

MAKING SENSE OF THE 4TH INDUSTRIAL REVOLUTION

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myForesight[®]

Malaysian
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INDUSTRIAL REVOLUTION

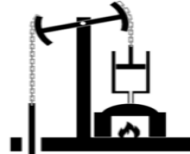
“

...fundamental change in the way products (goods & services) being produced, delivered & consumed...

”

INDUSTRIAL REVOLUTION

1.0



Based on mechanical production driven by water & steam power.

2.0



Based on mass production enabled by electrical energy.

3.0



Based on the use of computer & electronics to further enhance automation.

4.0

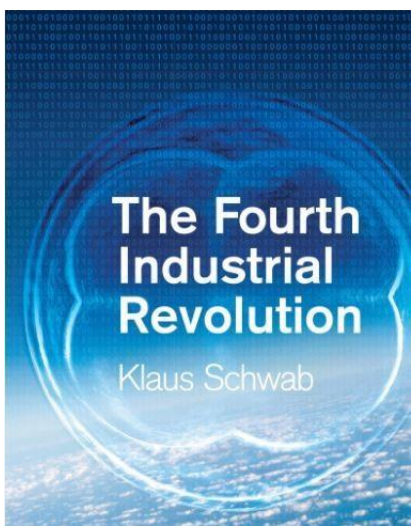


Based on the use of cyber physical systems.

“

We stand on the brink of technological revolution that will fundamentally alter the way we live, work and relate to one another. In it's scale, scope and complexity, the transformation will be unlike anything humankind has experienced before.

”

