

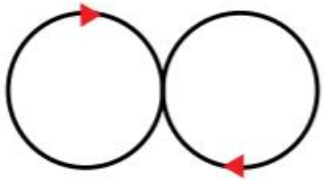
A large, stylized purple arrow graphic that points from the left towards the center of the slide. It is composed of two thick, parallel lines that meet at a point on the left and then diverge towards the right, creating a wide arrowhead shape.

CIRCULAR ADVANTAGE

**INNOVATIVE BUSINESS MODELS
AND TECHNOLOGIES
THAT CREATE VALUE**

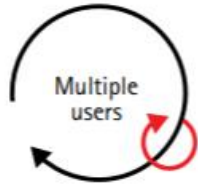
EU-Indonesia Business Dialogue 2018
Circular Economy: Maximizing Business through Sustainable Practices
Jakarta, 25 October 2018

THE CIRCULAR ECONOMY IS A \$4.5 TRILLION BUSINESS OPPORTUNITY BY 2030 IT REPRESENTS HUGE POTENTIAL FOR GLOBAL ECONOMIC GROWTH AND WILL ALSO ACCELERATE SOCIETY TOWARDS A SUSTAINABLE FUTURE



Lasting resources

Breaking the link between resource scarcity and economic activity by using only resources that can be continuously regenerated for productive use



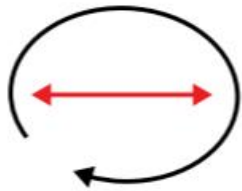
Liquid markets

Eliminating idle time of products in the markets in order to grow the number of users that gain benefit from the same volume of goods



Linked value chains

Minimizing resource value destruction in a value chain by reclaiming and linking up waste outputs as useful inputs into a next life production process

