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A Study Based on Data Analysis in Order to Improve and Evaluate Business Management in the Field of the Digital Economy

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Abstract: Businesses now formally enter the phase of "think power differentiation and gap" in response to the new economic climate. While AI, big data, empowerment via the internet, and other aspects of the digital economy help to improve technical capabilities and save operating costs, they also push businesses to innovate their strategies at a faster rate. Enterprises are strategically choosing to de-enterprise, moving from focusing on a single business functioning benefit to building an ecosystem of platform services that will give them a competitive edge. Additionally, the organization's structure is evolving continually from a vertical model to a curved working style, in order to achieve this, businesses must recognize the importance of data analysis in day-to-day management and operations, encourage the development of an organizational atmosphere that is driven by data, fully utilize digital technology, modularize areas or production links that perform related tasks, and encourage the reform of organizational structures. By streamlining the output of the product or service to the external community while also enhancing the company's financial performance model, switching from process-to result-oriented evaluation, and putting in place a customized authority and accountability framework. Replace outcome-focused evaluation with process-focused evaluation, and create a customized incentive scheme that balances power, accountability, and rewards.

Keywords: management; digital economy; economic climate; digital technology

1. Introduction

The online economy and the web have emerged as significant trends in the current economic climate, where technology and knowledge have the power to fundamentally alter the course of history. However, the majority of businesses still pick the standard approach when it comes to company management, which hinders the productive growth of the firm and results in inadequate data and information sharing inside the organization, Internet technology is rapidly expanding in the present digital economy. Market studies can also be accomplished through computer development applications on an Ethernet platform; interlayer transfers of information can be accomplished on the appropriate knowledge administration platform; and the work that previously required a lot of laborious input can now be completed with a simple program, saving a great deal of time and effort while guaranteeing the correctness of data communication [1,3].

Group norms, organizational concepts, and spiritual culture are all included in the contemporary scientific understanding of corporate culture, which serves as a benign bridge for the blending of culture and commerce. Corporate managerial culture, which supports management activities and permeates all facets of corporate decision-making, operational structure, motivational method, and leadership model, is more practical and focused than corporate culture, which emphasizes the spiritual aspect of business, The present study posits that management culture encompasses the management ideology that emerges from the application of strategic decisions,

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managerial models, and hiring and firing practices, along with the corresponding institutional and managerial architecture, to accomplish the enterprise's strategic objectives and optimize the enterprise organization's resource distribution within the constraints of scarce resources. According to him, the digital economy is different from traditional ones in that it was built on an open market at the start, which facilitates the formation of a positive feedback loop that includes competitive fierceness, efficient marketplaces, and ongoing innovation [4].

We cannot fully utilize digital technology to suit the individualized and specific needs of customers in the digital economy, increase manufacturing capacity of businesses, or improve output quality and efficiency unless through superior scientific decision-making. To sign a more favorable price point and more attractive advertising strategy, enhance the competitive position of the market for businesses, and create value for consumers, businesses must also conduct thorough analyses and research judgments on the advertising strategy of consumer demand habits, product sales dynamics, competitors' market statistics, and other massive and regularly changing data, based on their own products, Companies can interact with clients and market participants in the digital economy, generating value through cooperation and open platforms [5,7]. Additionally, it enables prompt reaction to the individual needs of customers, giving positive feedback to the market's supply capacity. Instead of focusing resources in one area, the most valuable businesses in the modern economy belong to those that may freely cooperate to satisfy customer wants and generate a network effect.

Utilizing innovations like big data with the internet of things to simplify manufacturing processes at affordable rates and high efficiency, the enterprise managerial culture should support constant innovation. As a result, new markets, industries, and product lines have emerged. Businesses will manufacture what customers choose to purchase in the online future, changing the conventional manufacturing procedure into small-volume, customized production. The swift advancement of the internet of things is propelling the rise of novel products and sectors [7,8].

In order for businesses to maintain their place in the market, they must manage effectively due to the growing level of tough competition. This study aims to serve as an example for future business leadership by examining the significance of data evaluation in organization management and suggesting ways to improve the accuracy of it in light of China's expanding usage of sophisticated technologies and increasing technological advancements [9].

