



Game Manual · July 2019



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KidVenture Increasing the entrepreneurial culture of children through gaming

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Developed by: Advancis Business Services, Lda (Portugal)



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INTRODUCTION

The **KidVenture Game** is a computer learning game, that together with **KidVenture Facilitator's Guide** makes for the whole of the KidVenture learning tool for the entrepreneurship education of kids.

The **KidVenture Game** was developed to be used in regular education settings and other contexts (e.g. blended learning, self-organised learning), providing a simulated environment in which users are challenged to make decisions, individually or in a group, concerning business-like situations.

This computer game is designed to **facilitate the acquisition of key entrepreneurial skills** (see *Framework for the key Entrepreneurship competences* available in www.kidventure.eu) and to **provide a context** for other learning opportunities on entrepreneurship topics.





GAME GENERAL INFORMATION

GENERAL CONCEPT

The general idea of the game is to simulate a necessarily simplified product development process for a Toy Robot in which the Players, playing individual roles but cooperating under the same objective, have to make decisions on product design, marketing, finances, production, to launch a successful product on the market, while facing competition of a toy factory.

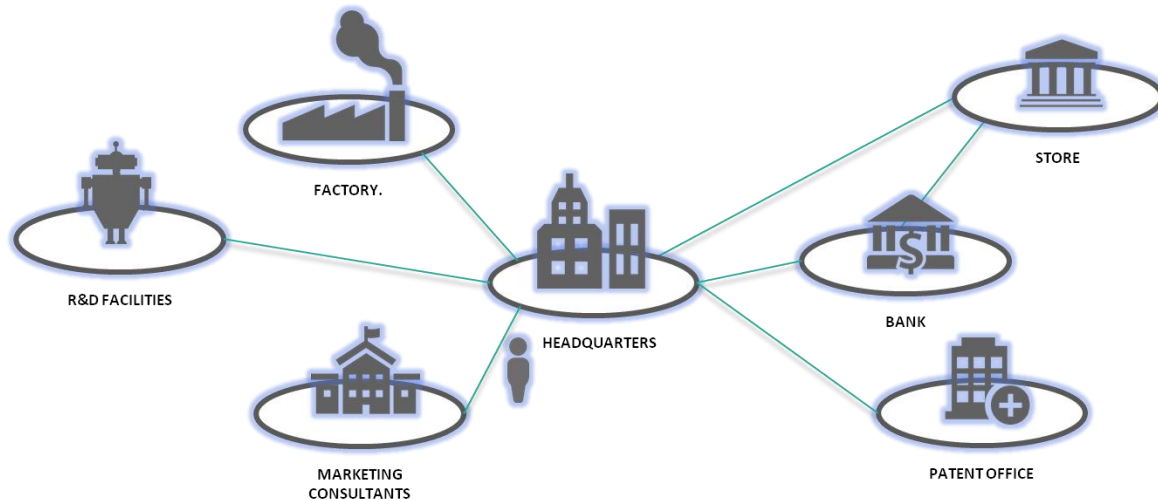
In the Game, four individual Players, with different profiles (interests) – Finances, R&D, Marketing and Production, embody the role of entrepreneurs engaged in developing and releasing in the market a Toy Robot. Their venture is supported and mentored by an external investor.

The Players begin by identifying the **market needs**, then proceed to **prototyping and testing**, followed by a **financial planning** just before engaging in the **production** to be able to finally **launch** the Toy Robot in the market.



- The **game's goal** is to develop and release successfully a Toy Robot in the shortest period of time possible.
- The probability for a successful release of the Toy Robot is measured by a key indicator - **Market Success Indicator (MSI)**. This indicator incorporates key factors such as response to clients needs, product innovation, effectiveness of marketing campaigns, etc.
- The actual successful release of the Toy Robot is measured by the number of units Sold. Players must sell at least 50 units out of 100 units produced to win the game. The number of units sold has a direct relation with the MSI level.
- The period of time is measured by the number of **Turns** in the game.
- The game should be played by a group of **4 Players** cooperating to achieve a common goal.

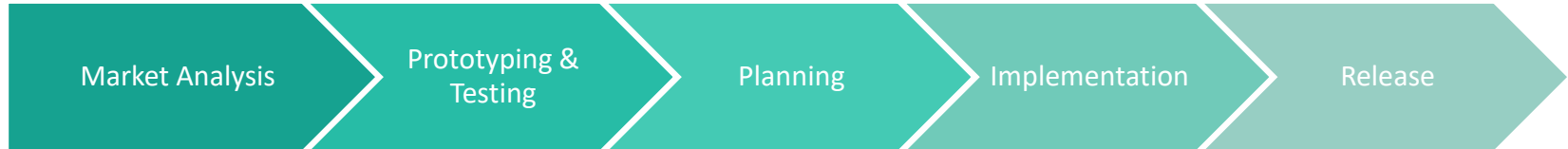




- The action takes place in a **business/city environment**, where the Players have to go through several steps on a product development process.
- Each step on the game's product development process corresponds to a game **Stage**.
- In each Stage, only part of the game environments will be accessible, according to the specific goal of each stage, also simplifying the game play.
- At the beginning of the game, and in each Stage, the Players are given **Coins** (the currency in the game). Like in real life, Players have to prove through their performance that they know how to manage money and get results so that the Investor keeps financing the project.
- Coins are used to commission market tests, develop parts, create marketing campaigns, etc., which are essential to raise success chances.