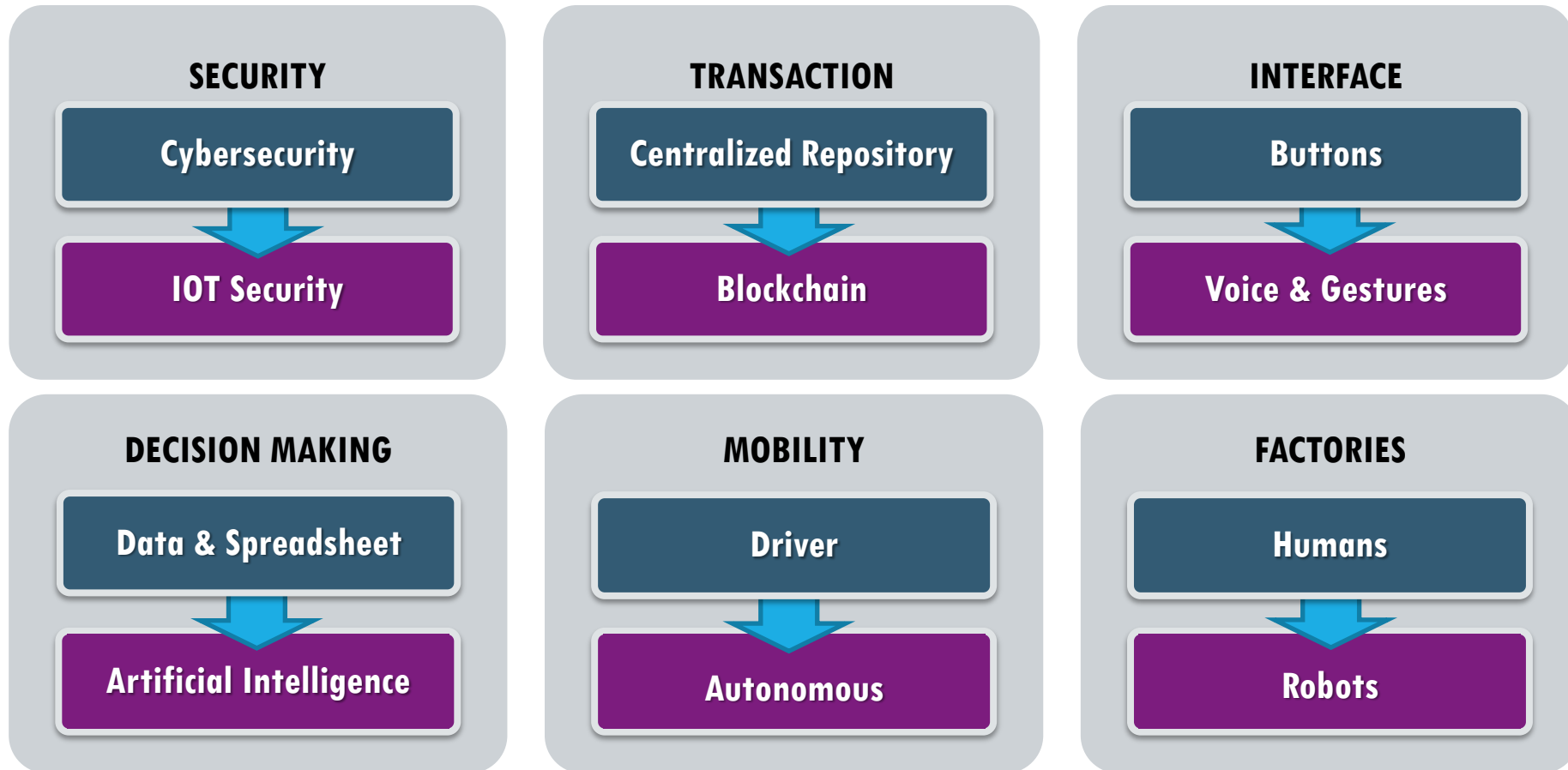


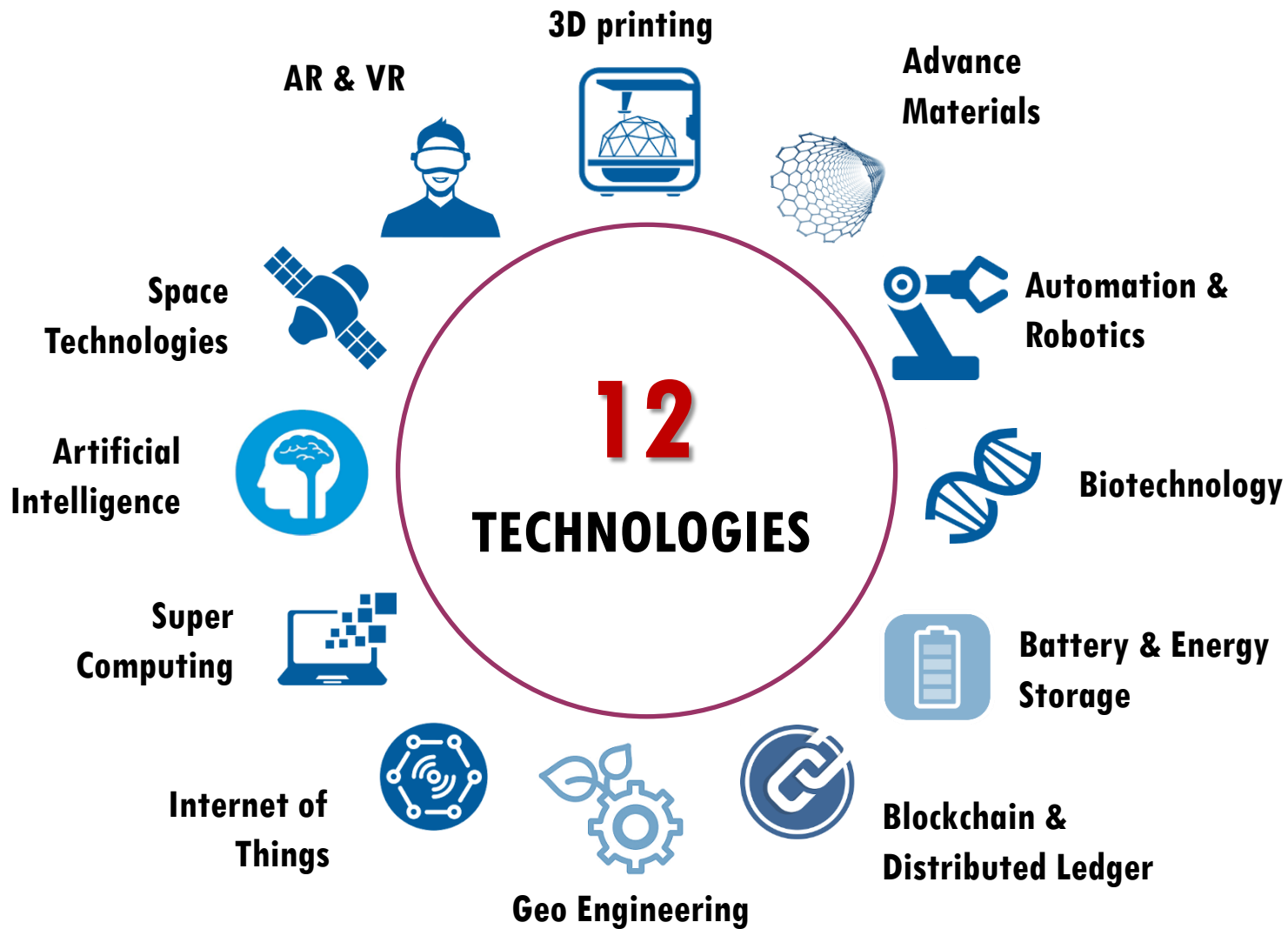
Klaus Schwab
Founder & Executive Chairman
World Economic Forum



THE 4th INDUSTRIAL REVOLUTION

Affects almost every facets of business sectors and arenas





Source: World Economic Forum

WHY IT MATTERS?

