

The Solution of Balancing Efficiency in Takeout Industry: A Case Study on Meituan

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Abstract: With the gradual maturity of the "Internet Plus" model, the youth of consumer groups, and the rapid development of the Online to Offline marketing model, the takeout industry has gradually become one of the most popular industries. After the outbreak of COVID-19, the takeout industry suffered a loss. Before that, the safety problems of takeout distributors and the social security problems caused by them were the social hot spots. Various takeout companies have been looking for answers on how to implement humanized management while ensuring work efficiency. The paper is based on behavioral science theory and two factors theory, and used SWOT analysis to analyze and summarize the export industry from various dimensions. The research concludes that the solution is that the company can make rational use of existing advantages, grasp market opportunities, and solve problems by changing management methods, improving employee enthusiasm, and improving the company's public reliability. The research findings can inspire the takeout company, make the takeout industry develop more rapidly and stably, and no longer worry about balancing work efficiency and employee safety.

1. Introduction

1.1 Overall Background

Since 2018, the sharing economy has been booming in China as the "Internet Plus" model has taken root in various industries. The market share of the takeout industry keeps expanding, which grows into one of the hottest industries. The mainly because of the accelerating urbanization process, the developed mobile Internet technology, and the younger consumer groups. After the outbreak of COVID – 19 in 2020, the takeout industry was affected by the epidemic, which showed a loss state in the first quarter [1]. As they return to work and production of orderly development and the success of the new ideas such as "no contact distribution" practice, delivery became the critical way of the repast, urban population and thus profitability. And a broader consumer market has been established. With a more developed life service industry and a perfect transportation network, the southeastern region has a far larger industry scale than other regions [2].

1.2 The State of Industry

Recently, many labor forces have shifted from agriculture and manufacturing to the tertiary industry, and the food delivery industry has become one of the primary sources of labor due to its high salary, low threshold, and flexible working hours. Meituan platform alone has 2925,000 food delivery workers active in the front line of food delivery, a concentrated embodiment of China's gig economy [1]. The rapid growth of the takeout market must base on the massive group of takeout workers, so the profession of takeout workers has gradually transformed from part-time to full-time. Under the new format of the gig economy, delivery platforms have tried to establish an effective human resource

system to manage employees with wide distribution and high daily activity rates. The highly efficient distribution of takeout business for consumers mainly relied on the strict delivery time algorithm and punishment mechanism of foreign sell member management and constraints. And the order quantity is the primary measure of the incentive system. In addition, the delivery platforms take advantage of the delivery men's strong desires to make money to drive them willing to risk their lives to complete the orders quickly. It requires delivery workers to comply with standard employee management regulations but refuses to provide any employee security, such as social security and work-related injury insurance. The overbearing management mode leads to the delivery workers being exposed to a high-risk and zero-security working environment, which all sectors of society have strongly condemned after being told by the media.

1.3 Research Result

In the past few years, there have been academic studies on delivery workers. A large number of early papers focused on the delivery attendants themselves. For example, in 2019, Yakun Wang tried to reveal and analyze the survival dilemma faced by delivery attendants from their violation of traffic rules and their inherent causes [3]. From the perspective of the delivery platform, Tang Dan points out the deficiencies in employee management based on the theory of human resource management in the same year [4]. After analyzing Uber Europe's employee security system, Jing Yang suggested it as the primary model to improve the plight of Food delivery management in China [5]. With the widely put forward of the concept of the platform economy puts takeaway member with a digital platform to study the interaction of remarkable achievements, Sun Ping focused inquiry platform using the algorithm logic implementation of a new model of labor-management [6]. Soon, with more sophisticated research perspectives, Qingmei Qiao explored new forms of labor rights in a new direction in 2020 [7].

1.4 Deficiency

The current research results have the characteristics of multi-perspective and robust theories. However, there are still many deficiencies in analyzing the deep causes of the current situation of delivery workers and the exploration of more feasible measures and suggestions. The core advantage of high efficiency means high requirements for practitioners, requiring universal and effective new management mode as the support, rather than relying on simple algorithm constraints and punishment measures. In the post-epidemic era, with the rapid growth of new takeout consumption demand and the continuous expansion of the workforce, how to provide a more humanistic management mode while enjoying efficiency?

