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MAPPING GAMIFICATION IN THE CONSUMPTION CONTEXT: A SYSTEMATIC LITERATURE REVIEW

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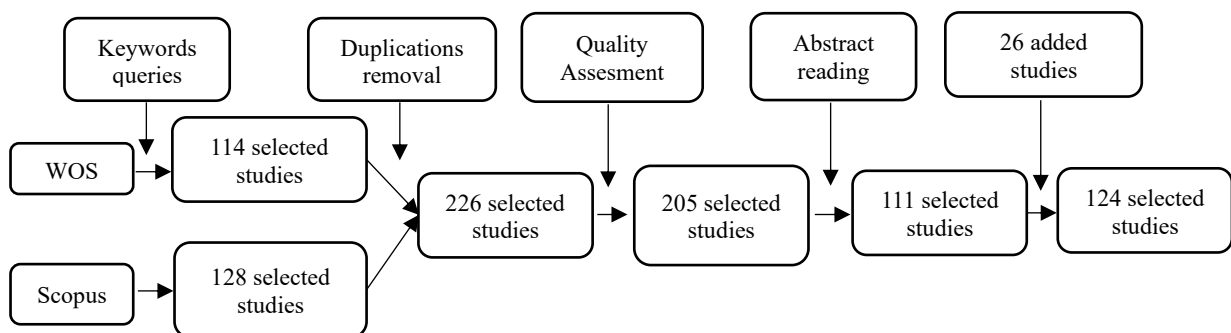
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This research provides an overview of the current state of the art in gamification. To do this, a systematic review of the literature (Tranfield et al., 2003; Loureiro et al., 2020) was conducted to map gamification. This systematic analysis is composed of articles, conference papers, and books published between 2004 and October 2023. This study analyzes the objectives, methodologies, theories, constructs (antecedents, moderators, mediators, consequences), main conclusions, main gaps, limitations, and indications for future research, that are relevant to this research.

Figure 1. Screening process



Source: author's elaboration

The studies for this research were extracted from two large online libraries, Web of Science and Scopus, from which 114 and 128 studies were extracted respectively. First, regarding the extraction on two different platforms, duplicate studies were removed (16 studies). Subsequently, quality was assessed, considering the rank of journals in Scimago 2022 (SJR 2022) and JCR 2022 that are between quartiles 3 and 1, thus reducing the list to 205 studies.

After that, the content of the title and abstract was assessed and 94 studies that were not relevant to this research were removed.

After reading the 111 studies, 13 studies were removed for not having relevant content and meeting the quality criteria applied in other studies. (Macpherson and Holt, 2007; Pittaway et al., 2004). Furthermore, it emerged that 26 studies were constantly being cited, but were not included in the initial search. Therefore, given the relevance of these studies, they were included. Most of the studies added (16) with relevant citations are from the sector technology and, therefore, they were included in this systematic review, which thus left the final number of 124 studies to analyze, of which 82 are articles, 41 are conference papers and 1 is a book (see figure 1).

From 2013 to 2023, around 82 articles were published in various journals, such as Computers in Human Behavior, International Journal of Information Management, Journal of Interactive Marketing, International Journal of Retail and Distribution Management, and Business Horizons of which represent 22% of this type of document. The year with the highest number of publications was 2022. In that year there was a wide variety of journals that contributed to the scientific community (21% of all journals with publications) since there was one publication per journal. Some examples of journals that were published that year are: Electronic Commerce Research and, the International Journal of Advertising and Tourism Management.

In terms of conference papers, 41 studies were published at the following conferences: CEUR Workshop Proceedings, ACM International Conference Proceeding Series, and SIGCSE 2021 - Proceedings of the 52nd ACM Technical Symposium on Computer Science Education of which represent 22% of all conference papers. Similar to articles, the number of publications has been increasing over the years, with the first year there was a study published being 2004 and the year with the highest number of publications being 2020.

Concerning the sectors used by the studies analyzed in this literature review, 27% of the studies deal with gamification in general. In terms of specific sectors, most studies are aimed at the Education (31%), Retail (15%) and Healthcare (8%) sectors.

Concerning the methodologies used in the studies, 52 are quantitative, 38 are qualitative, 20 are literature reviews, 10 are mixed methods and 4 are conceptual.

Regarding the theories used, 93 theories were identified throughout the studies analyzed, but only 11 theories (12% of all theories) were cited more than once.

The most referenced theories in the studies analyzed in this research are, as follows, Self-Determination Theory (Deci and Ryan, 1985), Flow Theory (Csikszentmihalyi, 1975), MDE Framework (Plangger et al., 2016), MDA Framework (Hunicke et al., 2004), TAM (Davis,

1989), Theory Planned Behavior (Ajzen, 1988, 2020; Sussman and Gifford, 2019) and Stimulus-Organism-Response (Woodworth, 1929).

The systematic analysis of the literature also identified the main constructs used in this field of research. The most frequent antecedents are Gamification (33%), followed by Challenge (6%), representing a total of 39% of the antecedents, where the rest are used only in the respective article. Within mediators, the most frequently used are Customer Experience (14%) and Emotions (7%). The moderators, on the other hand, there is no discrepancy in the variables, with only one use per article, e.g. moderators: Customer Engagement, Price Discount, Satisfaction, and Perceived Usefulness. Finally, consequently, the most frequent variables are Behavioral Intention (8%), Customer Intention (8%), and Perceived Learning (5%).

The findings of this systematic literature review provide a framework to show the main constructs and relationships used to study gamification, present gaps in the literature, and point to avenues for future research, as well as provide businesses with some pointers for best practices.

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