



Change management of technology enterprises in the era of 4th IR in Vietnam

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Abstract

IR 4.0 is taking place in many developed countries and provides opportunities for developing countries, helping to shorten the industrialization process by taking short cuts, leaps and bounds to higher technology. It gives mankind the opportunity to change the faces of economies, but there are hidden risks. Over the past few days, the concept of IR 4.0 has been mentioned a lot on media and social networks. Along with that is the promise of changing the life of businesses in Vietnam if this wave is welcomed. Economic uncertainties arising from the IR 4.0 will lead to instability in life. Its consequences will be the political fragility and instability. If governments do not fully understand and prepare for the IR 4.0, the risk of global instability is forthcoming. So, managing change in technology enterprises in the era of IR 4.0 should be important topic of research in this article.

Keywords: IR 4.0, technology enterprises, change management, Vietnam

1. Introduction

In the context of the booming Industrial Revolution 4.0 (IR 4.0), impacting many countries, Governments are very concerned and have proactively enacted their own IR 4.0 development strategies. Typically in the world are: Germany with Industry 4.0 strategy, the United States with the Industrial Internet Alliance, Korea with Korea 4.0 and China with Made in China 2025 ... According to Mr. Nguyen Van Binh, Head of Central Economic Division many countries in the world has built a national strategy to actively participate effectively in this breakthrough IR 4.0. In Vietnam, the Politburo of the 12th term clearly stated that the task of early building a strategy to approach and actively participate in the IR 4.0, in which, the viewpoint of maximizing the advantage of a country is clearly defined. In the period of golden population structure, to fully exploit the achievements of the IR 4.0 for trade advantages, to develop rapidly some fundamental industries to build competitive advantages in the IT, electronics industry is the main development path that includes manufacturing and processing industry, developing smart manufacturing industry is a breakthrough, focusing on green development. In 2017, the Prime Minister issued a directive to improve the capacity to reach the IR 4.0. After more than one year of implementation, the results have contributed positively and significantly to the socio-economic development of the country. In fact, the right and timely exploitation of the challenges and opportunities of the IR 4.0 are the common ways of national development. For a developing country like Vietnam, that challenge is growing as IR 4.0 opens many opportunities for us to improve our qualifications, production capacity and competitiveness in the global value chain, creating a great change in sustainable business models and opportunities for starting a creative business. This revolution also brings joy to developing countries, which can shorten the process of industrialization by taking short cuts, leaps and bounds to higher technology. However, if there is no proper approach and catch up with the development level of the world and the region, Vietnam will

face the risk of lagging further in technology, the excess of labor situation and social inequality. In addition, cohesion and cohesion in the IR 4.0 era leads to soft border issues, soft power, cybersecurity and transnational high-tech crime. This requires the best proactive response and control to ensure sovereignty and security for the people and the country. Stemming from the above analysis, the Party, the National Assembly and the Government of Vietnam realized that it is necessary to have policies and rules that are comprehensive, strong and create a breakthrough for Vietnamese technology enterprises to grasp opportunities, overcome challenges and actively participate in the IR 4.0.

2. Theoretical Framework

The world once witnessed the systematic collapse of illustrious names that partly stemmed from the business executive's thinking of business leaders that were not flexible and adaptable to the situation. The IR 4.0 is having a strong impact on most sectors and fields. For Vietnam, along with the integration trend of the economy, the effects of the IR 4.0 are posing great challenges for corporate governance. The article discusses common skills of corporate management, making suggestions to improve Vietnamese corporate management skills in the current context.