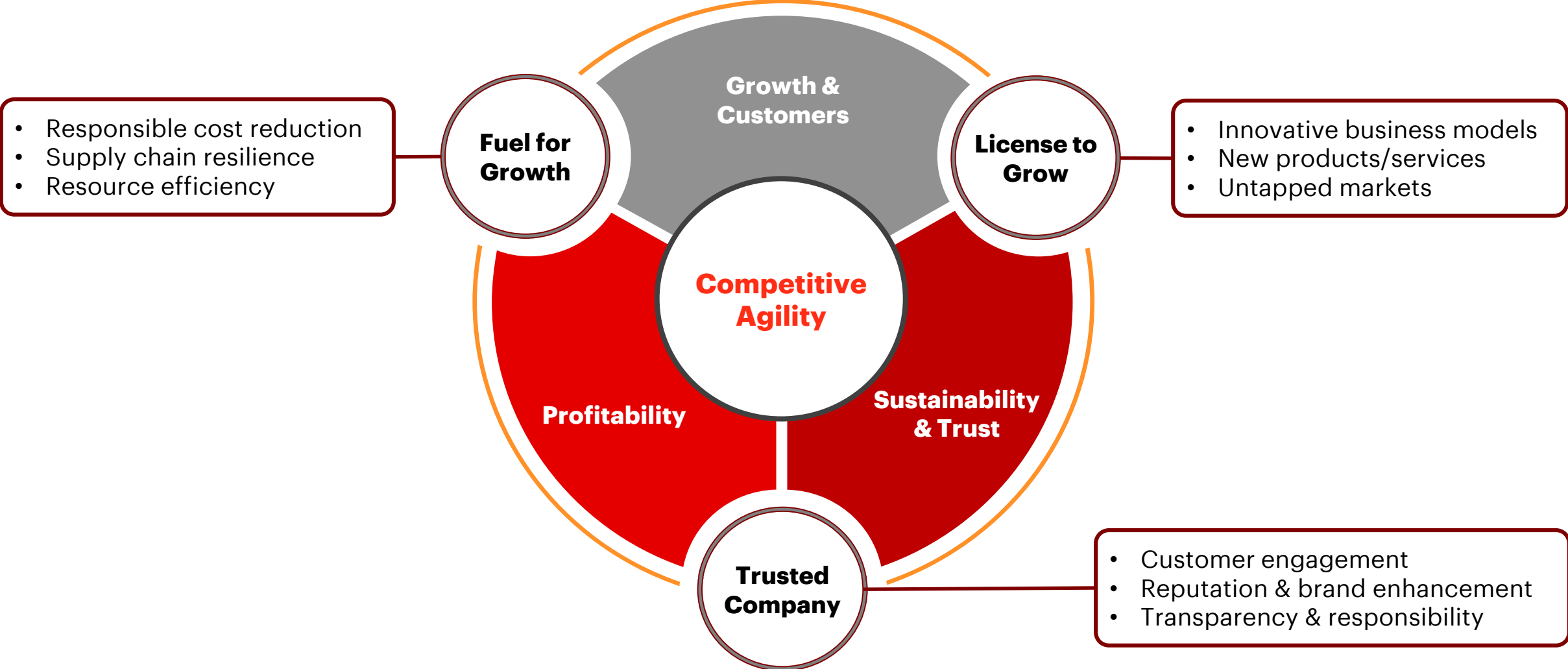


Longer life cycles

Keeping products in economic use for longer to satisfy a greater demand and provide more utility without needing additional natural resources

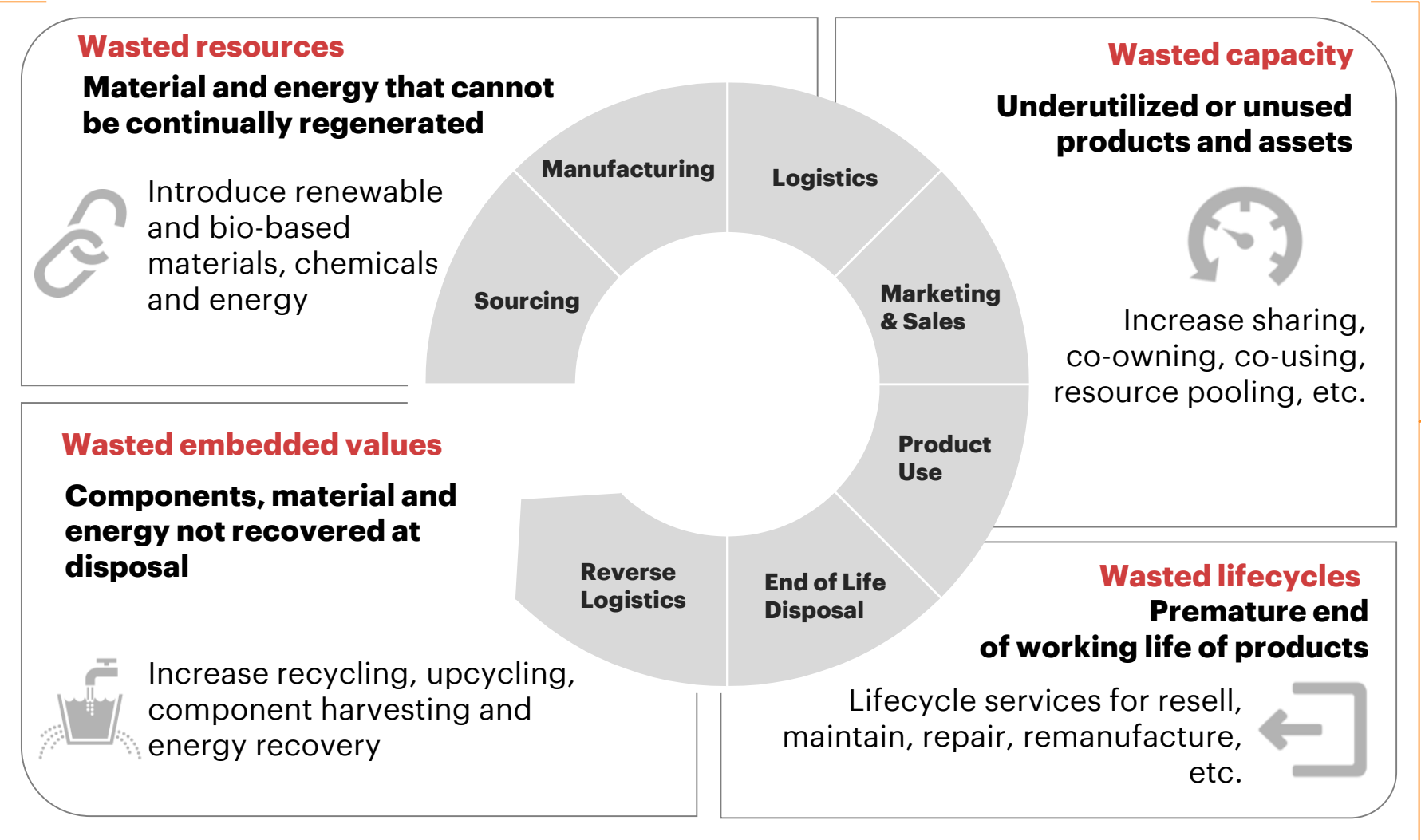
The circular economy is a new way of looking at the relationships between **markets, customers and natural resources** and it leverages innovative **new business models and disruptive technologies** to transform the linear economic model.