Therefore, this study chooses the fast development of the food delivery industry in southeast China in recent years and uses the SWOT model to analyze the status quo and challenges of the food delivery platform, taking Meituan food as an example, to find the most fundamental causes of the food delivery worker's dilemma. From the perspective of platform, consumers, and workers, the study uses the Behavioral Science theory as the guide and the Two-Factor theory to build robust security and flexible incentive mechanisms to optimize the takeaway member working environment and promote the healthy development of the healthy development the takeout industry.

2. Literature Review

2.1 Behavioral Science Theory

2.1.1 Definition

Mayo first studied the structural behavior of Behavioral Science Theory in Intercedence Conference Chicago in 1949. In 1953, the broad discipline was officially named "behavioral science" [8]. Behavioral science theory was born after the end of World War I in 1918. The attack of the capitalist economic crisis intensified the contradiction between labor and capital. Before this, the capitalist economic construction based on the assumption of "economic man" in classical management theory

was entering the monopoly period. The approach is a synthesis of psychology, sociology, anthropology, economics, political science; behavioral science theory studies interpersonal relationships, work, and life from the perspective of psychology. Behavioral science theory improves the lack of human nature management in previous management theories [8]. This theory has two research dimensions: individual behavior in organizations and team behavior in organizations. After long-term research and experiments, the main body of the research field mainly aimed at studying interpersonal relationships and leadership styles in organizations and informal organizations [9].

2.1.2 Development

Behavioral science in various enterprises at present has been widely used in social management, and has obtained the massive effect, not only changed the way managers' ideology and behavior; the most important thing is that moving target from the items to the change of the artificial center, the most apparent feature is the shift from simple rules and regulations in the democratic management style [9, 10]. In the process of the development of the theory, there are many different views, mainly divided into three kinds; the first is that it is science fiction, on the whole, is chaotic, the method is not practical, the second is that it has universality, and modernization, any country, and class can be used for reference. The third is that it is to maintain the product of capitalism and not yet entirely accepted. Some countries even reject it.

However, this theory has conflicted with China, mainly because human behavior is objective and cannot be assumed, and it is considered the product of capitalism. With the precipitation of time, more and more enterprises carry out experiments and achieve noticeable results; the world's famous enterprises have improved production efficiency and performance. In modernization, the theory has reached a stable position [9].

In modern enterprises, human resource management has become an essential part of enterprise development; the introduction of the theory will be the whole enterprise mechanization of production and service into humanized management. In the past mechanized production, it was inevitable for managers to convey orders up to and down every day, and it lacks practical judgment standards and consumes a lot of financial resources and energy [10]. At present, more managers will adapt to the professional arrangements of each worker and some specific corporate welfare. They will pay attention to the individual's work motivation and needs and maximize their work efficiency, from the individual's perspective to explore talent, to achieve a win-win situation between the enterprise and the individual [9,11].

Personnel management is an indispensable part of modern management research, which must constantly absorb the essence of each theory. Behavioral science management theory is an essential breakthrough in management theory, which gives play to better creativity and provides a platform for the development of modern individuals and teams [9]. The continuous application of behavioral science management theory has produced unique characteristics combined with different development situations of enterprises. Proper use can maximize the benefits between enterprises and employees [9, 11].

2.2 Two-factor Theory

2.2.1 Definition

The two-factor theory is also called "incentive-health theory," presented by the American psychologist Herzberg in 1959. This theory divides the relevant factors in the enterprise into motivators and health care factors. The factors that can satisfy and motivate people are called motivators and factors that tend to give rise to opinions and harmful behaviors are called health factors. These two factors are the main factors that affect employee performance. After the publication of this theory, many scholars have applied this theory over the years to analyze the policies of enterprises and give opinions to promote socioeconomic development.

2.2.2 Effectiveness

In 2012, Miao and Xu described the connotation, present situation, and harm of the job burnout of civil servants at that time. And based on the analysis of the two-factor theory, they pointed the cause of the phenomenon was procedural overload and tedious work, which lacks of sense of achievement, precise career planning and competition. Then from the two-factor theory of motivators, the study introduces six dimensions to the work characteristic model. In addition, they advised to pay attention to the employee's participation in management, as well as personal development, and prevent the subject's marginalization. With the introduction of a competition mechanism to strengthen the incentive role of the promotion system, these programs solve the problem of job burnout of civil servants [12].