2. Related Studies

The phrase "digital economy" describes how information and technology—especially the worldwide web and big data—are used to propel economic expansion. The substantial economic benefits of information and technical innovation are what define the current financial climate, and corporate management must take full advantage of these advantages. The internet-based economy is both real and virtual, enabling companies to overcome conventional obstacles and make new financial discoveries by continuously analyzing the market [8,9].

The advent of the internet has had a profound effect on social and economic advancement, changing corporate management styles and operations. It provides productivity, integration, and distribution of resources never before seen. Businesses today move from one-way to network-based interactions, from tangible items to intangible data for value creation, and from steady profit acquisition to ongoing competitive winning as their business philosophy. In order to foster effective information flow, human value, market adaptability, and general competitiveness, business administration must adjust to these developments.

Operations management relies heavily on data analysis, which helps the data analysis section comprehend firm operations along with sector development. This comprehension enables the department to efficiently oversee several facets of the business. The efficiency of the business can be increased by detecting and resolving issues early in the growth process, taking prompt, appropriate action, and using data analysis to prevent issues [10].

The rigorous nature of the data analytics department presents significant problems. To finish this difficult task, analysts must possess both theoretical and conventional knowledge. The workforce

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needs to be proficient in data analysis techniques, able to write well, and able to explain important procedures. This encourages people to keep learning and developing their professional expertise and skills in order to safeguard their place within the company and raise the standard of the workforce as a whole.

Financial growth has been achieved through the adoption of China's marxist free-market system as well, while several businesses nevertheless retain significant administrative features. Nonetheless, a lot of managers in the digital marketplace oppose change and place an undue dependence on conventional models, which hinders the expansion of business operations. One important factor influencing economic growth and the transformation of local businesses is the lack of talent development in the digital sector. Another issue is the churn of both new and experienced employees.

3. Proposed Method

According to the a meta-an approach for sample, meta-analysis is an analytical approach for reviewing earlier studies. Several standards were adhered to in this study's data selection procedure:

(1) The value of the connection between C-S and company performance must be addressed in the study, and the data may be grounded in empirical research utilizing data that is readily available to the public;

(2) Indicators of business performance and corporate social responsibility, also known as, must be included in the findings of the research for the dependent, independent, and modifying factors;

(3) The information collected in the investigation must be separate samples; in the event that samples be the same, comparable, or intersecting, the investigation will offer limited data with a thorough description of the sample size and research topic;

(4) The factors that follow studies are used in the data selection procedure for the creation of variables:

(5) If the data cannot be translated and processed, data with ambiguous variable classifications or variable definitions outside the purview of this study will be omitted.

As seen in Figures 1 and 2, the flat matrix structure model has many advantages over the vertical group model for enterprises. It allows them to efficiently integrate both inside and outside assets based on objectives, deliver high-quality goods and services, react quickly to changes in the market, cut down on trial-and-error expenses, and manage risks brought on by unpredictability [11].

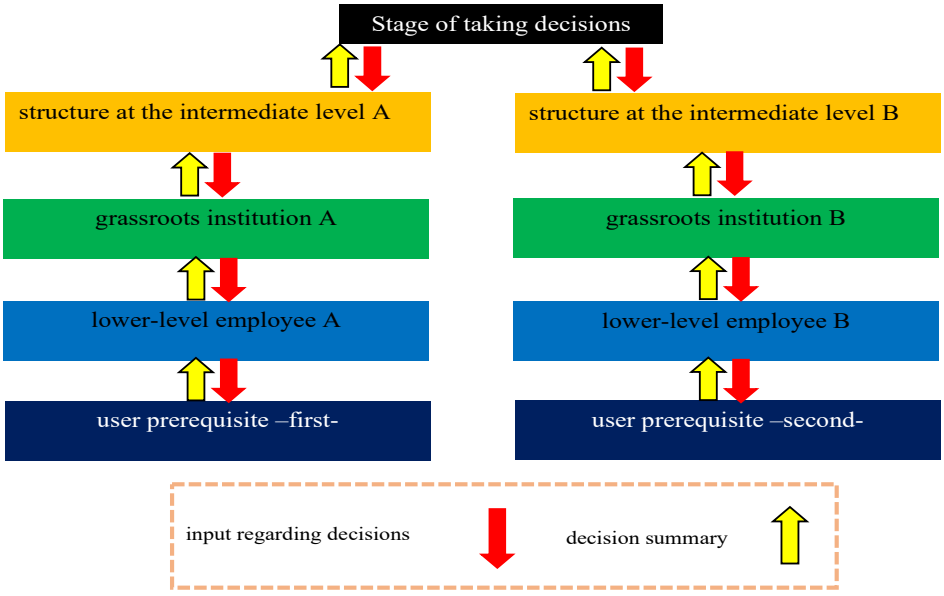

Figure 1. Form of Virtuous Organization.

