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The analysis of traditional enterprises transformation and upgrade in the internet Era

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ABSTRACT

With the wide application of the internet, the relationship between the traditional enterprises and internet is increasingly close, and transformation and upgrade of the internet has become the direction for traditional enterprises innovation and development. Based on the triple helix theory, the paper analyzed the value creation activities from three aspects of capital, traditional enterprises and the internet; pointed out the function and mutual influence of each aspect in transformation and upgrade; then, brought forward the triple helix model of traditional enterprise transformation and upgrade in the internet era; finally, the problem may be encountered in transformation and upgrade were discussed.

KEYWORDS

Government financial information; Disclosure quality; Factors; Consequences.



INTRODUCTION

At present, China's economy is moving towards mid-and-high-end level from mid-and-high speed, at this historic new stage, economic and industrial structures are all constantly adjusted to meet the requirement of sustainable development. Facing complex and volatile development situation, transformation and upgrading naturally become an important choice for the innovative development of the enterprises. A main trend in the complex and volatile transformation and upgrading is that internet age is coming-as chairman of the Board of Directors of Alibaba Group Ma Yun rang a bell at the New York Stock Exchange, in future all industries will try hard to enter internet and develop their own new businesses, manufacturing, service and retail are all included, without exception; the Internet has become an important carrier for transforming China's economic growth mode and promoting the transformation and upgrading of traditional industries (Zhang Qing, 2011)^[1]. To seize more opportunities, traditional companies can only follow the tide and step into the future and will in future competition by rapid development.

INFLUENCE OF INTERNET ON OPERATION OF TRADITIONAL ENTERPRISES

High efficiency of internet deeply disturbs the operation of traditional enterprises and has an impact on such enterprises, as well as expands their business opportunities. Dong Chao and Li Bin (2002) held that though E-commerce improved the enterprise's strategic competitive advantage, the development of E-commerce was restricted by the entire external network environment and restriction of the external environment adversely affects the smooth operation and implementation of E-commerce of the enterprises^[2]. Zhang Junjie, Yang Zhu (2011) and Yang Min, Zhou Yaolie (2011) studied the internet of things that is extended and expanded based on the internet and held that the internet of things improved logistic efficiency, and also promoted transformation, upgrading and development of traditional logistics to the internet^[3,4]. To provide "point-to-point" direct bus service is also an important way to improve the economic benefit of public transport enterprises, internet technology and modern internet of things extended from the internet technology can make the "whimsy" a reality; Chen She, Zhang Ying and Qiu Fajun (2014) recommended achieving such human-oriented service concept by conducting "bus coupon" activity, which will undoubtedly bring convenience to specific populations that travel regularly^[5]. TV industry is facing the challenge of transformation and upgrading both at home and abroad, to get rid of the dilemma of "being shocked", "being challenged" and "being diverted", the television industry shall follow the tide to actively integrate the Internet for upgrading and transformation (Lu Di, Jin Ge, 2014)^[6]; Lv Meiyun and Liu Yang (2014) analyzed external fulcrum and market intersection of in transformation and pointed out that analysis of big data path can be carried out to provide the basis for the transformation and upgrading of the television industry^[7]. A study made by Roger W. H. Bons et al (2012) showed that in the Internet and mobile era, existing channels and service of the banks have been changed and customer-oriented business will become increasingly important in the banking industry^[8]; a study made by Robert J. Kauffman and Frederick J. Riggins (2012) also expressed a similar view from other aspects and they pointed out that an important role of information and communication technology (ICT) is to drive the microfinance industry to become mature, which makes offering financial services to the poor possible^[9].