Game Stages



- Players will have to make **decisions** throughout the game play. Most decisions in the game will have an impact on the Coins and on the MSI.
- When the Players have reached the end of the final Stage the Toy Robot may be released in the market, **regardless of the MSI level.**
- The Players will have also to face the **competition** of another Toy Company. This virtual competitor - TrickyToys, will influence the MSI of the Players throughout the game play. For instance, if the competitor launches a similar product before the Players do, the MSI will decrease, as the innovation factor decreases.



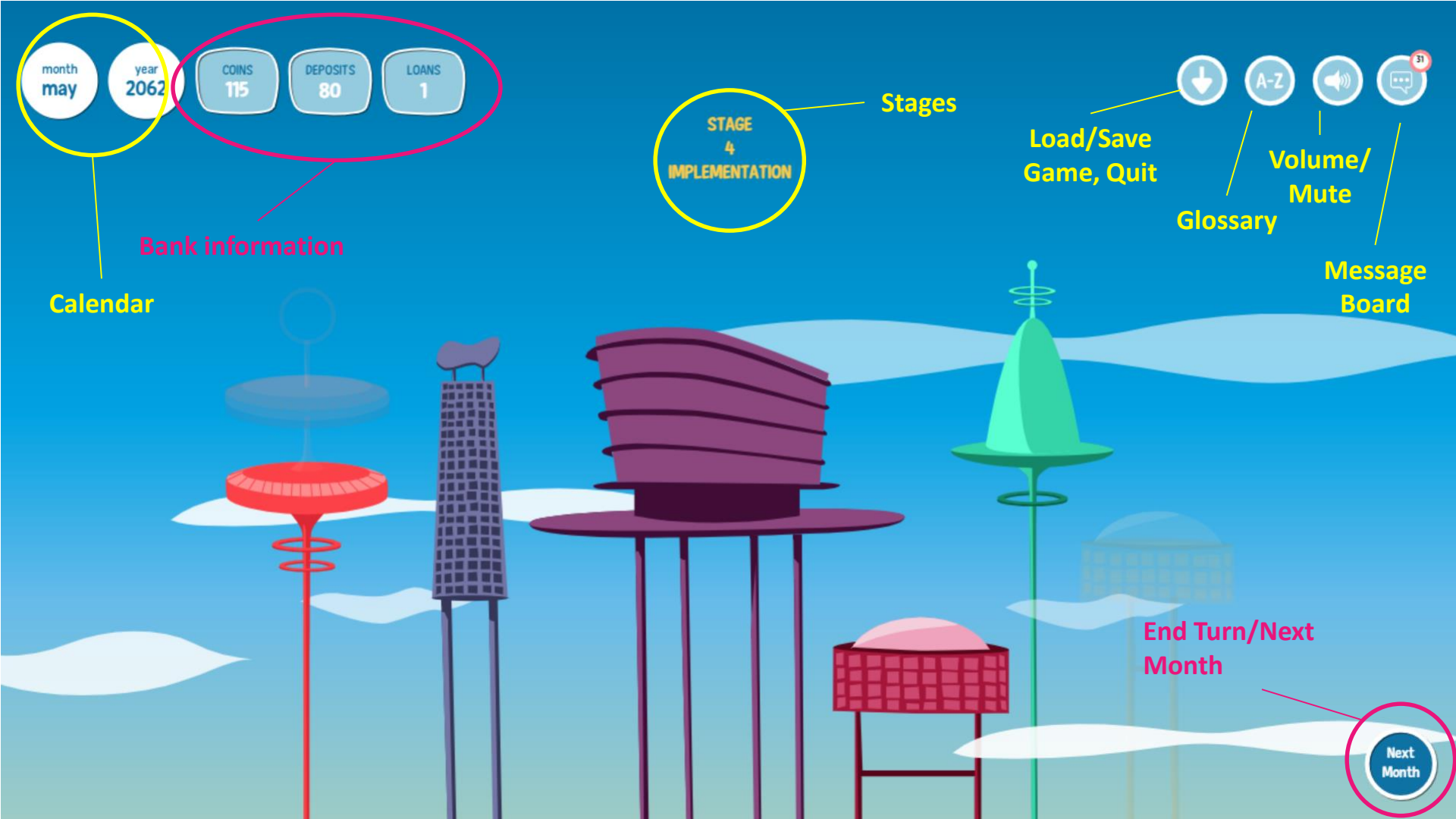
GOAL

The game's goal is to successfully launch a Robot Toy within the minimum period of time.

OBJECTIVE

The game's objective is to go through several steps on a product development process to launch a Toy Robot with a positive feedback from the market (sales over 50 units out of 100), in the shortest period of time possible, quantified in terms of game **Turns (or Months)**.

