

Boardcraft: Learning the Art of Strategic Decision-Making Card by Card

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Abstract: *Boardcraft*, an interactive, sequential card game, is a powerful tool for teaching Strategic Management in an undergraduate Business Administration Degree. This innovative game provides students with practical experience in strategic analysis, business strategy formulation, and strategic decision-making, addressing one of the main challenges of social science teaching: practical application. The objective of the research to be carried out is to find evidence of a change in students' attitudes towards making strategic decisions. To do this, two questionnaires will be carried out, one before and one after the game's introduction in the classroom, three months apart. The data will tell us if decision-making through a business strategy game changes their perception and attitude towards decision-making by acquiring competencies and skills that prepare them better for decision-making throughout their career and life. This game will streamline the teaching of strategic management in higher education, a subject traditionally based on lectures and case studies. Teaching strategic management is complex since the student is immersed in a context of continuous decision-making that requires the application of an appropriate methodology for proper understanding. Game-based learning (GBL) activities like *Boardcraft* that bring strategic management closer to real-life contexts are desirable. The application of this game will also allow researchers to analyse the effect of experiential learning, the acquisition of interpersonal and conceptual skills, the importance of aesthetics and the introduction of fun elements in game-based learning.

Keywords: Decision-making Teaching, Strategic Management Teaching, Game-based Learning (GBL), Experiential Learning, Card Game, Decision Crafting.

1. Introduction

One of the main challenges in teaching social sciences is the lack of a "laboratory" to apply the theoretical knowledge taught in the subjects to make decisions, and real-life situations do not provide enough practice opportunities (Chernikova et al., 2020). Teaching strategic management is complex as the student is immersed in a continuous decision-making context that requires the application of an appropriate methodology for proper understanding. Game-based learning (GBL) activities that can approximate strategic management to real life are desirable (Stewart and Wang, 2023).

Studies show that the results of a GBL methodology and traditional teaching are similar in knowledge acquisition, but game-based learning was more successful in increasing students' motivation (López-Fernández et al., 2021). Student learning involves acquiring knowledge and developing general and specific competencies, and both types of learning are enhanced by increased motivation. Games can be an appropriate methodology for motivation in developing competencies that are not achieved with the transmission of knowledge in the master class.

This study explores structuring a course as a game parallel to theoretical lectures. The research aims to evidence the change in university students' attitudes towards strategic decision-making and the acquisition of competencies and soft skills by introducing experiential learning through a game in the classroom parallel to the strategic management lecture sessions, which increases engagement and motivation.

2. Theoretical Background

Strategic management requires skills in conceptual and analytical thinking and creative thinking. The most common materials used in teaching the analytical dimensions of business strategy are texts, case studies, and simulations. However, materials that foster creative thinking are scarce (Weick, 2003). Research demonstrates that GBL is a well-founded methodology that can replace and complement traditional learning, providing engagement, motivation, fun, immediate feedback, causality, experiential learning, etc., in acquiring competencies (Tang et al, 2007; Anagnostopoulou, 2017). Literature in games and simulations in management higher education prioritises the beneficial effects of experiential learning (Stewart and Wang, 2023). These kinds of experiential teaching and learning activities, such as games, simulations, and practical activities, are increasingly in demand in management education. Gamification encourages behavioural change and promotes desired attitudes in many fields (Almarshedi et al., 2015). Following Mintzberg (2005:2), "Management is a

practice that has to blend a good deal of craft (experience) with a certain amount of art (insight) and some science (analysis).” In this sense, one of the challenges of teaching strategic management in higher education is introducing this experiential learning into the learning process.

3. Boardcraft: Game Description

Boardcraft is a sequential and interactive card-based role-playing game used to teach strategic management in the bachelor’s degree in business administration. It is designed to align with the course description. Students play it in teams throughout the course at the pace of developing the theoretical concepts, combining the practical game sessions with the theoretical lectures.

We named the game “*Boardcraft*” to convey that strategic decision-making within any organisation is an art. The game initiates students into “crafting” decisions as they act as if (role-playing) they were already at Strategic Committee. Their mission? To carry out the company's strategic analysis, formulate the most appropriate strategy according to their objectives and decide on the long-term strategy to present at a simulated General Shareholders' Meeting.