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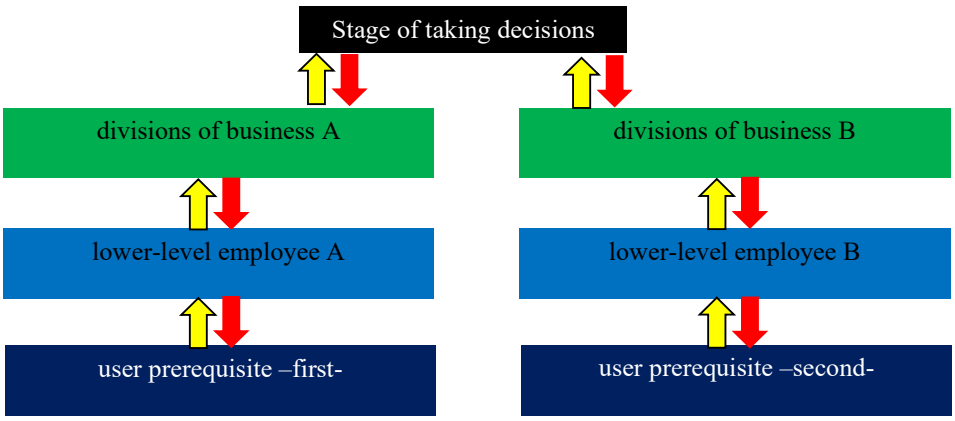

Figure 2. Method of organized flatness.

Sample data and impact values were the two types of data coding employed in the meta-analysis. Target variables, sample data features, and direct data on information were all included in the development of an accuracy coding manual. In addition to additional statistics including -values, -values, and the chi-square values, the primary effect values were coded using coefficients of correlation between business commitment to sustainability and profitability, Using techniques like various correlation the coefficients, coding as well as screening the same put of data for enterprise performance or social responsibility, converting statistics for effect principles, and that encode missing values—aside from the relationship among CSR and corporate performance—the study coded frequently encountered data problems. reducing effects were not examined; only the primary impacts were [9,11].

This study examines the connection between company performance and CSR using Fisher's z value. The measure of correlation r from the data sampled must be converted to The Fisher's z value in order to calculate the e/ect value. Other statistics, such as t-values, F-values, chin-squared values, and coefficients for regression are computed throughout the metaanalysis process. Both qualitative and quantitative tests are used to look for publication bias. The funnel plot approach is used to see if the graph is substantially symmetric. If the value of n exceeds zero, the decline of safety component is noted, and vice versa. The corrected statistic z number is 1.13, which rejects the originally proposed theory of publication bias, according to the findings of the tests conducted on the sample data for publication bias [12].

Table 1. Impact value translations.

Value in statistics	Method of computation
Value of relationship	$r = \sqrt{t^2/t^2 + df}$. where $df = N_e + N_e - 2$
T=	$r = \sqrt{F/F + df}$, where $df = N_e + N_e - 1$
F=	$r = \sqrt{x^2/N_e + N_e}$

The results of examinations for bias in publication of the collection of data are shown in Table 2. The Egger's linear correlation test findings in Table 4 demonstrate that the associated P value of the biased variable is 0.365>0.051, rejecting the initial hypothesis of publication bias [10,13].

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Table 2. Examinations for bias in publication of the collection of data.

The score of Adj. Middleton P&q	Standard deviation of the score	Quantity of research	Pr	z
147	134.12	57	0.28	1.31

Target layer G determines which online marketing development model is best for the company; criterion layer C comprises business management incentivizing factors, primarily brand awareness (C3), logistics cycle (C2), and personalized demand (C1); program layer P comprises various food online marketing program models, primarily social online advertisement model P1, company self-built a website model P2, and e-commerce website model P3. (*A built index structure is displayed in Figure 3),

A two-by-two comparison between the elements in the structure is done based on the index hierarchy in order to create a judgment grid. We determine the weights relating to the indications using the judgment matrix; the indicators with larger weights are the primary factors influencing the advancement of company leadership [14].