Corporate management skills in the IR 4.0

IR 4.0 drastically changed the method of production and management towards "smart factories", "smart offices and cities" connected to the Internet, linked into a system, instead of previous production processes and management methods. Thanks to technological breakthroughs initiated by artificial intelligence, robotics, nanotechnology, cloud computing technology, biotechnology, quantum technology, new material technology, computer connectivity, mobile devices, the ability to access large databases from multiple sources, the information processing features are multiplied many times before. The basic feature of the IR 4.0 is the integration of digital technology fields with high-quality

human resources to address socio-economic issues, the combination of virtual systems and real and internet-connected systems. This new wave of technology helps businesses improve production capacity, innovate products and services, reduce fuel consumption, production costs - operation, and meet more accurate customer needs. Technological trends are also opening up many opportunities for businesses, especially for small and medium enterprises, creative start-up businesses have the opportunity to penetrate the niche market with many technology products and services. According to experts on corporate governance, in order to take advantage of opportunities and respond to challenges in the new context, the qualification and management skills of enterprise administrators also require higher.

Oxford Leadership's recent research has shown the three most important transformations for leaders to redefine themselves to lead in the IR 4.0, including:

- Clarify the purpose: Identify a clear common goal, act as a "compass" of organizations and businesses to ensure people go in the same direction, motivate employees to wish to devote the best capacity. .
- See the organization as an "ecosystem": Instead of looking at the organization, through the lens of mechanical science, businesses see their organization as an ecosystem that continually evolves, linking more, enriching relationships and responding to each other constantly. Since then, leadership can arouse confidence for employees to contribute more to the organization.
- Empower your team: Share tasks and connect teams, align this system with technology and common goals. Since then, promoting, promoting talent and building an effective team.
- According to Pham Hoang Tu Linh, Pham Xuan Vien (2017), the IR 4.0 is based on the outstanding science and technology foundation that requires leaders and business managers to be experts in specialized field of knowledge. They should have the ability to think and be creative, innovative and skilled in analyzing and synthesizing information, able to work independently and make decisions based on the analysis of evidence and data. They will have to solve the problem such as: increasing resources, using cost effectively, improving business model.

Improve corporate governance skills during the IR 4.0

Corporate functioning in the technology era of IR 4.0 requires managers to improve their management capabilities in areas including strategic management, finance, human resources, production and marketing. In addition, in the context of IR 4.0 booming, comprehensively and extensively, business managers must innovate the way of thinking to improve competitiveness. It is necessary to recognize the fact that if Vietnamese enterprises invest in research and development in accordance with customers' needs, in line with the orientation of IR 4.0, it is likely that the position of enterprises will be affirmed and enhanced. Business needs to determine where it is in the IR 4.0, thereby identifying appropriate resources and strategies. At the same time, there should be a change in vision and orientation. In particular, the product value is decided by the user so it is necessary to bring quality products to the market. Especially in the IR 4.0, a business that wants to

survive and develop must build its own impressive image. In order to enhance brand image in the hearts of customers, enterprises need to improve product quality, promote customer care / support services, after-sales service, return and exchange. Corporate management in IR 4.0 takes customers as the highest target. Satisfying them by bringing them maximum benefit is a move into the right direction. In addition to these challenges, it is also a very good platform for connecting individuals and businesses to their enterprise development applications. On the other hand, businesses can take advantage of this superior technology to optimize business on the foundation of technology they create instead of using external resources.

3. Research methodology

In this article we will learn about change management in IR 4.0 age for technology enterprises in Vietnam; how will the change management strategies in IR 4.0 affect technology enterprises and other businesses in Vietnam; point out the positive and negative aspects of this problem. In addition, we will evaluate subjective and objective causes leading to changes in the IR 4.0 oriented technology enterprises in Vietnam and propose solutions to manage change in IR 4.0 oriented technology enterprises in Vietnam.

In terms of research method of theory we will analyze the collection of documents on the management of change in IR 4.0 technology enterprises in Vietnam, related articles to build the theoretical basis of the topic. Based on the Internet, searching for related issues such as psychological difficulties, activities of technology enterprises in IR 4.0 era in Vietnam using for a of newspapers such as Vietnam Economic Newspaper, Vietnam Business Newspaper. Based on the criteria of time, cost, accessibility and flexibility, we decided to choose the survey method using multiple choice questionnaires. We implement, as a collection tools, short questionnaires that are easy to understand and easy to answer. After identifying the research problem and objectives, we select the content for the multiple choice questionnaire, ask the audience questions related to get the information we want to learn. By using analysis method of summarizing experience, we review practical achievements in the past to draw useful conclusions for practice and science. By using expert method, we use the intelligence of a team of experts to consider the nature of the object, find out how to manage the change in the IR 4.0 technology enterprises in Vietnam in a right way.