Theory exploration. Xu Aiyu (2010) studied the requirement of entrepreneurship in business transformation and pointed out the composite structure that an entrepreneur shall have by taking "Zhejiang businessmen" as an example, which is essential to enterprise transformation in the post-crisis era^[10]. To find a suitable transformation path, Mei Shiyong, Zhang Litao and Hu Mengmeng (2012) recommended the enterprises to apply the combined mode of IT and destructive innovation to the management practices of enterprises and generate strategies to respond to various challenges in the information era based on their actual development^[11]. Under the impact of the Internet, customers also change their demand for tangible products, features and manufacturing. Wang Wenping (2012) proposed that it is necessary for the enterprises to break their own boundaries, make resources restricting on the basis of both internal and external networks of the enterprises and transform themselves to knowledge-based service enterprises to respond to the demand of the customers for good service, experience and solutions^[12]. An empirical research made by Nader S. Safa and Maizatun A. Ismail showed that in E-commerce E-royalty is formed based on E-trust and E-satisfaction^[13] and provided a way of thinking to the enterprises for improving E-commerce performance.

Under the impact of internet, new opportunities and market segment are constantly emerging and disturb the development rhythm of original industry and cause various crises to traditional enterprises. To master the new rule of the internet era to keep pace with innovative development of the internet era, triple helix theory^[14] generally accepted in analyzing innovative development will be used to analyze the transformation development of traditional enterprises in the internet era as below.

TRIPLE HELIX MODEL OF TRANSFORMATION DEVELOPMENT OF TRADITIONAL ENTERPRISES

Triple helix theory was originally used to describe the reciprocal causation relationship among genes, organisms and environment and later usually used for cooperative innovation among government, industry and universities on the initiative of Henry Etzkowitz, et al^[15]. To vividly reveal the interaction and mutual influences between the era when the traditional industries are successively subverted by internet and each study subject related to the traditional industries, the relationship

among genes, organisms and the environment in the triple helix theory is quoted to metaphorize the changes in capital, traditional enterprises and internet in innovative development in the internet era.

Arbitrary progress of each helix in capital, traditional enterprises and internet

In the triple helix theory, each helix of capital, traditional enterprises and internet is stepping towards its own set target.

Capital pursuing its value in constant and endless movement;

Capital is essential to enterprise establishment. The enterprises shall constantly raise capital during their development, otherwise, it will be difficult for them to expand production scale and they shall keep certain capital stock in their production and operation; capital is necessary to the enterprises to get independent personality and is a material basis for survival of the enterprises in competition. Capital is a factor concealed in the enterprises, including blueprint and password of enterprise development. Though the enterprises have no ownership of their capital, they must “evolve” based on the factor—capital. During the whole development process of the enterprises from establishment to demise, capital is always closely related to the capital, no capital, no enterprises.

Traditional enterprises generally feature relatively low profit rate and less market attraction than emerging industries, however, it has no close relation to capital acquisition. In fact, what the capital, namely, value in motion, focuses on is specific competition advantages and sustainable profitability of traditional enterprises and whether the traditional enterprises can defeat their competitors in the industry. Of course, capital is more likely to be invested in the projects relating to reform of the times, or at least it is a future trend. In an era of survival environment restructured with new technologies featured by internet, cloud computing and big data, active investment is made in internet field or traditional industries integrated with internet and investment scale of capital is also often breathtaking.

Traditional enterprises making continuous innovation in fierce market competition

When new internet technology has restructured the whole industrial environment and business environment, going the flow will be more helpful to implementation of business of traditional enterprises. Because DNA, structure and personnel of traditional enterprises are profoundly different from internet requirements, combination with internet and full play of traditional enterprises’ advantages in procurement, channel and logistics have become the best choice to the traditional enterprises. According to Metcalfe Law, Moore’s Law and Law of Disruption of internet, in the brand-new environment created by the internet, the combination of traditional enterprises with internet may help them to set the trend and regain strength in product production and marketing.

Traditional enterprises need to break their original model in internet innovation and need to constantly overcome their mindset and overcome path dependence in pursuit of new goals. If the traditional enterprises are not brave enough to make transformation, they will face the risk of removing from new business environment and industry environment. So competition among the traditional enterprises is more often the competition in innovation capability and the traditional enterprises can achieve their own value in pursuit of internet innovation only by constantly reinventing themselves.

