

# THE GAME OF BRAND MANAGEMENT: A CLASSROOM GAME OF COMPETITION SIMULATING BRAND PORTFOLIO DEVELOPMENT ACROSS THE CONSUMER FUNNEL.

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## ABSTRACT

*This article introduces a game for classroom use based on a simplified model brand management, The markets consists of five different segments, and the brands are developed through many types of promotion actions along a consumer funnel. It was designed for a three-hour session, in a classroom, with up to thirty participants, but preferably with around sixteen participants.*

*The model simulates the difficulty of developing all brands together, and therefore the students must make choices. It highlights the importance of different promotion actions as the brand develops in the market, as well as positioning and segmentation.*

*The model is simple to give the students a better view of the possibilities, and yet the possible combinations and adaptations are so many, that no two games will be the same.*

## INTRODUCTION

This article introduces a game for classroom use based on a simplified model of brand management using concepts of consumer funnel, segmentation and promotion.

The game is a translation with minor improvements of the Brand game published in Alves (2015), which is a major improvement over a brand game of Alves (2001).

The original game was published only in Portuguese language. The game has been applied successfully many times in executive education courses over the last years.

The basic model is that each segment is represented by a track in which a brand gets developed. This track is a simulation of the consumer funnel. To advance in this track the player has to choose among a few different promotion options that have different prices and probabilities of success. The top layers of the funnel (regular and loyal) have a check to maintain the position, simulating the difficulty of sustaining such positions.

The game rules section was written as an appendix so that it can be printed separately for the participants.

## DESIGN GOALS

The main goal of the game is to be applicable in a classroom with minimal infrastructure, and therefore it retains the traditional pen and paper logic, however today we have a more easy access to spreadsheets and projectors, so that, not necessarily, the main game data has to be drawn in a blackboard.

The secondary goal is that it will be a competitive game to develop the concepts of positioning, segmentation, promotion and consumer funnel.

The tertiary goal is that it can be used in a three hour session with a thirty minutes explanation and a thirty minutes debriefing and two hours of gaming itself. This allows it to be applicable to executive education, MBA, EMBA, graduate, and under-graduation courses.

The quaternary goal is that it has to be fun and engaging, while retaining a reasonable connection with the real world, so the promotion actions, segments, and stages of the consumer funnel are real, the formulas are realistic. The model is simple and explicit but close to reality. Dice are used to represent life-like events like the success or failure of promotion actions.

## USAGE METHODOLOGY

This game was designed for use in a three-hour session, in a classroom, with up to thirty participants, but preferably with around sixteen participants.

The only materials needed are printed copies of the rules, a blackboard, and at least one ten-sided die, but preferably more dice. This makes it a low cost application for any situation. However if a projector and a spreadsheet are available it will be much easier to use.

The participants should preferably have received the rules beforehand, but that is not entirely necessary, since the rules are simple and can be learned while playing.

The facilitator must divide the participants into four to six groups, ideally four groups. Each group can have from two to five participants, ideally four participants. So the number of participants can range from eight to thirty, but with an ideal number of sixteen.

Time usage should be:

- a) Thirty-minutes for groups' setup and game explanation.
- b) Thirty to forty-minutes for the first turn.
- c) Twenty to thirty-minutes for subsequent turns.
- d) Thirty to forty-minutes for debriefing.

The number of turns will depend on the speed of the groups for decision-making, but at least five turns should be taken, preferable six turns or more.

The facilitator should answer all questions pertaining to the rules of the game to the best of his or her ability, but never directly answer question about which strategy to pursue, or what decision to make. If a group is stuck with decision paralysis, that is unable to make a decision, it should do nothing that turn as a penalty for indecision.

Some questions and issues selected for discussion in the debriefing can be advanced with each group as they realize some of the points. However the game rules purposely miss the issue as which is the objective of the game, and who wins, so

that this discussion may rise in the debriefing as how to evaluate a company, its assets, return on investment, sustainability of the profit, and future cash flow. So the facilitator must avoid a direct answer to these issues always pointing to the participants that this issue is missing on purpose, and asking them how they think the companies should be compared to each other. Usually only a few groups rise the question and only in the later half of the session.

The market does not have a trend to monopoly, but at the top layers of the funnel the brands must make a check in order to sustain themselves on those positions (regular and loyal), the positions tend to be unstable. This makes the game look like a race to occupy and maintain the top layers of each segment.