Similar to their research, Zhao Zhirong in 2020 based on the two-factor theory on the "90" after the employee's work system multidimensional. After the degree analysis, he combed the "post-90" employee's demands and employee characteristics, from strengthening the employee's ability to work incentives and the enterprise work environment incentive mechanism. Moreover, welfare and material incentive mechanisms are incentive policies to put forward the advantages of strategy [13].

In 2021, Zhou Weifei discussed the phenomenon of overwork in China and the reasons for the frequent occurrence of overwork, reusing the two-factor theory to propose some solutions. Such as clarifying the duties and scope of work, improving the employee manual and life guide manual, adding new employee health management in enterprise management and introducing the psychological help program Employee Assistance Program (EAP). These four points above can prevent overwork recommendations and initiatives [14].

GAO and Zhang designed and analyzed the job satisfaction questionnaire for insurance sales staff under the guidance of the two-factor theory. It found that the salary level, the sense of achievement of the work itself and the working environment are the main factors affecting the satisfaction of sales staff. It is pointed out that enterprises should redesign the compensation system from the experience of other industries, give respect and fairness to material compensation and work together with the government and joint industry enterprises to improve the internal environment of the insurance industry. These measures are able to enhance the image of insurance enterprises and insurance sales work in front of the public as well as solving the high turnover rate of sales personnel in insurance enterprises [15].

Based on the two-factor theory, Chao Liu analyzed the application of "health care" factor and "incentive" factor in Toyota's human resources management theory in 2021. The study put forward that the company should enhance employee autonomy, promote job enrichment and provide employees' growth opportunities [16].

In general, from the previous research, the two-factor theory can be analyzed from many angles to find out the cause of the problem of employees, convenient for the cure, and put forward the corresponding countermeasures.

3. Method

3.1 Research Design

This study will conduct a qualitative analysis of the job of Meituan Takeout Services, the most representative takeout and occupies the largest market share in China [1]. To make an in-depth analysis of the current institutional model adopted by Meituan Platform, the SWOT model is introduced as a tool and bridge to comprehensively restore the current management model of Meituan takeout. It can directly attack the imbalance between efficiency dividend and humanized management under the model.

In recent years, Meituan takeout has gained a broad consumer market by taking advantage of the explosive development of Internet technology and gradually establishing various management mechanisms. However, it is urgent to reform the increasingly fierce competitive environment to maintain its leading position [2]. SWOT model, one of the most widely used business analysis tools

in today's enterprises, is good at situation analysis based on internal and external competitive environments and realistic conditions. From the perspective of the interaction between delivery personnel and the system, a comprehensive, systematic, and accurate study of this model attempted to develop a more reasonable and adequate management model.

