# Centralized Payment Network Advertisements on Digital Branding

Subjects: Others

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Crises are always challenging for banking systems. In the case of COVID-19, centralized payment networks and FinTech companies' websites have been affected by user behavior globally. As a result, there is ample opportunity for marketing managers and professionals to focus on big data from FinTech websites. This can contribute to a better understanding of the variables impacting their brand name and how to manage risk during crisis periods.

Keywords: crowdsourcing ; web analytics ; fuzzy cognitive mapping ; crisis management

# 1. Passive Crowdsourcing Participatory Culture and Mind Sharing

Crowdsourcing and crowdfunding practices could play a crucial role in CPNs and FinTech advertisements by reaching all players, such as investors and technicians <sup>[1][2]</sup>. Howe and Robinson invented the term crowdsourcing to describe an internet corporate model that relies on the collaborative force of many globally connected users that participate in a project through an open call <sup>[3]</sup>. As a logical consequence, crowdsourcing, better described as "knowledge of the crowds" <sup>[4][5]</sup>, incorporates two main web users: the requesters and the employee participants <sup>[6]</sup>. Participation and mind sharing are both key elements of crowdsourcing tasks. Mind sharing refers to the use of crowd knowledge, and emphasis is given to the diversity of opinions <sup>[Z][8]</sup>. A significant advantage of focusing on crowdsourced knowledge is the strategic optimization of decision-making processes, for example in efficacy and objectiveness <sup>[Z][8][9][10]</sup>. It is vital to establish participation or a "participatory culture" to accomplish mind sharing.

The participatory culture encourages users to behave as entrepreneurs and main contributors and not simply as customers <sup>[11]</sup>. Crowdsourcing and crowdfunding can be fruitful and beneficial for the community with the application of the mentality of participatory culture <sup>[12]</sup>. Since the purpose of crowdsourcing is to collect ideas and provide solutions <sup>[13]</sup>, participatory culture is necessary since the user takes on a role in the crowd and adds value to it <sup>[14]</sup>. The two critical elements are implicit participation and explicit participation <sup>[15]</sup>. Explicit participation is perceived as an actual act that is created by motivation <sup>[15]</sup>. For example, a participant uploads a response to a question. Implicit participation, on the other hand, does not necessarily involve intentional action <sup>[15][16][17]</sup>.

According to previous studies, there are a lot of types of crowdsourcing, including direct crowdsourcing, collaborative crowdsourcing, passive crowdsourcing, and crowdfunding (which is considered a type of crowdsourcing since the platform delivers financial benefit by facilitating transactions among companies and members of the crowd) <sup>[13][18]</sup>. The crowd's everyday internet activity produces a massive amount of user-generated data. The gathering of publicly available data without a specific request is referred to as passive crowdsourcing <sup>[19][20]</sup>. Governments are inquiring about behavioral data from internet platforms to gain a deeper knowledge of public opinion <sup>[21]</sup> and passive crowdsourcing in various fields such as European research projects <sup>[21]</sup> and environmental sciences <sup>[21]</sup>. Passive crowdsourcing encounters difficulties in terms of quality and ambiguity of the outcomes. A significant barrier, for instance, is how to filter worthless and malicious content <sup>[22]</sup>. This research is based on passive crowdsourcing and implicit participation.

# 2. Crisis and Risk Management

Many previous studies present different strategies in order to expand the company's reputation and minimize risk in the supply chain and FinTech <sup>[23][24]</sup>. This study is focused on the correlation between crisis and risk management in centralized payment networks and FinTech. Risk management, in a general context, refers to a company's organized activities that are aimed at risk control <sup>[25]</sup>. Risk management is crucial in crisis periods, especially in a pandemic period <sup>[26]</sup>. Specific guidelines must be followed in order for a risk management strategy to be successful. The PACED set of guidelines is mainly used by organizations since they promote the successful implementation of the risk management

strategy <sup>[27]</sup>. Except for PACED, other guidelines are commonly used and the main points in all are the same; the core elements include identification, assessment, treatment, monitoring, and reporting <sup>[28]</sup>.

