KARYA TULIS
REVOLUSI INDUSTRY 4.0 DI INDONESIA

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I

INTRODUCTION

In the last 3 years, the economy in Indonesia has grown by 5%, it is estimated that in 2020 the growth will reach 6% per year due to strong macroeconomic management, structural reforms and the acceleration of the number of national strategic projects. The government is already committed to building the global competitiveness of the manufacturing industry through the acceleration of industry 4.0 considering that the national industry really needs connectivity and interaction through integrated technology, information and communication that can be used in the production chain to achieve efficiency and quality improvement.

In 2011, where machines have been integrated with the internet network, several countries have even been able to realize a more efficient way by integrating production industrial systems, for example the automotive industry uses more information technology to summarize the value chain that includes research, development and design, product production. , distribution, after-sales and recycling. The automotive industry in Indonesia has taken advantage of several technologies that lead to efficiency, such as three-dimensional printing technology and robotic technology.

One of the determinations to innovate without stopping is the readiness of the business world to build and prepare Human Resources with global quality, namely having talents with high competence. The Indonesian state needs high human resources as basic capital, given the disruption of technology which indicates that the 4.0 industrial revolution has changed the political and economic order which has resulted in many losses in jobs and storage by technological processes.

1.2 Problem Formulation

1. The Industry 4.0 revolution in Indonesia is at a loss.
2. The development of the industrial revolution 4.0
3. The losses experienced have resulted in many jobs being replaced by technological processes

1.3 Tujuan

1. To overcome the losses experienced in the industrial revolution 4.0 in Indonesia
2. To find out the development of the industrial revolution 4.0

3. To overcome the losses experienced at work, with the industrial revolution 4.0 which resulted in changes in the political and economic order

II LITERATURE REVIEW

The Industrial Revolution 4.0 is a phenomenon that collaborates cyber technology and automation technology. The Industrial Revolution 4.0 is also known as the "cyber physical system". Its application concept is centered on automation. Assisted by information technology in the application process, the involvement of human workers in the process can be reduced. Thus, the effectiveness and efficiency of a work environment automatically increases. In the industrialized world, this has a significant impact on the quality of work and costs of production. But in fact, not only industry, all levels of society can also get general benefits from this system. In the 4.0 Industrial Revolution, there are at least five technologies that are the main pillars in developing a digital ready industry, namely: Internet of Things, Big Data, Artificial Intelligence, Cloud Computing and Additive Manufacturing.

1. Internet Of Things (IoT) is a system that uses computing devices, mechanics, and digital machines in an interrelated connection to carry out its functions through data communication on the internet network without the need for human interaction or human and computer interaction. The IoT system integrates four components, namely: sensor devices, connectivity, data processing and user interface.
2. Big Data is a term that describes large volumes of data, whether structured or unstructured. But it is not the amount of data that is important, it's what organizations do with data. Big Data can be analyzed for better business strategy and decision making. Indonesian Big Data Service Providers, such as sonar platform, paques platform, data shop, dattabot.
3. Artificial Intelligence (AI) is a computer or machine technology that has human-like intelligence and can be adjusted according to human desires. AI works by studying the data received on an ongoing basis. The more data that is received and analyzed, the better the AI can make predictions.
4. Cloud Computing) is a technology that makes the internet the center of data and application management, where users are computers are given access rights (login) to use the cloud to be able.

III

DISCUSSION

Indonesia's 2017 Human Development Index (HDI) score was 70.81. This can be said to be a high HDI category because the score is above 70.00. However, there are still 18 provinces that have a medium or low HDI category, such as Papua, West Papua, and East Nusa Tenggara. The main causes are difficult access to schools and high infant mortality rates, including government policies that have not prioritized the development of quality human resources. So, it can be said that until 2018 there has been no significant breakthrough in improving the quality of human resources or the three of them there have been no significant changes.

The quality of human resources is also inseparable from the poverty problem that hit Indonesia at this time and has become a complicated problem even though a number of indicators have shown improvement. The population dependency ratio in 2000 was 53.8% and in 2017 it was 48.1%. This shows that the decrease in the dependency ratio for 17 years does not appear to be linear with a decrease in the poverty rate of 26.58 million people as of September 2017. The fluctuations in commodity prices in recent years have had a major impact on the number of poor people, especially in some commodity-dependent areas.

It appears that the government is committed to remaining focused on work programs aimed at reducing poverty, unemployment and income inequality. However, the problem of poverty in Indonesia will not be successful if it is not handled in a multidimensional manner. Many people are still reluctant and afraid to take a different approach. They are afraid to be said to make strange or break existing orders. So, they prefer to be followers and wait for other people to do it first. Likewise, something different will be considered "wrong" if it does not refer to standard operating procedures that ultimately makes employees do not care about different thoughts. Currently, the factor most needed is the belief that the current status quo needs to be changed to be more adaptive in facing the future of VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) in order to exist in the market.