THE 4th INDUSTRIAL REVOLUTION

Accelerated Rate of Change

Convergence



Technology Advancement

**New source of
growth/inequalities**

**Technology cost &
investments**

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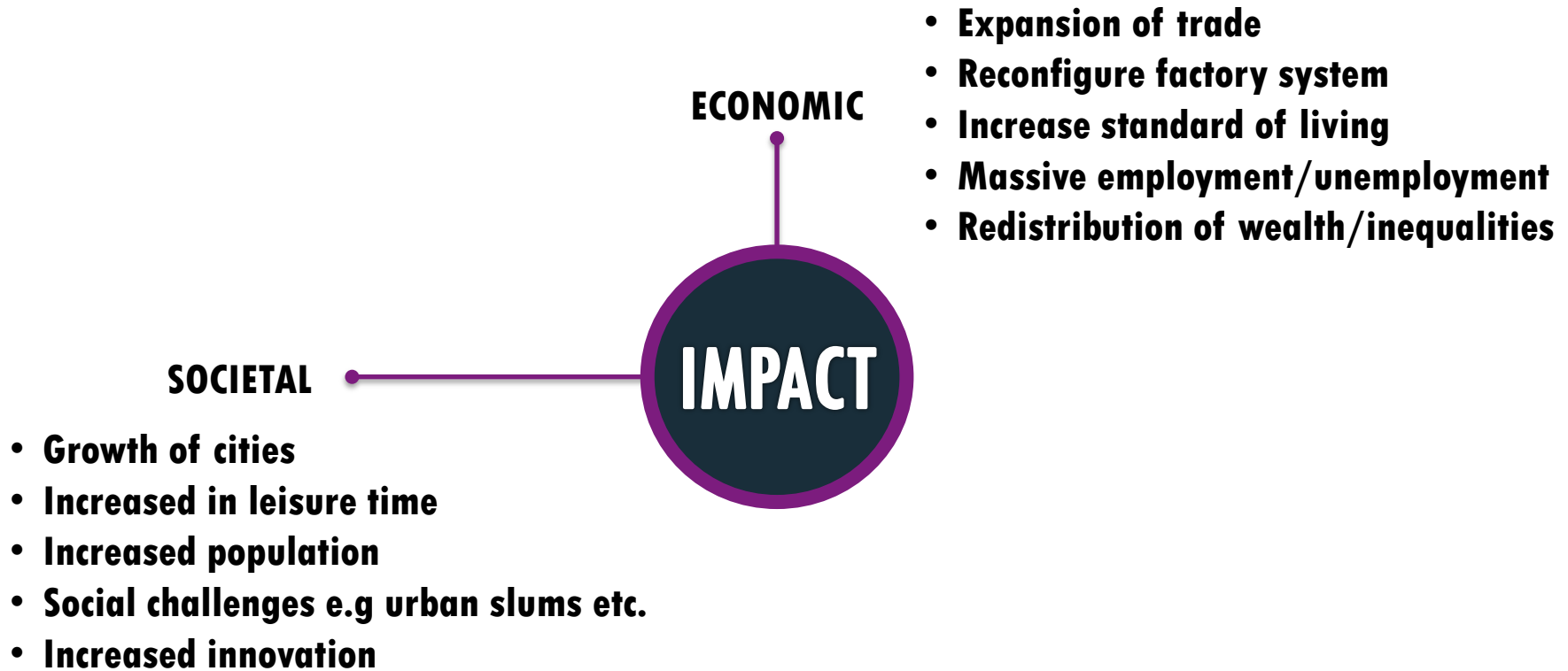
“
... Reset the playing field...”