3.2 Meituan Food Delivery Work

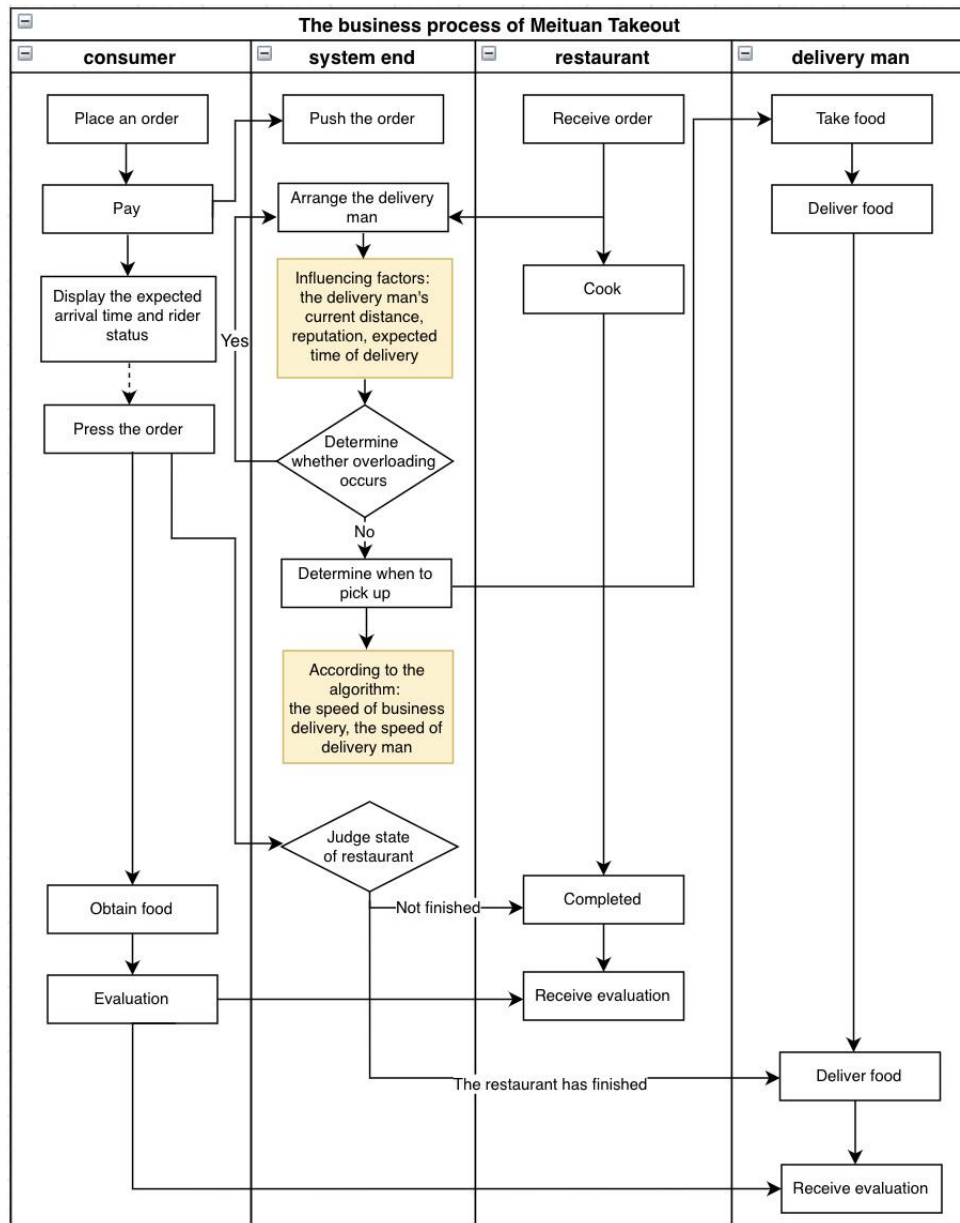


Figure 1. The Whole Process of Meituan Takeout Order [17].

As shown in Figure 1, Meituan Takeout Services plays a communication role among consumers, restaurants, and delivery attendants, ensuring the smooth completion of orders through multiple procedures.

It now adopts the delivery staff management mode, with the core idea of meeting the needs of consumers to the greatest extent, mainly relying on algorithms, reward and punishment mechanisms, and transparent management as means. The first is the strict delivery time algorithm: after the platform randomly distributes the delivery order to the delivery personnel, it is accompanied by the "expected delivery time" calculated according to the delivery route, weather conditions, historical traffic conditions, historical delivery time under the same conditions and other factors. Although various factors have been taken into account, this is still a decision made by an algorithm divorced from reality. Data show that Mantuan's expected delivery time is shrinking, pushing the speed limit of delivery

attendants. The second is the reward and punishment mechanism, which is wholly based on distribution efficiency. The more orders completed, the shorter the time to complete a single charge, the more rewards the delivery staff will receive. Meituan even created a level challenge to encourage orders and improve efficiency. Accordingly, Meituan uses a cumulative punishment model for delivery drivers who fail to complete delivery within the specified time, which means overtime costs are increasing. In addition, the punctuality rate is closely related to the order of pickup. This means that if there are more delays, messengers will lose out on fewer orders and earn less money in the future. Thirdly, the delivery worker is exposed to the monitoring of consumers. From the moment the delivery worker takes the order, consumers can check the trend of the delivery worker on the client-side at any time and contact and urge the delivery worker at any time. The delivery worker also needs to deal with the monitoring from consumers in the face of complex traffic conditions. The platform gives consumers the right to complain, and the number of bad reviews is directly linked to the commission, which means delivery workers must win over consumers with good service.