IV

CONCLUSION

The Industrial Revolution 4.0 is a phenomenon that collaborates cyber technology and automation technology. The Industrial Revolution 4.0 is also known as the "cyber physical system". Its application concept is centered on automation. Assisted by information technology in the application process, the involvement of human workers in the process can be reduced. Thus, the effectiveness and efficiency of a work environment automatically increases. In the industrialized world, this has a significant impact on the quality of work and costs of production. But in fact, not only industry, all levels of society can also get general benefits from this system. In the 4.0 Industrial Revolution, there are at least five technologies that are the main pillars in developing a digital ready industry. In 2011, where machines have been integrated with the internet network, even some countries have been able to realize more efficiently the way by integrating industrial production systems, for example the automotive industry uses more information technology in summarizing the value chain that includes research, development and design, production, product, distribution, after-sales and recycling. The automotive industry in Indonesia has taken advantage of several technologies that lead to efficiency, such as three-dimensional printing technology and robotic technology.

Indonesia desperately needs superior human resources to face the 4.0 industrial revolution that demands smart factory operations, smart services, and innovative products. The type of work to be done that is affected first is work that is done repeatedly. This type of work will be replaced by artificial intelligence through automation. Going forward, the war on talent will be at the top of the agenda for corporate leaders in the digital economy era and they seek to make talent management a core business, including changing the mindset of employees in relation to managing company assets. Basically, individual performance management systems are drivers of individual performance, and can support organizational performance. Talents must be able to work together in implementing competencies in order to obtain optimal and sustainable results, and companies are expected to be able to build organizational capabilities that are reflected in strategic and performance management, given the close relationship between the level of capability in management organization and implementation strategy with company performance.

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RANGKUMAN PPT KELOMPOK

COVID-19 BERDAMPAK LUAR BIASA (*EXTRAORDINARY*) TERHADAP PERKONOMIAN GLOBAL 2020

kebijakan fiskal ekspansif memberikan stimulus bagi perekonomian dan mencegah krisis kesehatan lebih lanjut, kebijakan moneter longgar menurunkan suku bunga dan melonggarkan likuiditas agar pasar keuangan tetap berjalan

COVID-19 BERDAMPAK LUAR BIASA (*EXTRAORDINARY*) TERHADAP PERKONOMIAN GLOBAL 2020

Kemajuan penanganan COVID-19, peningkatan mobilitas dan dampak stimulus kebijakan mengurangi kontraksi pertumbuhan ekonomi 3,8% (yoy) dibawah pertumbuhan 2019 2,8% (yoy) yang sejalan dengan ditemukannya vaksin yang akan didistribusikan pada pertengahan 2021.

MEREBAKNYA PANDEMI COVID-19 PADA TAHUN 2020 MENGANGKAT TIGA PELAJARAN PENTING PADA STRUKTUR PEREKONOMIAN GLOBAL

covid-19 makin mendorong perilaku sejumlah negara yang mendahulukan kepentingan domestic. Semakin besarnya pengaruh Non-Bank Financial Institutions (NBFIs).

COVID-19 MEMICU KRISIS KESEHATAN DAN KEMANUSIAAN YANG LUAR BIASA

- Perekonomian global 2020 menghadapi krisis yang belum pernah dialami sebelumnya.
- Meningkatkan jumlah penduduk miskin di dunia.
- Tingkat kematian (fatalitas) lebih rendah dibanding pandemi sebelumnya, didorong oleh protokol dan kebijakan pemerintah.
- Terjadi kasus COVID gelombang kedua dan ketiga.

Upaya Penanggulangan penyebaran Covid-19 menimbulkan kebijakan pembatasan mobilitas.

- Zonasi daerah berdasarkan tingkat infeksi
- Larangan meninggalkan rumah, berkumpul, berpergian, atau keluar masuk negara lain.
- Lockdown

Penerapan Pembatasan mobilitas untuk mengurangi penyebaran Covid-19 tersebut menimbulkan krisis ekonomi dan keuangan.

- Penurunan tajam aktivitas ekonomi global, baik konsumsi, produksi dan Investasi.
- Aktivitas perdagangan internasional terhambat
- Menurunnya sektor jasa yang berhubungan dengan manusia yaitu sektor pariwisata
- Memburuknya ekspektasi kinerja ekonomi
- Indikator ketidakpastian Volatility Index (VIX) dan Economic Policy Uncertainty (EPU) mengalami peningkatan tajam

Kinerja Perekonomian Global Kuartal II 2020

- Kontraksi Google Mobility Index membaik secara bertahap dari kontraksi 56,7% menjadi 15,5%. ELI juga membaik dari kondisi paling ketat di 56,3 menurun menjadi 25,9.
- PMI sektor manufaktur dan sektor jasa di berbagai negara juga membaik dan telah berada di luar area kontraktif pada Juli 2020
- Negara dengan permasalahan struktural, seperti aging population dan tingkat tabungan yang tinggi, membutuhkan waktu yang lebih lama untuk pulih ke periode sebelum pandemi.

Kinerja perekonomian global mengalami penurunan pada periode yang sama, khususnya pada triwulan II 2020

- Lemahnya permintaan konsumsi dan gangguan produksi akibat dari keterbatasan mobilitas orang dan barang telah menyebabkan penurunan kinerja manufaktur global.
- PMI manufaktur di AS, Eropa, Jepang, Tiongkok, dan India turun tajam dan mencatat pertumbuhan negatif.
- kinerja yang lebih baik terlihat pada sektor terkait penanganan Covid-19, antara lain industri bahan pangan, alat kesehatan dan obat-obatan, sektor yang memanfaatkan teknologi penunjang aktivitas kerja jarak jauh, sejalan dengan penerapan work from home, school from home, dan social distancing.