

ASIA MARKETING: AN INTERNATIONAL BUSINESS GAME

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ABSTRACT

Asia Marketing is a flexible simulation set in the small size laptop manufacturing industry. Players face the challenge of making synergies of the logistic and international competition in the Asian region. The simulation offers users the following background and features.

- Facilitating the lecturing of professors who are concerned with international business education.
- Encouraging the interaction of knowledge and information among professors and students in class. Such as, how to make international business strategies and teacher eyes on the performance and activities of students.
- Affording professors teaching material and advance knowledge in international business.

BACKGROUND: (OBJECTIVES OF AM)

Online simulations are Internet-based games that allow students to perform tasks such as overseeing operations management of a virtual factory or serving as chief executive of a virtual business and networking with other executives. Professors can track every move students make in these online games and use the data to grade the students and provide feedback on specific skills. Online simulations tend to be closer to reality than lectures and straight theory, and force students to figure out how to put textbook theory into practice. Some of these simulations take up a day or two in class and replace a lecture. Others are assigned as homework and can last the duration of the semester without taking up lots of class time. Students log in to make changes and check their progress on their own clock. Professors can get in-depth data showing every move each student makes. This can then be brought up in class discussion to motivate students, show them their mistakes, celebrate their successes, and pump up the competition among classmates and teams.

There are several objectives of “Asia Marketing”, including the following:

- Administering to students to learn the real competitive world of international businesses. At the beginning, students have to get information about the trade countries, such as environment, the geographical features of a country and economic data.
- Emphasizing on international marketing and logistics to help students learn the concept and practice in business classes.

INDUSTRY BACKGROUND

There is a new line of PCs that focuses on providing the most comprehensive internet experience and portable function. It is a small laptop, with a 7” to 10” screen, and usually with a moderate performance. Also, the price is relatively lower as compared to similar devices, such as UMPC.

The low-cost PC market is sweeping across the global consumer electronics and PC market. Their portability and low power consumption has already changed the way consumers think about their notebook computers and thereby altered the computer industry and their business behavior. Some industry researchers indicated that netbooks are expected to reach a penetration of 10-15% of total notebook sales. Intel expects low-cost PC shipments (including those for Internet-centric devices such as netbooks and nettops) to break 100 million units between 2008-2011. In short, the market for “Netbook”(mini laptops) is growing and becomes more competitive.

GAME FEATURES:

- **Asia Focus.** Competition is based on countries representing the major trade countries in Asia, such as Japan, China, Indonesia, Korea, Thailand, Vietnam, Singapore, Malaysia, India and Taiwan.
- **Step by step.** Students have to round the simplest level, and then to proceed the next more complex level. There are several complexity level and different situations of environment.
- **Generic and Business Level Strategies.** Players can design and implement the most complete array of