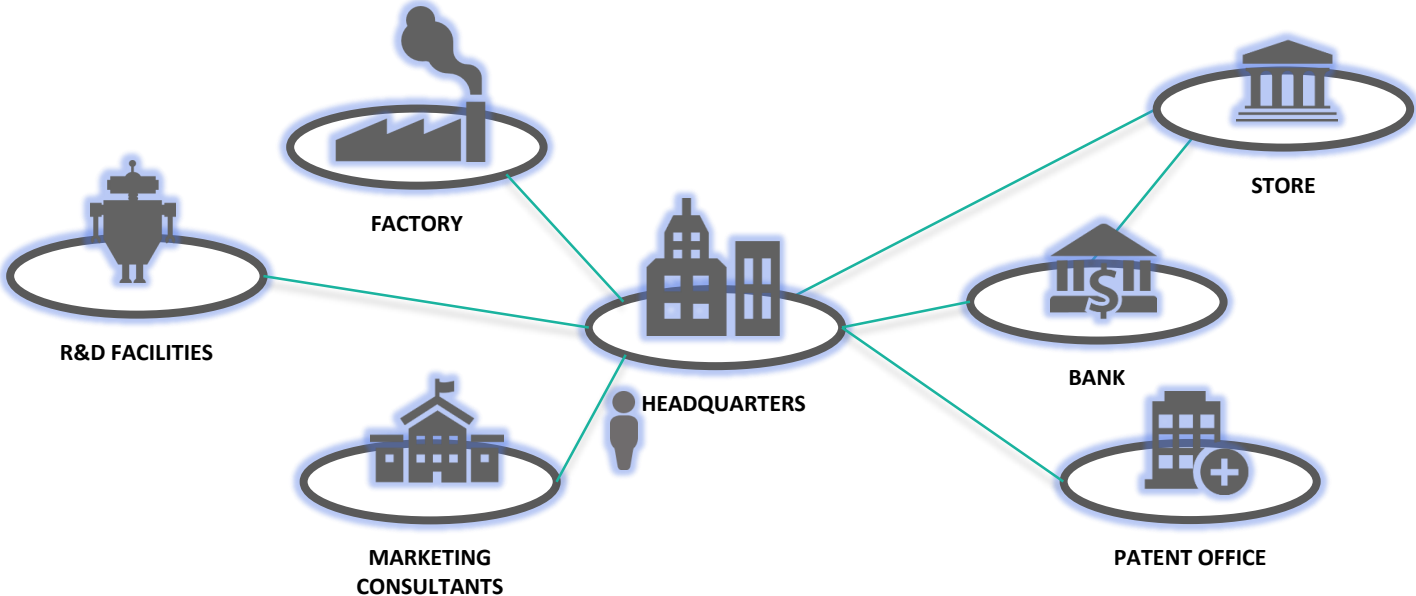




BASIC SCHEME OF THE GAME MAP



BASIC SCHEME OF THE GAME MAP



ENVIRONMENTS/BUILDINGS



Information Monthly Budget
Key indicators

Action Rent, end rental



Information Clients requirements'
list & competition

Buy Market Studies,
Start campaigns



Information Available patents

Action Pay rights, Register
patents



Information Deposits, Loans &
Insurances

Action Deposits, Loans,
Insurances:
Withdrawals,
Repayments,
contracting





R&D DEP.

Information Parts development plan

Action Develop parts



STORE

Information Information on consumer and sales

Action Collect market information
Check on sales



FACTORY

Information Phases to build the toy and time schedule

Action Produce toy



PLAYERS

The game is played by a group of four players, filling different roles – Financial Expert, R&D Expert, Marketing Expert and Production Expert – but contributing for a common objective.

In alternative, the game can be played individually or by larger groups, in cases that the Player assumes all roles or in cases in which each role can be taken by a group of Players making decisions together.

In class, teachers may also use the game to create different groups playing in different computers, creating a competitive environment to see which group reaches a higher level of success with a fewer number of game turns.

These other options should be explored in more detail in the Implementation Guide mentioned before.



TURNS



Turn is what enables the game action to move forward. The Turn starts always in headquarters (see ahead).

Each turn represents a month in which the Player can visit freely the different environments of the game that are available. The Player will have to hit the End Turn button to go the next month.



COINS AND CURRENT ACCOUNT



Coins is the currency in the game. The Players can use them to commission services and buy things, and to contract the financial services that they need to go through the game stages and launch the new product.

The Players get an initial grant in every game Stage and an additional monthly allowance. They can also draw income from interests on bank deposits.

The Coins the Players earn are automatically deposited in a Current Account in the bank.



MARKET SUCCESS INDICATOR (MSI)

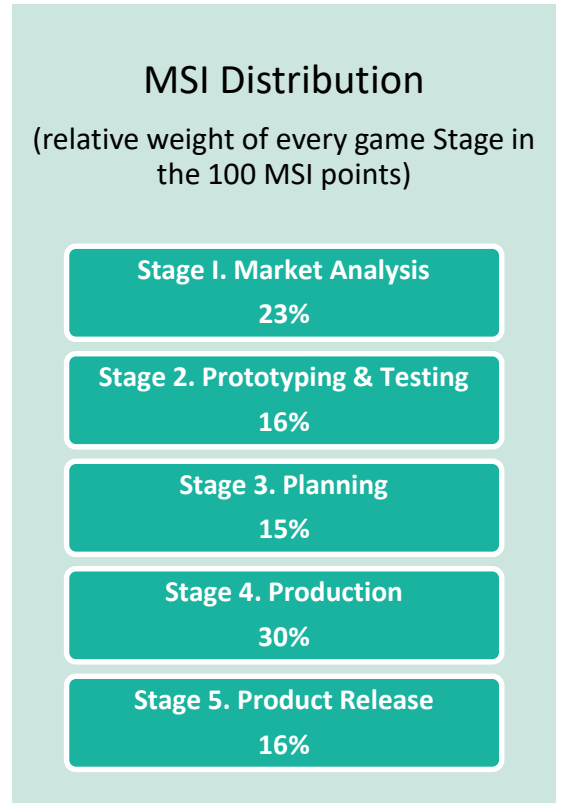
MSI is a **measure of success in the game**.