At present, the employment status of Meituan's delivery workers are polarized. Driven by the interest of working more and getting more money, nearly half of delivery attendants work more than 90 percent of their working hours, meaning they are full-time. However, the takeaway work dominated by the algorithm has high physical demands and solid mental pressure on practitioners, so nearly 40% of delivery workers work less than half of the total working hours. Which means they're just using takeout as a way to make extra money [18].

3.3 SWOT Analysis

3.3.1 Strength

The current management model of Meituan caters to the needs of consumers to the greatest extent and effectively enhances user stickiness. The large and stable user base continues to provide more job opportunities for delivery workers. Efficiency-first algorithms guide delivery drivers to complete deliveries efficiently, increasing the total number of orders that a single person can achieve to increase commission income. The "more pay for more work" model allows delivery workers to have more flexible working hours and a fairer chance to earn money. Under the hierarchical reward and punishment mechanism, employees can gain more motivation. According to an internal survey conducted by Meituan, delivery attendants' expectations for their future life rose from 3.88 points in 2019 to 3.97 points out of 5 in 2020 [18].

3.3.2 Weakness

Under Meituan's management mode, due to the one-sided pursuit of high efficiency, the traffic accident rate of delivery workers increases rapidly, and the most basic life-safety cannot be guaranteed. In August 2020, Shenzhen, where takeaway food is well developed, dealt with 12,000 traffic violations in the takeaway food delivery industries, accounting for more than 10% of the total non-motor vehicle violations [19]. In addition, the medical staff of Shanghai Medical Emergency Center pointed out that there were first-aid needs related to delivery men every week at the same time [19]. Due to the strict algorithm, delivery drivers cannot choose the delivery route and delivery speed. The lack of humanized punishment mode also makes takeout workers still suffer the penalty of deduction when faced with unexpected situations, such as restaurant food preparation is not timely. Traffic conditions are not ideal, which will significantly hit the enthusiasm of takeout workers. The multiple bundles and stressful working environment make delivery workers unable to obtain a comfortable working experience.

3.3.3 Opportunity

Based on decades of construction experience and advanced Internet technology, Meituan has every opportunity to carry out management reform.

The first is the refactoring of algorithmic logic. Based on the original efficiency-oriented, the algorithm should be found on the personal safety of delivery personnel and delivery capacity. For example, the expected delivery time displayed on the client-side is designed as a period instead of the original specific time point. This gives delivery workers more flexibility to respond to emergencies.

Eleme, another mainland food delivery leader, recently introduced an option for consumers to accept late delivery. It was also a successful attempt.

Secondly, in terms of incentive mechanisms, the takeaway platform does not change the way of monetary reward. According to the two-factor theory, the platform can adopt a more human approach such as emotional motivation, such as a team competition in a sharing area. As well as offering rewards to delivery workers, it also helps to address their lack of free time to socialize. Finally, it is worth noting that Meituan should establish a more comprehensive security mechanism to provide workers with work-related injury insurance so that they can devote themselves to orderly delivery work without worries.

3.3.4 Threaten

Any reform would be accompanied by temporary chaos. Meituan's redesign of algorithm logic is bound to affect the current efficient distribution model. It is foreseeable that this will lead to the loss of some users, who may choose other delivery platforms due to the decline in delivery speed. In a competitive environment, a loss of market share can be fatal.

There are also many unknown challenges to realigning incentives. While emotional stimuli create a warmer work environment, money is often more attractive to delivery workers at the bottom of the social ladder who have a more substantial need to survive. When labor mobility is quite frequent, unreasonable reforms will prompt delivery workers to switch to other platforms or even change their jobs. The construction of the guarantee mechanism also requires Meituan to invest additional human resources and material resources, which makes the enterprise face significant challenges of capital and personnel. Meituan can adjust its management system, but the cost of trial and error is high.

4. Result

4.1 Advantage

Looking through the mechanism transformation to reduce short-term profits for growth, Meituan Takeout Services will be a new benchmark for the food delivery industry. It uses people's ability to deliver food and its market proportion advantage. Moreover, in the game of more rewards in its activities and activities.

