An Introduction to the Research on Profit Models

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ABSTRACT

The purpose of a company is to make a profit, and the way a company makes a profit in different periods is different. This article starts from what value the profit model can create, that is, to achieve sustainable development, increase sales revenue, maintain normal cash flow, improve the time value of resources and funds, and provide customers with high-quality value. The research results of the profit model have been obtained and a new direction of profit model research has been proposed.This paper focuses on analyzing the applicability of the current popular content-based collaborative filtering technology to the current profit model. This paper proposes a system technical scheme and system structure based on the association rules of the profit model. Based on the grounded survey data, a series of evaluation indicators are established, and comparative experiments are carried out to propose the future development direction of the profit model.

Keywords: *Profit Model; Sustainable Development; Customer Value*

1. INTRODUCTION

The most influential foreign research on profit model is Adrian J. Slywotzky and his collaborators, and they came up with 33 monetization models. One of the earliest authors of the term profit model was William J. Vatter(1945), afterwards, Harlan D. Mills(1959), also proposed a profit model when discussing competition in marketing promotions. In recent years, the development of e-commerce and big data has triggered many new profit models, and Vivek Bader(20151) uses fuzzy set theory to determine profit model through big data. Through sorting out the research, it is found that the profit pattern, profit model and profit formula in the literature express the same concept in essence, so this article translates all three into profit model.

Foreign research on profit model shows an upward trend year by year, from 2002 to 2011, there are many articles about the profit model. Compared with the previous period from 2012 to 2021, the number was reduced and most of them were concentrated in emerging fields, such as finance 2, big data, etc., while the research in this period from 1945 to 1995 was the least, and a few scholars covered profit models in their articles. the term, and there is no independent research on it. The reason is that at the end of the 20th century, the most attractive thing about the world economy was the economic prosperity of the United States that lasted for ten years. Science and technology are the primary productive forces, and the leading position of the United States in science and technology is a powerful guarantee for its economic prosperity. During the adjustment of the US industrial structure in the 1990s, the development of the information industry drove the overall industrial upgrading of the US. Different from mass production in the past, the American business management concept has turned to customer-centric supply chain management. Under such an economic situation and the emergence of new business concepts, from the early 1990s, people began to pay attention to new profit models. Enterprises do not follow the logic that the larger the scale and the higher the sales volume, the higher the profit. The enterprise must not only have resources, but also effectively use resources to create value for the enterprise. Since 2002, the attention to profit model has shown rapid development. The reason is that the study of corporate profitability is equal to the study of profit model, and the business model is equal to profit model, so the total amount has increased, while the independent study of profit model did not grow. From 2012 to 2021, due to the influence of e-commerce and big data, the industry profit model related to big data was mentioned the most.

This study mainly focuses on the business profit model rather than the enterprise profit model. Most of the previous studies were on the study of the enterprise profit

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model. A group has many businesses, and these businesses have different purposes. Most businesses are for profit, and some businesses seem to be Not so, but to provide a platform for other businesses to support other businesses to achieve profitability. There are also business purposes to prevent competitors from entering the field to ensure that the market on the spire is not eroded. The strategic profit model of a business can realize the following five aspects of value for the enterprise: first, to achieve sustainable development; second, to increase sales revenue; third, to maintain the cash required for normal operation; fourth, to increase resources and funds time value; fifth, to provide customers with high-quality value. From these five aspects, this paper reviews the foreign profit model research.

2. AN INTRODUCTION TO THE RESEARCH OF PROFIT MODEL

Profit model is an important concept in modern enterprise management, it is a part of business model．（Mark W. Johnson，Clayton M. Christensen，Henning Kagenmann,20083；Itami Hiroyuki and Nishino Kazumi,20104）. If the company has only one business, the profit model is the same as the business model in the course of operation; if the company has multiple businesses, the business model includes the profit model. At present, although the profit model has received extensive attention abroad, so far the academic circle has not reached a consensus on the conceptual nature of the profit model. On the basis of summarizing many literatures, this paper believes that the profit model refers to the business model, combined with the external economic environment of the enterprise and stakeholders (suppliers, competitors, complementors, partners), according to the internal resource strength of the enterprise A detailed plan that can not be easily imitated gradually forms both to provide value to customers and to create value for itself. The profit model can provide the following five aspects of value for enterprises and customers.

2.1. Second Level Heading

Afuar(2015[5]) defined the business model as the way to obtain short-term profits, the planning of long-term profits, and the way to obtain sustainable competitive advantage. We combined with morris on business model and the definition of profit model can be found that the ruffle substance to the definition of business model is a description of the profit model, profit model for enterprises to provide short-term profits at the same time, to serve the enterprise strategy, to provide guarantee for long-term profits, in the pursuit of enterprises to survive at the same time to consider sustainable development．William J. Vatter(1945[6]) proposed that general managers and financial managers care about different contents. Financial managers focus on financial statements and hope to make them more beautiful, while general managers should consider sustainable development of enterprises rather than focus on current interests when making profit models．Mark Johnson proposed that the profit model should have a holistic view and take other influential factors into account while considering the income. Adel I. El-Ansary(2006[7]) from Coggin Business School of University of North Florida believes that under the coordination of functional strategy and organizational strategy, marketing management, human resource management and financial management constitute the main contents of strategic profit model. Professor Adel's research is inclined to the profit model of enterprises. He combines human resource management, market management and financial management of enterprises, balances profits from the perspective of enterprises, and enables enterprises to achieve sustainable development through outsourcing, internal marketing and strategic profit model.