THE 4th INDUSTRIAL REVOLUTION

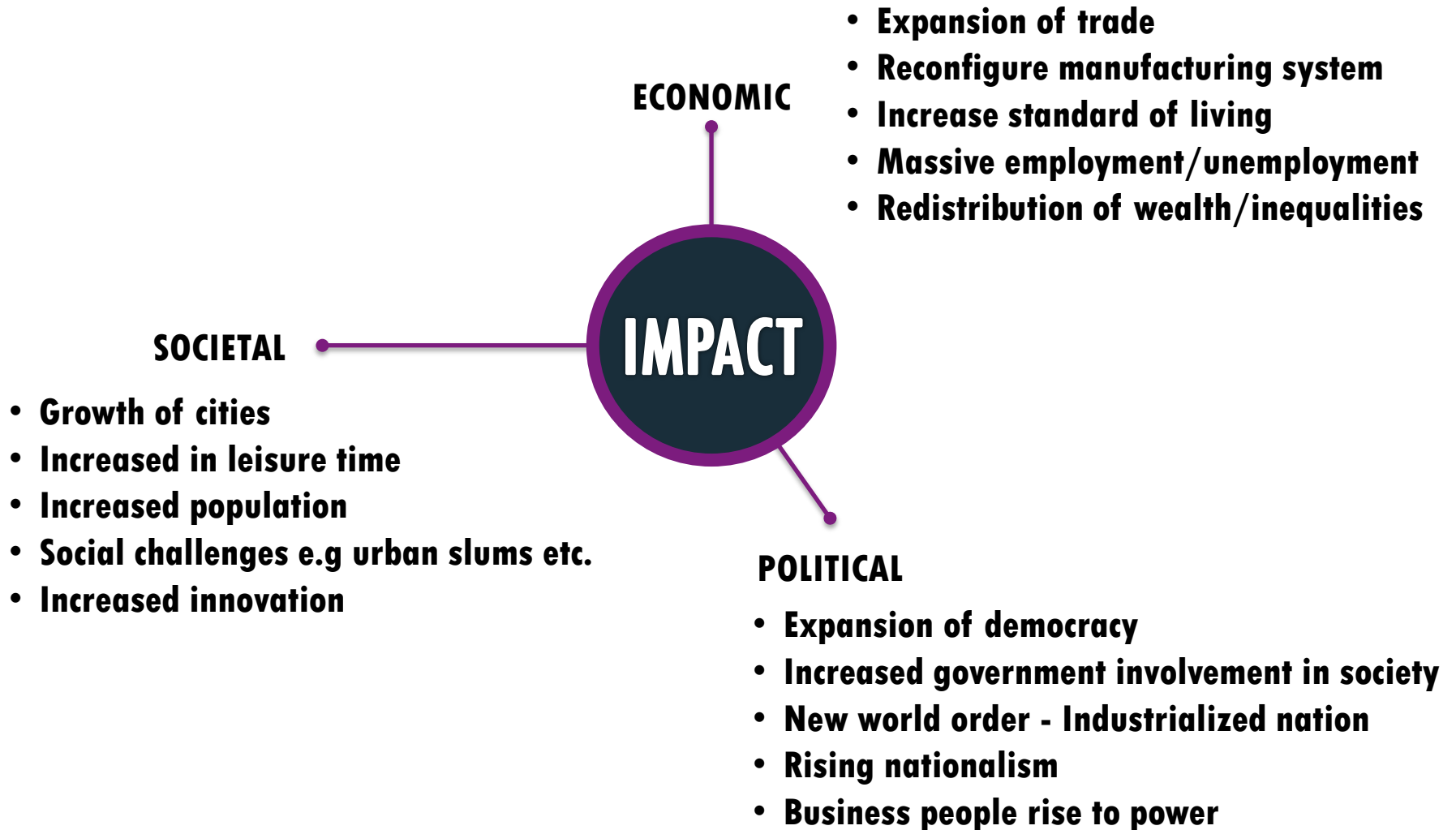


- **Expansion of trade**
- **Reconfigure factory system**
- **Increase standard of living**
- **Massive employment/unemployment**
- **Redistribution of wealth/inequalities**

THE 4th INDUSTRIAL REVOLUTION



THE 4th INDUSTRIAL REVOLUTION



“...the world is changing; future of Jobs will see changes in jobs role and lifestyle preferences”

Growing Population

“...Malaysia’s population 35 million by 2030”

“..World’s population 8.5 billion by 2030”

Aging Population

“...median age of Malaysian 40yr by 2040”

“...global, people aged 65+ double to 1 billion by 2030”