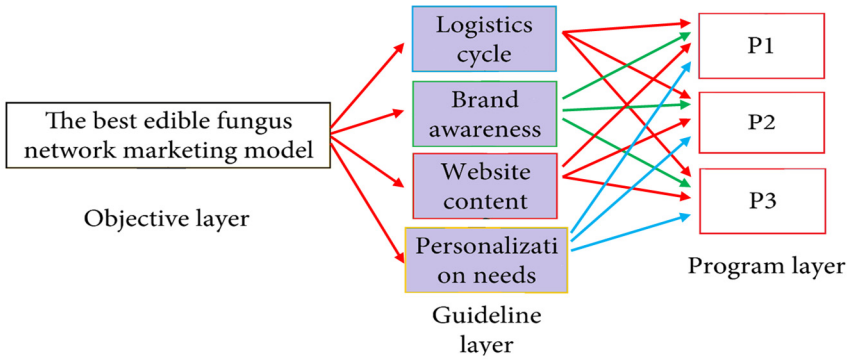

Figure 3. A system of hierarchy.

4. The Chain of Manufacturing

An examination of both Figures 4 and 5 reveals that the majority of users involved in company production have only completed junior high school, and the majority of users are around the ages of 42 and 51. These figures also reflect the users' educational backgrounds. Users in the family model are less knowledgeable about the enterprise because of their lower educational attainment, which causes the business industry's development to stagnate continuously [13,15].

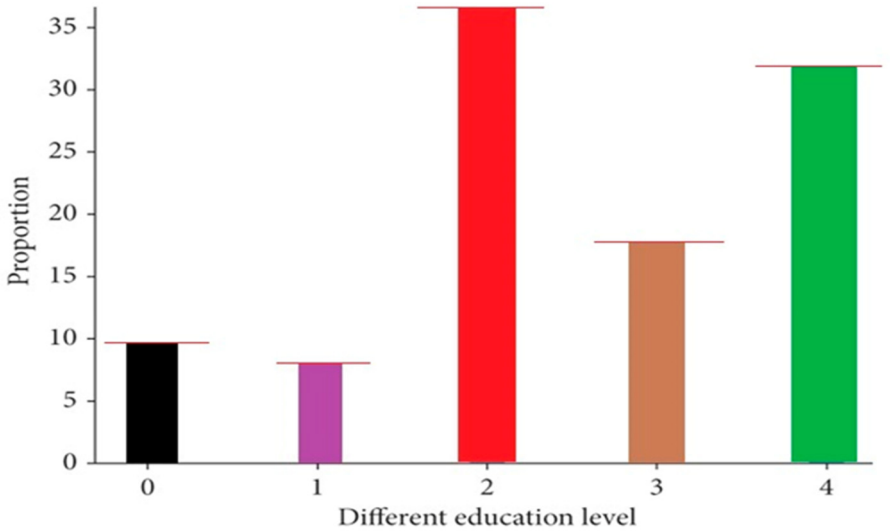

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Figure 4. Grouping of learning levels.

