



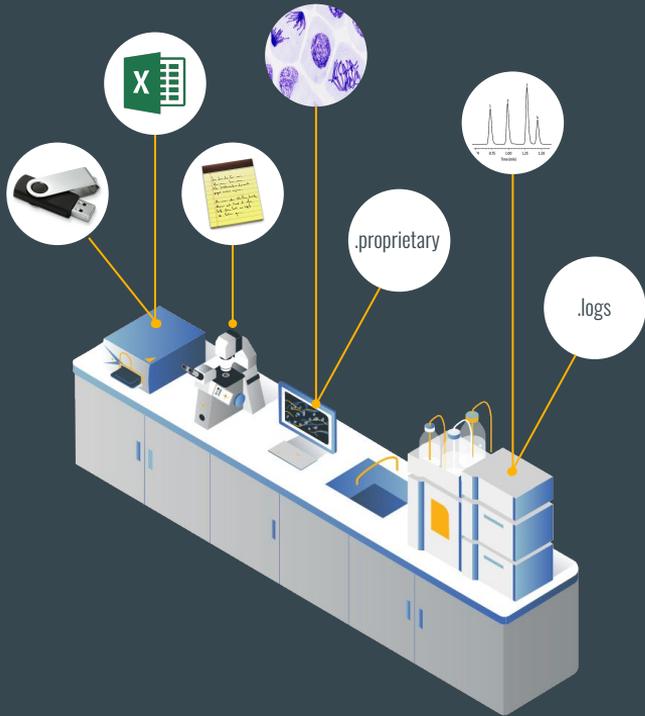
# Benefits of mobile robots and on-demand automation in R&D labs

...

MaximilianSchulz



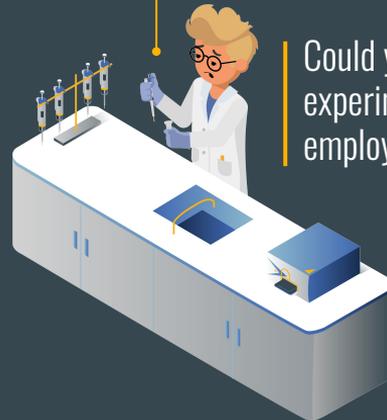
You need to manually gather information together, while keeping track of the context



Integrating your informatics systems requires a lot of custom work for every application