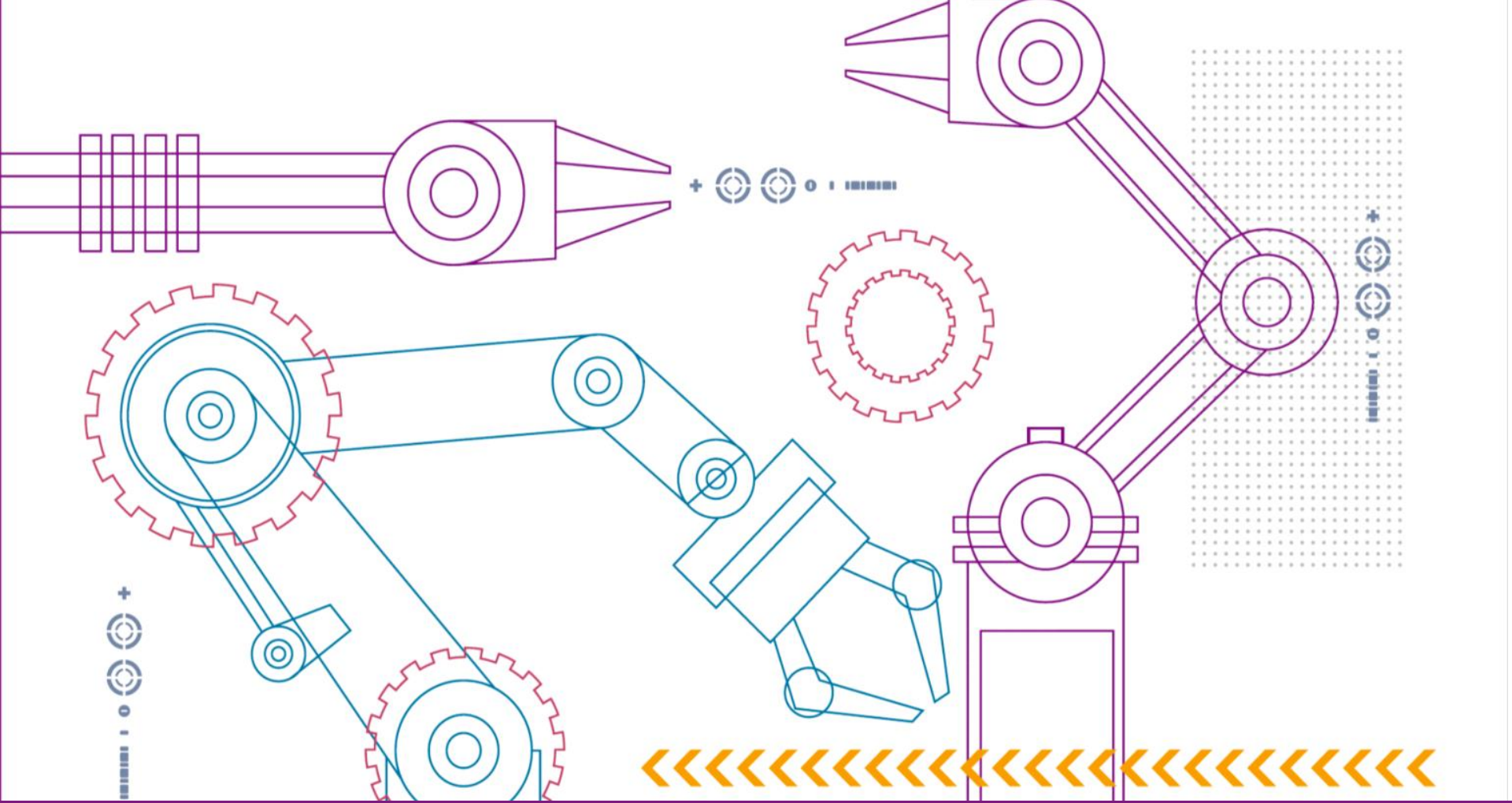
Global Talent Crisis

“... 2014-2030, increase migration south-south countries”

“...by 2030, labor force participation rates failing below 63 percent of the global working age population”

“...As generations collide, workforces become more diverse and people work longer; traditional career models may soon be a thing of the past”

“...many jobs being filled today did not exist 20 years ago; it is expected that in 10 years time, 60% of jobs will be completely new”