Weekly, each team randomly picks cards related to their company and environment: *Information, Decision, and Breaking News*. What will they do? At the end of the semester, students will be able to understand the process of analysis and formulation of business strategy with an entertaining methodology that challenges and helps them develop, among others, strategic thinking, teamwork, and communication skills.

3.1 Game Elements

The game's elements are a virtual road map of the strategic process, a set of three different card decks, a guide booklet, and a task description.

Boardcraft's Road Map is a virtual board with a road map of the strategic process. The visual element locates the participants' positions in the decision-making process, the following steps, and the path to the final decision (Figure 1), following two of the strategic management process's main stages: strategic analysis and formulation (Guerras and Navas, 2023).

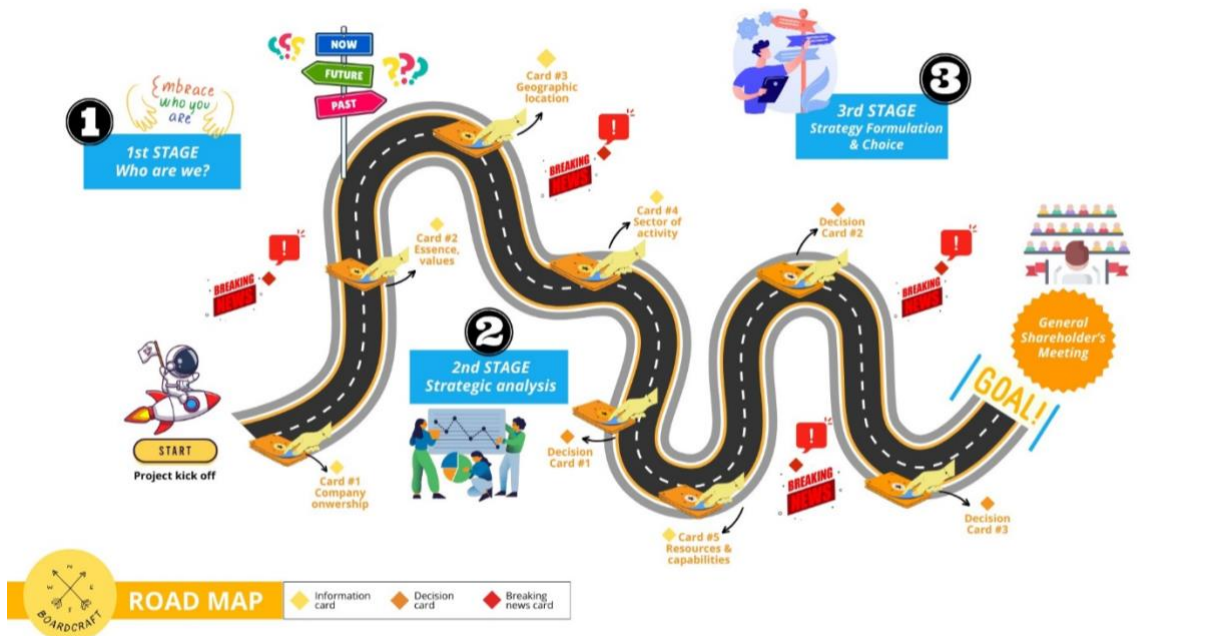


Figure 1: *Boardcraft*'s Road Map

The cards comprise *Information cards*, *Decision cards*, and *Breaking News cards*.

Information cards are physical cards with a yellow diamond in the front. There are five themed decks: company's ownership structure, essence and values, geographical location, sector of activity, and primary resource/capability (Figure 2).