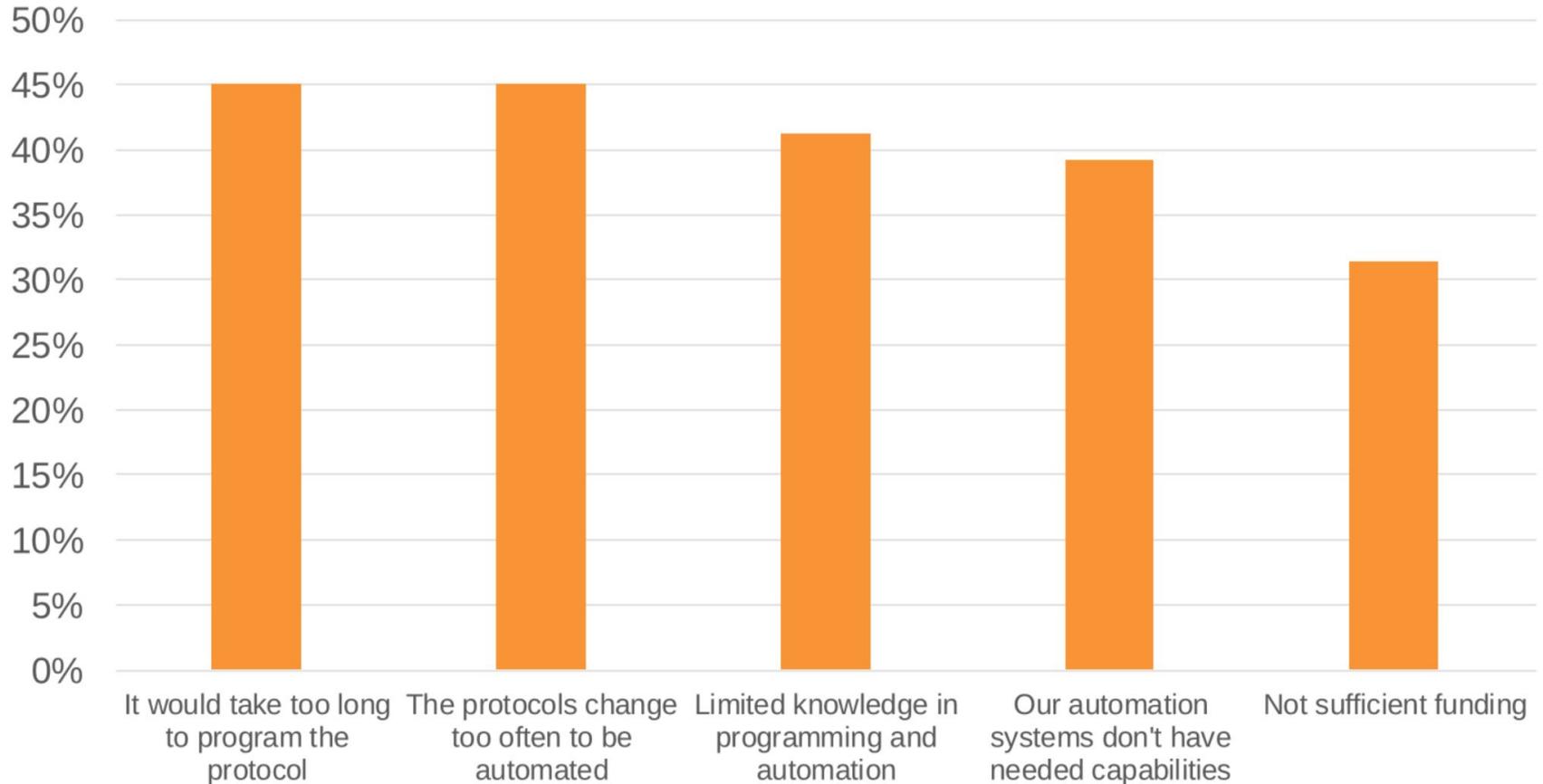
Repetitive lab work is demotivating and error prone



Could you reproduce your experiments if a key employee left?



# What are common reasons to perform a protocol manually instead of automatically?



# Big questions for lab automation

How could we:

- Make automated protocol design faster and easier?
- Change the automation system in hours instead of months?
- Build systems that are more versatile?
- Do all this while reducing costs?



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**On-demand automation**  
*can be repurposed to new tasks  
independently by the lab staff without  
significant time and cost*

We need  
on-demand  
automation!

