Introduction

Morden product development require us to go beyond traditional boundaries

$$Modern \approx Digital \approx Software \implies \approx AI$$

$$Product\ development\ ?$$

The evolving landscape of product development

Stone	Bronze	Iron			

BC	3300bc	1200bc	1760	1840	1970	2000	2020	2030+

Internet, Digital Web

Pre-Industry	Industry 1.0	Industry 2.0	Industry 3.0	Industry 4.0	Industry 5.0

Material	Energy	Information	Intelligence

No Interactions	Attentive	WYSIWYG	Seamless transition	Touch and Feel	Immersive

1940	1970	1980	1990	2000	2010	2020

Batch Age	CLI Age	GUI Age	Internet Age	Interactions Age	AI Age

		Web 1.0 - ReadOnly	Web 2.0 - Participative		Web 3.0 - Execute
		Situated Servers	Cloud		Spatial, Edge, 5G
		SQL, Files	NoSQL, Unstructured		Distributed Data, Web3
					Metaverse

The evolving landscape of product development

Beyond software horizons

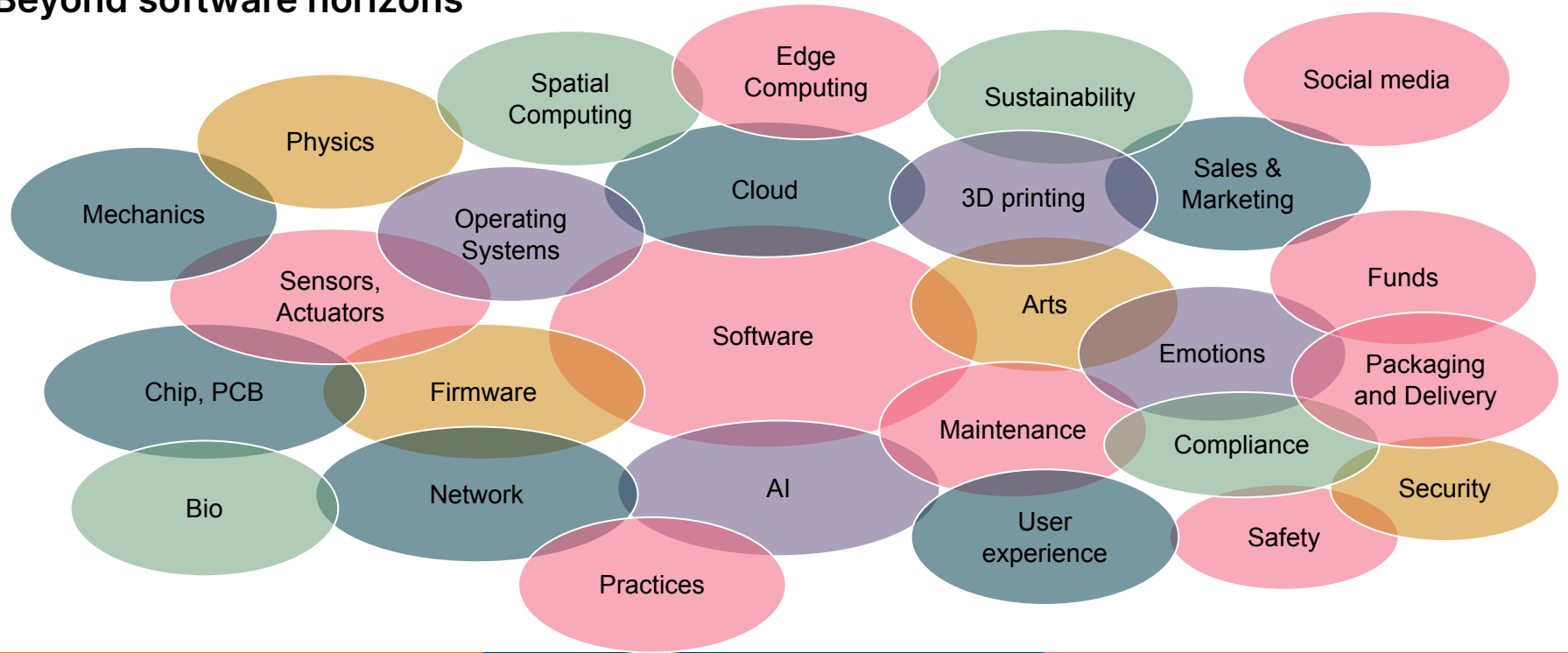$$Modern \approx Digital \approx Software \quad \Rightarrow \quad \approx AI \ ?$$

Traditional software-centric approach

The expanding scope of modern product development

Embracing holistic product development

The evolving landscape of product development

Beyond software horizons

Spatial Computing · Edge Computing · Sustainability · Social media · Physics · Cloud · 3D printing · Sales & Marketing · Mechanics · Operating Systems · Arts · Funds · Sensors, Actuators · Software · Emotions · Packaging and Delivery · Chip, PCB · Firmware · Maintenance · Compliance · Bio · Network · AI · User experience · Security · Practices · Safety