The Players will collect and accumulate MSI points along the different game Stages.

Players can continue playing as long as they perform mandatory tasks, regardless the MSI points that have accumulated.

MSI has a direct relation with the Sales that the Players will be able to make at the final Stage of the game. That is, the higher the MSI, the higher chance the Players have to sell more of the 100 units they will be producing in the game.

Thus, the MSI is expressed in the final sales and does not show in any other way during the gameplay.



SALES (WINNING THE GAME)

Sales is the **ultimate measure of success in the game**. Sales are expressed in 0 to 100 units of toys, and will only appear at the end of the game, when Player launch the product in the market.

To win the game the Players have to sell at least 50 units of the 100 units they produced in Stage 4.



GAME STAGES

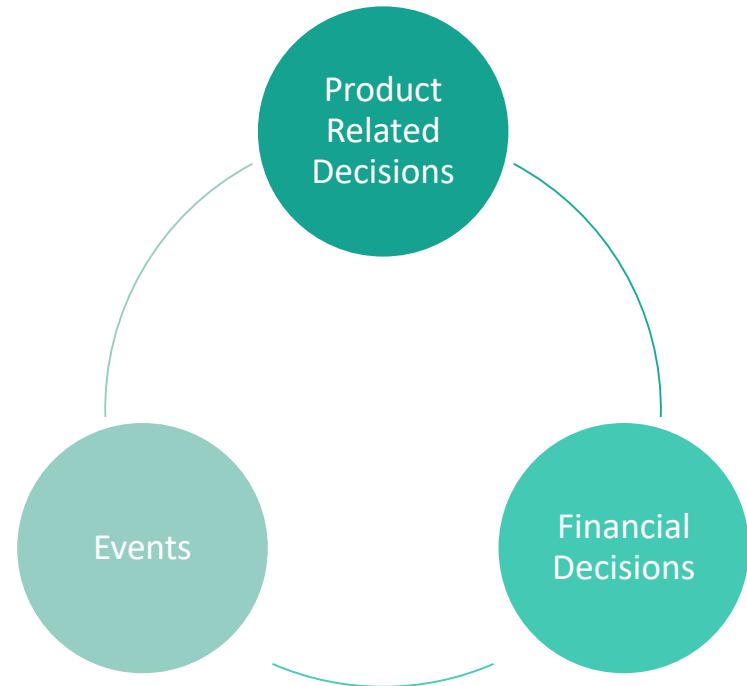
There will be **5 Stages** (game levels). Stages are what makes the players' journey more engaging and fun overtime, enabling for them to be challenged every step of the way.



DECISIONS & EVENTS

In their journey, the Players will have to buy items, pay for services and pay for current expenses (e.g. rent). They will also be able to contract financial services. Finally, the Players can be affected by random events that will challenge their financial management skills.

Thus, the Players will have to make **Product Related Decisions** and **Financial Decisions** and will be subject to random **events** that influence the play.



MESSAGES



A Message Window is a mean to signal desired behaviors for the Player and to give him/her directions. It's a way of giving feedback and contribute to engagement. All message are stored and accessible to the Players during play.



Well Done!

You developed a new Robot part and made your first registry in the patent Office. This way you can prevent other from copy your Robot!



Well Done!

You made your first bank deposit! Saving money is important to invest or to be able to deal with unexpected events.



Oh Oh...

Your debt Stage is very high for your current income. Be careful or you may go bankrupt



Hey...

Looks like nothing is happening for a while, perhaps you should hit the End Turn button to go to the next month

EXAMPLES



GLOSSARY

There is a glossary to help the Players, contributing to develop a business vocabulary. It also helps teachers explore financial and business concepts.



LOOSING

The Player will loose the game in particular circumstances:

- Does not have a positive balance (current account +deposits-loans>0) in 2 consecutive months
- Fails to have a successful launching of the product (Sales < 50 units)