JOBS UNDER THREATS

TRAVEL AGENTS



TELLERS



SURVEYORS



JOURNALIST

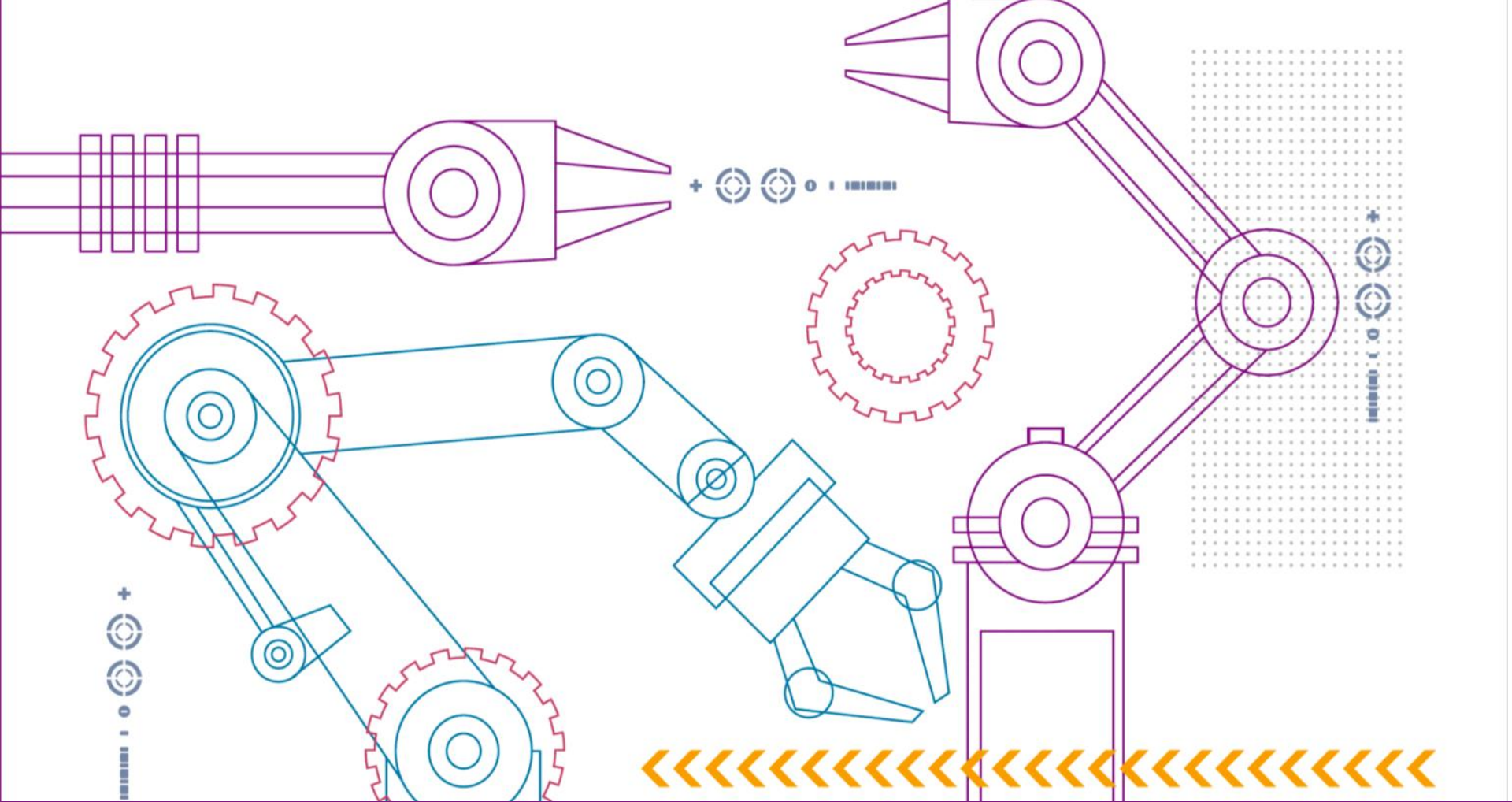


LEGAL ASSISTANT



FINANCE ASSISTANT





JOBS THAT DID NOT EXIST 10 YEARS AGO

SUSTAINABILITY

MANAGER



BLOGGER



DRONE OPERATOR



SOCIAL MEDIA

STRATEGIST



APPS DEVELOPER



DATA SCIENTIST

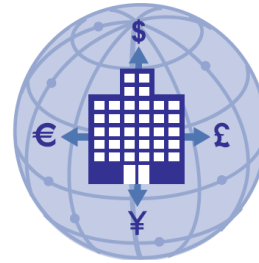


PLAUSIBLE SCENARIOS



Turbulence and Trust Deficits

A chaotic world where trust is a scarce commodity. Yet, thanks to the possibilities created by the rise of the networked society, there is a significant latent desire for social engagement by citizens, particularly at the local level.



A Privatized World

Many governments are seen to have failed, inequality is incredibly high and corporations play the most important role in society, being the main providers of social services.



Mad Max

a world characterized by international and national conflict. Governments exert strong security controls on business and society. Levels of funding for societal and development challenges are limited.



Transparently Blurred

Global economic growth is relatively high over the period 2020-2030. The government & private sector are both deeply engaged in tackling societal challenges. Access to data, technology and rigorous monitoring are the hallmarks of a revolution in both economic activity and social development.

Source: World Economic Forum

ROLE OF GOVERNMENT

“ ...what government do in these scenarios ... ”

- **Taking control...** ownership of development of technology and its application
- **Liberalized ...** A hands-off approach moving towards decentralization and market liberalization
- **Business friendly...** Understand the changing role of government, paving the way for business to take leadership?
- **Managing growth ...** to ensure stability & fairness...

ARE WE READY?