Internet continuing to create new consumption time-point in wide application

Now the internet has gone beyond a variety of terminal devices. Through generic internet devices such as desktop internet or mobile internet, netizens come upon the stage individually or in group. When they reach a scale, the internet will become a force, the crossing of thinking and behavior becomes more and more frequent and the era of consumer sovereignty with consumption equality, democracy and freedom is coming. People are always “online” and the speaking right is transferred to the consumers from the enterprises, consumer praise and acceptance becomes an asset of the enterprises and consumer first becomes a principle that all enterprises must adhere to. The internet has established a new pattern of enterprise competition and the network has a strategic highland in enterprise competition.

With profound changes in life style brought by exchange and mutual communication on internet, the spirit of internet also begins to blossom. To traditional enterprises, the spirit of internet includes openness, equality, cooperation and sharing, etc. Internet blurs traditional enterprise boundaries and makes internal and external environments of traditional enterprises integrated with each other and towards openness; decentration, de-hierarchization and de-authoritarianism of internet weaken the hierarchical organization management mode of traditional enterprises and promotes the mutual communication between the enterprises and the consumers and between the enterprise employees; internet re-tribalizes the human being and its fragment feature makes multiple and extensive cooperation becomes more important for the traditional enterprises to achieve their goals; internet development is benefited from sharing, which allows the enterprises to keep and attract more consumers, now whether to share the big data generated in production and service of traditional enterprises has become the core of value of the enterprises. Power of the spirit of internet constantly generates new consumption points and allows the internet to have greater energy.

Intersection and integration of each helix among capital, traditional enterprises and internet

In triple helix theory, each helix is actively seeking an opportunity to realize win-win cooperation.

Constant motion of assets under the impact of internet disturbing original social production order

Capital constantly seeks profits in the whole process of enterprise establishment and operation and the capital moves constantly in order to increase its own value and control the world. When enterprise operation becomes bad or not satisfying, the capital will make a respond rapidly and immediately adjust its investment direction and is withdrawn out from original enterprises. Pursuit-of-profit feature of the capital determines it will jump to another enterprise from one enterprise and iteratively expand through constant pursuit. Plainly speaking, in the view of the capital, the enterprises are not important and only it is eternal.

At present, a few of traditional enterprises face relatively good opportunities, for example, the opportunity of industry merger and reorganization, etc.; however, the interaction area between the traditional enterprises and the internet is the most attractive to the capital. Internet has become a trend of the development of the era and will bring boundless vitality to the world, independent of man's will. Such extraordinary growth of the internet is closely related to strong respond of the capital to the trend. After years of competition between the capital and internet, internet field has evolved to a search era, network video era and E-commerce era, even currently popular mobile internet era, from preliminary portal era; rise and fall and replacement of each era are not only related to the demand of consumer market, but also the result of capital input and stimulation. In the internet era, internet becomes a tool to dig the potential of traditional enterprises again and achieves the development speed and benefits that traditional enterprises have never achieved before, which makes some traditional enterprises lagging behind in internet innovation and breakthrough restless.

Traditional Enterprises and Internet Crossing and Integrating with each other in Pursuit of Capital

On the side of the traditional enterprises, though they need to continue to meet the capital appreciation preference and though some of their behaviors are determined by capital, they are not a vassal or appurtenant article of the capital. Now the traditional enterprises are not a simple manufacturing unit or a unit offering service. In fact, the traditional enterprises are comparable to biological organism. In this organism, there are employees, products, technologies, knowledge, market changes, management and moral principles. According to the theory of evolution, with change in the environment, organisms on earth will gradually evolve from a lower life form to a higher life form, and if the organisms cannot adapt to environmental changes in evolution, they will be extinct. Similarly, in the industrial internet era of integrated traditional enterprises and internet, under the selection role of struggle for existence in social development law, traditional enterprises shall also attract more internet elements with capital in order to make themselves more vital.