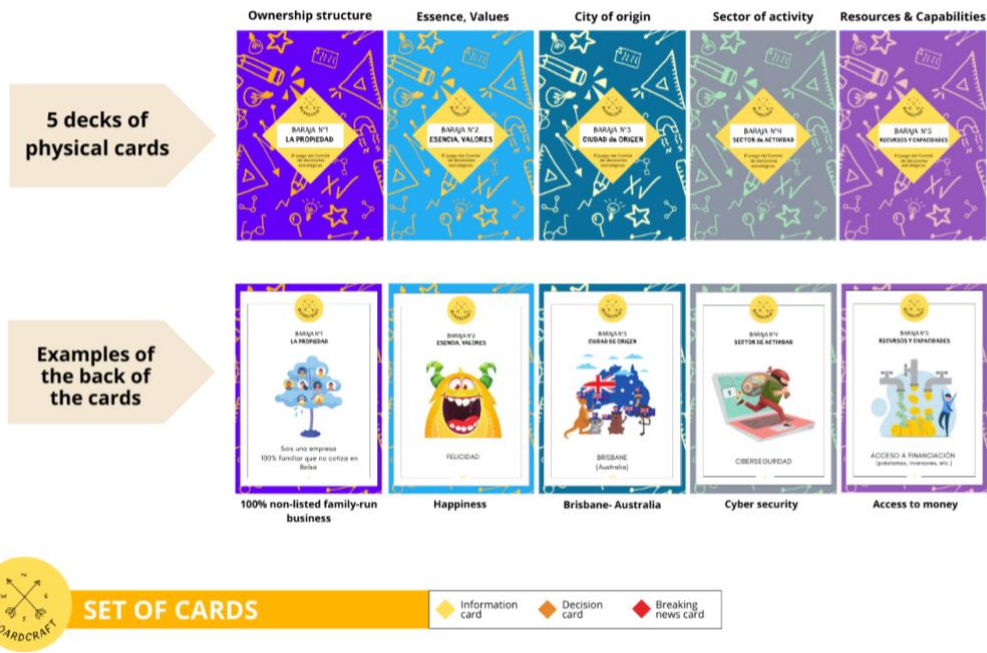


Figure 2: Set of Cards: Information cards

Decision cards and Breaking News are virtual cards (Figure 3). Decision cards have an orange diamond on the front. These cards are standard to all groups and are sent by the teachers:

- Decision Card #1: What is your field of activity within the sector?
- Decision Card #2: What is your general strategic positioning?
- Decision Card #3: Given three strategies, choose the most appropriate one as the company's next move.

Breaking News cards have a red diamond on the front. During the game, the teachers prepare these cards to choose real news related to the cards picked by the teams.

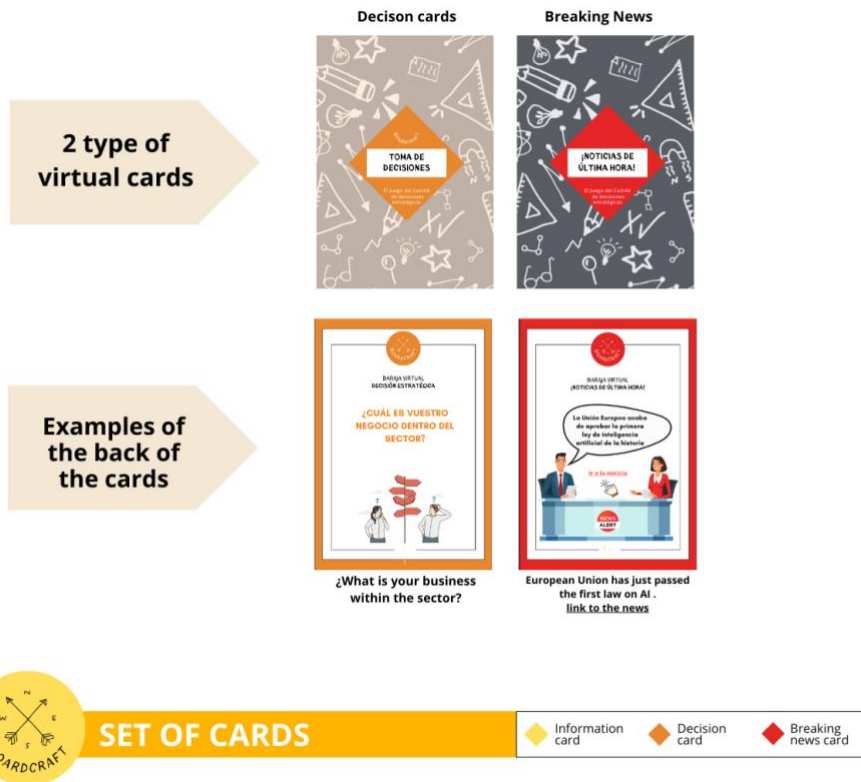


Figure 3: Set of Cards: Decision cards and Breaking News cards.