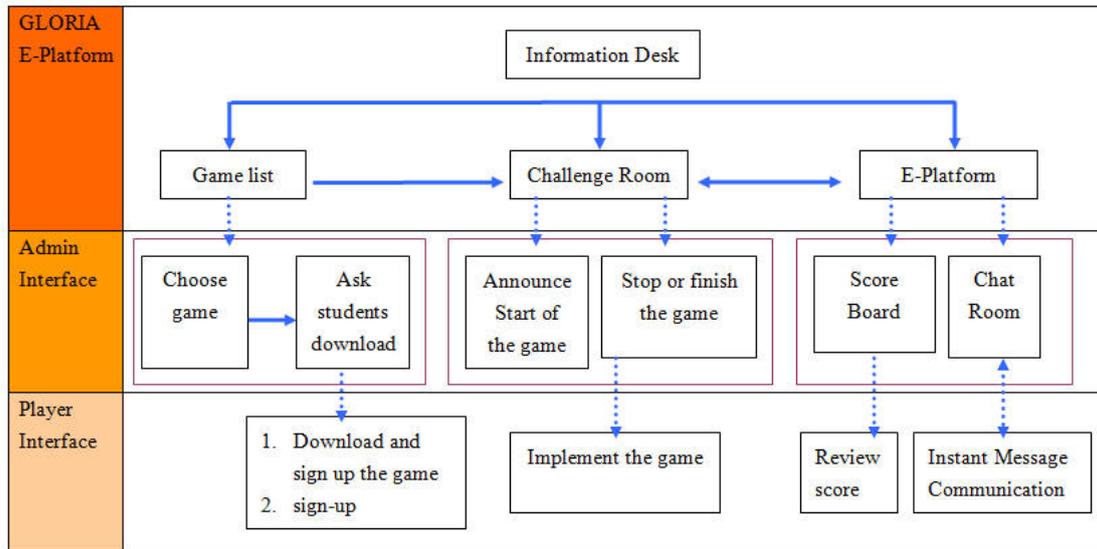


Figure 1
Flow sheet of game

strategies provided by any game.

- **International Dynamics.** Students can experience currency fluctuations, value-added taxes, dividend taxes, technology transfers, joint ventures, product patent cross licensing, differing labor wage rates, culture-related productivity and absenteeism rates as well as off-shore manufacturing opportunities.
- **Web Based.** Web-surface is easy.
- **Critical Incidents.** The Game Administrator can invoke up to ten Critical Incidents over the course of the game. These incidents are in mini-case form and highlight the "soft" side of the strategic manager's decision-making situation.
- **Reality-Based.** Real world data can be used for each country in operation as well as for the various financial markets within which they reside.

SOFTWARE

We propose an idea that let teacher and student easy to use and communicate with each other in real time, called GLORIA (game learning oriented resource integration architecture, and game learning oriented + rich internet application). It's a web based simulation which is designed in **Flash** form. If teacher and students want to start the game they have to connect via a server, which is established and managed by us. The surfaces of teacher and student are separate and different.

In the beginning of the class, teacher login and ask all students download the Asia Marketing game file and setup. The download and setup process are less than 2 minutes. Every students of the class has respective sign-in account and password. After their sign in, each computer screen shows respective information. Therefore teacher knows the status of students separately, including the students attendance at this class, the problems that students occur, and record in the past.

There are different levels and main learning courses of this game, for instance the simplest case in the first level is to let students recognize the geographic location of each country

on map, the second level is to let student learn how exchange rate, currencies and country imported tariff influence the business practice, and there are further levels integrated main concepts of global marketing. Each levels of the Asia Marketing are independent but the same background, and teacher can choose suitable level with the present situation.

In the end, the game score will be announced and recorded on the web, so that everyone gets aware of the learning effect. If the specific course is done, they can choose to repeat it or go to the next course, so it's a course by course game according to the different main learning objectives. The process is described by Figure 1.

GAME DEVELOPMENT PROCESS

There are some factors concerned in this game. About the geographical area, we choose the major members of ASEAN+3 (Association of Southeast Asian Nations, see Figure 2), but eliminate the country which is less international or not technical oriented. So we chose Japan, China, Indonesia, Korea, Thailand, Vietnam, Singapore, and Malaysia from the list of ASEAN+3. Besides, because IT industry is the focus in this game, we have to put India and Taiwan into concern. India is an important outsourcing destination for multinational corporations and a major exporter of software as well as of financial, research, and technological services. The same applies for Taiwan. Some of the above countries are developed countries, such as Japan, and others are developing countries. Regardless of the degree of education and GDP, all of the countries need foreign trade to transfer the commodities, foods, products, etc. in nowadays Global era.

There are eleven kinds of currencies like US Dollar, Japan Yen, China RMB, Indonesia Rp, Indian Rupee (Rs), Singapore dollar (SGD), Malaysia Ringgit(RM), Korea Won, Thailand Baht, Vietnam VND, and Taiwan dollar(NT). The reasons why we take different currencies into consideration is that the real world is not so fixed in Asia. Many countries in Asia are developing countries, and the economic situation is facing dramatic changes, no matter depression or boom. Some



Figure 2
Map of ASEAN

incur severe inflation problems, and some are much more stable. For these reasons, we take currencies and interest of money into account, and Asia Marketing could be a kind of a game which focuses on international finance strategy.