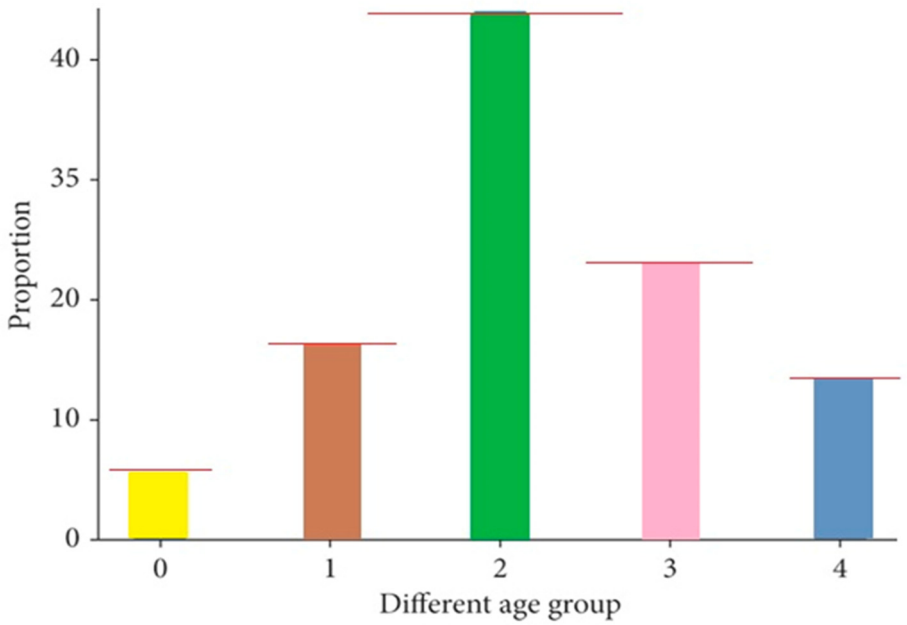

Figure 5. Breakdown of age groups.

Families tend to utilize daily collection and summary methods for their companies, and they have less experience with enterprise matters, particularly when it comes to purchasing enterprise items, which makes it simple to purchase subpar goods. The enterprise market in China is now poorly regulated, with few buy channels and low both yield and quality items used to nurture the enterprise, all of which have a negative impact on user revenue [16].

5. Case Investigation

The current state of USA enterprise network growth in marketing is examined using the evolving status of a city's business management as an example. The primary sources of enterprise manufacturing within a city are factories, bases, and private households, which are primarily dispersed among multiple districts and counties. While the production and sales of various types of businesses vary, the total production is generally steady, A city has created an enterprise plant in recent years. Enterprise manufacturing plants have higher levels of production and economic efficiency when compared to the traditional method. This makes it easier to apply new technologies, promote new varieties, and maintain a stable supply market—all of which are essential for the nation's enterprise industry to grow [18].

Analyzing the information in Figure 6 reveals that a city's enterprise manufacture increased between 2017 and 2020, but from 2020 to 2022, it showed a decreasing trend; in contrast, the town's enterprise manufacture increased by approximately 21% in 2022 compared to the national companies manufacturing, which was in the percentage of the lowering trend [17,19].

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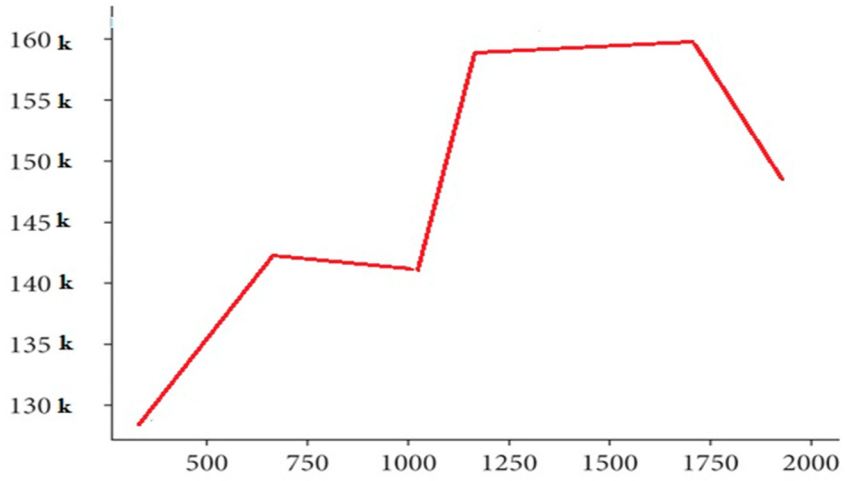

Figure 6. Production of enterprises in a city from 2017 through 2022.

The quantity of enterprise forms in a city in 2022 is identical as it was in 2021, and their production is approximately 15.3 million tons, or 95% of all the enterprises in the city's production, which is the largest and most typical volume of sales in a city marketplace. Based on a city's output between 2017 and 2022, different types of companies can be categorized into three groups. The first group consists of businesses that produce a greater number of characteristics and increase annually, the production share of the city's enterprises accounts for a sizable amount of the total output, which varies annually on average between 31k and 51k tons. Figure 7 illustrates the city's output from 2017 to 2022 [21].