GAME
OVER





GAME STAGES

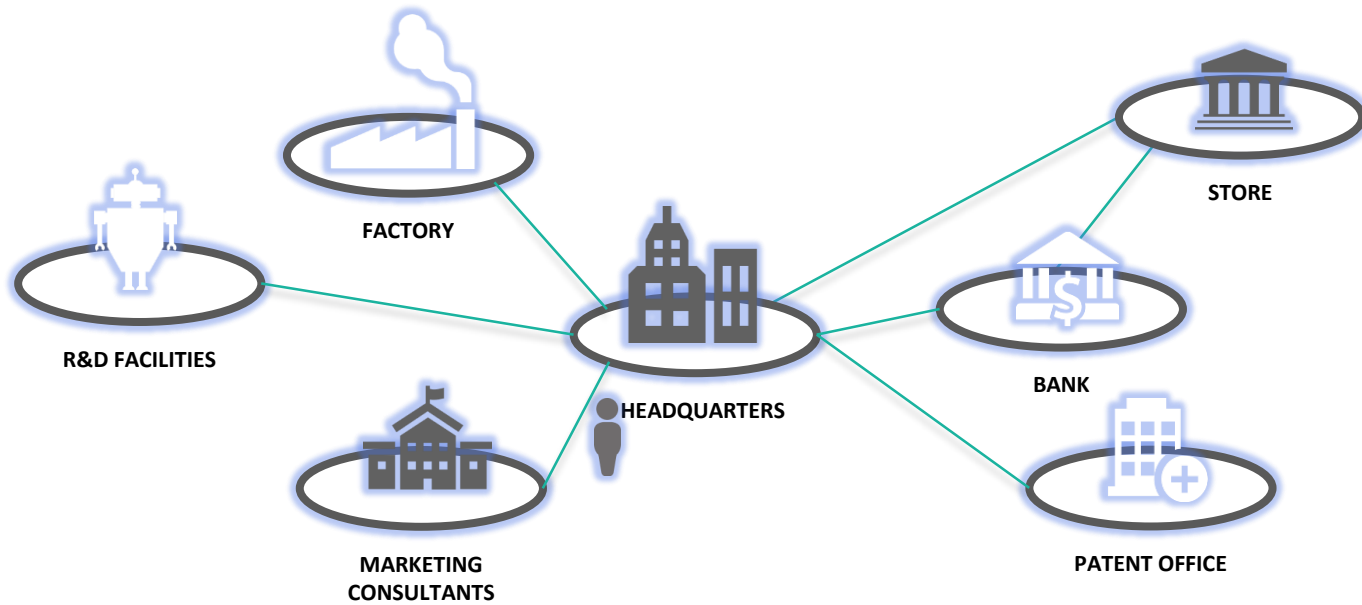
Stage 1. Market Analysis



- **Stage 1** is about market analysis. The Players will have to assess the needs of potential clients (kids) regarding their Toy Robot – e.g. Should it be remotely controlled? Should it have special features, like playing music?, etc. They will also have to gather information on the competition to have a sense of the existing offer on the market.
- Toy needs will determine which robot parts should be considered in the development of the Toy Robot later in the game.
- The Players will make this assessment by accessing different **information sources**: market survey, competitors report and interviews. The market requirements for the Toy Robot should vary each time the game is played by a random selection from a pre-established pool of requirements.
- After the assessment, the Players have to fill a **requirements summary form** about the traits of the Robot to fulfil.
- By filling the **requirements summary form** Players are given access to the next Stage.
- The Players will be taking decisions together on this Stage, as they get acquainted with game and develop a team culture, also facilitating the emersion (or the setting) of a decision process within the group.



Stage Map



Objective	MSI	Initial Coins	Allowance (monthly)	Turn Mechanism	Events	Messages
Fill the summary requirements form	23	15	5	ON	OFF	ON

Headquarters (HQ)

The **headquarters** is the space where the Player meet, discuss and make decisions. Players will have to rent a space in the first month, without which they cannot progress or end turn. The rents will be automatically paid each month (a visual effect should be created to make that evident to players).

It is in the headquarters that the player will fill in the **requirements summary form**. There is no limitation for the number of times the Players may fill in the form, but they can only do it once each turn. When filled, the form can be checked returning the number of right answers. However, if the form is actually submitted, then the Players progress to Stage 2 regardless the fact they have all answers right or not.

Marketing Consultants

The **Marketing Consultants** building enables Players to purchase reports with valuable information to fill in the Requirements Summary Form.

Store

The **Store** building enables Players to interview the store manager and a client to get valuable information to fill in the Requirements Summary Form.