The guide “booklet” and task description for the students are digital guides uploaded to the university's virtual platform.

3.2 Game Dynamics

At the beginning of the course, the students form teams and are informed that they have recently joined a company's Strategic Committee. Their mission is to deliver the strategic report, prepare an executive 8-minute presentation for a simulated General Shareholder's Meeting, and debate and justify their decisions on a given date (the last day of the course).

The game unfolds in three stages, and the teams periodically pick *Information cards* five times:

- First stage: Who are we?
Information Card #1: Teams pick one card from the “Ownership” deck.
Information Card #2, #3, #4: Teams pick three cards from the “Essence, Values” deck.
Information Card #5: Teams pick one card from the “Geographical location” deck.
- Second stage: Strategic Analysis
Information Card #6: Teams pick one card from the “Sector of activity” deck.
Decision Card #1: What is your business within the sector?
Information Card #7: Teams pick one card from the “Resources, Capabilities” deck.
- Third stage: Strategic Choice
Decision Card #2: What is your general strategic positioning?
Decision Card #3: Which strategy do you think we should follow, why, and what resources should be required?
- Finish line: A simulated general shareholder's meeting takes place on the last day of the course. Each team has 8 minutes to present their business case and strategic decision and deliver the strategic report for evaluation.

The game has been designed to encourage the spirit of play. The design of the cards is attractive to achieve greater student engagement. Colours, symbology and illustrations try to convey the messages and promote the understanding of the information with a touch of humour. The role of fun elements is to create comfort and increase motivation in a learning process, providing satisfaction without coercion and without feeling bored (Prensky, 2001).

4. Research Design

The research will be carried out in one semester of the academic year. The sample will be between 50 and 60 undergraduate students in the Strategic Management course for the Business Administration Degree. The methodology will be a pretest and post-test before and after the game's introduction in the classroom. The phases of this research are as follows:

1. At the beginning of the semester, an ad hoc questionnaire will be administered to students measuring their motivation and attitude towards decision-making (*I like to make decisions, I prefer to be the one who decides, I prefer others to decide, etc.*), their attitude towards group or individual decision-making work, as well as the personal assessment of other competencies and soft skills. The questionnaire also will include initial demographic questions (gender and age).
2. For three months throughout the semester, the game will be implemented in the teaching methodology in parallel with the development of theoretical lectures.
3. At the end of the course, the students will be questioned again to obtain information on a change in their attitude towards decision-making, and a discussion group will be held with them to obtain qualitative information on the intervention.

4. At the end of the intervention and data collection process, we will have qualitative and quantitative information on the student's attitudes towards strategic decision-making and the acquisition of competencies throughout the course.

Before the research, the game was tested and introduced into the classroom methodology to verify its functioning and its integration into the content of the Strategic Management subject in 2023-2024 academic course. Boardcraft will be integrated into the teaching plan for 2024-2025, incorporating enhancements based on the pilot test conducted in the previous academic year.

The appropriate methodology will be used to treat quantitative and qualitative data, allowing robust conclusions to be reached about the change in students' attitudes towards decision-making and the acquisition of soft skills and competencies such as teamwork, negotiation, collaboration, creativity, decision-making with uncertainty, individual and group responsibility, and oral and written communication.

5. Conclusions

Boardcraft is a learning methodology that balances the practical application of strategic management knowledge with the development of soft skills inherent in people engaged in "the craft of" decision-making and management. The application of *Boardcraft* aims to recapture the principle of "instructing by delighting", used by Horace in the 1st century BC to promote holistic growth of learners (moral, spiritual and intellectual growth) beyond the purely intellectual. The main objective of the research is to demonstrate whether experiential learning through a game increases motivation and changes learners' attitudes towards decision-making. The learner belongs to a group, and the group has to make strategic decisions. The data collected before and after the intervention (application of the game) will allow us to demonstrate whether there is a change in the students' attitudes towards decision-making because motivation increases and, with it, the acquisition of competencies.

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