrics is highly contributing to optimize the strategies of live streaming platform for marketing.*

Researchers used 5-Point Likert Scale, which is to say, that 5 equals to strongly agree, 4 equals to agree, 3 equals to Neutral, and 2 equals to disagree while 1 equal to strongly disagree. What's more, researcher used the mean scores were rated as manners: less than 1.5 (M<1.5) equals to strongly disagree, 1.5 - 2.5 = Disagree, 2.5 - 3.5 = neither agreed nor disagreed, 3.5-4.5= agree, greater than 4.5 (M > 4.5) = strongly agree. Hence, a standard deviation of less than 1.5 (< 1.5) means there were no significant variations and vice versa. Many people consider 1.5 standard deviation's (SD) as a high-probability location of either dramatically below or above average results. While the question mainly focused on "do you agree with following factors can contribute to optimize the strategies of live streaming platform for marketing?"

Verification by Deductive Research
After conducting deductive research and analyzing the quantitative data, several hypotheses were verified regarding successful implementation of live streaming marketing. As a result, six companies were selected as they have successfully implemented live streaming marketing, and the conclusion was shared with the respective owners of those companies through utilizing a combination of WeChat, phone calls, and face-to-face interviews, the owners of the selected companies were invited to participate in a discussion and demonstration of their successful practices and work experience in the field of live streaming marketing. This process allowed for a thorough examination and validation of the hypotheses through practical application and real-world examples.

Data Analysis
Despite researcher patiently explained the purpose and significance of the questionnaire survey and repeatedly reminded all SMEs owners, who engaged in live marketing, to actively cooperate in completing the questionnaire survey, a total of 197 people completed the survey questionnaire in the end. This paper referred to a total of 197 respondents among the total sample size of 426 SMEs owners in two WeChat groups, all of whom are engaged in live

streaming marketing. The questionnaire survey generated quantitative data, which was analyzed by the researcher using the Statistical Product and Service Solutions (SPSS) theory. Roger Daley, a British meteorologist, in his book "Atmospheric Data Analysis", explained that the purpose of data analysis is to address a gap in the existing literature and curricula of atmospheric science (Daley, 1993). The analysis mainly focused on percentage, mean scores, standard deviation, and frequencies.

The 197 respondents among the 426 SMEs owners were consists of male and female, and proportion of both male and female are 60.9%% (120) and 39.1% (77) respectively. Due to the stratified random sample method, that female and male were equally distributed in every level of job classification, so we ignored this factor of majority of male and female in each category. Data showed that there were 18 respondents who have the master's degree and 92 respondents have the Bachelor's Degree, while degrees of Diploma, certificate, secondary were 60, 17, and 10 respectively. From the data collected, it indicated that majority of SMEs owners are at the age of 26-35, its proportion is 60.1%; and employees' age between 18-25 is 29.9%, while the proportion of 46-55, 56-65 is 6 and 4% respectively.

With respect to data analysis of using mean scores and standard deviation (SD) based on 5-Point Likert Scale, the mean score is 4.36, Square each deviation of H1, H2, H3, H4, H5 are 0.0016, 0.0081, 0.0961, 0.0225, 0.0009 respectively, therefore, the standard deviation of these scores is approximately 0.1601, their standard deviation is all less than 1.5.

Regarding verification by deductive research through 6 SMEs owners, I interviewed 3 via WeChat, 1 via telephone, and the other 2 interviewed face-to-face. While in-depth interviews among them and demonstrations can be achieved through face-to-face, combined with specific cases and practical experience of the company's live streaming marketing. The two owners who took face-to-face interview also made an in-depth analysis of the practical difficulties faced in optimizing the strategy of the live streaming marketing platform. They indicated that High-Quality Equipment means more capital investment, while this capital investment is also worth investing; as for Analyze Metrics, in fact, the application of big data analysis methods may have better results, while SMEs generally cannot easy to realize due to the collection of massive data, but can only be conducted accurate analysis on a small scale.