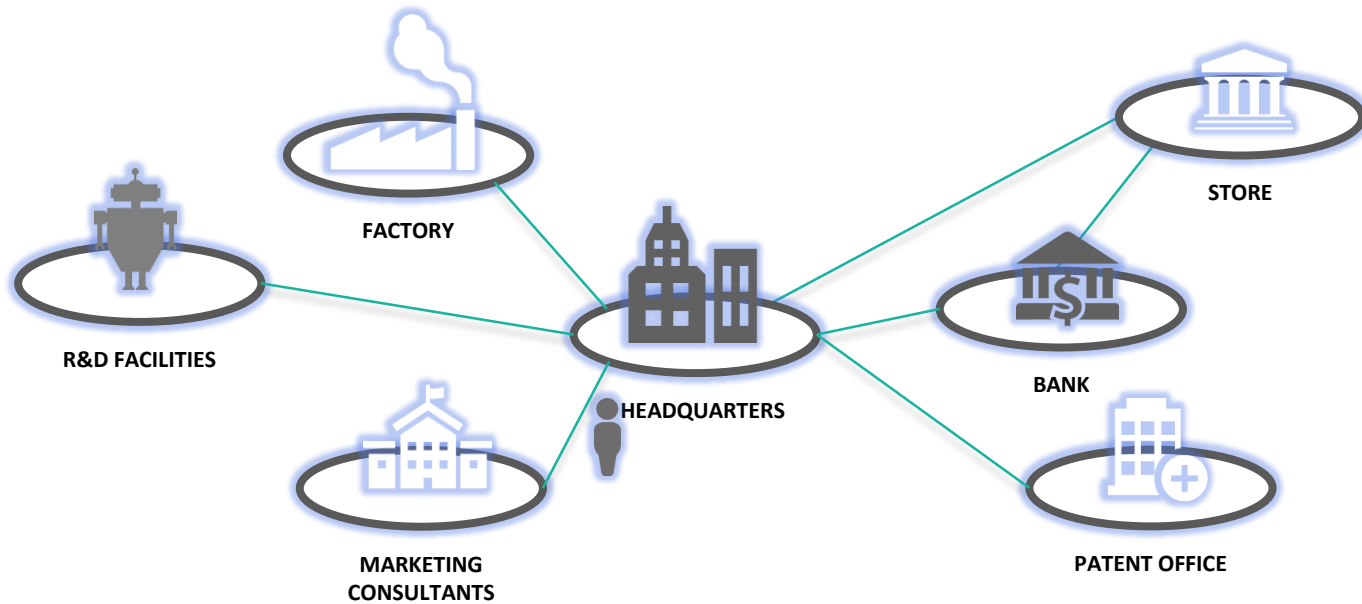
Stage 2. Prototype & Test



- **Stage 2** is about prototyping and testing. Based on the summary of requirements resulting from the Market Analysis (Stage 1), the Players will have to **define the particular parts & assemble a prototype** and then **test it**.
- To **define the robot parts**, the Players have to consider the requirements list from Stage 1 (available in the Headquarters for viewing) and match them to particular Robot prototype parts that are available, while
- After the prototype is ready, the Players will **test** it. An automated *focus group* will check whether the Players have made a good choice with the partners considering the Market requirements. The focus group will return a feedback, signalling whether the Players are on a good track or not.
- If Players get a negative reaction to the prototype during test, they may reconfigure the prototype and submit it again for testing till they achieve a satisfactory outcome. Each prototype+test trial will cost time and money.
- Players can overspend with testing if they struggle to find a satisfactory prototype. If the money runs out, Players can ask for a loan from the Bank.
- The Players may choose to advance to the next Stage, as long as the test results return a positive feedback. The better the feedback, the better the chances for success when the final product is released.
- The R&D Expert is the Player taking the final decisions on this Stage, but may involve the other Players the way he/she sees fit.



Stage Map



Objective	MSI	Initial Coins	Allowance (monthly)	Turn Mechanism	Events	Messages
Get positive feedback in the prototype testing (get right 50% of the toy requirements or 8 MSI points)	16	20 + Coins in Stage 1	5	ON	OFF	ON

Headquarters (HQ)

The **headquarters** will have access to information gathered in the previous stage for consultation. The Requirements Form may also be edited here if the players feel needed

R&D Facilities

In the **R&D Facilities** player will be able to put together a prototype and test it.

Bank

The **Bank** makes available loans for the player to access extra Coins at a price (interests).



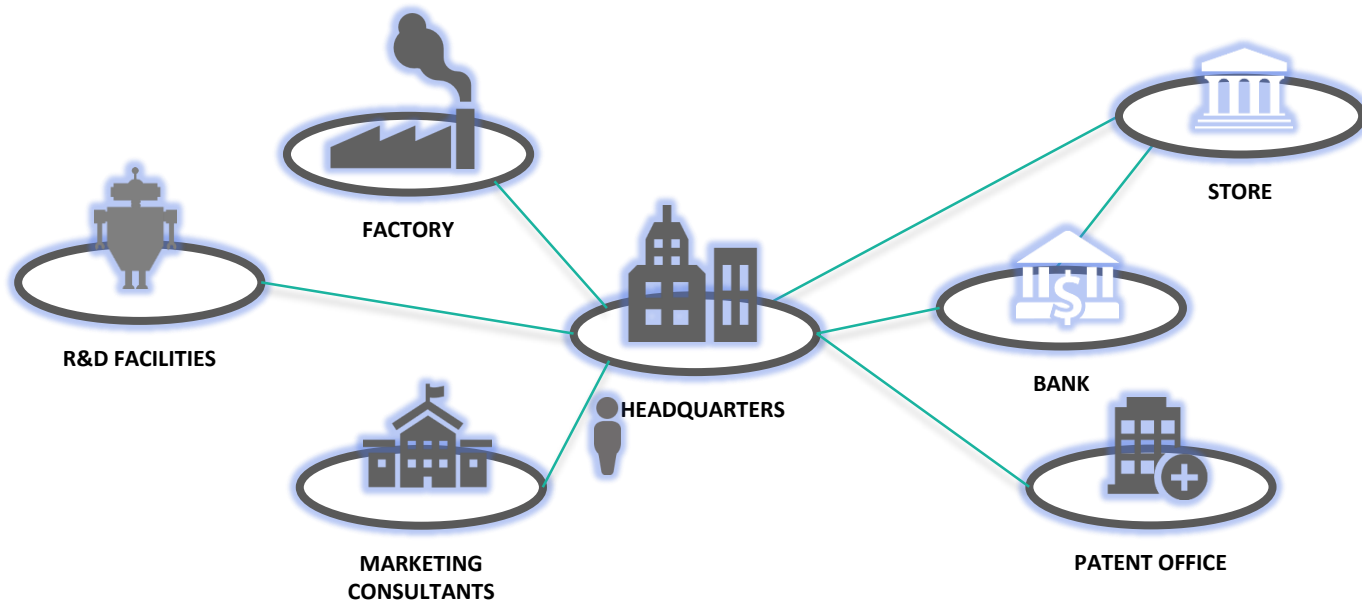
Stage 3. Planning



- **Stage 3** is about Planning. The Players will have to get information data on the possible development time and on the cost of the Toy Robot parts, the assembly and the market release, to produce a Cost statement.
- The Player must make the correct cost estimation to progress to the next Stage. For each wrong attempt the Players will loose time.
- The costs may vary slightly from game to game so that the correct answer to the budget estimation is not always the same.
- The Financial Expert is the Player taking the final decisions on this Stage, but may involve the other Players the way he/she sees fit.