We emphasize both industrial and consumer markets, chips (microprocessors) and mini laptop as respective products. Chips are traded between countries. Trade-off happens simultaneously when you choose the one as the country of origin, such as Japan chips means higher cost but higher product quality, and chips from China means lower cost and product quality. Chip cost and quality influence the financial statement and marketing demand. After that, a company chooses locations to produce the laptop. Players must choose at least one from eleven countries (Japan, China, Indonesia, Korea, Thailand, Vietnam, Singapore, Malaysia, India and Taiwan). Therefore, players have to choose the way to ship via air (higher cost and product quality) or sea (lower cost and product quality). In the end, the company sells “Netbook”(mini laptops) from producing countries to at least one of the purchasing countries. The purchase will be listed in the buyers’ inventory in the following period. The same applies for choosing a shipping way via air or sea.

We set two levels of chips and “Netbook”(mini laptops), and there are several sizes of “Netbook”(mini laptops) for sale, like 7”, 8.9”, and 10.2”. Furthermore, laptop storage is divided into 2G SSD, 4G SSD, 8G SSD, 16G SSD, 40 GB HD, and 80 GB HD; two kinds of processors are available: 900 MHz and 1.6 GHz; three kinds of memory are available: 512MB, 1 GB RAM, and 2 GB RAM; 3 camera choices are available: none, 0.3 megapixel, 1.3 megapixel; two kinds of battery capacity are available: 2 h 45 min and 3 h 30 min battery life; furthermore choosing if Wi-Fi communication or not; and Bluetooth or not.

ADMINISTRATIVE PRAGMATICS

This is a web competitive game, and individual can compete with computer alone. That is to say no upper limit

and lower limit of members in a team, students can group or be single.

There are twelve months a year and typically one month is a round. We provide monthly and annual reports, including the market share, financial, marketing and human resource reports. Due to the realistic set of environmental events to occur sequentially, we set some variables, such as inflation, interest exchange changes, business cycles or R&D effect. We provide a default model and a free model that can be used by professors to change the default value. Facilitators can choose the environment to be more complex and difficult, such as the growth of cost of utility and shipping, bad cash budget, and higher quality standards.

Business gaming simulations have been classified in many ways. Asia Marketing is kind of an international business game by discipline classification (Graham & Gray, 1969) , a functional game by scope classification (Cohen & Rhenman, 1961; Keys, 1987; Thavikulwat, 1990), a flexible game by difficulty classification (Raia, 1966; Wolfe, 1978), a independence game by independence and dependence across firms classification (Thavikulwat, 1989), and a Computer-Controlled Simulation (Participant control and Computer-Participant interaction) by control and interaction classification (Crookall, Martin, Saunders, and Coote ,1986). The decisions of the competing firms are all computer driven, so professors are not responsible for running the simulation. Therefore, professors can spend more of their time and energies assisting students while they learn international marketing concepts. Moreover, since all participants begin from the same starting situation, performance comparisons are more equitable.

CORE ACTIVITIES

There are some important activities that need to undertake each round. But in the beginning level, we only focus some activities. In the following round, we extend the area gradually.

LOGISTIC MANAGEMENT (SUPPLY CHAIN MANAGEMENT)

Supply Chain Management includes all movement and storage of raw materials, work-in-process inventory, and finished goods from point-of-origin to point-of-consumption. Effective supply chain management can provide an important competitive advantage for a business marketer through coordination of operations with all the companies involved in the entire sequence of suppliers.

- Emerging markets
- Location decisions
- Transaction cost
- Cultural distance
- International retailing
- Free trade areas

MARKETING MANAGEMENT

Marketing managers are responsible for influencing the level, timing, and composition of customer demand in a manner that will help to achieve the company's objectives.

- Cross-cultural marketing
- Country-of-origin issues
- Exports/imports
- Foreign market entry modes
- International advertising
- International sales management
- International marketing & e-commerce

HUMAN RESOURCE MANAGEMENT

Humans and the potential they possess drive an organization. There are seven management functions of a human resources (HR) department that will be specifically addressed: staffing, performance appraisals, compensation and benefits, training and development, employee and labor relations, safety and health, and human resource research.

