

# The Management Game

## Board of Directors Manual



# Welcome to the Management Game!

This handbook outlines your tasks and responsibilities as a member of the Management Game Board of Directors. Briefly, the manual explains the following topics:

- ❖ The **amount of time** you will need to devote to the Game, either as Board chairperson or member
- ❖ The **role of the Board of Directors**, including evaluation of the team, group and individual presentations, strategies, and development
- ❖ The **simulation environment**, including the game or competitive design, the factory design, the product design, the market design, and how to play
- ❖ Aspects of the company or the Game that the Board of Directors **should and should not control**
- ❖ A comparison of **the student perspective and the Board's perspective**

## Acknowledgements

We, the creators and organizers of the Management Game, would like to thank you for your expertise, time, and commitment to this project. Further, we extend our gratitude on behalf of the Management Game students, who benefit the most from your support.

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## Time Commitment for Board Members

We understand that time is the scarcest resource, so we work hard to keep your time commitment to a minimum.

Each Board of Directors **meets with its team 3 times**— These meetings consume an evening and are usually scheduled from 6 PM to 9 PM WITHIN A WEEK LONG WINDOW TO ACCOMMODATE AS MANY SCHEDULES AS POSSIBLE. In most cases, meetings are held at the office of the Board Chairperson. Some meetings are held on campus, but since this is normally not convenient for Board members, campus meetings are rare.

Prior to each meeting, the team of students will create an agenda, a plan document and perhaps presentation slides, and send this preparation package directly to you either via an e-mail attachment or as a paper copy, as you choose. It will take you some time to review and evaluate the document prior to the meeting.

In conjunction with each meeting all board members are asked to complete a set of performance evaluations so that Game administrators know what happened at the meeting. These evaluation forms do take some time to complete; however, evaluations are a critical part of the grading process for the class. Your opinions of the team's performance and your feedback of how to improve it are very important to both the students and to us. These evaluations constitute normally between 40% and 50% of the grade in the class. The class is a required class and it counts twice as much as a normal class. So, the students take their interaction with their board quite seriously in most cases.

### Time Required of the Board Chairperson

Chair people hold a special position on the Board; as a result, they also have a greater time commitment to the Game.

Board chairs have more direct contact with the team presidents. In fact, it is not unusual for you to receive some form of communication from the team president between meetings. These communications typically involve an action the team needs your permission to do, some scheduling issue, or problems that the team cannot address without your expertise.

We normally do not encourage people to volunteer to be board chairs unless they have the interest to commit to this higher level of involvement.

## The Role of the Board

The Board of Directors is an integral part and a critical facet of the simulation environment. As mentioned, members will attend three meetings, the first of which involves discussing, modifying, and approving the management team's strategic plan. At the two subsequent meetings, the Board will review the team's performance and set new goals. Occasionally, the Board may need to allot additional time for informal meetings with students to address special problems. In the past, the experience has been rewarding and educational for both Board members and students.

The Board of Directors adds value in the following fundamental areas.

❖ **Providing oversight by representing the owners of the company**

It is important that managers never forget who they work for. The Board of Directors can and should require managers to act in the best interest of the owners of the firm by pursuing strategies that maximize the value of the company. Conflicts frequently arise between what is best for the managers and what is best for the owners. The Board ensures that the owners' interests are represented.

❖ **Setting goals and standards for the management team to meet**

Managers regularly set goals that are not aggressive enough or that are probably not possible to achieve. Other times, managers set amorphous goals, that cannot be easily measured, so they can claim success later. It is incumbent of the Board of Directors to ensure that clear and measurable goals are established. At each meeting, Board members and managers will set goals for the upcoming year. The team's performance is then measured by how well they accomplish these goals.

❖ **Evaluating performance and providing feedback**

At each meeting, Board members provide written performance appraisals of the team's achievements and advise the team on how they might improve it. This formal evaluation is crucial and valuable in that the team must understand how to achieve the predetermined goals, as well as what drives success or failure in achieving these goals.

❖ **Providing high-level strategic guidance and advice**

Oftentimes managers focus on the short-term details of running the business. They fail to see opportunities or threats that might be obvious to more experienced Board members who are less immersed in the day-to-

day operations. By pointing out these less obvious opportunities and threats, Board members offer invaluable advice.

