DOI: 10.53469/itnce.2023.03(10).10

# Practice and Research on Applying Business Simulation Software in Business Management Teaching

## Yaxing Li

Xi'an Eurasia University, Xi'an, China

Abstract: The training of Business Management in the past focused on theories teaching, accompanied by limited experimental training, is not conductive to the development of students' professional skills and innovative entrepreneurial abilities. In past, the practical training of Business Management revolved around classroom teaching, which was difficult to arouse students' interests nor contribute their knowledge of real businesses. The modern information technology provides the possibility for Business Management teaching to carry out more realistic practical training projects. Based on the model of students' self-regulated learning, Business Simulation Software is used in Business Management teaching in a lot of British universities. The software can help students understand how real businesses work in a fast-moving market by simulating business operations. It can help students practice management knowledge and theories and practice their professional skills.

Keywords: Business Management, Teaching, Business Simulation Software.

#### 1. INTRODUCTION

With the rapid development of science and technology, the Internet economy has become an indispensable part of people's lives, business management professional in the social needs and their own continuous reform and exploration process has been developed by leaps and bounds, its traditional teaching mode can not meet the requirements of the modern society for the training of talents, and must carry out corresponding teaching innovation to meet the needs of the new situation. Under the background, to improve the practical training effects of Business Management specialty, this paper studies the application of business simulation software commonly used in British universities, and analyzes its advantages and disadvantages based on the real operation experience, it provides valuable experience for professional teaching reform.

#### 2. BUSINESS SIMULATION SOFTWARE

As an online Business Simulation Software, Practice Operations aims to improve students' skills and capabilities through operating a factory. The background of this software is a clothing factory, production and sales work on a weekly basis, products from the most basic socks, as the industry expands, participants can go on to make more complex, but more expensive, products such as tops and trousers for a higher profit. Students need to run the factory as a boss, with a small initial amount of money, purchase the materials to make socks, and put them into production. In the first few weeks, with production and sales relatively stable, most participants were able to accumulate a certain amount of profit. At this point, participants have to choose whether to spend money to expand the line? There are also two options for expansion: produce more socks, or start a blouse line. In the same way, after continuing operations for a certain amount of money, participants can again choose whether to start making pants products.

As a practical exercise, participating students want to pass the course assessment, it is necessary to obtain more than the target operating profit. The goal seems simple, especially in the first few weeks of operation, the accumulation of wealth, most students feel easy to pass. But in fact, by the time the factory runs for ten weeks or so, all sorts of unexpected "Business simulations" are happening. Mimicking the real situation, the software sets up a number of conditions that affect the accumulation of wealth, such as products being returned due to quality problems, operators have to bear the related losses, or even lose other customers; Or the product can not be completed by the agreed time production and delivery, resulting in customer dissatisfaction. In addition, there are machine damage, workers asked for a pay rise, transport companies did not arrive on time and other problems often occur in real business. As the operation became more difficult, the software designed a total of six models, even if in a model failure, as long as the accumulation of enough wealth, is considered to achieve the goal. The

design is very much in line with the actual operation of the company-even a loss-making project is not a failure.

ISSN: 2790-1521

## 3. THE ACTUAL DATA

In order to understand the specific application of software, the author as a student of the identity of the actual operation. Even though I have a certain knowledge of management, and have accumulated relevant management experience in the actual work, but in the process of operating business simulation software, and other students are still troubled by some business problems, resulting in not being able to accumulate the target amount of wealth. In practice, even if the software has been fully understood how to use and operating rules, or it is difficult to deal with each unexpected problem. One important reason for this is the difficulty of taking into account all six modules in the software: producing, sourcing, delivery, biding and human resources managing. Especially when the problem comes, often because of concentrating on the treatment method, and forget about other operations should be carried out, resulting in a problem to induce more problems, eventually leading to total failure. However, the following is the actual operation data and experience.

module	Pass or not	CT	Most important things to win
1	Y	100	Keeping the process in mind
2	Y	100	Sourcing materials correctly
3	Y	100	Gaining order by providing the attractive elements
4	N	86	Thinking about the value of human resources
5	Y	92	Organizing operations effectively
6	Y	88	Organizing operations effectively

## 4. LEARN FROM BUSINESS SIMULATION SOFTWARE PLAYING

Module1: The first module is simpler compared to other modules with less processes. But it still took few times to try to complete all tasks. This branch contributes to understanding of the production processes referring to inventory management, manufacturing and delivery. As Peterson and Silver (1979) report, an effective system to plan, manage and control production is necessary for all modern companies to apply to manufacture correct quantity products on time with acceptable quality. However, following the process is the most important things to win all modules which help players to avoid mistakes of missing actions.