As for the enterprise's image, it can redefine the positioning of the enterprise, a simple service image label, a high-profile appearance, and the factor of market share can be transformed into high-quality services. On the side of employee safety issue, it can ensure the safety of employees at work, and it needs to be the first step of the company's development. The confidence of local employees will enable the company to develop for a more extended period.

As for the last part of enhance the brand value, with the precipitation of time and the legacy of image and image, use one's property- the food delivery industry- as the foundation and derive other businesses. According to the existing brand, there are also leaks in the development of new initiatives.

4.2 Disadvantage

If corporate positioning and management methods change, will product funding issues: need to invest a lot of funds for reforms and management model changes, need to ensure sufficient cash flow and expected operating profit security.

The changes in the previous management methods will focus on the internal operation of the enterprise, which will occupy more capital and workforce of the enterprise and weaken the market operation. The risk rate is high. In recent years, China's online market has been undergoing a period of significant changes, and it is necessary to bear the risk of national policy changes.

5. Discussion

To sum up, enterprises can improve the quality of service and productivity by changing their image and refreshing their positioning. Furthermore, enterprises need to ensure the safety of employees,

improve the insurance system and other issues, achieve humane management, and improve employee satisfaction and enthusiasm for work. Lastly, they can improve the self-management system, enhance brand value, and promote the future development of enterprises balance harmless.

5.2 Measures

Firstly, the platforms should vigorously develop their advantages, use the original user stickiness, increase the number of distribution staff so that the distribution task is reasonable. Meanwhile, work efficiency and customer satisfaction will increase.

Secondly, platforms are supposed to improve the intelligent algorithm to meet customer demand and give the distribution staff a reasonable time allocation. In addition to that, it improves employees' happiness to achieve a fair distance from the dispatcher and creates the users' accurate receipt time and efficient distribution modes.

Thirdly, strengthen the construction of corporate cultures, such as avoiding formalism and giving employees a family-oriented management atmosphere, to increase employee cohesion and reduce employee mobility.

Finally, they should try to implement humane management and improve the corporate image, using big data and grasping the Opportunity to enhance.

Platform enterprises should also take measures to avoid disadvantages based on continuing to play their advantages. The company for the distribution staff to buy accident insurance, the development of uniform standards, to meet the standards of the distribution staff can establish a formal labor relationship with the company. In addition, ensure that the selection system is fair and open to provide employees with an excellent competitive environment. Moreover, they should implement humane management, improve staff welfare and promote employee motivation, thereby increasing work efficiency. Lastly, sublimate the company's image to enhance social credibility.

5.3 Compare

Similarly, the study holds the belief that balancing the effectiveness and humanization of the takeaway industry management rate needs to be done by modifying the enterprise's system and improving employees' enthusiasm to improve the comprehensive ability of enterprises. The defect of this paper is that there is no survey data and reasonable data analysis, but only using the existing data and previous research for analysis and reasoning to get the results. Will face the problem of lack of feasibility.

6. Conclusion

Through the observation of the authors, in recent years, there have been a lot of accidents involving delivery personnel or consumers, such as squeezing delivery personnel's working hours, resulting in delivery personnel's life safety problems and consumers' dissatisfaction with delivery time. This article discusses how to balance the relationship between the high performance of delivery attendants and humanized management.

As mentioned in the literature review, the SWOT factor was systematically produced based on SWOT analysis and behavioral management theory. According to real-life and the development of other enterprises, using the behavioral management approach to supplement the method provides practical and feasible techniques to help the enterprise develop.

Taking Meituan Company as an example, this study uses SWOT analysis to describe its macro and microenvironment. Through the analysis and the case in real life, found that the occurrence of these problems is because their management model of human nature degree is not enough, for example, high orders of reward mechanism stood in the reward, the lack of a part for distribution to security concerns, so the initial assumption of this article and the research explores the results are identical. This article provides the idea that the enterprise can improve its current profitability. The most important thing is to adjust the current distribution algorithm through science and technology to achieve the balance point of high efficiency and humanized management to improve the image and brand power of the enterprise.

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