❖ **Approving/disapproving key decisions**

The Board should decide ahead of time what type of decisions it wants to retain control over. These decisions might (or should) include: large construction projects, major debt and equity transactions, dividend policies, or other choices the Board feels are necessary to ensure the viability of the company. Based on demonstrated proficiency, the Board can tighten or loosen its control. In general, the board should avoid the temptation to manage the company. This is the role of the students and it is important that they have the freedom to grow within this challenging role. Frequently this means letting them make mistakes if it will add educational value.

## The Computing Environment

The Management Game web-site contains information that you may find interesting and helpful as a Board member. The site provides financial performance data for your company and all other companies involved in the Game. Generally, this information includes high-level financial data, such as sales, profits, dividends, and stock transactions.

The URL for the Management Game web-site is:

<https://managementgame.tepper.cmu.edu/>

**NOTE:** Please notice that the above address does NOT include *www*, like other web addresses. You will not be able to access the page if you include the *www* prefix. Notice also that the site is encrypted. Most browsers currently in use support this 128K encryption standard. However, if you are using an older browser, you may be unable to access the website. We use “cookies” to authenticate people so your browser must also be set to accept “cookies”. Generally the default settings within your browser will work.

You must have *Internet Explorer 6.0* to view the Management Game site.

## The Simulation Environment

The software environment of the Management Game provides a framework that simulates a competitive business situation. Management Game players are put into teams. Each team runs a multi-national company, based in the United States that produces two brands of a consumer product and sells them in six different countries.

The success of each team (or company) depends on its ability to compete, the preferences of market customers, and the team's skill in determining and addressing these preferences.

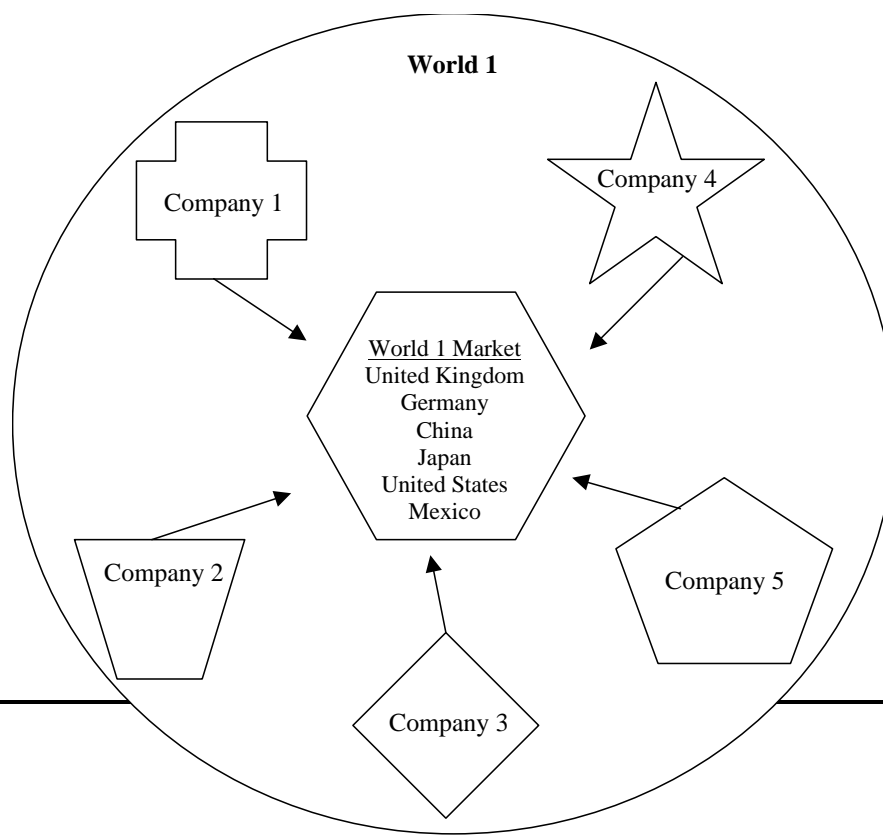
For this year, companies will produce and market **wrist watches**.

## Competitive Design

To mimic a “real” company, play of the Management Game relies on teamwork.

### Play within Worlds

Each team exists in its own world, named World 1, 2, 3, etc., and competes against four or five other companies. All companies within a given world sell their products in the same countries: United Kingdom, Germany, China, Japan, United States, Mexico



Japan, United States, and Mexico. The figure below is an example of World 1 for five companies.