4. Research Results and Discussion

Besides many advantages, the IR 4.0 is posing many great challenges to Vietnamese enterprises. In particular, for small-scale enterprises, management issues may not be a big problem but in the enterprises that have the potential to become the leading flagship of the economy thinking innovation and improvement of management skills are required. In Vietnam, at present, every year, the number of enterprises suspending business and dissolution is still very high, originating from many causes, including the capacity of enterprise management of the business owners themselves. This is an interesting situation when businesses have not really paid attention to the requirements of corporate management efficiency in terms of how to change, innovate and update management skills in the current context, especially, when entering the IR 4.0 era with many new factors appearing leading to change exactly the old

fashioned method of production. Considering the specific context of Vietnam, in order to improve the skills of enterprise managers in the IR 4.0, it is necessary to focus on the following issues:

First, continue to propagandize to raise awareness for the business community, management agencies and the whole society about the role, importance and standards of operation and management of enterprises. Focus on building good standards, guidelines and practices for SMEs management, private enterprises. Continue to expand the training and professional capacity to be able to have a team of high skilled professional senior managers, a team of financial directors, human resources managers.

Second, change thinking about management. The IR 4.0 has changed the nature of industries, changed the management system in businesses. Therefore, the businesses and managers must actively change and renew themselves. Oxford Leadership's research shows that successful leaders in this 4.0 IR are those who accept a new set of thinking whereby organizations must be viewed as an "ecosystem" and not is a "mechanical machine" and sees each individual in the company under the lens of an overall person, not just a "working tool". In addition, for the good management capacity enterprises also need excellent leaders who can feel, forecast and evaluate the fluctuations of the external business environment and identify problems within the organization to actively adjust and adapt to change. Therefore, enterprise managers need to change the vision, orientation and the view of development resources in the enterprise

Third, improve management skills. In the era of IR 4.0, when the role of leverage of managers becomes clearer and more important than ever, to create excellence, managers need to be equipped with new thinking, new tools and methods to be ready to pioneer the way for organizations to come to great victories in the new era. For example, with skills to identify resources for development investment, enterprise managers need to determine where they are in the IR 4.0, thereby identifying resources and development strategies that fit organization most. The strategy for development must come from possessed resources and capabilities. In particular, material resources account for only about 25% and intellectual resources account for 75%. The fact also shows that, when planning strategies, managers often encounter three following failures: small resources that serve big goals; appropriate resources but no suitable strategies; clearly set objectives but no related plans and actions. Therefore, business managers need to have a deep awareness, to understand who they are and to assess their right resources.

Fourthly, to continuously proactively learn and update new management experiences in the world to apply to the specific situations of enterprises that are however typical in IR 4.0. Learning is not only to acquire new experiences, new skills but business managers need to put themselves into the flow of the times across the globe, thereby avoiding mistakes to take advantage of development opportunities.

5. Conclusion and Recommendation

Conclusion

Kết luận, doanh nghiệp Việt Nam sẽ đi đầu hay theo đuôi trong công nghiệp 4.0 còn tùy thuộc vào chính sách của Nhà nước về độc quyền, đào tạo nhân lực, thuế và chính sách lương.

