

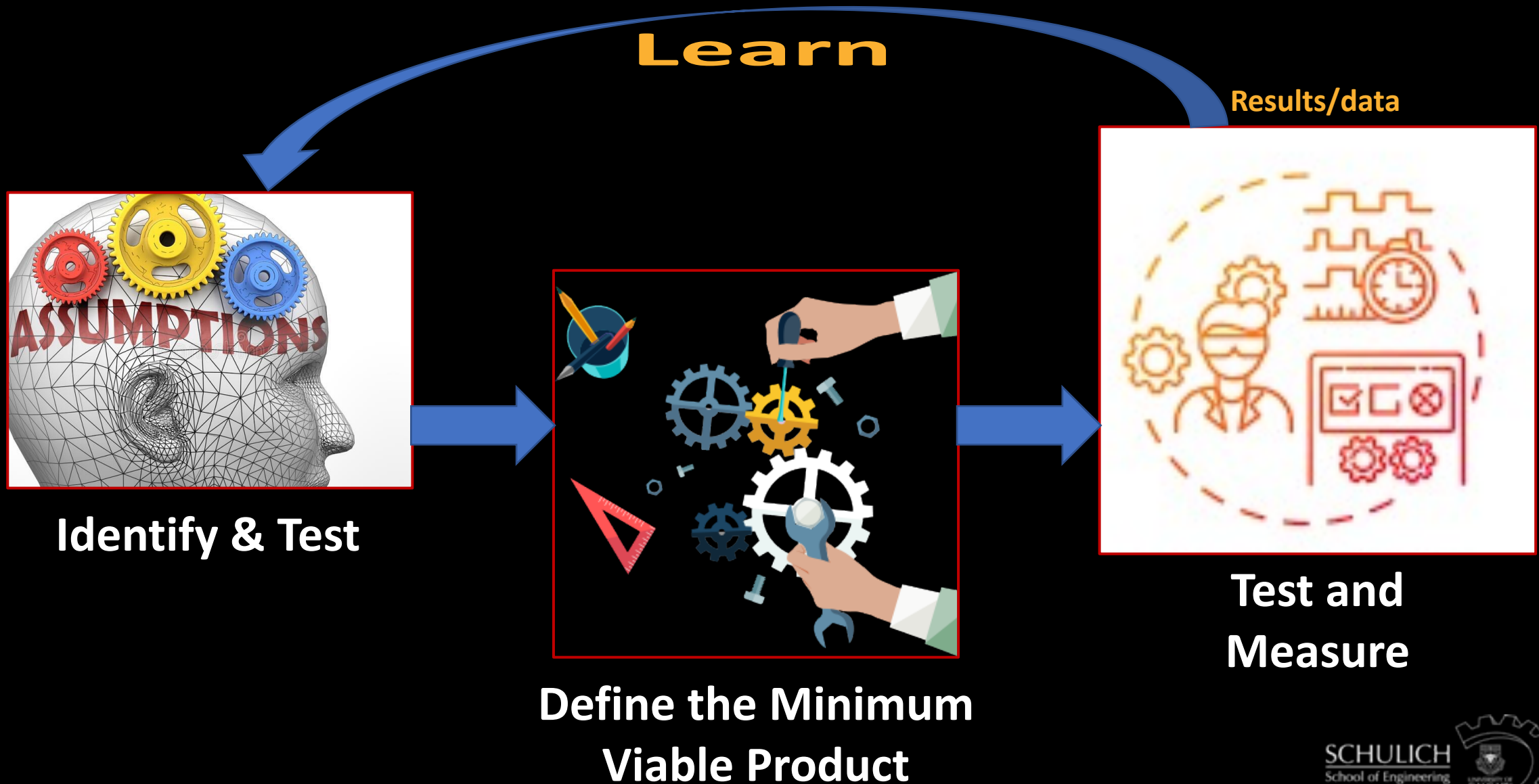
ENGG 683 – Product Design and Development

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Schulich School of Engineering

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How do you produce the product?



Segway Case Study

Assumptions

- Everyone will get one, great technology
- People don't want to walk
- People are willing to spare 5K to avoid walking
- More energy efficient
- There is infrastructure to support it
- It is safe with perfect balancing



In reality,

- No consideration to parking
- It is 80lbs very heavy to carry up stairs
- No Consideration to political, logistical, and regulatory issues
- Charging stations infrastructure
- No consideration to pedestrians
- No Consideration to weather

Product Design & Development

Minimum Viable Product (MVPs) – the minimum form of functional product for a solution so it can be tested.



How do MVPs look like?

- Product designs *sketches*, *wireframes* or *mockups*
- Demo Videos of the value proposition
- Landing pages