In the pursuit of capital, combination of traditional enterprises and the internet inspires more vitalities of online and offline business and attract them to have a try in transformation. Under the impetus of capital and investors, the traditional enterprises make more innovations to promote internet. Today, with the rapid resources allocation platform—network, the enterprises can integrate a variety of resources to make borderless development and self-organization management, and make amphibious operations to offer the traditional enterprises a wider development space with the help of internet. Sensitive capital also pursues the new emerging force and acts in the forefront of reform to eventually change and subvert all industries and thus complete transformation and upgrading of traditional enterprises.

Changes in investors making internet gene-based enterprises become a development trend in future

At present, it has become a trend to introduce internet gene into traditional industries and make restructuring and innovation with the help of internet thinking under the drive of internet. Traditional media, after being introduced with internet gene, will generate stronger ability to compatibility of internet media, and their tremendous opportunities sometimes may overwhelm the traditional media, rising market share and profitability attract the enterprises to invest more in online media; after introducing internet gene into retail industry, E-commerce becomes a more convenient online sales method and its advantages in fastness, efficiency and low costs, etc. heavily blow offline retail industry and cause that many consumers take shops as a fitting room of online stores; real estate and internet seem unrelated, however, with maturity of internet and home automation technology, housing real estate with internet gene can be comparable with business complex. When people expect real estate to fall, transforming real estate with internet is playing a more important role and confers people a wonderful fantasy of future real estate development. With the start of transforming traditional business with internet, in order to get the initiative power in internet, it is necessary for the traditional enterprises to introduce internet gene to promote their own advantages and close the gap with their competitors in products and services.

Internet not only influences traditional enterprises in technology reform, in fact, it has a more profound influence on traditional enterprises in way of thinking and business logic. From the initial stage when people only regard internet as an industry or a tool to the stage when production method and operation principle of traditional industry collapse under the impact of internet, internet always releases its power to impact the inherent way of thinking of the traditional enterprises. Under the impact of internet, some internet thoughts that are unique in 21st century such as “consumer first”, “free hardware”, “fans economy” and “experiential marketing” have changed the entity economy theoretically and create a new growth space for traditional enterprises, which promotes the transformation and integration of traditional enterprises.

Triple helix model for integration of traditional enterprises and internet under the drive of capital

In fact, to many traditional enterprises, internet is a familiar and unfamiliar field, uncertainty also makes them sometimes expanding or cold in the transformation and upgrading, it is really difficult to enter the internet. Actually, people's unknown knowledge about the internet is far more than the known knowledge, “development problems” of the internet also

constantly result in difficulties and obstacles while breeding the vitality. In addition, deep-rooted experience and mindset make most executives of traditional enterprises see only the “hottest” aspects when judging the internet, mistakes in overall consideration and carelessness in details lead to failure of many traditional enterprises that cannot do well in internet, and transforming traditional enterprises with internet needs cooperation of multiple aspects.

Therefore, based on the above analysis, “triple helix model” for the development of traditional enterprises in the internet era is structured as below (as shown in Figure1). In this model, capital, traditional enterprises and internet belong to three parts. Transformation of the traditional enterprises with internet attracts the attention of the capital and the profit-seeking capital reconsiders and assesses the market, consumers, products and enterprise value chain, even the whole business ecosystem in order to seek high returns; if the traditional enterprises fail to keep up with the development of the internet era, the capital will quit rapidly. Integration of the internet and the traditional enterprises will generate huge energy, and under the drive of the capital, the energy will change the original development rhythm of the industry and set a new “game rule”. With the impact of internet, the traditional enterprises shall actively seek new business opportunities for transformation and upgrading and rebuild their competition advantages with the help of capital. In this way, each helix in the model will together form a close triple helix with interactive influence.

