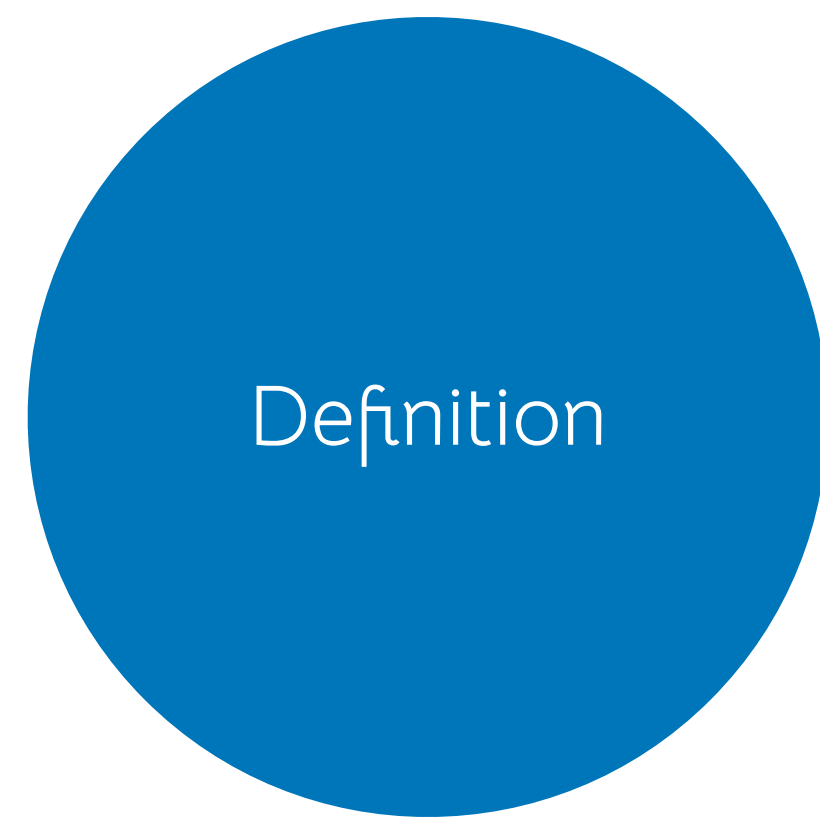


How technology has transformed Research?

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What is technology?



- The term “technology” has always been difficult to define, since the antiquity
- In the 18th Century the Germans started referring to technology as a form of elite, systematic knowledge
- In the 20th Century, technology was seen as the science of the industrial arts
- Today technology encompass, **engineering**, **digital** and **artificial Intelligence**