Stage Map



Objective	MSI	Initial Coins	Allowance (monthly)	Turn Mechanism	Events	Messages
Complete the Cost Statement correctly	15	Coins in Stage 2	5	OFF	OFF	ON

Headquarters (HQ)

The **headquarters** is where the Players will find the Cost Statement to complete.

R&D Facilities

In the **R&D Facilities** players will get information on time and cost of developing the robot parts by talking with the R&D director.

Factory

In the **Factory** players will get information on time and cost of producing, assembly and paint the toy robot by talking with the Factory director.



Marketing Consultants

In the **Marketing Consultants** building players will get information on time and cost for the launching campaign of the toy robot by talking with the consultant.

Patent Office

In the **Patent Office** players will get information on time and cost for protecting the rights to the toy robot by talking with the Official.



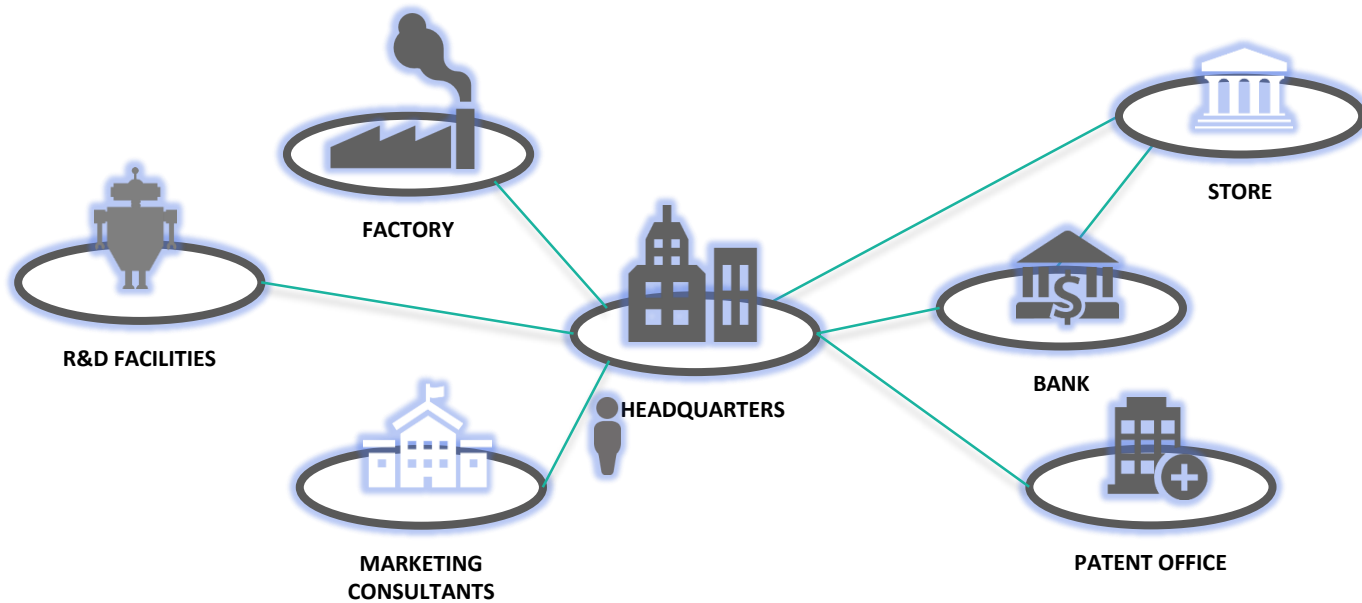
Stage 4. Implementation



- The **Stages 4** is all about developing the parts and initiating the production.
- The game play will be more free than in other Stages, with more buildings/areas accessible and more decisions to make, including contracting financial products, insurances, patent parts, etc
- The Players will have, first, to develop the Toy Robot parts. The Players can opt, instead, for paying for the use of existing patented parts, but this option will have, in comparison, a lower impact on the MSI.
- If Players decide to develop their own robot parts, it will take more time and money, but the potential impact on the market will be much more positive.
- Players may also patent their developments so that the competitors cannot copy. If the Players do not patent the parts they develop and if too much time is passed, competitors may copy them, damaging MSI points.
- There is a new Headquarters the Players can rent. In this new facilities the Players have access to indicators on the development and production progress that facilitates the monitoring of what is happening in the game.
- The Production Expert will have to lead the team but players will have to make decisions on a general agreement basis, as the decisions deal with many different aspects.



Stage Map



Objective	MSI	Initial Coins	Allowance (monthly)	Turn Mechanism	Events	Messages
Produce 100 units of the Toy Robot	40	50 + Coins in Stage 3	40	ON	ON	ON

Headquarters (HQ)

To rent a new equipped HQ is mandatory. In the new Headquarters, Players will be able to follow more easily the development and production of the Toy Robot as a dashboard will be provided. It also has a view on your opponent's progress – TrickyToys. If they finish production before you do, they are in a good position to launch the product ahead of you and decrease the novelty of your product.

R&D

The R&D related decisions are taken in the **R&D Facilities**. The Players have 2 alternatives: either developing new parts, which makes them unique and contribute more to the MSI level, or buy the rights to use existing parts other have developed before (in the Patent Office). This last options contributes less to the MSI level, but is cheaper and delivered immediately. When choosing to develop a part, the option to buy right for that part is no longer valid.