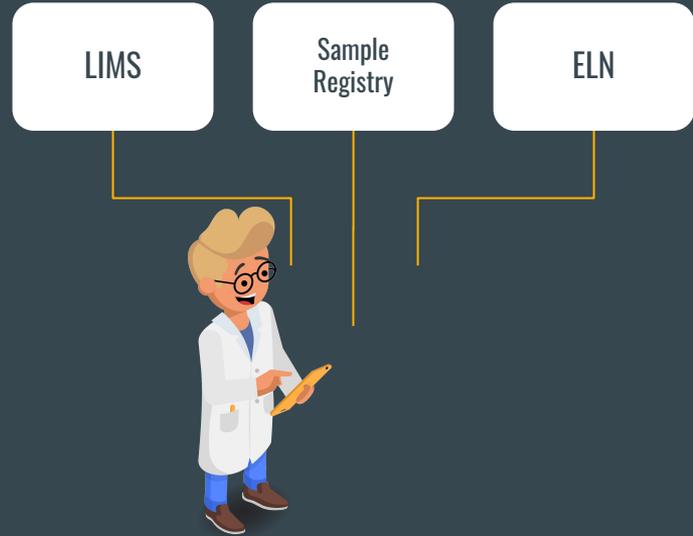


# Build your digital laboratory

Take the three steps of digital transformation

1

Digital workflows



# Build your digital laboratory

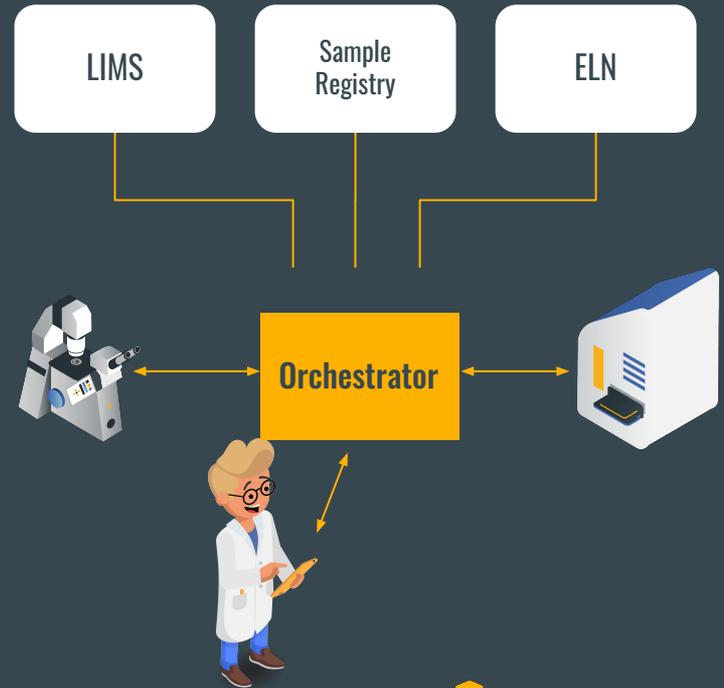
Take the three steps of digital transformation