THE CIRCULAR ECONOMY IS INCREASINGLY A NEW SOURCE OF GROWTH AND PRODUCTIVITY



TO REALIZE THE FULL POTENTIAL VALUE OF THE CIRCULAR ECONOMY, BUSINESS SHOULD ADOPT A 4-DIMENSIONAL VIEW ON WASTE

**Internal
operational
focus**



**External
market
focus**

ACCENTURE IDENTIFIED FIVE BUSINESS MODELS AND THREE TECHNOLOGIES THAT WILL HELP YOU IMPLEMENT THE CIRCULAR ECONOMY

FIVE BUSINESS MODELS:



CIRCULAR SUPPLY-CHAIN:

Use renewable energy and bio-based or fully recyclable inputs



RECOVERY & RECYCLING:

Recover useful Resources out of materials, by-products or waste



PRODUCT LIFE-EXTENSION:

Extend product lifecycles by repairing, upgrading and reselling, as well as through innovation and product design



SHARING PLATFORM:

Connect product users to one another and encourage shared use, access or ownership to increase product use



PRODUCTS AS A SERVICE:

Move away from product ownership and offer customers paid access to products, allowing companies to retain the benefits of circular resource productivity or ownership to increase product use

THREE DISRUPTIVE TECHNOLOGIES:



DIGITAL TECHNOLOGIES:

Internet of Things (IoT), Big Data, blockchain, and RFID help companies track resources and monitor utilization and waste capacity



PHYSICAL TECHNOLOGIES:

3D printing, robotics, energy storage and harvesting, modular design technology and nanotechnology help companies reduce production and material costs and reduce environmental impact



BIOLOGICAL TECHNOLOGIES:

Bio-energy, bio-based materials, bio catalysis, hydroponics and aeroponics help

FIVE BUSINESS MODELS & THREE DISRUPTIVE TECHNOLOGIES IN VALUE CHAIN

Circular Supply-Chain:

Use renewable energy, bio-based or fully recyclable input material to replace toxic and single lifecycle inputs



Recovery & Recycling:

Recover materials, resources and energy from disposed products or by-products



Product as a Service:

Offer product access and retain ownership to internalize benefits of circular resource productivity