Communication

Robotics

Medical

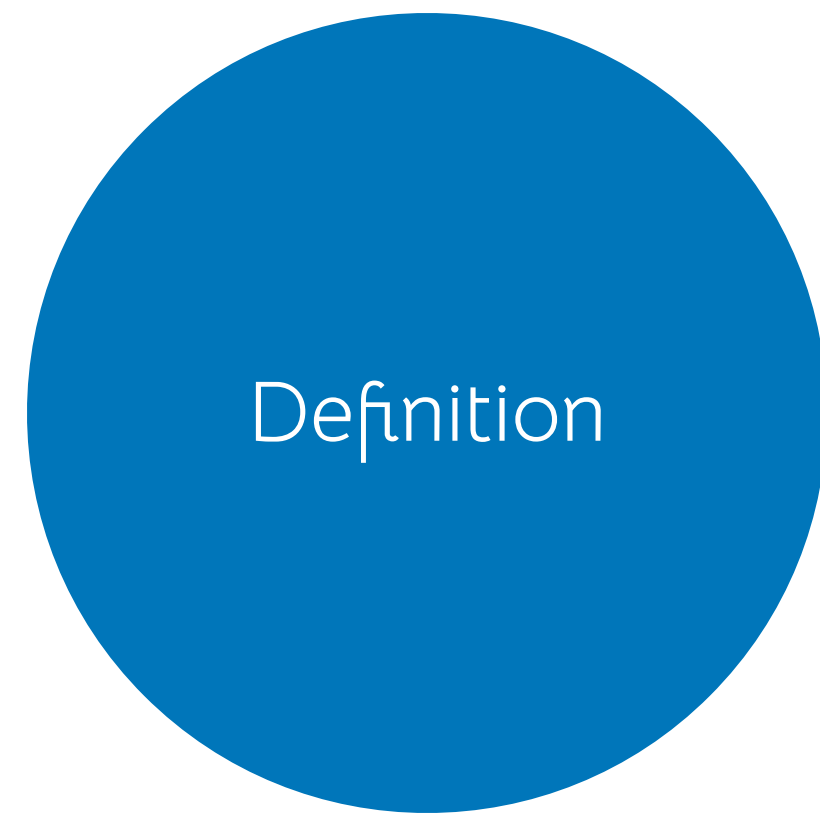
Digital

Artificial Intelligence

Information
Technology

Intelligence

What is Research?



- Research comes from the French word '*recherche*' which means "go about seeking"
- Research is used in all disciplines, one of them being technology
- Research uses **quantitative** and **qualitative** research methods to answer research questions related to **Technological products** - ergonomics, physiology, Human & Computer Interaction

What is changing ...

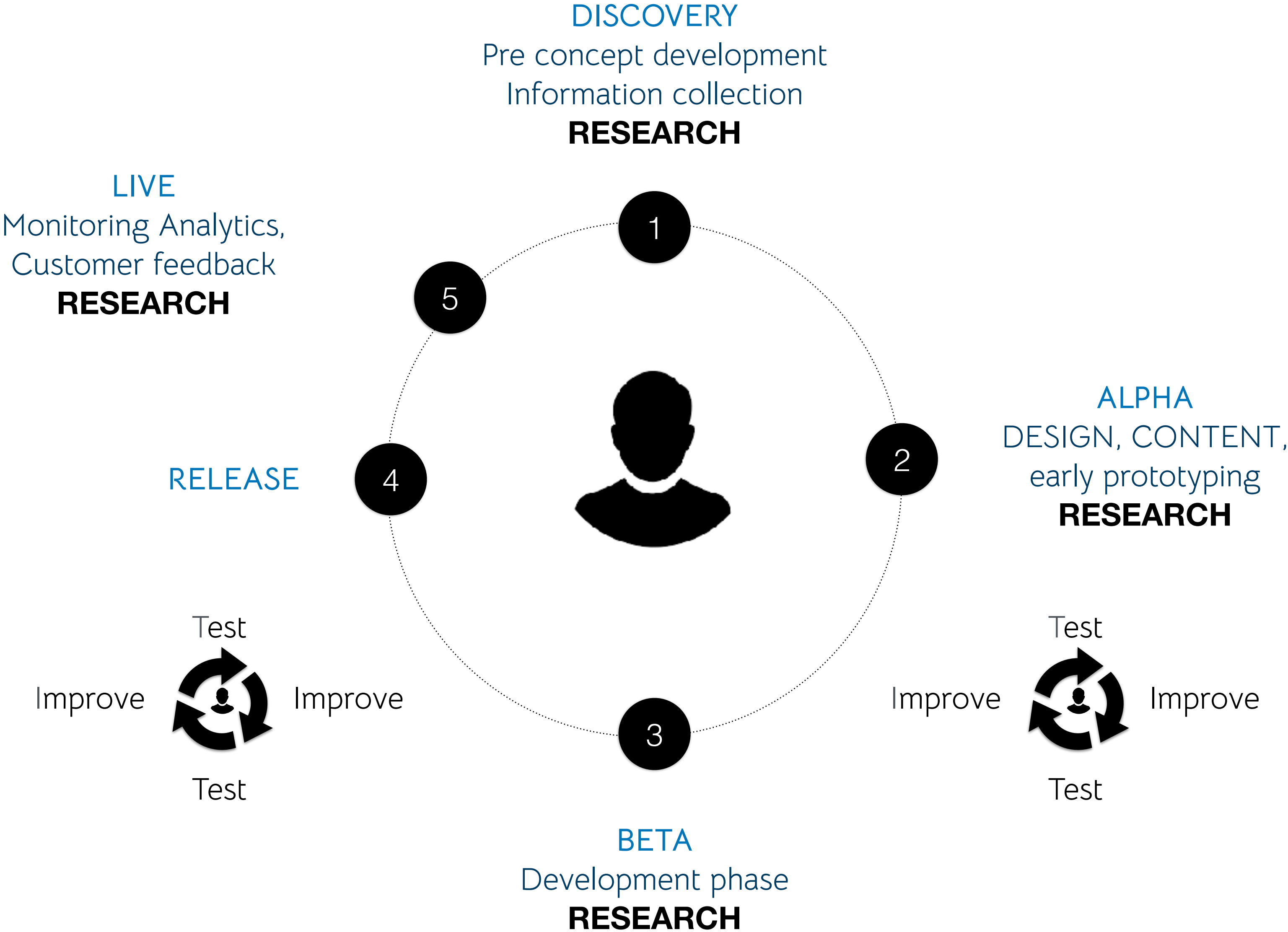
- **Democratisation** of the the use of technological tools (mobile, computers, tablets)
- **Digital products** are at the center of all businesses
- Replacing humans with machines - **automation** - **Artificial intelligence**
- Professionals need to use sophisticated tools to do their jobs



