Massive Open Online Courses (MOOCs) as a Facilitator of Organizational Culture for the Implementation of Key Indicators (KPIs)

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The study is based on literature reviews focusing on Key Performance Indicators (KPIs), organizational culture, and corporate Massive Open Online Courses (MOOCs). Its objective is to identify synergies and intersections related to these themes and provide guidelines for constructing a learning model centered on MOOCs. The findings suggest that MOOCs can contribute to fostering a performance-oriented organizational culture by enhancing technical and adjacent skills, thus aiding in adopting KPIs within organizations. The study proposes a set of guidelines comprising 10 distinct elements for implementing a learning model based on MOOCs.
Keywords: Organizational Culture. Key Performance Indicators. KPIs. MOOCs. Massive Open Online Courses. Corporate MOOCs.

The increasingly complex and globalized business environment necessitates continuous monitoring of organizational performance to remain competitive [1,2]. Key Performance Indicators (KPIs) are crucial for optimizing resource utilization and enhancing organizational outcomes through ongoing improvements [2,3]. However, selecting appropriate KPIs is often challenging and intricate [1,5].

Organizational culture is a significant factor influencing the development, implementation, and utilization of performance indicators [6-8]. It is recognized as a strategic asset and competitive advantage [9,10], playing a vital role in fostering success by cultivating desired behaviors, skills, and attitudes.

Massive Open Online Courses (MOOCs) emerged as a popular form of digital learning, particularly after platforms like Coursera gained prominence in 2012 [11]. MOOCs offer several advantages, such as cost-effectiveness, broad accessibility, flexibility, adaptability, and agility [12-14]. They provide focused, short-term learning opportunities aimed at developing specific skills. Given MOOCs' capacity to enhance technical and adjacent skills, including digital and social skills, they hold the potential to be facilitators for implementing KPIs within organizations. They can influence organizational culture by continuously developing behaviors and attitudes in the workplace at a reduced cost.

This article aims to explore the synergies and intersections among KPIs, organizational culture, and MOOCs through a literature review. It also intends to provide guidelines for constructing a learning model based on MOOCs, assisting Human Resources managers or training program administrators in organizations.

Materials and Methods

The method approach for conducting the literature reviews involved qualitative research to synthesize the findings from selected studies. This process was structured into five distinct steps, as outlined below:

Step 1: Selection of Databases

The first step involved identifying and selecting relevant databases for the literature review process.

Databases such as the CAPES journals portal and other pertinent academic platforms were chosen to ensure comprehensive coverage of the literature related to KPIs, organizational culture, and MOOCs.

Step 2: Definition of Inclusion and Exclusion Criteria

Clear criteria were established to determine which studies would be included or excluded from the review. Inclusion criteria focused on studies directly related to the corporate context and accessible through the selected databases. Exclusion criteria were applied to studies that did not meet these criteria or lacked relevance to the research topic.

Step 3: Establishment of Search Descriptors

Specific descriptors and keywords were defined to conduct targeted searches within the selected databases. These descriptors were carefully chosen to capture the essential aspects of KPIs, organizational culture, and MOOCs, ensuring relevant literature was identified.

Step 4: Study Selection Process

The selection process involved analyzing the titles and abstracts of identified studies against the predefined inclusion and exclusion criteria. Studies that did not align with the corporate context or were inaccessible through the CAPES journals portal were excluded from further consideration.

Step 5: Full Study Analysis

Selected studies underwent a thorough reading and analysis to extract relevant aspects and identify intersections and synergies among KPIs, organizational culture, and MOOCs. This analysis aimed to identify insights and findings that could contribute to the development of guidelines for implementing a learning model based on MOOCs.

Overall, this methodological approach ensured a systematic and rigorous review of the literature, enabling the synthesis of key findings and the development of actionable guidelines for leveraging MOOCs in organizational learning models.

Table 1 shows the topics studied, the databases consulted, the inclusion criteria adopted, and the descriptors used in the research.

Table 1. Topics, databases, inclusion criteria, and descriptors.

