

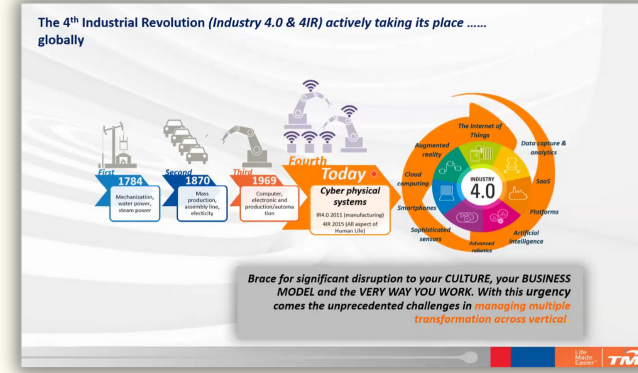


EXECUTIVE SUMMARY

Since 1946, Telekom Malaysia or TM has been serving Malaysia with its telecommunication services and infrastructures. TM consists of 3 service groups, unifi for local consumers and small businesses, TM Wholesale for wholesale business, and TM One for large enterprises/businesses. Not only do they provide choices of products and services, but TM also contributes to developing technology infrastructure throughout Malaysia to realize the vision of "Digital Malaysia".

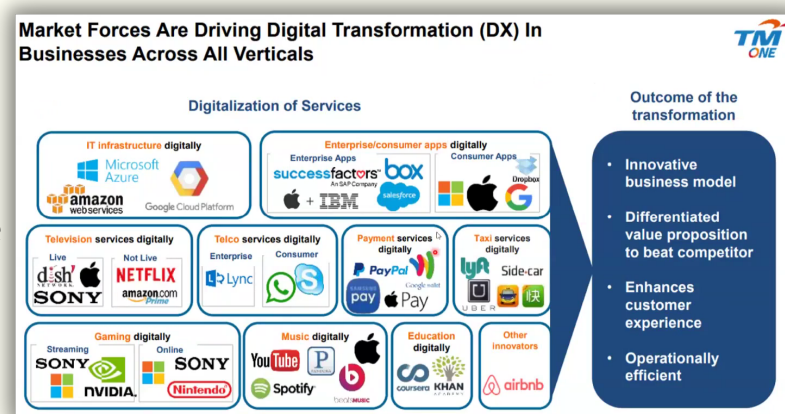
INTRODUCTION

We've been through many industrial revolutions (IR). Starting with the 1st Industrial Revolution in 1784 all the way to the current 4th Industrial Revolution. With the revolution underway, TM has developed future-ready infrastructures like new data centers and cloud services. In this talk, Dr. Nazri Edham will discuss some of the technologies that are essential for the 4th IR, namely digitalization, smart city, and 5G. He will also discuss how TM will enable the industrial revolution.



DIGITALIZATION

In the 4th IR, major services are already beginning to transform to digital formats, like payment, commerce, entertainment, education, and many more. This transformation occurs to improve their services, such as more efficient operations, better customer experience, better value proposition, and more innovative business. In order to do this transformation, these services require a strong digital infrastructure foundation. The foundation consists of its backbone (cloud, IoT, automation), insights (analytics and business insights), and engagement (customer experience, product innovation, access channel). Combine with security and privacy, this foundation will be able to contain the needs of these services.

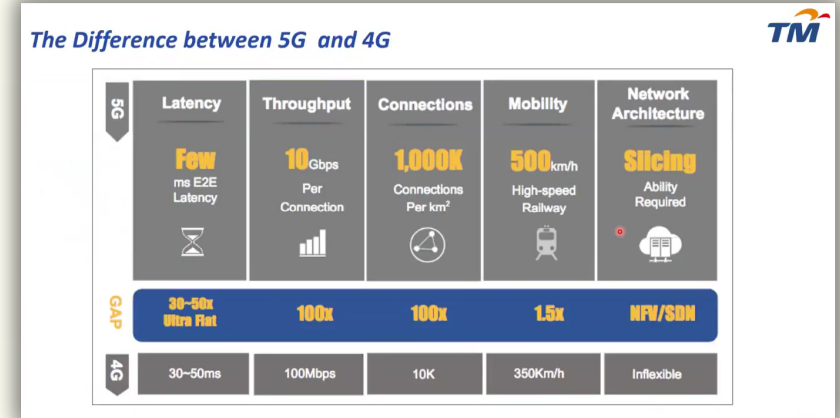
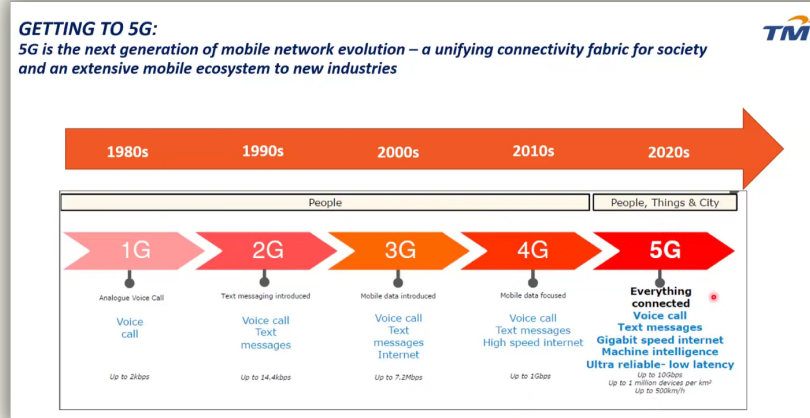


SMART CITY

There are several factors that need to be considered in making a smart city, such as the problem, the city's persona, and sustainability. On top of that, we also need the technology that can intuitively adapt and respond, one of the examples is smart service. Smart services can be built by designing their development blueprint, collaborating with the government and enterprises, and implementation according to their vertical. Smart services can also be built by enhancing existing services like water management, manufacturing, and logistics.

5G

With its great capabilities, 5G will enable new solutions in our everyday life. Thanks to its features like enhanced mobile broadband (eMBB), massive machine type communication (mMTC), and ultra-reliable low latency communication (uRLLC), 5G will become a crucial pillar for developing smart cities and 4th IR. Compared to 4G, 5G has 100 times more speed, 30-50 times lower latency, 100 times better connection range, and has more flexible network architecture. 5G can be used in different cases, like real-time monitoring and tracking, automated solution, virtual reality, and connected tools.



ENABLING THE 4TH IR

To enabling the 4th IR, TM has made several steps towards their journey. At unifi, they change the way they work by using multiple channels in their business so they can accommodate customers and take the advantage of TM Network Operating Centre to manage massive network and system technology platforms. TM also made 2 latest world-class data centers, namely Iskandar Puteri Core Data Centre and Klang Valley Core Data Centre. They also keep maintaining their Network Operating Centre to support the connectivity infrastructure for the 4th IR.

REFLECTION

This talk had given us some of the core information about the 4th Industrial Revolution. Dr. Nazri had also given us an overview of their plans for the revolution as well. Because of this phenomenon, our lives will change drastically due to the benefits provided by these technologies. We have imagined about how our life in the future, and now that future is almost near. This will be a new direction for us, students, starting from now to accompany us until our upcoming career.

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