## DEBRIEFING

The game is a mean to an end, which is learning through experience, so to consolidate this learning a debriefing is necessary at the end of the session. The participants will probably keep talking about the game afterwards but it's important to give them a closure at the end of the session.

The facilitator may discuss whatever he or she finds necessary and important given the purpose of the course but some suggestions are made here.

a) The first question to address is which company won the game, since it's not explained anywhere on the rules on purpose. The facilitator should induce them to think how much each company is worth, or by how much money they would buy each company, or how much money each company will get in the future. The concepts behind those questions are valuation, future cash flow, and assets evaluation. They must understand that cash is not the only asset here, and the assets will have some value in the future, but this value is not fixed, and different evaluations may exist.

b) Other possible line of discussion is about the game dynamics that represents the game and its relation to the strategies. Since the model is built in such a way that some segments are bigger than others while some have a better profit margin, the priorities may be different. Also the first stages of the funnel don't generate much market share, and therefore money, in comparison with the top layers. So reaching at the top with at least one brand to generate cash for the others may be critical.

c) Another possibility is the group dynamics in terms of decision, or how they made their decisions during the game and how they felt time pressure, incomplete information, decision trees, group synergy or conflict, how they dealt with the competition, the deals and betrayals.

d) The segmentation of markets itself can be a line of debate as well since the game presents a segmentation that is usual for many consumer products, but could be defined in different ways. Organizational markets (B2B) would have different segmentations, but could follow the same logical model.

e) Promotion actions along the consumer funnel can be another topic for discussion. The uncertainty model of promotion and the cost effectiveness of the actions, as well as the fact that some actions are possible only in some parts of the funnel present a nice debate, and possibly a separate lecture onto itself.

f) In this same line it's possible to discuss why the funnel even exists, linking it to human memory behavior, that is, showing that long-term memory is not readily accessible, and therefore a long exposure to sensorial memory is necessary before loading into short-term memory, that by its time loads the long-term memory.

g) Still following this path it's possible to link the model with adoption models using the normal distribution in terms of

time to adopt a new technology.

h) On last possibility is to discuss the simplifications on the model, like segments being fixed in terms of size, and margins, as well as technology and product quality being fixed. .

## COMMENTS

This model tries to simulate a generic consumer market where promotion is the key factor.

The players represent consumer product companies that must try to develop their brands with some monetary restrictions, so that they cannot develop all the segments at the same time. Some segments are smaller and therefore cheaper to enter, while others are big and more expensive. The margins of the segments are also different.

The model was developed using the concept of consumer funnel, and associating the promotion actions to the stages of development of the brands. This is a very common concept in marketing. The probabilities of success and costs for each action are arbitrary, and can be changed if the facilitator prefers so. They reflect that the more effective actions are more expensive thus creating balance between cost and efficiency. However sometimes the players will prefer effectiveness rather than efficiency.

In the long run across all segments efficiency is likely to prevail, but the risk aversion at each point may lead to a lower efficiency.

The markets shares are low until the trial stage. This reflects low sales before this stage is reached, and then it climb very fast, also pointing that the real profit in the later stages of the funnel. But at the later stages of regular and loyal it's hard to maintain a brand. This simulates the human memory that tends to erase short-term memory. Once at the top investment must be almost continuous.

Maintaining the brands at top level is unstable and therefore changes in leadership of the game are very possible.

To avoid some possible distortions all stages have at least 1 point of market share. If the unawareness stage had zero market shares, it could be possible for one brand only to get all the market value making this player a potential runaway winner.

The model has two major distortions in relation to reality.

The first one is that the shares of market are high in the beginning since all brands begin from unawareness. A variant on the game could include a non-player brand in each segment that would stay at trial level. This would be a non-consumer brand, becoming a proxy to reduce shares at early stages of brand development. This variant has not been tested.

The second one is that the model doesn't follow a product life-cycle curve. Such model could be implemented in a computer version of the same game.

Minor distortions come from the fact that the game model also doesn't incorporate all factors. For example cost of manufacturing, and logistics are not included. The players also cannot invest in new technologies or product quality.

The prices are fixed and given as margins in order to avoid price competition. Incorporating price fluctuations would create a much more complex model, and potentially create a race to the bottom in prices, changing the focus of the game.

The game could be complicated much more, however more complexity does not necessarily means a better learning experience for the participants. The complexity was kept low on purpose to maximize learning for participants.