Modeule2: In this division, choosing the reliable suppliers to gain high quality materials with cheaper prices on time is the most important thing. Moreover, as Handfield and Nichols (1999) explain, planning production advanced to save cost and guarantee schedule conduces to companies' successes. In simulation system, the discounts offered by suppliers when purchase large quantity or set long lead time. Based on market tendency, order more materials in ahead saves cost. However, the cost of inventory should be considered in real situation when operate businesses.

Module3: In this module, one more activity added into operation process as bidding. The target is gain more orders through adjusting prices and schedule to achieve customers' expectations. Based on clients' demand, the way to capture clients is creating attractive and acceptable conditions. Besides, reputation is required to be built in this module to access higher level customers. As Weiss, Anderson and MacInnis (1999) state, manufacturers pay more attention to reputation management as effects of reputation-related perceptions and beliefs continually increase in market. Positive reputation provides companies with more opportunities to win in competition. However, reputation management becomes more difficult in next module when profit accounted in consideration.

Module4:Personally speaking, it is the most challenge one to pass because the large loss generated at the end. The new element added in this module is human resources management which recalls to salary cost. To achieve the target profit, accepting the most valuable order is the way to win. In order to identify the value of order, cost of production should be considered. Cost is determinant to profit when income decided by confirmed price; it is complex because the effects of quantities of variable factors (McLaney and Atrill, 2016). Although the cost in simulation system is fixed and easy to account, it is still hard to gain profit by covering all costs. Additionally, effectively use human resources to increase production capabilities and enhance reputation to access more valuable order is the way to create healthy balance.

Module5&6: In last two modules, overall control of operation is required. Five processes involved in these two

divisions are manufacturing, inventory management, delivery, contracts management and human resources management. Organizing all activities together is more difficult because a small mistakes can due to terrible result. For example, order smaller size materials than expected leads to a delay of schedule. Further, the delay cause the waste of human resources and cost. In short, modules 5&6 require students pay attention to overall organization and correct the mistakes as soon as possible to avoid more losses.

ISSN: 2790-1521

# 5. ANALYSIS OF THE SUCCESSES/ FAILURES

Recalling to Business Simulation Software play, I pass module 1, 2, 3, 5 and 6 while failed in Module 4. To analyse the actions made in each division, there will be three parts. First is based on successes in Module 1, 2 and 3; second part talks about failure in Module 4; and last part will compare experiences of pass Module 5 and 6.

Above all, a necessary thing should be kept in mind is operate activities according to processes. Reviewing the successes in first three branches, modules can be passed once all tasks completed. Module1 took me few times practices before passing it. It is easy to take when understand the rule. Then Module2 and 3 are easier than Module1 based on similar system. Tasks involved in these three modules are quiet simple caused by less analysis required. Only attention is required to avoid making mistakes. Answers for decisions-making procure are easy to figure out.

Secondly, effectively use human resources is a strongly support of healthy balance refers to cost. In first time I played Module4, I hire as more as staff in each department to increase capabilities. At the end, a large loss came out because the high cost of salary. It is a big waste when the production capability is much more over the real requirement. Then, hiring only one staff in each department and pay lowest salary to employees. There is another problem arise that stopped production. The problem is powerless sorting capabilities leads to too much unsorted materials sit in warehouse. Then a series problem came out such as the delay in delivery, slow increase of reputation and nothing do in other departments. According to the experiences, planning human resources and considering salary cost should be considered in human resources management besides employees' motivation.

Finally, the writer failed many times in Module 5 while passed Module 6 at first time tiring. Although using theories and technology to operate business is quiet important, luck can be a factor affects result. When playing module6, I had better choices of orders to bid and gained them finally. In a limited period, such as in simulation Business Simulation Software, luck probably help players achieve goals more quickly. However, managers cannot depend on luck to win successes in real business. In real conditions, unexpected accidents could be happen and lead to horrible result. Applying theories to solve problems and avoid worse situation will contribute to achieve successes in long-term operations.

# 6. THEORIES INVOLVED

Based on the analysis of experiences, three theories applied to improve actions in real practices. Firstly, process is the basis and core in operation management which guarantee all production operations logically run in order (Heizer, 1983). However, in the simulation factory, procedures are distinguished clearly in where tasks should be completed is clear. Especially in first three modules, everything is listed in order and divided into different areas. Even in last two modules where overall control required, all tasks are assigned to different stages and can be completed step by step. Almost ambiguities could appear in real situation are removed from simulation Business Simulation Software, like changes of materials' prices, quality and unexpected damages. Things can be more complicated when various varieties involved in system. Continually developing system to improve effectiveness is necessary for all companies to do.