Research evolution - understanding Humans

- Understanding **human physical processes** -> automation (e.g automotive -> engineering)
- Understanding **human cognitive/mental processes** - Artificial Intelligence (e.g. automated call centres, automatic replies, automation for tradings)
- Understanding how **users interact** with the equipment (Human and computer Interaction)
- Understanding Human **Behaviour**, **perception** and **motivation** (user experience of digital products)

Integrating Research to the product development

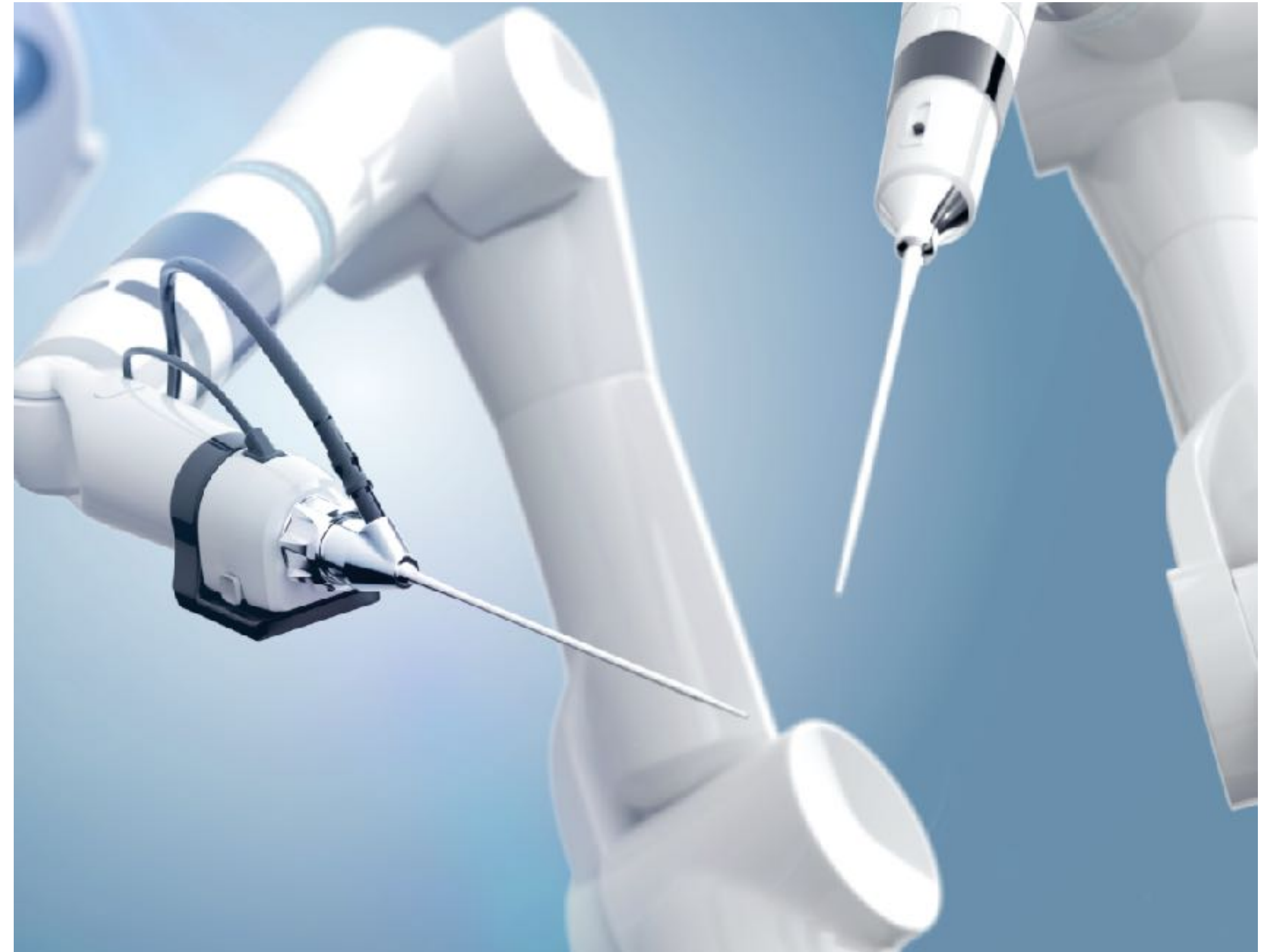


Technology & Research
in context

Impact on Jobs

Healthcare

- Technology is replacing surgeons; technology is more precise, reliable and reduces risk
- Surgeons now have to be expert in manipulating complex tools
- Research today: Helps to understand
 - How to perform a surgery
 - How surgeons will interact with the technology



Defence

- Equipments have improved dramatically over the years (remote command of drones)
- Satellites to provide imagery of the ground
- Soldiers must also adapt to the new technology and become experts to manipulate the devices
- Research today: helps to understand functionalities, as well as how soldiers interact with digital interfaces that allows them to command the drones