Through the results of this article entitled "Change management in IR 4.0 technology enterprises in Vietnam", we come to the following conclusions:

- Vietnam is considered a country with advantages in young and abundant workforce. However, this will no longer be strength because robots will replace all manual work. In the future, people will lose their jobs, because technologically advanced robot can affect all sectors such as textiles, services, entertainment and health, transportation, education.
- The strong deployment of IR 4.0 in the world is happening, and companies have to move from 36% digitalization to 75% digitalization of their activities until 2020. Meanwhile, we still have a sluggish IR 4.0 related infrastructure that is synonymous with IR 2.0 and IR 3.0.
- The State has recognized the urgency of IR 4.0, instructing ministries and departments to make digital transformation to keep up with the times. IR 4.0 is a category of manufacturing enterprises and without the policy of assisting and developing the manufacturing enterprises, Vietnam's IR 4.0 experience is limited only to the use and import of IR 4.0 achievements of the developed countries.
- We cannot ignore the role of business in transforming Vietnam's economy. Currently, Vietnamese enterprises are not yet able to fully participate in IR 4.0. They are still fumbling using products imported from developed countries. Specifically, Vietnam does not have the main corporations that produce high value export products to bring foreign currency back to the country. Vietnam do not also have high quality human resources to research and develop products and do not have suitable equipment for the development in the IR 4.0.

In short, IR 4.0 is the game of producers, businesses, corporations, creating products and services provided to society. Therefore, the State cannot only talk about upgrading infrastructure, applying information technology, building a smart city, calling on investors, but recognizing the problem from the root. The development of the country must be based on the strength of the business, the national corporation. Therefore, in order to develop the economy, the State needs to resolutely implement the following issues:

- Removing monopoly in electricity, water and telecommunications: The state can argue that the State needs to control these areas for national security reasons. However, in developed countries, these key sectors are held by private corporations.
- Educational investment: The quality of teachers is extremely urgent now, teachers who are not qualified will not train good generations. It is necessary to promote wage increases, increase in allowances and in welfare for the education sector to attract talented people to work. There is nothing we can do about the IR 4.0 if the quality of human resources is at the level of IR 1.0, 2.0 and 3.0.
- Tax reduction for people: Tax is increasing when the State suffers from budget deficit. In order to avoid the state budget deficit, it is necessary to be transparent in spending, review the expenditures that do not serving the national development strategy.
- Above all, it is a matter of income of public servants, the State needs to change the salary policy, so that

public servants can live on their wages, so it will not cause negative phenomenon such as corruption.

- In conclusion, Vietnamese enterprises will be leading or following in the IR 4.0, it depends on the State's policy on monopoly, human resource development, taxation and salary policy.

Recommendation

This article proposes ministries, branches, localities, business community to focus on some important contents. It is first and foremost, to keep abreast of the Party's guidelines and policies, the State's policies and laws, synchronously perform tasks, build solutions and develop the digital economy and smart industry: focusing on improving institutions, mechanisms, policies and laws; focusing on regulations to create conditions for businesses to quickly absorb and develop new technologies and new business models; continue to actively review and abolish business conditions that are no longer appropriate; building a synchronous infrastructure system, especially information-communication technology, digital connection infrastructure development, ensuring safety and network security; complete 4G mobile network, research and deploy 5G mobile network, meet the requirements of Internet connection in the shortest time. Secondly, it is important to quickly develop human resources and promote the implementation of education in science, technology, technology and mathematics (STEM) in the general education program; enhance research and teaching capacity in higher education institutions; enhance skills education, basic knowledge, creative thinking, adaptability, career change with the requirements of the IR 4.0. Thirdly, emphasis should be put on developing science and technology, the national innovation system to take enterprises at the center of everything; deploying key scientific and technological research directions on information technology, physics, biology and artificial intelligence. Selectively develop key and strategic products of the country to stick to close and integrate with new technologies. Focus should be on developing entrepreneurship ecosystems, having policies to strongly develop creative startups. In order to become a truly IR 4.0 businesses, also known as digital engineering business, enterprises are to take following six steps:

1. Upgrade the industry strategy to convert to digital;
2. Select key products;
3. Determine well the input factors;
4. Implementation the input factors;
5. Create databases and analyze data to become digital companies;
6. Integrating physics and digital to create the best product.

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