## CONCLUSIONS

This article introduces a game for classroom use based on a simplified model of the consumer industry segmentation, promotion and brand management. The game is designed to last three hours and train up to thirty participants.

The game is a translation with from the brand game pub-

lished in Alves (2015).

The purpose is to create a relatively cheap training tool for Strategy, Business strategy, Marketing Strategy and game theory.

The game rules section is in an appendix so that it can be printed separately for the participants.

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**APPENDIX A  
Game Rules**

**GAME SCENARIO**

A new technology has been developed allowing for an entirely new consumer product to be made. All companies in this market are going to markets their brands for the five existing segments: high income, innovators, family first, status seekers and adventurers.

The companies will develop specific brands for each segment and manage these brands along the years trying to obtain the best positioning at the end of the decade.

The brands begin the game unknown to the public and must be developed through many stages of adoption and loyalty. Many marketing actions can be chosen in the target segments.

Your objective is to manage the company over the next 10 years (ten turns).

**GAME SCALE**

Each turn is the equivalent one fiscal year.

Each monetary unit (\$ 1) is the equivalent to one million dollars (1 US\$ Million).

Each market size unit (Size 1) is the equivalent one million consumers.

Each group starts with two hundred and fifty Million dollars (\$ 250).

The margin of each consumer is given in monetary units, that is, the number of million dollars of profit margin, per million consumers that bought the product.

Each group starts with five brands, one in each of the five segments. These brands are in the situation of unawareness, that is, they are located in the leftmost box of the main diagram of each segment. Put a marker on the unawareness box to represent that.

**GAME SETUP**

The facilitator will distribute the rules among the participants, and separate them into four groups or more groups. Each group can have from two to five participants.

The facilitator must draw, or project, the main diagram table in a blackboard, or wall. Figure 1 shows the main diagram with all segments. Each segment has seven boxes with a name and a number. The number represents the markets share correspondent to that development stage of the brand and it ranges from 1 to 20. The last two boxes have an arrow pointing left, reminding that there is a check to maintain the brand at this level of development. Each segment also has a size, a margin and a value. The value is the multiplication of size and margin.

The facilitator will also distribute a copy of the actions table for each group. Figure 2 shows the actions table. Each action has a cost, an efficacy and shaded areas representing the stages of development to which they can advance a brand, that is, in those unshaded areas they cannot be used to advance a brand. The shaded areas are also referred to as the range of effectiveness. The cost is represented in terms of a size and a multiplier, meaning that they cost differently depending on the segment they are used. The efficacy is represented in terms of a probability that is always a multiple of 10%. This is used to simulate the result using a ten-sided die.

**EXHIBIT 1  
FIGURE 1 –MAIN DIAGRAM**

High income	Unawareness 1	Awareness 3	Consideration 5	Trial 7	Repertoire 10	Regular 14	Loyal 20	Size= 40 Margin=20 Value=800
Innovators	Unawareness 1	Awareness 3	Consideration 5	Trial 7	Repertoire 10	Regular 14	Loyal 20	Size= 20 Margin=16 Value=320
Family first	Unawareness 1	Awareness 3	Consideration 5	Trial 7	Repertoire 10	Regular 14	Loyal 20	Size= 100 Margin=8 Value=800
Status seekers	Unawareness 1	Awareness 3	Consideration 5	Trial 7	Repertoire 10	Regular 14	Loyal 20	Size= 20 Margin=32 Value=640
Adventurers	Unawareness 1	Awareness 3	Consideration 5	Trial 7	Repertório 10	Regular 14	Loyal 20	Size= 40 Margin=16 Value=640

The facilitator will distribute a few copies of the Turn Expenditure spreadsheet. Figure 3 shows it.

Finally the rules must be briefly described and turn 1 will begin.

**GAME SEQUENCE**

The game is divided into turns representing one fiscal year. Each turn will be divided into several phases in the following sequence.

- Phase 1 – Planning Phase
- Phase 2 – Revelation Phase
- Phase 3 – Calculation Phase
- Phase 4 – End of turn Phase

Repeat these phases until the specified number of turns, or to the end of class time. A two-hour class will probably last three to five turns, while a four-hour class will last for five to eight turns.

Each phase is now detailed.

*Phase 1 – Planning Phase*

During this phase the students will make their decisions. They will analyze the situation, discuss among themselves looking at the market size, margins, current cash, brand situation and competition.

They have to choose one action for each brand in each segment. The possible actions are show in the actions table and have three characteristics: a cost, an efficacy and a range of effectiveness.