THE WORLD MOST TECH READY COUNTRIES

Malaysia Ranked

#31



#1



#5



#7



#13



Mobile Phone Penetration



Internet Users



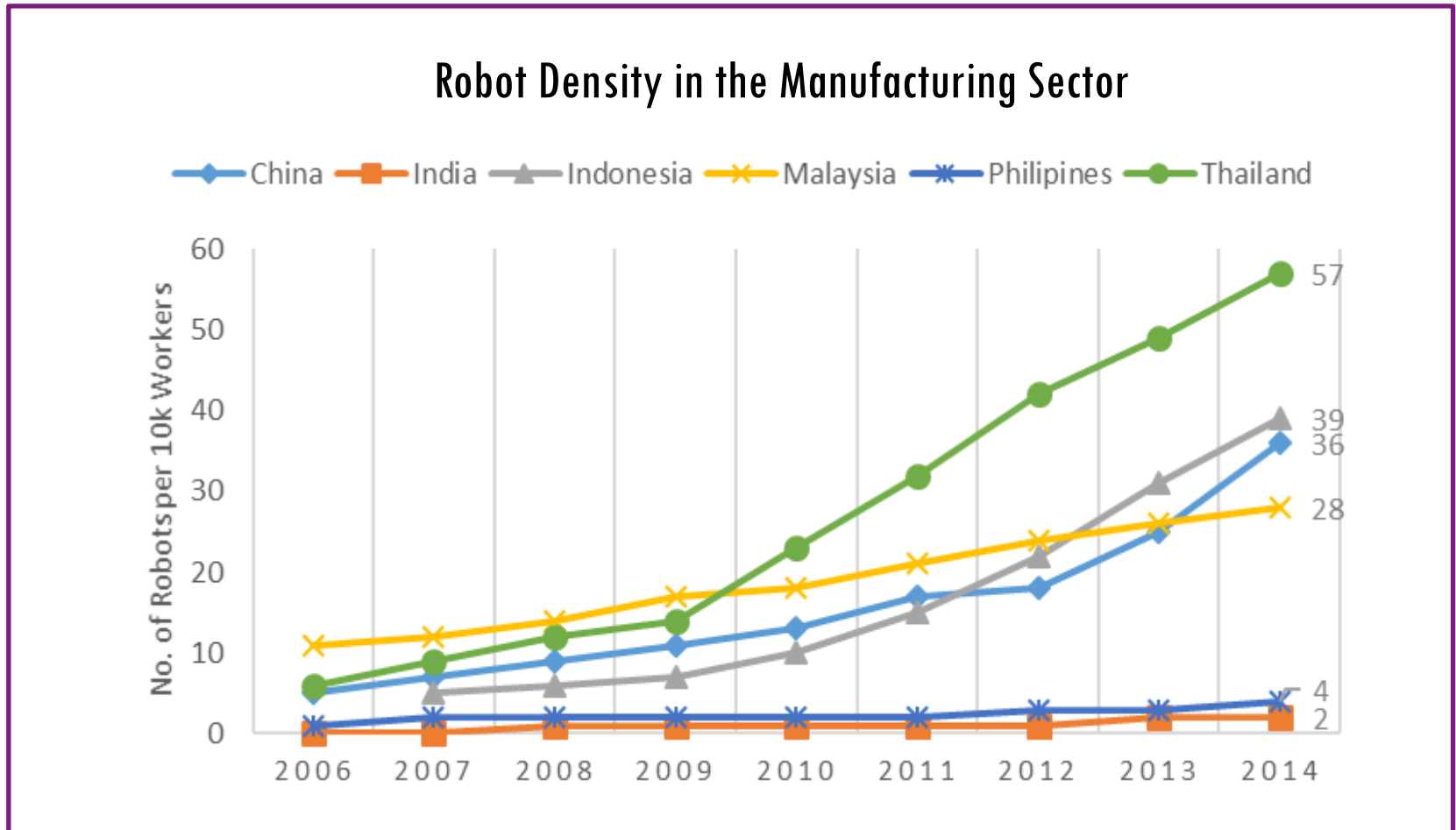
Active Social Media Users



Online Shoppers

Source: WEF, INSEAD, KKMM, DoS, Insights, MIGHT

IS OUR BUSINESS SECTOR READY?



Source: International Federation of Robotics, MIGHT

IS THE PUBLIC SERVICE READY?



POLICY QUESTIONS

- How do we manage the transition & impact?
- What policies do we need to:-
 - Protect societies & human rights
 - Development of critical infrastructure
 - Balance information
 - Ensure services & opportunities availability
- How might the development pathway change?
- What kind of new legal infrastructure required?



ROLE OF GOVERNMENT

“ ...what should government do? ... ”

- **Maintain a sense of cohesion** in facing disruptions to the economic, social & political landscape...
- Understand the **changing role of government**. Digital government vs analogue government?
- Cultivate an **understanding of the 4th Industrial Revolution** & the risk and opportunities it presents...
- Ensure the **necessary infrastructure** is in place to take advantages of its opportunities...

.... technology values are characteristics that consumers would seek out in products, services, and technologies over the next decade.



Source: myForesight

How to use dryer? How



<p>14kg STACK DRYER</p>  <p>13</p>	<p>14kg STACK DRYER</p>  <p>12</p>	<p>14kg STACK DRYER</p>  <p>11</p>	<p>14kg STACK DRYER</p>  <p>10</p>
 <p>8</p>	 <p>7</p>	 <p>6</p>	 <p>5</p>
<p>14kg WASHER</p>	<p>14kg WASHER</p>	<p>14kg WASHER</p>	<p>14kg WASHER</p>

A row of ten coin-operated laundry machines. The top row consists of four 14kg stack dryers, numbered 13, 12, 11, and 10 from left to right. The bottom row consists of four 14kg washers, numbered 8, 7, 6, and 5 from left to right. A person is partially visible on the right side, interacting with the washer numbered 5.