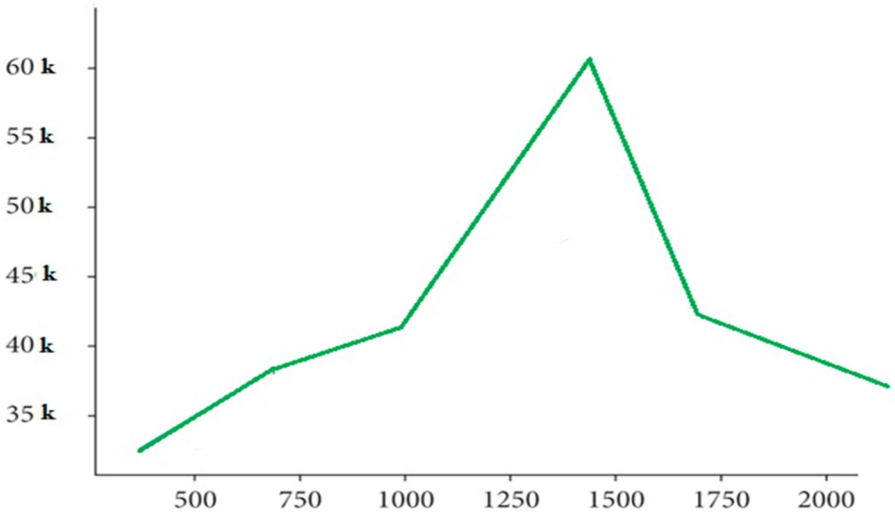

Figure 7. illustrates the city's output from 2017 to 2022.

The variations with good industrial manufacturing technology and significant growth in output over the previous two years are referred to as the additional category of firms. Figure 8's data analysis reveals that what is produced in 2022 has doubled when compared to the output in 2017. The third category of businesses, which had a downward trend in production year over year, produced the most in Zhonghe in 2017 and 2018, but after 2019 it started to decline [23].

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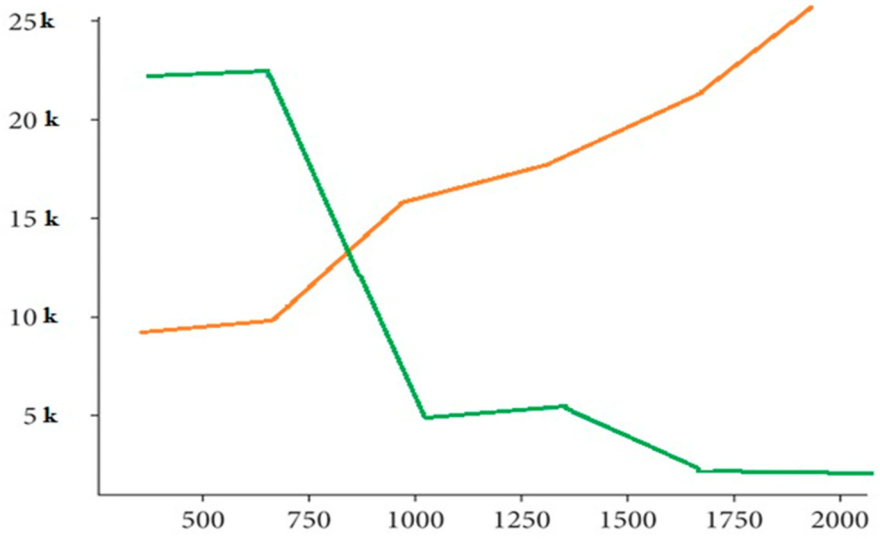

Figure 8. Data analysis reveals that what is produced in 2022 has doubled when compared to the output in 2017.

6. Conclusion

User value competition now forms the basis of enterprise competitiveness instead of product function competition. More thorough and three-dimensional rivalry in human resources, management modeling competition, corporate culture competition, and competition in tangible products, supply chain competition, manufacturing and operations efficiency competition, have been formed from the conventional base. Businesses should not only be content with the conventional competing product strategies—such as cost leadership, differentiated offering plan of action, and target concentration strategy—in such a fiercely competitive market. They also need to develop and enhance a corporate governance atmosphere and leadership The model that are tailored to the demands of the digital economy.

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