The cost of is dependant on the size of the of the segment in which it will be used. The size of the markets must be multiplied as indicated to find the cost in monetary units.

The efficacy is show as a percentage, which is the chance that the brand situation will improve during the calculations phase. All percentages are multiples of 10% so that a ten-sided die will be enough for resolving the game. This die may be physical, or simulated with a Smartphone application.

The range of effectiveness shows to which stages of development of the brand the action is effective. Refer to the table in the action and the stage, and if the area is shaded the action can be selected to improve the brand situation from the previous stage to the stage selected.

For example, since all brands begin in an unawareness situation, they must advance to the awareness situation as the next stage, so only two actions can do that, which are the TV ad and Magazine Ad. Let’s suppose that the TV ad action was selected for the Innovators segment brand. In this case the cost will be three times the size of this segment, that is, 3 x 20= 60\$. The chances of advancing will be 80%, or a 1 to 8 result in a ten-sided die.

In total each group can select up to five actions, that is, one for each brand:

*Phase 2 – Revelation phase*

In this phase all the decisions taken during the previous phase are revealed, so that the decisions taken privately are now public. The professor will mark the decision on the board, or spreadsheet.

*Phase 3 – Calculation phase*

**EXHIBIT 2  
FIGURE 2 1 –ACTION TABLE**

Action	Cost (\$)	Efficacy (%)	Advance to					
			Awareness	Consideration	Trial	Repertory	Regular	Loyalty
TV ad	Size x 3	80						
Magazine Ad	Size x 2	70						
POS ad	Size x 2	60						
Event	Size x 4	80						
Discount	Size x1	50						
Sampling	Size x 2	60						
Collectables	Size x 3	70						
Special series	Size x 2	60						
CRM	Size x 3	70						

**EXHIBIT 3  
FIGURE 3 –TURN EXPENDITURE SPREADSHEET**

Segment	Size	Value	Global Lever	Profit & Gains	Johann & Johann	Golden Life
High Income	40	800				
Innovators	20	320				
Family First	100	800				
Status Seekers	20	640				
Adventurers	40	640				

In this phase the professor will make all calculations in front of the students in the following order:

- a) Debit the costs of actions for each brand.
- b) Roll for advancement of the situation of each brand.
- c) Calculate the market share of each brand
- d) Credit the profit for each brand.
- e) Check for loss of situation in regular and loyal brands.

The steps a and b above have already been explained and they are basically dependant on the action selected for each brand, and the size of the segment.

The steps c and d are very close and linked to each other.

In step c to calculate the profit each brand in a segment will be assigned a market share of the market that is dependant on its situation at this point. This share is shown in the main diagram and is 20 if the brand is in Loyal, 14 if in Regular, 10 if in Repertoire, 7 if in Trial, 5 if in Consideration, 3 if in Awareness, and 1 if in Unawareness.

In step d we will divide the value of each segment, that is, its size times its margin, by the shares proportionately, rounding down fractions.

In step e all brands in the regular and loyalty situation have to check whether they lose one position. There is a 50% chance of this loss. Check for each brand with a ten-sided roll. This represents the difficulty of maintaining these situations, due to the nature of human memory. An arrow pointing leftwards is shown on the main diagram to remember this roll.

Example:

Let's suppose that in the innovators segment we find one brand in the Loyalty, two in Regular and one in Repertory. The brand would receive market shares of 20, 14, 14 and 10 respectively for a total of 58 market shares out of a total Value of 320 (Value = size  $20 \times$  margin 16). So each market share would correspond to  $320/58$  or 5.52, that is 5 rounding down. So the brands would receive a profit of 100, 70, 70 and 50 respectively.

After that the Brands in Loyalty and Regular situations have to check for loss of this situation. The Loyalty brand rolls a 4 in a ten-sided die and is reduced to a regular situation. Of the two Regular brands one rolls a 6 and the other a 1, so the brand which rolled a 1 is reduced to a repertoire situation. The brand in the repertoire situation does not have to check for reduction.

#### *Phase 6 – End of Turn phase*

Once done the calculations the companies must have positive cash. If that is not the case the professor will lend them enough money so that their cash becomes \$100.

Remember that this money will have to be taken into account in the debriefing as if it was money sent by the corporate headquarters to save the product division.

The professor may at his discretion grant additional money for the group to keep itself in the game without going bankrupt.