Traditional software-centric approach

The expanding scope of modern product development
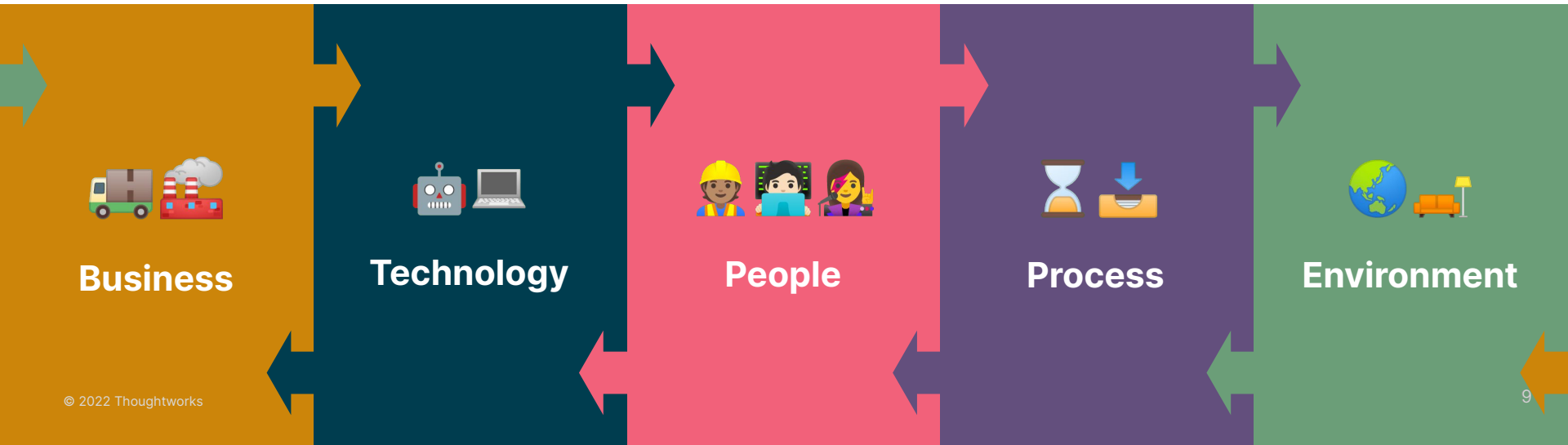
Embracing holistic product development

Beyond code: Navigating the ecosystem

Beyond code: Navigating the ecosystem

Integrating together

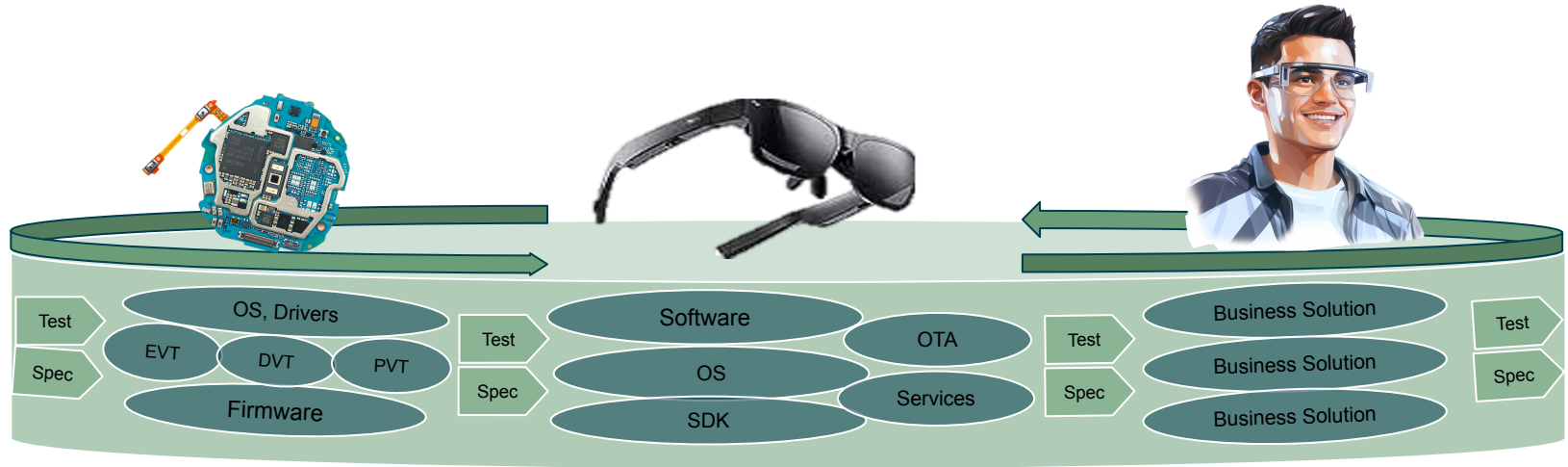*Business + Technology + People + Process + Environment*

Business **Technology** **People** **Process** **Environment**

Practical insights and common pitfalls

Practical insights and common pitfalls

An example of a modern product development

Test	OS, Drivers	
Spec	EVT DVT PVT	
	Firmware	

Test	Software	OTA
Spec	OS	Services
	SDK	

Test	Business Solution
Spec	Business Solution
	Business Solution

Test	
Spec	

Real-world example of holistic product development

Addressing common pitfalls

Future trends of collaboration and communication

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Future trends of collaboration and communication

Ready for anything

The need of cross-functional teams

Effective communication strategies

Collaborative tools and practices

Emerging technologies and their impact

Potential challenges on the horizon

Preparing for the future of product development

Thank you! Keep in touch

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