Only the parts selected for the prototype (Stage 2) will be available. Painting the Toy Robot will not need to be developed and will be added in the Factory.



Patent office

The decisions related with the protection of property and with the purchase of property rights are taken in the **Patent Office**. The Players may file patents to protect parts developed in the R&D Facilities so that no competitor is able to copy them (or at least not without paying you). Here Players may also purchase the rights to use part already developed by others in the past. This option contributes less to the MSI level, but is cheaper and delivered immediately, enabling Players to move more quickly to production. When choosing to buy the copyrights for a robot part, the option to develop that part ceases to be available in the R&D Facilities.

Factory

The production related decisions are taken in the **Factory** building. The Players have to develop the parts, assemble the toy and finally paint 100 units. Only the developed parts or the parts the players got copyrights will be available.

Bank

The **Bank** makes available loans for the player to access extra Coins at a price (interests). It also allows Players to make deposits and gain interest. Insurances will be available as well, which will decrease the likelihood of accidents happening and covers for losses in case accidents do happen.



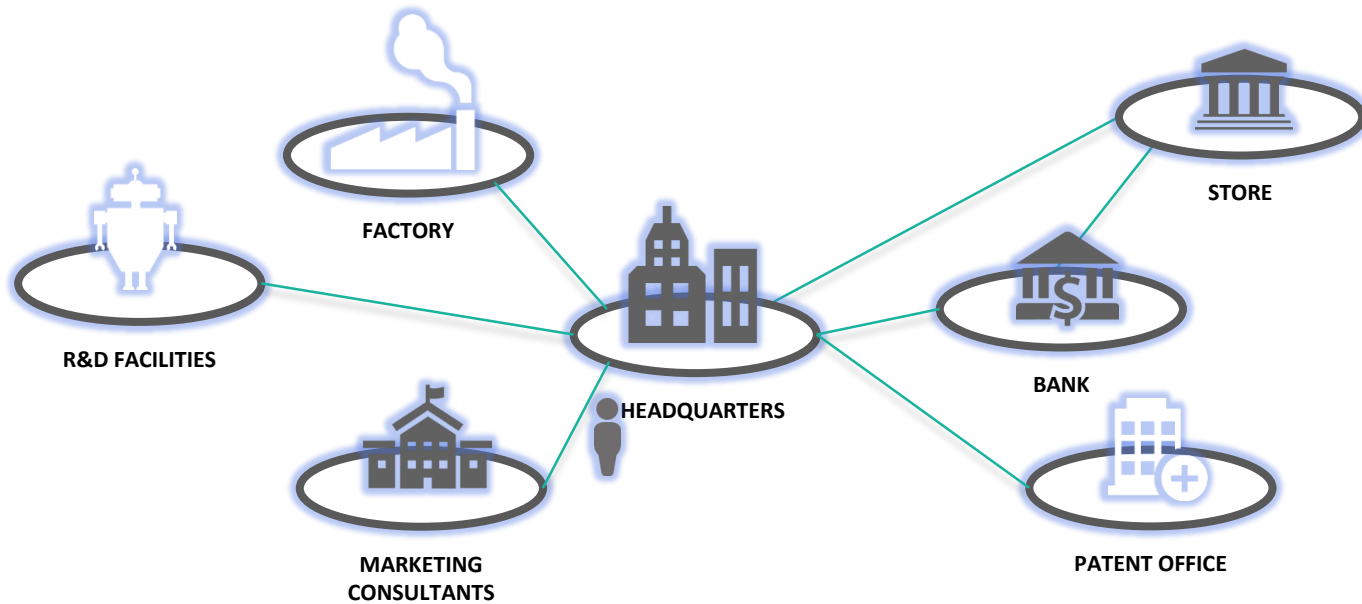
Stage 5 – Product Release



- **Stage 5** is about launching the product in the market. The Players will have to set up a marketing campaign, by choosing a name for the toy and composing an advertisement.
- When played in class, the teacher may use the opportunity to create off-game activities like oral presentations, etc. to develop other competences in kids.
- The Marketing Expert will be coordinating efforts during this Stage.



Stage Map



Objective	MSI	Initial Coins	Allowance (monthly)	Turn Mechanism	Events	Messages
Launch campaign	16	20 + Coins in Stage 3	20	ON	ON	ON

Headquarters (HQ)

The Headquarters will give Players access to the Dashboard where they can among other things, monitor the competitor's progress.

Marketing Consultants

In the **Marketing Consultants** building players will be able to prepare and launch the campaign.

Bank

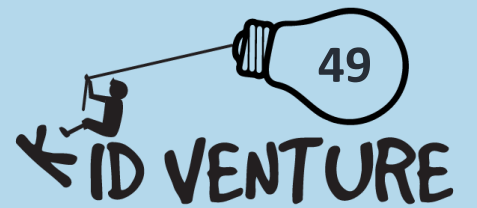
The **Bank** makes available loans for the player to access extra Coins at a price (interests). It also allows Players to make deposits and gain interest. Insurances will be available as well which will decrease the likelihood of accidents happening and covers for losses in case accidents do happen. To launch the Toy, the Players have to repay all debt (loans).

Store

The **Store** building enables will show Player how sales are going after the launching.



End





ACCESSING THE GAME



The game is freely accessible online in www.kidventure.eu
You need to make a simple registration and then just PLAY!

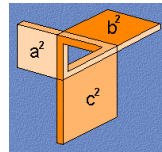




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