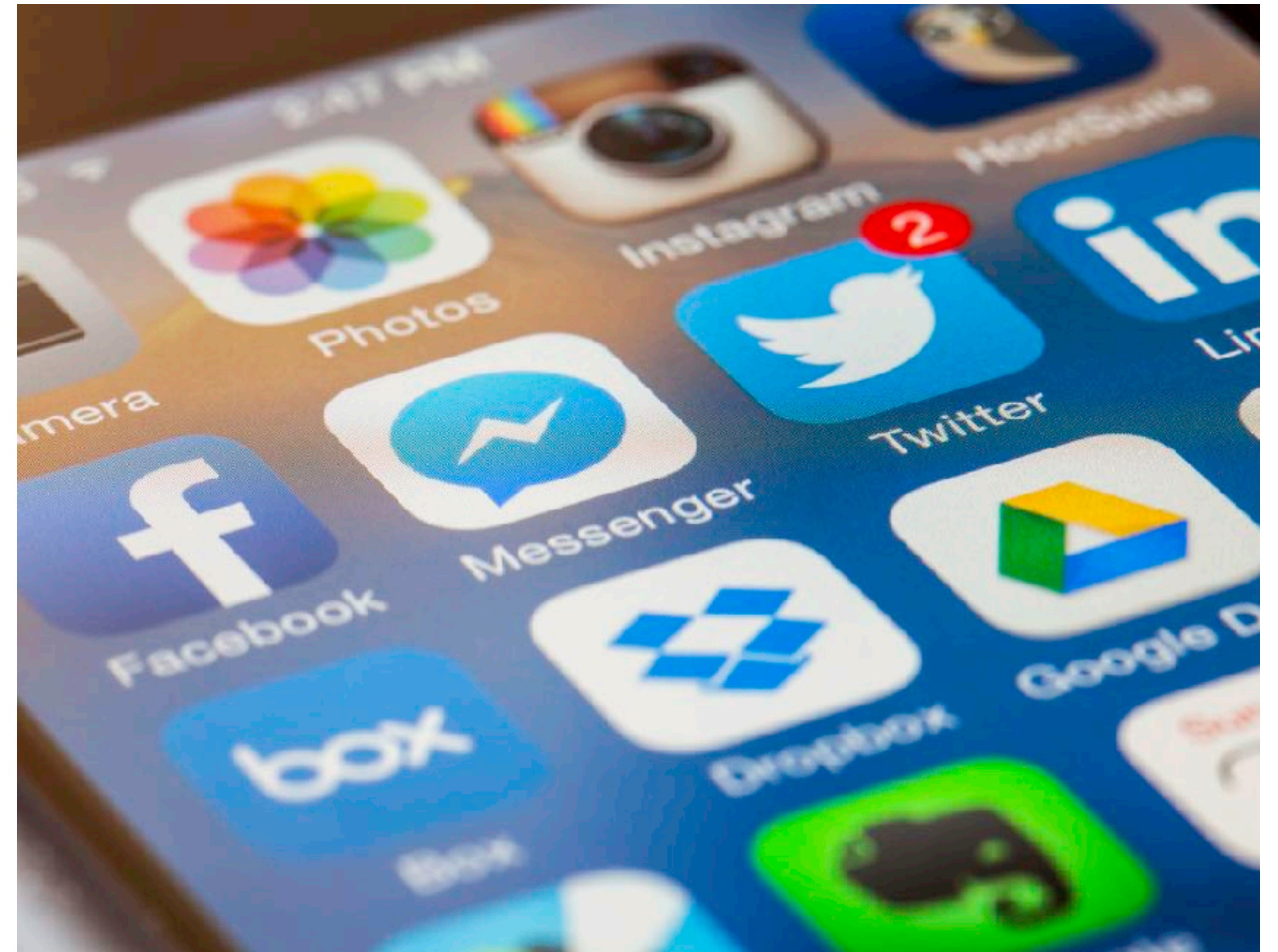
Finance

- Before, most trades were done over the phone
- Today, sophisticated financial platforms are used by Traders, analysts and Investment bankers to perform their daily jobs
- Research today: Helps to understand - how we can use machine learning and artificial intelligence to replace humans to limit human errors and to anticipate trends



Social Media

- People interact with their mobile devices
- They use social media, chat, timelines, video, images etc.
- Research helps understand how people interact with social media and how to make them embedded into their eco-system



e-Commerce

- Today, more and more business need an online presence
- Shops, from micro to large organisations have a website. B2C and B2B offer online transactions
- Research now provides a better understanding of user/customers needs as well as business needs to increase the transactions, as well as anticipate what Users will be buying next (e.g advert)



e-Government

- In order to make government services accessible to everyone and to reduce cost, more and more governments are moving their services digitally. e.g. GOV.UK
- Research now: is embed in the product development team, which undertakes projects to evaluate business and user needs, test the end to end service and make sure that the e-government platform is accessible to all citizens



Education

- Classroom tools have changed, computers; and tablets are used more often by professors and students
- Online learning is also developing very fast
- Research now: looks at how to best use technology to support learning.



Research now

Research now

- Understanding human processes
- Replacing humans with machine
- Improving the User experience (Engineering and digital)
- Research in Technology is pragmatic, to reduce cost, optimise processes and limit risks.
- We have to work much faster - Agile - to support the development team

Thank you !

Practical User Research - everything you need to know to integrate User Research to your product development.

Available on [Amazon](#)

and [apress.com](#)

If you have any questions please contact me on

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