Corporate profit model is the integration of business profit model. The ideal business profit model not only enables enterprises to obtain continuous income, but also helps to explore the source of sustainable competitive advantage of enterprises. The fundamental purpose of business is to make profits, but some businesses do not bring revenue to the enterprise, and it is the platform for other businesses to make profits.

2.2. Profit model can increase sales revenue

The essence of a business is to obtain sales revenue. Revenue and cost are the two most basic elements often involved in the study of profit model. Increasing sales revenue can be divided into the following categories.

1)From a financial perspective

*a)*Revenue and cost are the two most basic elements of profit model. Based on the perspective of sustainable development, William J. Vitto proposed that revenue and cost are the two basic elements of profit model. In order to increase profits, the most important thing is to increase revenue and reduce costs. Many scholars hold this view（Wesley S. Randall,2011[8]）. Almost all scholars who discuss the profit model agree that revenue and cost are the two most direct variables to obtain profit, which is the first step to study the profit model.

*b)*Analyze profit model with financial indicators. Using financial indicators to analyze profit models has two major advantages. First, it can quantitatively analyze and compare profit models, and second, it can find profit sources. Financial indicators can analyze the enterprise and the business profit source, operating capacity, efficient use of assets, liabilities, and the reasons of these indicators changes can also help you whether the optimal analysis and business cost structure, analyze the impact of cost and expense on profit, the system can find the way to reduce the cost, strengthen cost management. Joseph Cronin and his colleagues(1993[9]) proposed three ways to improve profitability: first, profit management -- the management of marginal profits in business operations; Second, asset management -- the management of the rate of return on investment; Third, leverage management -- debt management. Three ways to improve profitability are the building blocks of the profit model: leverage management, costs and assets. They(Drew Stapleton, Joe B. Hanna, Steve Yagla, Jay Johnson, Dan Markussen,2002[10]) also uss financial indicators to study strategic profit model, and believes that profit model can be used to determine the impact of a proposal on the enterprise, profit and return on assets.

*c)*Professor Edill and Joel R. Evans treat profitability models as a set of financial indicators related to management issues. Professor Edil believes that the strategic profit model includes four elements of net profit margin on sales, total asset turnover, leverage ratio and return on equity, which correspond to sales personnel, marketing managers, financial managers and top managers of enterprises. The profit index is decomposed and the responsible object is implemented, which is more maneuverable. Sales personnel are responsible for the profit margin of the enterprise, marketing manager is responsible for the market management of the enterprise, financial lever is responsible for the financial manager, strategic management and roe are responsible for the top management.

To sum up, several researchers who analyzed the profit model from the perspective of finance started from the perspective of enterprises rather than business, and considered the sales revenue, cost and expense, turnover of fixed assets and financial leverage of multiple businesses from the perspective of enterprises, which has reference value for analyzing the profitability of enterprises. In particular, the analysis and optimization of fixed assets and capital are of guiding significance. Fixed asset turnover is mainly used in the analysis of plant, equipment, machines, machinery, transport efficiency, the higher the ratio shows that the enterprise the higher efficiency of the use of fixed assets, the management level is higher, if the fixed asset turnover is lower than the industry average, is the enterprise of fixed asset use efficiency is low, the management level is bad, will affect the profitability of the enterprise. Moreover, they all regard financial leverage management as one of the elements of the profit model, which shows that they study the profit model from an enterprise perspective rather than from a business perspective. If the business profit model is studied, the significance of financial leverage is not great, because financial planning is based on the perspective of the whole enterprise, and the revenue structure and cost structure are the most important.

2)From a market perspective

Some American scholars conducted a survey on the relationship between market share and profit margin in the 1980s. The survey found that in the food industry, each percentage point increase of a brand's market share would increase its sales profit by tens of millions of dollars. A survey of hundreds of manufacturing companies found that their market share exceeds 40% and their return on investment can reach about 50%. There are many scholars who study the relationship between market share and enterprise profit amount. With large product sales volume, enterprises can achieve economies of scale, that is, within a certain range of output, the average cost of products decreases with the increase of output. In the 1970s and 1980s, corporate managers followed the logic: gain market share, retain market share, reap market share （Robert D Buzzell, Bradley T Gale, Ralph G M Sultan,1975） [11]. They aggressively pursued market share, and profits would follow, an idea that was most valuable under the old economic order. Donald J. Milliner and Mark K. Pyles(2010[12]) conducted an empirical study of British banks and came to the same conclusion: higher market share leads to higher profits. If the external environment of the sales channel changes and the profit model in the sales channel remains unchanged, the profit margin will be affected. If the external environment changes, then it is necessary to change the sales channel and build a new profit model, so that the profit will not be affected.