High Level Product specification

Define the **product**

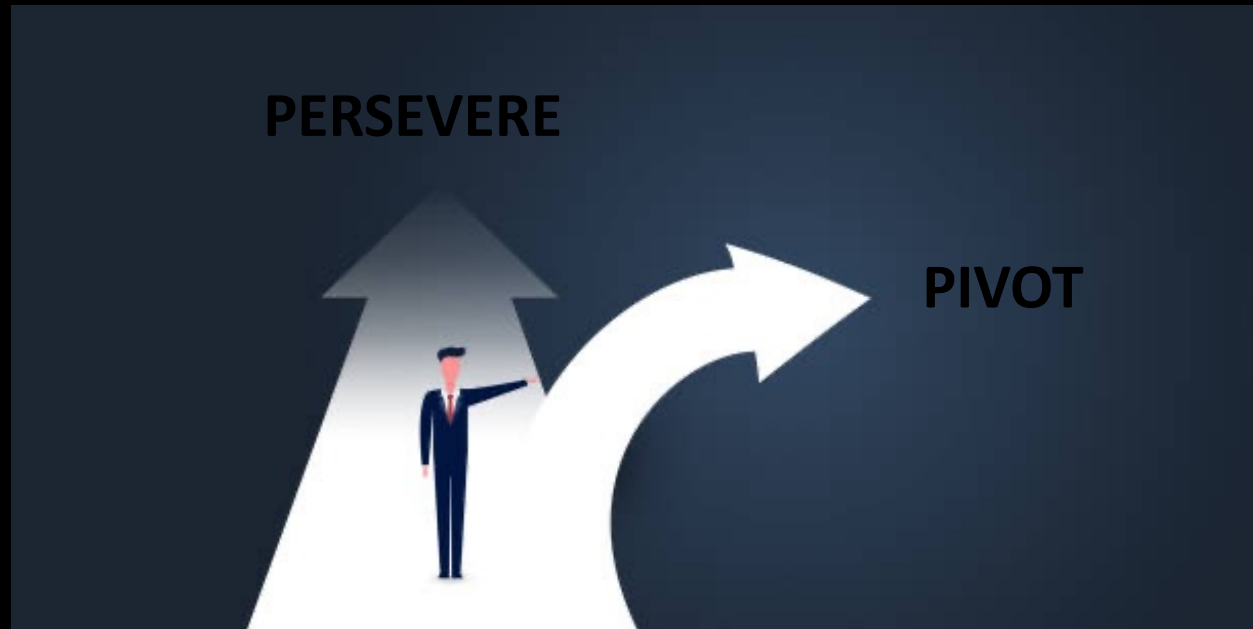
from the specific **end user** customer's perspective

describing its features

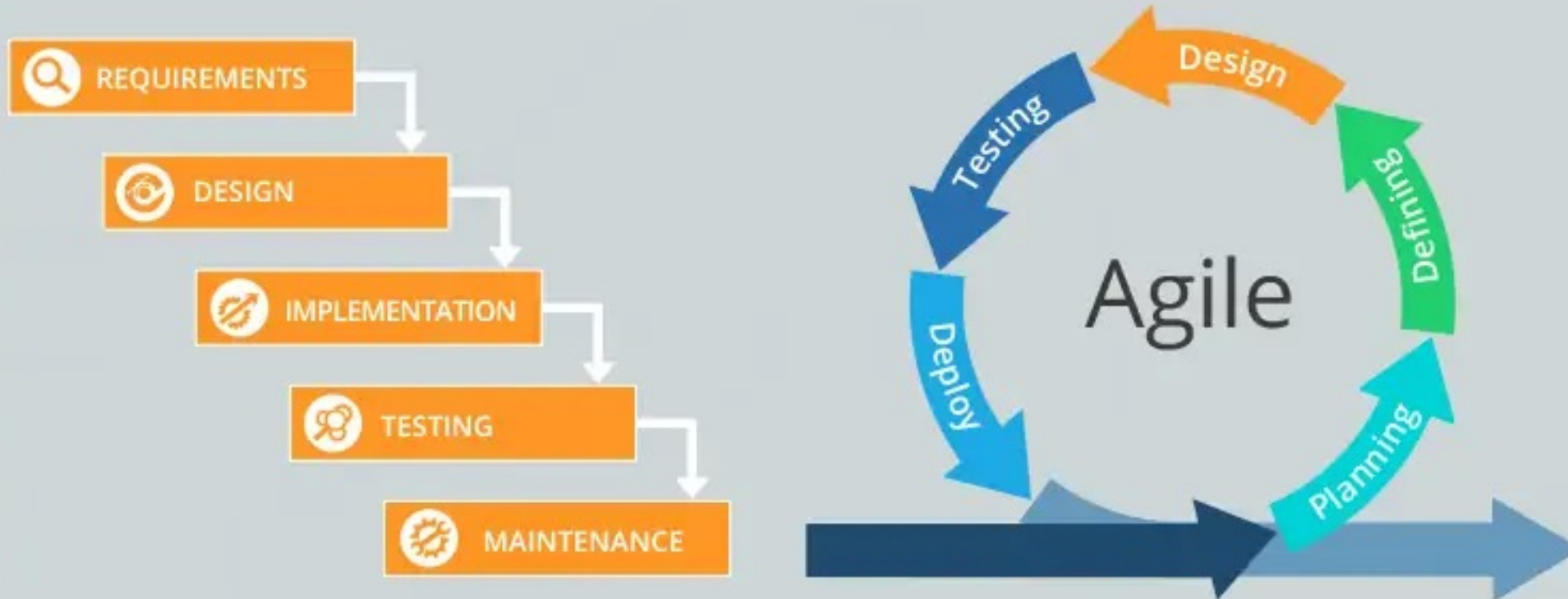
through a **visual** representation

Minimum Viable Product (MVP)

- Build something that works
- Gives at least one feature or functionality



Waterfall vs. Agile



*DIGITE – Mahesh Singh



Prototypes examples

- Landing pages
- Videos
- 3D printing
- Sketching
- Duct tape or *Lego*



ACTIVITY – Breakout rooms



How do you design and build your product?

1. Identify key assumptions
2. Test key assumptions
3. Build your product for your persona

THANKS!