Next, Jackson and Schuler (1990) report that the value and leverage of human resource should be included when plan strategies and make decisions. Although motivating employees is the most popular topic involves quiet lot theories in human resource management, legitimately arrange human resource is the core action should be taken by companies. According to Schuler and MacMillan (1984), most companies will ignore evaluating the equivalent of salary and value can be created. To gain competitive advantages from human resource management, financial consideration should be involved into manpower arrangement process. Additionally, capitalizing employees' capabilities is a way to create more profit in future.

Last but not least, planning production is an effective way to create benefits such as reduce cost, guarantee schedule and avoid risks (Florian, enstra and Rinnooy Kan, 1980). In simulation Business Simulation Software,

discounts offered to purchasers who buy in bulk or in advanced order. As manufacturers, planning purchasement earlier can gain discount of price and leave more time for receivers to sort materials. At meantime, suppliers increase income by selling more products and save cost through schedule delivery earlier and planned. However, inventory is a very important factors to consider when planning production. As Silver, Pyke and Peterson (1998) report, inventory cost and stock capabilities should be concerned before planning production which can due to increase of cost.

ISSN: 2790-1521

## 7. TEACHING EXPERIENCE LEARNING

Based on the experience of using Business Simulation Software, two advantages of applying software in Business Management practice teaching can be summarized. Firstly, the software is very realistic, it almost simulated a real-life company operating scene, so that students can experience the most intuitive operation of the company. For most students, the practice of Business Management teaching is a case study or group activity, and there is a big gap between the actual operation of the company. It's a completely different feeling to work with analog software by hand. It shows the real consequences of each student's choices, and it also uses unexpected questions to show how the external environment directly and deeply influences business operations. Many students participate in the game with a relaxed attitude, but become more and more serious in the experience, not even through the course as a goal, but to try to create better business results.

Secondly, such practices are more vivid and interesting than other practices. Simulation software page design is very close to the real factory appearance, can bring a strong sense of reality, quickly attract students' interest, let students immerse themselves. In the process, without any intervention, unlike classroom discussions or case studies, students are inevitably influenced by teachers or other students, who can not really speak up. In the simulation process, students operate on their own volition, independently analyze the reasons for success or failure, and then try again. This model is very suitable for the learning habits of contemporary college students, rather than the teacher's lectures, they prefer to actively explore to acquire knowledge and technology.

However, there are also some potential problems with application of Business Simulation Software such as the inability to specifically measure student learning, which may lead to student addiction. In the application of teaching, we must consider the appropriate time, do a good job in driving, as far as possible to play the advantage of software, to avoid difficult to control the results. At the same time, the high cost of software is also a factor to be considered, colleges need to be based on their own actual economic budget situation to select.

#### 8. SUMMARY

The aim of Business Management is to develop a systematic grasp of the basic theories, professional knowledge and basic skills of business management, and to become familiar with modern business management methods and means, with the ability to engage in modern enterprise management and skills of application-oriented professionals. In view of the present situation that the traditional teaching method of Business Management specialty needs to be optimized, this paper analyzes the experience of applying business simulation software in the teaching of Business Management specialty in Britain, so as to explore the optimized path of the practical teaching of Business Management specialty, with a view to further deepening the comprehensive reform in the field of education to promote education information.

#### REFERENCES

- [1] Florian, M., Lenstra, J. K., and Rinnooy Kan, A. H. G. (1980). 'Deterministic production planning: Algorithms and complexity'. Management science, 26(7), pp.669-679.
- [2] Handfield, R. B., and Nichols, E. L. (1999). Introduction to supply chain management.
- [3] Heizer, J. (1983). Production and operation management.
- [4] Jackson, S. E., and Schuler, R. S. (1990). 'Human resource planning: Challenges for industrial/organizational psychologists'. American psychologist, 45(2), pp.223.
- [5] Krajewski, L. J., Ritzman, L. P., and Malhotra, M. K. (1999). Operations management.
- [6] McLaney, E. J. and Atrill, P., (2016), 'Introduction to Accounting and Finance', Accounting and finance: an introduction, pp. 1-32.
- [7] Peterson, R., and Silver, E. A. (1979). Decision systems for inventory management and production planning, pp. 799-799.

[8] Schuler, R. S., and MacMillan, I. C. (1984). Gaining competitive advantage through human resource management practices'. Human Resource Management, 23(3), pp.241-255.

ISSN: 2790-1521

- [9] Silver, E. A., Pyke, D. F., and Peterson, R. (1998). Inventory management and production planning and scheduling, Vol. 3.
- [10] Weiss, A. M., Anderson, E., & MacInnis, D. J. (1999). Reputation management as a motivation for sales structure decisions. The Journal of Marketing, pp.74-89.