Results

Taking into account both the mean score and the standard deviation, all five factors can contribute to optimize the strategies of live streaming platform for marketing. Which is to say, Define the Target Audience, Promote the Live Stream, Create Engaging Content, Use High-Quality Equipment, and Analyze Metrics are contribute to optimize the strategies of live streaming platform for marketing.

It showed that six SMEs owners selected for verification, who have successfully implemented live streaming marketing, are all agree with the quantitative analysis results, and claimed that they implement these five strategies to optimize the online marketing live streaming platform.

Based on three theories of technology acceptance model (TAM), social influence theory, and the social exchange theory, researcher built "Five-dimensional Unity" model for optimizing live marketing platforms, which consists of five strategies including "Define the Target Audience, Promote the Live Stream, Create Engaging Content, Use High-Quality Equipment, and Analyze Metrics" for optimizing live marketing platforms through quantitative research and deductive research. (Figure 1)

Figure 1: Five-dimensional Unity for Optimizing Live Marketing platforms

- Define the Target Audience: Defining the target audience is an essential step before creating a live stream as it helps to tailor the content and messaging to effectively engage with and reach the intended viewers. To define the target audience, it is important to consider factors such as demographics (age, gender, location, income), interests, behaviors, and preferences. It is also helpful to think about the problems or challenges that the target audience may be facing and how the live stream can provide value or solutions to those issues.

- Promote the Live Stream: Promoting a live stream is a critical step to ensure that it reaches the target viewers and achieves maximum viewership. By leveraging various promotional channels such as social media, email invitations, partnerships, advertising, website, and landing pages, it can increase the visibility of your live stream and generate excitement and interest among your target viewers. By tailoring your promotion efforts to the preferences and needs of viewers, it can ensure that live stream resonates with them and delivers the intended value or solutions. Effective promotion of a live stream can lead to higher viewership, engagement, and overall success of the event.

- Creating engaging content is crucial for a successful live stream as it captures the viewer's attention and keeps them invested. By understanding the audience's preferences and incorporating visuals, storytelling, and interactive elements, you can deliver valuable content that resonates with viewers and increases engagement. Ultimately, engaging content is key to achieving the intended goals and outcomes of the live stream.

- Using high-quality equipment is crucial in live streaming to ensure a professional and reliable experience for the viewers. High-quality cameras, microphones, lighting, and internet connection can prevent technical difficulties and ensure the live stream delivers value to the viewers. Ultimately, high-quality equipment is essential for the success of any live stream and can increase engagement and achieve intended outcomes.

- Analyzing metrics in live streaming is crucial for understanding the success of the event and making informed decisions for future live streams. By tracking metrics such as viewership, engagement, watch time, and audience demographics, we can gain insights into the effectiveness of content and promotion strategies. Regular analysis of metrics can help improve the success and impact of live streams and achieve intended goals and outcomes.

Conclusion

Live streaming has become an increasingly popular marketing tool for businesses due to its ability to reach large audiences and promote engagement. However, optimizing a live streaming platform for marketing purposes can be a challenging task. This paper has provided an overview of the current research of live streaming for marketing purposes and found that "Define the Target Audience, Promote the Live Stream, Create Engaging Content, Use High-Quality Equipment, and Analyze Metrics" are contribute to optimize the strategies of live streaming platform for marketing by quantitative methods, which have been verified by six SMEs owners who have successfully implemented live streaming marketing. Therefore, based on the previous research, relevant theories, and systematic literature review, researcher built "Five-dimensional Unity" model for optimizing live marketing platforms, which consists of five strategies including "Define the Target Audience, Promote the Live Stream, Create Engaging Content, Use High-Quality Equipment, and Analyze Metrics" for optimizing live marketing platforms, which offers some study enlightenment to researchers in this field, and operational guidance for E-commerce live streamers of SMEs in China.

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