- Expatriate managers
- International staffing and recruitment

FINANCE MANAGEMENT

Corporate or Business Finance is basically the methodology of allocating financial resources, with a financial value, in an optimal manner to maximize the wealth of a business enterprise. There are three major decisions to be made in this allocation process: capital budgeting, financing, and dividend policy.

- International financial markets
- Foreign exchange management
- Performance evaluation & control
- International taxation

GRADING ISSUES

Grading methodologies vary considerably when using simulations. Here are three alternative approaches that may at least provide some ideas as to how to grade to best meet your own objectives. Most professors will use a combination of these alternatives, weighted in such a way as to support your goals. Very few faculties would only measure performance on the bottom line without some subjective materials as well.

Again, the purpose of a simulation is to encourage integrated, long-term thinking in a team environment.

BOTTOM LINE

Choose a particular measure (cumulative contribution, market share, etc.), combination of measures, or rankings as the basis for a grade. Several measures are available for faculty on the website and in the performance summary on a period-by-period or cumulative basis. Also, instructors may want to take into consideration the final presentation or additional exercises for the basis of the grade to allow for some subjective measures. It's easy to track and post.

MEETING OBJECTIVES

After a couple of periods, each group or individual has a meeting with the professor. Have the students make a presentation on how their bonus (e.g. grade) should be determined. Negotiate as necessary to keep all groups within a "fair" range and meet with groups periodically for reviews.

EXPRESSING SKILLS LEARNED

A more subjective approach is to ask the students to prepare papers and/or presentations, including entry decision analysis, market plan in the beginning and after several periods, and finally a presentation at the end focus on lessons learned. Here are some examples. (1) Your initial regional marketing strategy. Be sure to include countries entered, target markets served and positioning and mix strategies within those countries; (2) any important changes to your initial strategy and the rationale for those changes. (3) Your firm's performance objectives and actual performance; (4) Key strategic moves that led to your success (or demise); (5) how you left the company positioned for the future; (6) important lessons learned from the simulation experience

SUMMARY

We summarize the game features in Table 1. The description will help you to understand the setting environment and decision variables quickly, and will let you learn international business knowledge without pressure through our web-simulation game.

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Table 1
GAME CHARACTERISTICS

Characteristic	Features
Industries	Small size laptops: “Netbook”
Economic blocks	ASEAN (Association of Southeast Asian Nations; see Map) and APEC.
Countries	1-10—Japan, China, Indonesia, Korea, Thailand, Vietnam, Singapore, Malaysia, India and Taiwan.
Currencies	1-11—US Dollar, Japan Yen, China RMB, Indonesia Rp, Indian Rupee (Rs), Singapore dollar (SGD), Malaysia Ringgit(RM), Korea Won, Thailand Baht, Vietnam VND, and Taiwan dollar(NT)
Products	1-4— Low level and high level “Netbook”(mini laptops), the two levels belong to different sales sizes. The sizes are 7”, 8.9”, and 10.2”. Three kinds of memory are available: 512MB, 1 GB RAM, and 2 GB RAM; 3 camera choices are available: none, 0.3 megapixel, 1.3 megapixel; Two kinds of battery capacities are available: 2 h 45 min and 3 h 30 min battery life; furthermore have to choose if Wi-Fi communication or not; and Bluetooth or not.
Shipping methods	1-2— Sea, Air Express or a combination of Sea and Air Express shipping methods
Manufacturing methods	Man-attended assembly line.
Wholesaling types	1-2— Independent or Company-Owned
Sales promotion methods	2-3— Advertising, Base salaries and commissions for sales force by product lines
Sales force staffing methods	1-2— Hiring experienced Sales Representatives or hiring Sales Trainees
Employee training	0-4— Programs for Line Workers, Automation Technicians, Sales Representatives and Sales Trainees
Product quality methods	1-5— Raw materials grade, Automation, Supervisors, Quality Control budgets
Finance options	1-4— Sell Stock, Retire Stock, Short-Term Loans, Overdrafts
Company performance criteria	1-6— Profits, Rate-of-Return on Assets, Rate-of-Return on Equity, Earnings per Share, Stock Price and Composite Performance Index