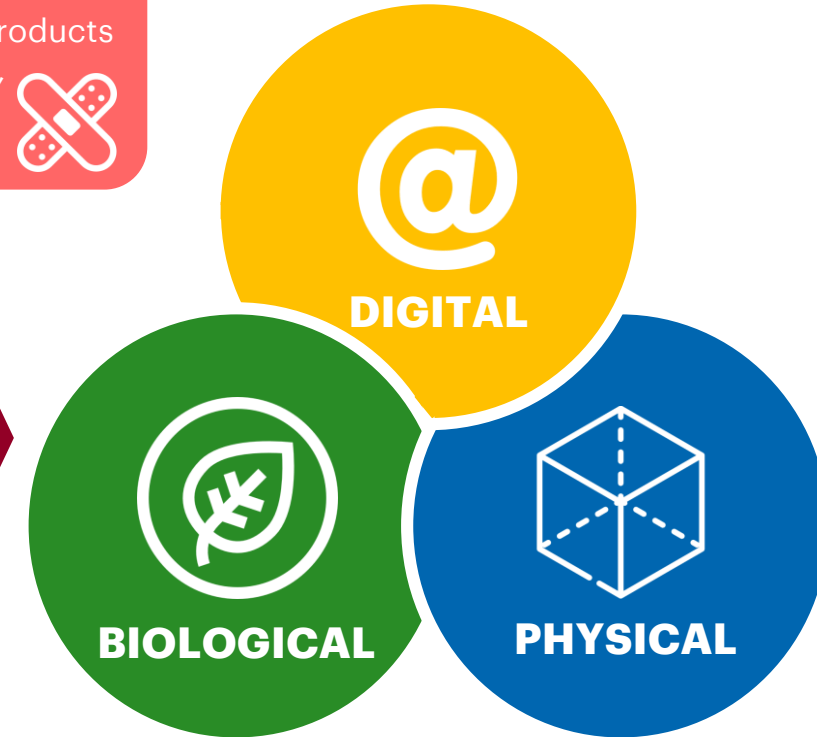
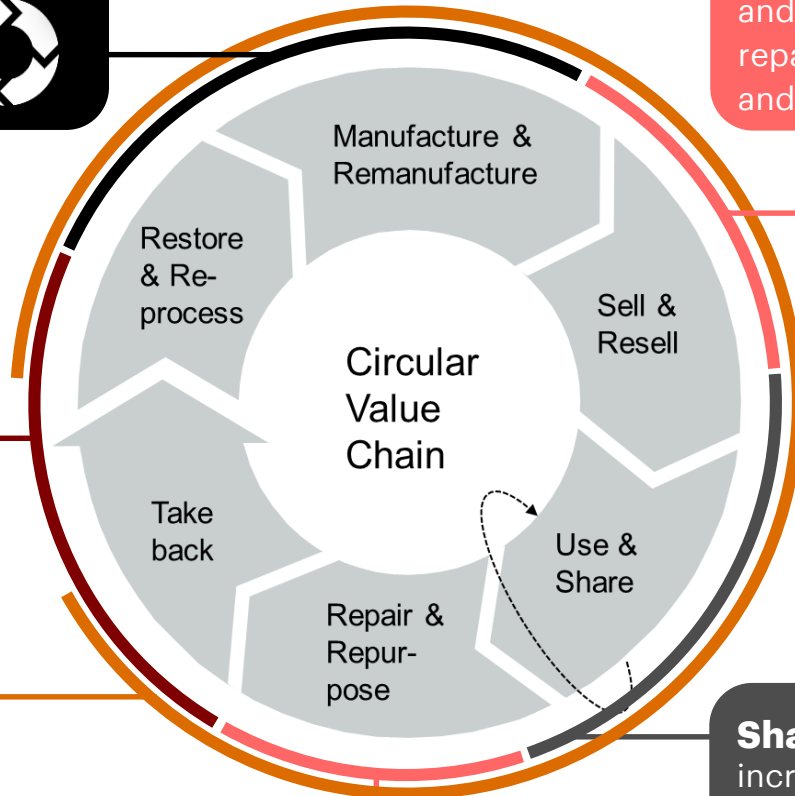


Product Life-Extension:

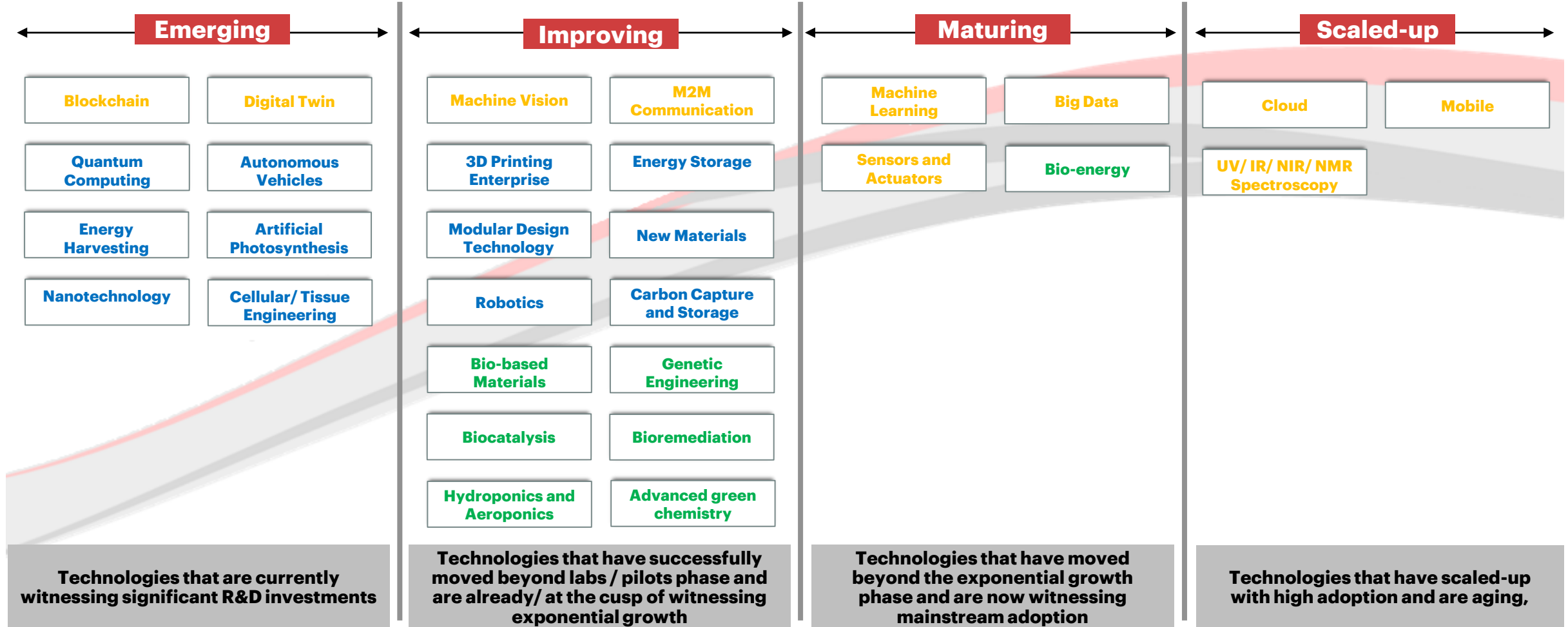
Extend working lifecycle of products and components by reselling, repairing, remanufacturing and upgrading



Sharing Platform: Enable increased utilization rate of products by making possible shared use /access / ownership



NEW TECHNOLOGIES, KEY FOR CIRCULAR ECONOMY TRANSFORMATION, CAN SUPPORT COMPANIES IN THEIR TRANSITIONS



Note: Given the rapidly evolving nature of technology landscape, the maturity of technologies may change very quickly and some of technologies may also see exponential growth

COMPANIES AMONG INDUSTRIES THAT USE CIRCULAR ADVANTAGES



CIRCULAR SUPPLY-CHAIN

Royal DSM18 is one player at the forefront of adopting the Circular Supplies business model to fuel its shift from a virgin material supplier to a company that reuses materials and provides new eco-friendly ones.



RECOVERY & RECYCLING

IKEA is using “Waste is given new life” concept for a greener and healthier planet. IKEA aims to close the loop between harvesting materials, producing products and lab testing.



PRODUCT LIFE EXTENSION

Google is addressing the obsolescence challenge in the mobile phone area. The Project Ara initiative focuses on reinventing the smartphone by breaking it down into replaceable modules that can be assembled and customized according to user requirements.



SHARING PLATFORM

Lyft, Inc as a ride sharing company is revolutionizing one segment of the travel market with the Sharing Platforms business model. The company helps fill underutilized seats during car trips by enabling, via its mobile app, individuals who need a ride somewhere to request one from someone who has a car.



PRODUCT AS A SERVICES

Michelin, one of the world’s leading tire manufacturers, has made significant strides toward adopting the Product as a Service model to create an innovative program in which fleet customers can lease instead of purchase tires outright.

HOW COMPANIES CAN WIN IN THE CIRCULAR ECONOMY



Realize there is no one “**right**” answer for every company and carefully choose your business model.



Make sure you can access **key enabling technologies** to support and scale your new business model.



Develop capabilities that effectively **deploy and operate** circular economy principles.

**THE FUTURE OF BUSINESS IS
CIRCULAR**

THANK YOU