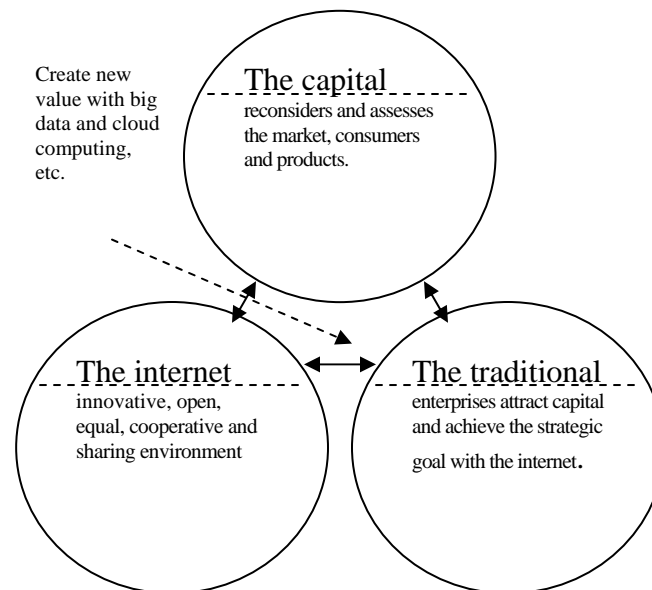


Figure1 : Triple helix model for transformation and upgrading of traditional enterprises in internet Era

Another important problem in the transformation and upgrading of the traditional enterprises is that internet-based big data, cloud computing and artificial intelligence technology have gradually blended into production method and operation principle of traditional enterprises and influence the production and trading process of the enterprises. For example, by analysis of big data, it is possible to find the correlation with consumer data so that the enterprises can rapidly lock their own target consumers, further provide personalized services, rapidly respond to the problems proposed by the consumers and meet the requirements to the utmost. In addition to effective analysis of consumer demand, with this energy, the enterprises can also improve utilization rate of capital, reduce inventory and effectively control risks. With broadcasting of such technologies, traditional industries have had qualitative changes in some aspects of productivity and operation and start to create new value.

Xiaomi Phone is a model to do the best with the internet thinking. When all people in the field look on coldly, Xiaomi develops rapidly and embarks on a road sharply different from that of Nokia, BlackBerry and other enterprises that are once great and later acquired. With the internet, young Xiaomi becomes a new star in the market in a few years and previous mobile phone giants are eliminated from the mainstream of smartphone because they cannot keep up with the rhythm of the internet. When this company mainly engaged in sales of intelligent hardware became famous, Xiaomi had no its own plant and stores. Xiaomi uses the internet and completely introduce the internet thinking into the traditional phone industry with increasing competition.

CONCLUSION

With the coming of internet era, what the traditional enterprises are expected to do is neither adhering to traditional operating principle that has existed for many years and nor being away from the industry they are familiar with, instead, they shall understand new rule, seek new method and apply new thoughts to do original business better. As long as the traditional

enterprises can correctly introduce “internet gene” and apply it to make restructuring from principle, system, mechanism, flow, assessment, products and culture, etc, they can make gorgeous turn and a butterfly change in future.

Of course, the transformation will not be all smooth, and the expected goal will not be achieved rapidly. This is because at the new platform and starting point the operators of the enterprises shall not only adapt to the requirements of internet era for operating structure and mechanism, follow the demand of consumers in product service, consumer positioning and other aspects, but also promote the implementation of internet strategies with thorough transformation, which requires the traditional enterprises to break through original model and eliminate the obstacles in transformation. Because uncertainty of industrial transformation and lag in transformation of the model of personnel benefits and noema, to ensure the behavioral agent, namely, the employees of all levels, understand, accept and contribute to the transformation in concept, mind, skills and behavior will become an important chip of success of the transformation. In order to win the future, an entrepreneur shall blend the internet thinking into the mind of the employees of all levels and into the logic of the whole enterprise operation, in addition to deep understanding of the essence of traditional enterprises.

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