To sum up, scholars who study profit model from the perspective of market combine the sales volume and profit of an enterprise. From the middle of the 20th century to the end of the 20th century, it was believed that the larger the sales volume, the more profits the enterprise would make, and the enterprise would achieve high profits after expanding the market share. 1960s was a period of rapid development of American capitalism, from Truman's "fair" policy to Johnson's "great society", the New Deal policies state monopoly capitalism development to a new level, makes this period, the economic height prosperity, large enterprises through economies of scale and high market share can get high profits.

3)Cash needed to keep running

Cash is the lifeblood of a company, and so vital to its survival that Itami Hiroyuki and Nishino Kazumi, Japanese academics, find the profit model even more fascinating because it goes to the heart of the matter. A business if there is no cash flow, so its days are numbered facing bankruptcy, cash flow is to show the enterprise for a certain accounting period according to cash accounting, through certain economic activities (including operating activities, investing activities, and financing activities and the current project) and produce the cash inflow, cash outflow and the floorboard of the total situation. Cash was first mentioned by Wells Stapleton in his work on profit models, and it was put on the formal agenda when they analyzed the current assets of companies.

4)Time value of resources and money

Time is an important component of the profit model. In the previous analysis of the profit model from the perspective of finance, many researchers proposed the asset turnover rate（J.Joseph Cronin，Thomas J.Page,1993[9]，Drew Stapleton, Joe B. Hanna, Steve Yagla, Jay Johnson, Dan Markussen,2002[10]）, which emphasizes efficiency and time in essence. Asset turnover is an important indicator to measure the efficiency of enterprise asset management. The higher the asset turnover is, the faster the asset turnover is. If the enterprise sells more, the higher the asset turnover will be. The value of land and other resources keeps rising. Some enterprises hoard resources after obtaining similar resources and wait for the value of resources to rise to a certain extent over time before making production and utilization. On the other hand, the time value of capital is also an element of the profit model. Due to the appreciation of capital, opportunity cost, inflation and risks undertaken, the time value of capital exists.

5)To provide customers with high quality value

The typical representative from the perspective of the customer is Adrian Slyworski and his fellow researchers（Adrian J. Slywotzky，David J. Morrison，Bob Andelman）[13], who clearly stated in "Discovering the Profit Zone" that market share is out of date and the focus is now on customer-centric profit model design. Stephenson, P. Ronald and Willett, Ronald P(1968[14]) argue that for a profitable model to succeed, customer service must be taken into account as an explicit variable. Based on the point of view of customers, the theme of profit model is to meet customer needs.

Analysis based on the perspective of customer profit model is proposed in view of the market point of view, because people once the market share and profit delimit equal-sign, based on this, Adrian weasley, walter and David Morrison was proposed based on the customer's profit model, but the area found that profit as revenue model research literature is a summary of case, the seeds of a lack of prospective.

3. CONCLUSIONS

The profit model is developed on the basis of the development and wide application of information and communication (CIT) technology. CIT plays a key role in the theoretical development of the profit model, because CIT can not only provide enterprises with ways to reduce costs, but also provide innovative entrepreneurs with innovative opportunities. The profit model seems simple, but it is in a complex system, accumulated over a long period of time formed can not be copied and imitate the subsystem. Profit model is a structure that enterprises rely on for survival and profit under the complex environment of continuous competition with competitors. The following points should be paid attention to in the research of profit model.

3.1. The profit model is more of an element that is mentioned in articles that study business models

The development process of the enterprise profit model is very important to grasp the existing profit model of the enterprise.

3.2. Businesses should understand the interdependence between profit models, as well as their strengths and weaknesses

It is critical that a business can build a profit model where all components work together to get the job done in the most efficient way. How to coordinate the various elements of the profit model and how to coordinate among the profit models are issues that need to be further studied.

3.3. The study of profit model lacks research methods, theoretical paradigms, and strict logic lines

The profit model has not been studied for a long time and lacks a systematic and theoretical basis. It is possible to learn from the relevant research results of business models to study its research methods, formation reasons and profit sources. There is no “one-size-fits-all” profit model, but successful profit models must not have nothing in common and are not related to each other. Studying the laws behind them can provide guidance and reference for the design of profit models.

3.4. There is no good or bad profit model, the key lies in whether it is suitable for the enterprise itself

The profit model does not exist independently, it depends on the external environment and internal resources of the enterprise.

3.5. Profit model elements are still incomplete

Many of the elements of the profit model are proposed from the perspective of financial indicators, lacking long-term evaluation and external factors

AUTHORS’ CONTRIBUTIONS

We have sorted out scholars' research on profit models, and put forward the problems and solutions faced by the current development of profit models based on the characteristics of e-commerce development.

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