Consider this example, a student who is part of Company 5 is competing with Companies 1 through 4 in the six countries of the World 1 market.

Class teams **cannot** interact across worlds, which means teams are not competing with classmates on teams outside their world. Each team publishes its high-level performance data on the class web-site, so that the relative performance of each team can be measured against other teams in the class to some degree.

At the start of the Game, the economic characteristics of all the worlds are the same. As Game proceeds, competitive dynamics drive the outcomes for each world in different directions

## Factory Design

When the Management Game begins, each team has two factories located in different countries. The starting characteristics of each factory are as follows:

- ❖ Each factory makes only one product; that is, a factory can either make Product 1 or Product 2, but not both products.
- ❖ The Game involves six possible countries in which factories are located: Japan, China, Mexico, United Kingdom, Germany, and the United States.
- ❖ Factory locations are initially selected by the Game administrator, but once the Game starts, teams can relocate the manufacturing facilities to any location within their world.
- ❖ Initially, both factories are of equal size; students can make them larger or smaller after the Game begins.
- ❖ A factory reflects the available labor and material costs typical of the country in which it is located.
- ❖ Both factories can be located in the same country.
- ❖ Factories will produce wrist watches of the quality level typical for factories located within a certain country.



For example, German and Japanese factories are usually more automated and capital-intensive; therefore they have high fixed costs and costs for building new facilities, but fairly low total labor costs for a very high quality product. Factories in China and Mexico, on the other hand, use more, much less expensive labor and cheaper facilities with less automation; it can be more difficult and more expensive overall to get the same high quality products out of these factories.

We frequently remind our students that if they run their company correctly, they can make a quality product anywhere in the world.

## Product Design

Each company can make no more than two different products, but some teams may decide to produce and market only one. Teams will not be rewarded or penalized for the number of product models they choose to make.

Products are initially positioned in the market as described below; however, teams can change this position as the Game progresses:

- ❖ **Product 1** is at the more price-sensitive end of the market; customers of this product show little product loyalty and will quickly buy from competitors should the team "stock out."
- ❖ **Product 2** is a more premium product; Product 2 customers show both brand loyalty and sensitivity to quality.

## Market Design

At the start of the Management Game, each team is currently marketing two products in all six countries: Japan, China, Mexico, the United Kingdom, Germany, and the United States. The markets are approximately the same size as those of the actual countries, and the behavior of these markets mimics their real-world counterparts in terms of market demand, cost structure, growth rates, and other macroeconomic parameters. In addition, all transactions occur in a country's local currency and are consolidated into US dollars for financial reporting purposes.

Consumers in these markets have markedly different preferences. Team members' intuition about the preferences in each country will hold generally true. For example, consumers in more affluent countries tend to be less price sensitive. For a company to survive the team must identify these preferences; for a company to be profitable and successful, the team also has to address these preferences.

## Other Start-up Information

Several years of historical data are available so that the team can develop a feel for consumer preferences, price and quality characteristics, and other aspects of the economic environment for each market. Team members receive both input and output data for their company, so that they can determine what actions their predecessors decided to take and what resulted from these decisions. This historical data is extremely rich in valuable information. Students also receive current information about the economic conditions for each country at the start of the Game, such as tariff rates, transportation rates, currency exchange rates, and average manufacturing costs.

Using this information and their management savvy, team members can determine the feasibility of relocating a factory or factories. However, factory location may constrain the team's future flexibility and actually has less impact on a team's performance than do the skills of the team members.

We also suggest the following to students as they play:

- ❖ What type of decision and/or support tools will the team need (i.e., tools to manage cash flow or forecast sales)?
- ❖ What type of organizational structure should the team have? How can the team design ways to coordinate the work of team members effectively?
- ❖ What strategies would the team like to implement and what value will these strategies add to the business?
- ❖ Each student is a talented manager, capable of great success. Planning is the key.

- ❖ Effective teams use all of their assets productively. The most valuable assets of any business are the time and talents of its people.

## How to Play

Each team is responsible for tracking its progress using different online tools. The simulation runs periodically using the variables that the teams input to produce output data. The inputs of a team and its direct competitors drive the output data.