PLAZA TOL KUANG BARAT





UBER

EVERYONE'S PRIVATE UBER™

UBER

UBER

UBER

A high-angle, top-down view of a large, intricate maze. The maze is composed of light-colored, textured walls that create a complex network of paths and dead ends. The walls are slightly raised, giving the maze a three-dimensional appearance. In the center-right area of the maze, a small, dark silhouette of a person stands, providing a sense of scale and emphasizing the complexity of the path. The overall lighting is soft and even, highlighting the geometric patterns of the maze.

**CHALLENGES
AHEAD**

THE 4th INDUSTRIAL REVOLUTION

... Not all organizations & industry sectors are at the same stage of understanding as what this means to their business...

... Level of disruptions, the risk & opportunities differs for each businesses & sectors...

... affecting services, products or business model ...



**“Increase disruptions &
instability”**

**“Barriers to entry
continues to be lowered”**

**“Role of technology will
be at the forefront”**

**“New competitors &
incumbents”**

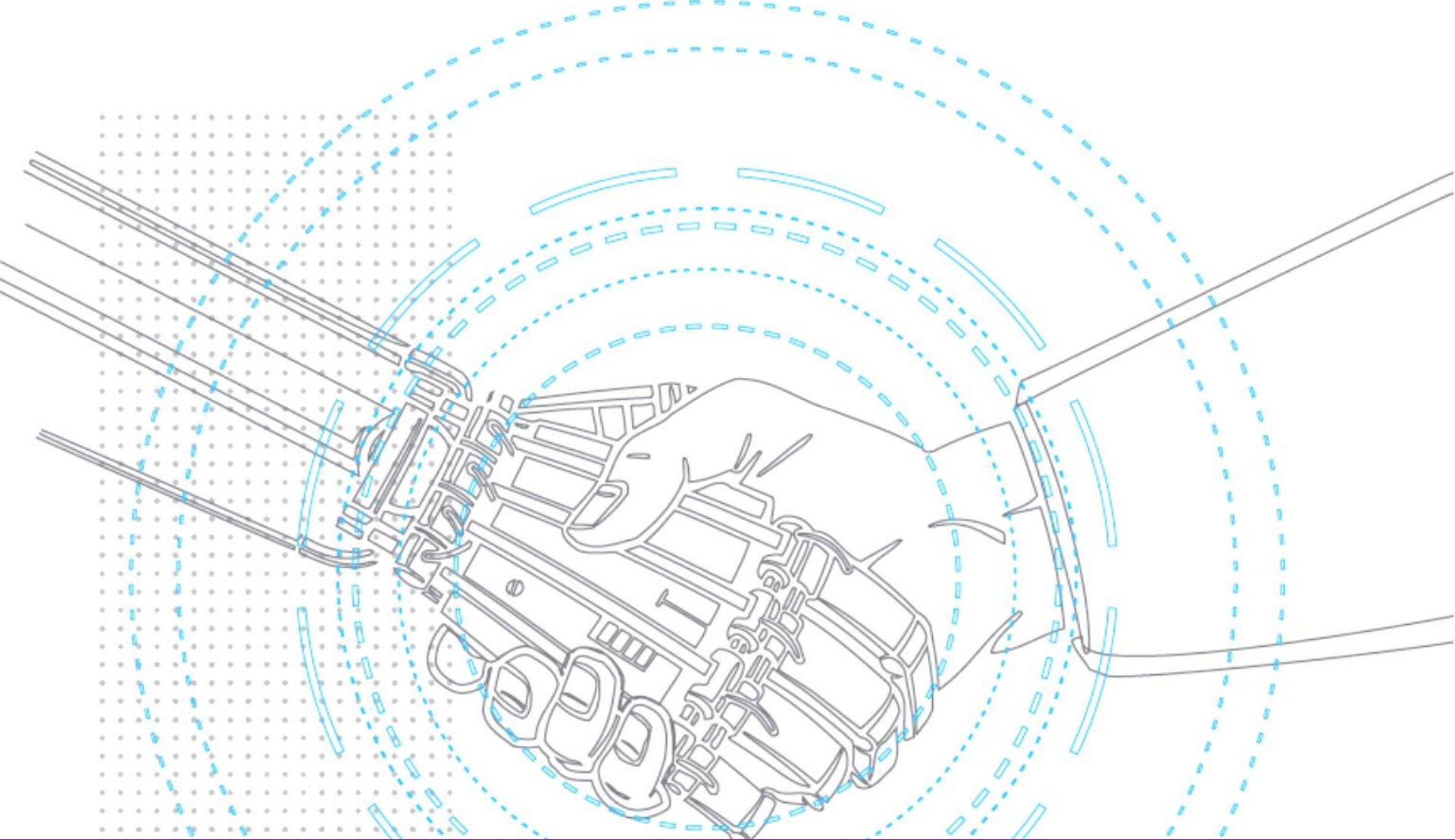


**“To regulate or
liberalized?”**

**“Preparing the right
ecosystem”**

**“Education & skills
required”**

**“interoperability &
standards”**



THANK YOU

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