Supply chains serve as a connecting platform for goods and services to move from suppliers to distribution companies to end customers <sup>[29]</sup>. Consequently, in a broader sense, CPN and FinTech companies, such as PayPal, fit that purpose. A small disturbance in the supply chain could lead to financial disaster for the companies involved <sup>[30]</sup>. In a highly volatile and challenging environment, low-risk supply chains seem to be the main strategy to ensure uninterrupted and profitable business operations <sup>[30]</sup>. In FinTech and CPN companies, various strategies have been promoted in order to ensure that in challenging periods the supply chain will remain productive and beneficial <sup>[24][31]</sup>. The analysis of big data and the implementation of artificial intelligence in risk management strategies can play a significant role in the vitality of a company <sup>[24]</sup>.

### 3. Innovative Crisis Effects Analysis

One of the most significant parts of corporate survival has been the development of crisis management. Following major crises have been identified amongst the most fruitful periods for an upsurge in innovation. A decrease in the quantity of innovation performed by tech startups does not always reflect a decrease in economic growth <sup>[32]</sup>. The lengthy consequences of such disturbance are determined not just by its volume influence, but also by the value improvement that it could cause. But real financial effects of the disturbance are partly determined by the capacity of innovation to migrate throughout various companies. Overall, a crisis phase could be used to shift innovation processes to more efficient organizational structures and meaningful initiatives <sup>[33]</sup>.

In the aftermath of a crisis, there is a huge and continuous reduction in emerging enterprises, and great technical breakthroughs are made by both stalwarts and startups. These included the beginnings of FinTech, cloud storage/computing, knowledge sharing, along with substantial developments in artificial intelligence, which fueled a surge in innovative initiatives <sup>[34]</sup>. In this path, the adoption and analysis of crowdsourced-obtained data regarding customers' onsite behavior can be an innovative leap forward. During a crisis period, organizations, especially those counting on customers' service usage frequency, need access to customers' behavioral data. These data refer to web analytic metrics, acquired via crowdsourcing platforms, providing valuable intelligence to FinTech organizations. Such information could be harvested in terms of timely assessment of crises' effects on centralized payment network organizations' website customers.

# 4. Big Data, and Web Analytics of Passive Crowdsourcing and FinTech

According to previous research, competitive advantage can be accomplished by analyzing and utilizing big data <sup>[35]</sup>. "Big data" is a large amount of unstructured information <sup>[36]</sup>. Marketeers, to gain knowledge from these massive amounts of information must structure and process those data <sup>[36]</sup>. A wide range of industries could gain useful insights from the use of big data such as government agencies, FinTech, and crowdfunding <sup>[37]</sup>. Web analytics is a type of passive crowdsourcing that incorporates the big data generated by web users throughout their normal web research <sup>[38][39][40]</sup>. This process can be elucidated as the gathering and evaluating user's activity on a company's website, for businesses to acquire a wider knowledge of the interactions that occur between web users and corporate web pages <sup>[41][42]</sup>. This process can be applied in social media marketing research to produce useful results for web developers and marketers <sup>[43]</sup>. The use and research of big data support innovation in the CPN and FinTech industry by making the procedures more interactive, platforms better to use, and promotes innovative business models <sup>[44][45]</sup>.

Web analytics are extracted from corporate websites and transformed and processed in quantitative form, widely known as key performance indicators (KPIs) <sup>[46][47]</sup>. When users access a website in order to make a payment, various KPIs are produced. Those KPIs are divided into two categories: technical KPIs, such as fully loaded time for webpage size, and some behavioral KPIs, which include traffic, bounce rate, and average visits duration. In this research, the authors attempt to study the behavioral KPI's. Search engine marketing (SEM) encompasses every aspect of extracting search engines results encouraging the digital marketing strategy. The abundance of digital marketing campaigns and the poor knowledge of web metrics create challenges for KPIs to meet essential requirements <sup>[38][48]</sup> and for marketers to integrate web analytics metrics with the optimal outcome for the organization's KPIs <sup>[38][49]</sup>.

As can be distinguished from previous research <sup>[38][39][50]</sup>, the importance of various web analytic metrics to firms' digital marketing and advertising campaigns' efficiency has been proven significant. The referred researches focus mainly on crowdsourcing organizations, air forwarder businesses, airline firms, and cryptocurrency trade organizations. Therefore, a research gap is spotted regarding the digital advertising efficiency of CPN organizations, via crowdsourced web analytic

metrics utilization. In order to extract valid insights for CPNs' advertising performance, the impact of user engagement metrics (bounce rate, average time on site, average pages per visit, etc.) and website traffic type (branded or non-branded) to the main digital advertisement measurement variables of organic traffic and global rank <sup>[50]</sup>.

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