In addition, some activities occur **between** simulation cycles. For instance, the shared stock market is only open when the simulation is **not** running. The stock market closes as the simulation starts to run and remains closed until after the output data is produced, normally an eight-hour period.

### Inputs—Things teams can control in each simulation cycle

First, companies have to choose their input variables and enter them using a Microsoft Excel spreadsheet. These inputs record variables like pricing, marketing budgets, and the like for each team. Each team **must** complete an input sheet for the company each period. This spreadsheet provides a template for entering and delivering input decisions to track a company's progress over time and contains **67 variables** or spreadsheet entry fields.

### Outputs—Results of the simulation using the inputs for a single cycle

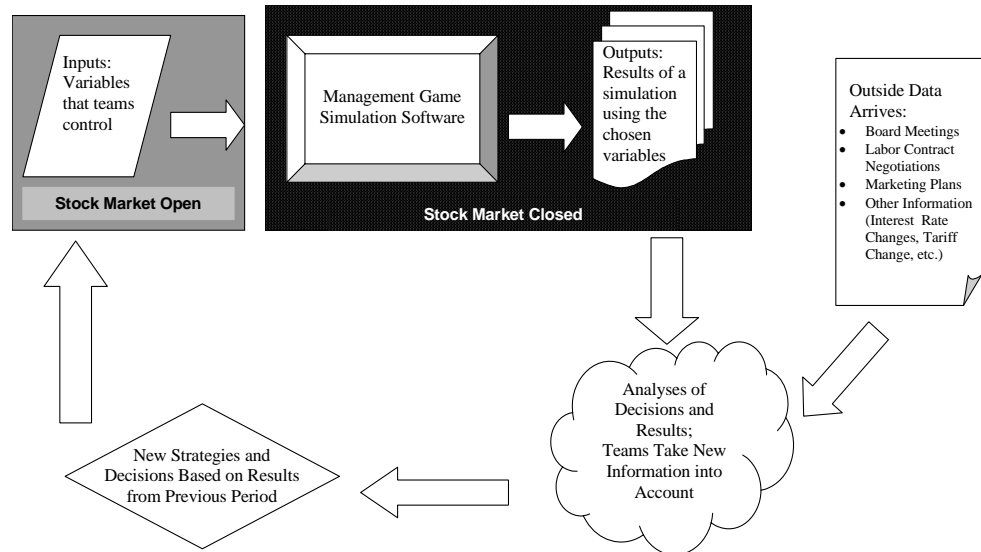
Once the input decisions are submitted, the simulation acts upon each company's decisions and the decisions of its competitors to produce reports (called **outputs**). These outputs can be printed from a Microsoft Excel workbook file.

### Moving through the Management Game

The Management Game spans **10 or 12 moves or periods** to represent a total cycle of up to three years. A single move equals three months.

At the end of a given period, teams can access resulting information using either the three pre-formatted output forms provided in the outputs workbook, or a team can design its own output report using any other desired tool.

The diagram below illustrates what happens during a single move or period in the Management Game.



## Types of Output Reports

The pre-formatted output reports available to Management Game teams include the following:

- ❖ The **Market Report** provides summary information about the company's place and performance within the world market and explains how the company's pricing compares to other companies in that world.
- ❖ The **Production Report** describes the activity of a company's two factories, including the unit price and capacity at which the factory is operating.
- ❖ The **Finance Report** supplies information about what your competitors are doing, including the size of their facilities, the amounts of their loans, and their retained earnings for the period.
- ❖ The **Cash Flow Report** is a simple, single-period cash flow statement that should help each team manage its cash flow.

### **Additional Game Information -- Board Approvals**

The Board of Directors is on hand to assist in decision making for a Management Game team. In general, the Board should approve the following aspects of the Game:

- ❖ Executive compensation
- ❖ Dividend policy changes
- ❖ Stock sale or purchase decisions
- ❖ Capital spending changes (greater than \$2 or \$3 million)
- ❖ Major shifts in strategy
- ❖ Major debt restructuring

For instance, factory relocation would be a decision the Board should approve because it is both a large change in capital spending and a major shift in the team's strategy. There is a fine line between what the board approves and what they control. In general, all initiatives should come from the managers and they should be approved unless the managers have not justified how the initiatives are related to improving shareholder value. The students should be free to make some mistakes, so it is always a fine line between oversight and control.