Topics	Database	Inclusion Criteria	Descriptors
KPIs	CAPES journals portal	2017-2022 peer-reviewed articles English	Key performance indicators, kpis, performance indicators, extraction, development, selection, prioritization and identification
Organizational Culture	CAPES journals portal Web of Science Google Scholar Scopus	2017-2022 peer-reviewed articles English	Organizational culture, pharmaceutical industry e performance indicators
MOOCs	Web of Science Scopus Scientific Electronic Library On-line Scielo (SciELO) ERIC	2017-2022 peer-reviewed articles English / Portuguese / Spanish	Corporate university, corporate learning, workplace learning, professional learning, mooc, massive course, massive open online course

Results and Discussion

Data has been identified through the literature review, highlighting synergies, intersections, and other relevant aspects among the themes of KPIs, Organizational Culture, and MOOCs (Table 2).

The primary objective was to address the research question concerning how MOOCs could drive changes in organizational culture to facilitate KPI implementation. Additionally, the study aimed to propose a set of guidelines for developing an "Online, Flexible, and Technology Enhanced."corporate learning model.

Based on the literature, it is evident that assigning technical skills to the development and selection of suitable KPIs is crucial. This necessitates influencing employee behavior to align organizational culture with performance values.

MOOCs, as highlighted Farrow [22], can facilitate this transformation. By serving as a learning model for employee qualification, MOOCs offer cost-saving advantages through their online format, eliminating travel expenses [12-14].

By leveraging MOOCs, organizations can disseminate technical knowledge and foster adjacent skill development continuously, reaching a larger employee base at reduced costs. Given these benefits, MOOCs have the potential to effectively shape organizational culture, aiding in the adoption of appropriate KPIs.

However, critical factors such as a proficient training program planning, well-defined objectives and expectations, and a secure digitalplatform are essential [13].Therefore, adhering to a set of guidelines (Table 3) is vital for creating a learning model that ensures the successful implementation of KPIs and the effective use of MOOCs for employee qualification strategies.

Conclusion

This study delved into the intricate dynamics involving organizational culture, KPI implementation, and employee qualification through MOOCs. Adopting guidelines for implementing an "Online, Flexible, and Technology-Enhanced"

Table 2. Relevant aspects, intersections, and synergies about KPIs, organizational culture, and MOOCs.

Relevant Aspects	Intersections	Synergies
KPIs help to identify gaps between current and desired performance [5,15,16].	One of the factors influencing the development, implementation and use of performance indicators is organizational culture [6-8].	In addition to technical skills, MOOCs promote the development of fundamental skills for the socialization of knowledge [22].
The process of selecting, prioritizing and developing suitable KPIs is a complex and subjective task, so specific technical knowledge is required [5,17-19].	The successful implementation of a measurement program requires a performance-oriented organizational culture [20].	The strategic implementation of MOOCs makes it possible to contribute, among other things, to improving organizational performance [13,14-23].
Due to the dynamics of today's world, both professionals and organizations have invested in continuous qualification and retraining through MOOCs [12].	Performance comes from interdependent behaviors such as cooperation, knowledge sharing and mutual assistance [21].	Organizations are diversifying the options for the hybrid online-to-offline (O2O) training model [14].

Table 3. Guidelines for implementing a learning model based on MOOCs.

Identify the challenges and opportunities related to organizational culture and the implementation of KPIs.
Identify the gaps in knowledge, technical skills (competencies) and what attitudes (adjacent skills) need to be developed [23-24].
Clearly define the objectives, goals and expected results in the course plan [13].
Design focused short courses based on real cases and problem situations [25].
Adopt the hybrid learning model (O2O) [14].
Promote engagement through non-monetary incentives such as participation in special events, courses, meetings, gifts, among others [24].
Enabling adaptable (flexible) learning paths according to participants' needs [25].
Select a learning platform with clear rules on data use and privacy [13].
Implement course evaluation and monitoring indicators [13].
Promote the course openly, without restrictions or prerequisites for the entire organization [13-22].

learning model based on MOOCs could shift organizational culture toward valuing performance monitoring and easing KPI implementation. This is primarily due to MOOCs' capacity for widespread knowledge dissemination and continuous technical and related skills development.

The research uncovered the convergence of KPIs, organizational culture, and MOOCs, identifying barriers, drivers, and practical strategies. It also proposed guidelines for establishing a corporate learning model to assist human resources managers and MOOC developers in transforming training and development programs through technology-driven continuous learning. It is worth noting that the literature review on MOOCs in organizational contexts needs more empirical studies. Therefore, evaluating MOOC initiatives in this context presents a promising area for future research.

Acknowledgments

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