In addition, the Board of Directors should avoid involvement in these types of decisions:

- ❖ Day-to-day operating decisions
- ❖ Short-term or tactical issues
- ❖ Those areas normally left to the discretion of upper-level management

### **Us vs. Them**

Your experience and knowledge of “real-world” scenarios means that your view of certain situations differs from the students' point-of-view. This skew in perspective frequently leads to miscommunication. To avoid such confusion, we have included summaries of the team's perception as compared to the Board's standpoint for some common problem areas.

### Problem: The Purpose of Board Meetings

#### Management Team Assumptions and Expectations

- Views team purpose in the meeting as narrating the steps involved in technical analyses of data.
- Behaves and speaks as if the meeting's purpose was self-evident and under their exclusive control.
- Misinterprets the Board's desire for a role in decision-making as a desire for control.
- Fails to specify their objectives at the start of the meeting; notably, students fail to specify the decisions for which they are seeking consensus.

#### Board of Directors Assumptions and Expectations

- Assumes their purpose at the meeting is to make strategic decisions to influence the competitive position.
- Appears confused about the meeting's purpose; seeks an explicit statement of the meeting's purpose.
- Seeks to provide insight and guidance, not necessarily control.
- Requests not only information about what decisions need to be made, but also a role in presenting and defining those decisions.

### Problem: Perception of Self & Social Role

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#### Management Team Assumptions and Expectations

- Sees its members as *defendants* put before accusations and judges (i.e., the Board of Directors).
- Views member roles as fact *reporters* and the Board's role as fact *collectors*.

#### Board of Directors Assumptions and Expectations

- Sees themselves as consultants and advisors and wants to view the team in a similar way.
- Perceives themselves as evaluators of proposed strategies and supporting arguments.

### Problem: Historical Context of Meeting

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#### Management Team Assumptions and Expectations

- Presents recent performance history without referring to related goals, problems, and solutions from the past.
- Neglect summarizing or sharpening key implications for decisions that are pending when offering recent performance history.

#### Board of Directors Assumptions and Expectations

- Wants to know performance history in a *strategic context* that indicates competitors' past actions and goals.
- Requires summary of performance history that explicitly defines the decisions needed to improve the team's competitive position.

### Problem: Interactive Style & Discourse Pragmatics

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#### Management Team Assumptions and Expectations

Assumes its main task is to present facts and narrate steps involved in technical analyses of data; sees little need for interaction.

Presupposes that any critical comment is a threat to the entire team or an individual attack; reacts defensively, blaming the limitations of the Game, interrupting both Board members and other team members.

Underestimate the usefulness of uncertainty; team assumes that expressing doubt is a threat to its hard work and attempts to downplay such expressions.

Fails to restate the Board's questions or comments for the benefit of the whole group; also overlook complimenting insightful questions or comments.

Assumes the best way to control a meeting and its outcome is to avoid controversy; as a result, controversies become both unproductive and uncontrollable.

Responds to questions by *thinking out loud*, trying to solve problems without knowing the true answer.

#### Board of Directors Assumptions and Expectations

Expects rich, extensive interaction to foster alternative competitive strategies.

Views criticism as an opportunity to improve the team's competitive position.

Sees uncertainty or doubt as a focal point for better understanding goals, problems, and strategies.

Volunteers comments less often because views self as not knowing enough to contribute.

Sees controversy as productive of new knowledge and strategies; creates controversy without context or purpose because of team reactions.

Prefers the manager response: *We'll try to find that out for you; we're unsure right now.*

### Problem: Structure, Flexibility, and Meeting Agenda Focus

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#### Management Team Assumptions and Expectations

Creates and executes agenda that does not reinforce/relate to the meeting's purpose.

Organizes agenda around topical or functional areas (i.e., in a *grand tour* style).

Maintains an agenda that is too rigid to allow effective interaction.

Infers agenda is unsatisfactory without soliciting comments about it; team also fails to update the agenda for the Board as the meeting proceeds.

#### Board of Directors Assumptions and Expectations

Needs an agenda that explicitly reinforces meeting's purpose.

Wants an agenda focused on proposed decisions and supporting arguments.

Seeks flexible agenda to accommodate frequent interaction and determine when/where interaction is needed.

Hopes to clarify the agenda; expects that the agenda will be updated in terms of the meeting's purpose and proposed decisions.