1

Digital workflows

2

Instrument automation



# Build your digital laboratory

Take the three steps of digital transformation

1

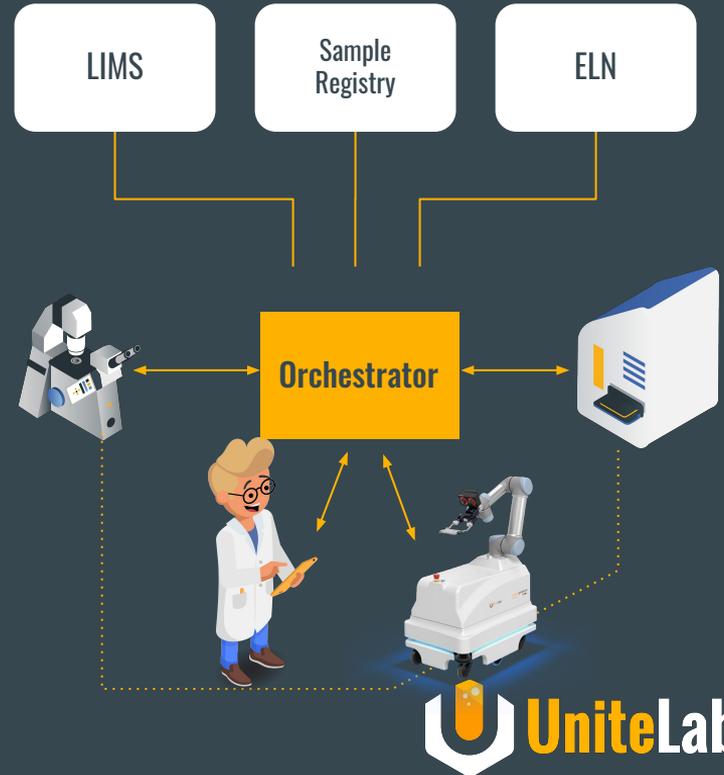
Digital workflows

2

Instrument automation

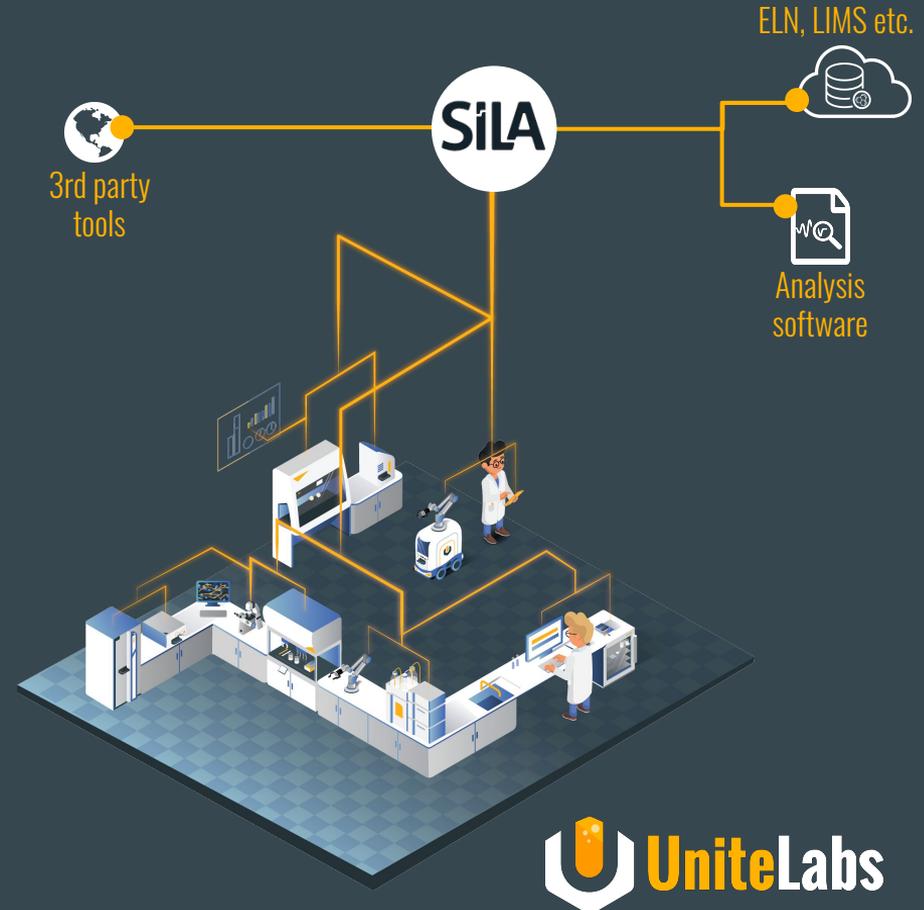
3

Robotic automation



# SiLA leads the way to digital infrastructure

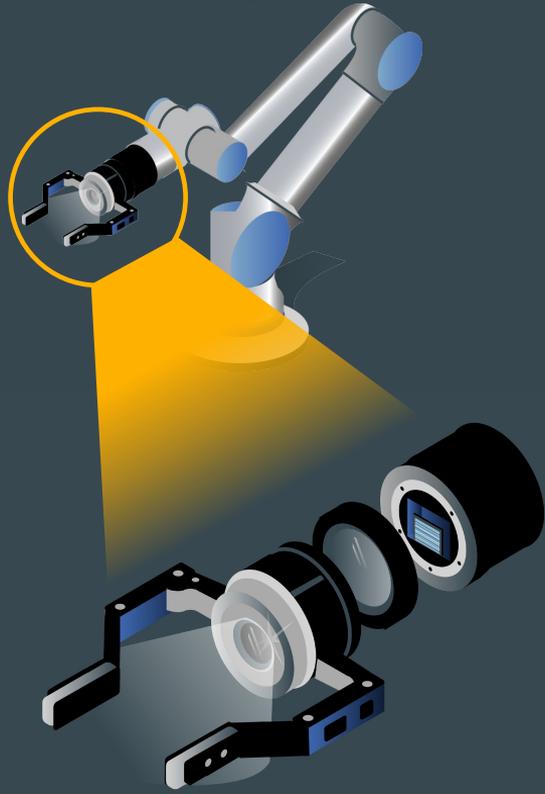
- ⚡ Forget compatibility issues and rapidly combine solutions across vendors
- ⚡ Use the same infrastructure for different solutions: dashboarding, orchestration, data capture, status alerts, log collection...
- ⚡ Build new solutions with your in-house expertise





# Automation solutions that evolve with your needs

Benchtop arm



Pushable cart



Self-driving robot





COMPUTER VISION

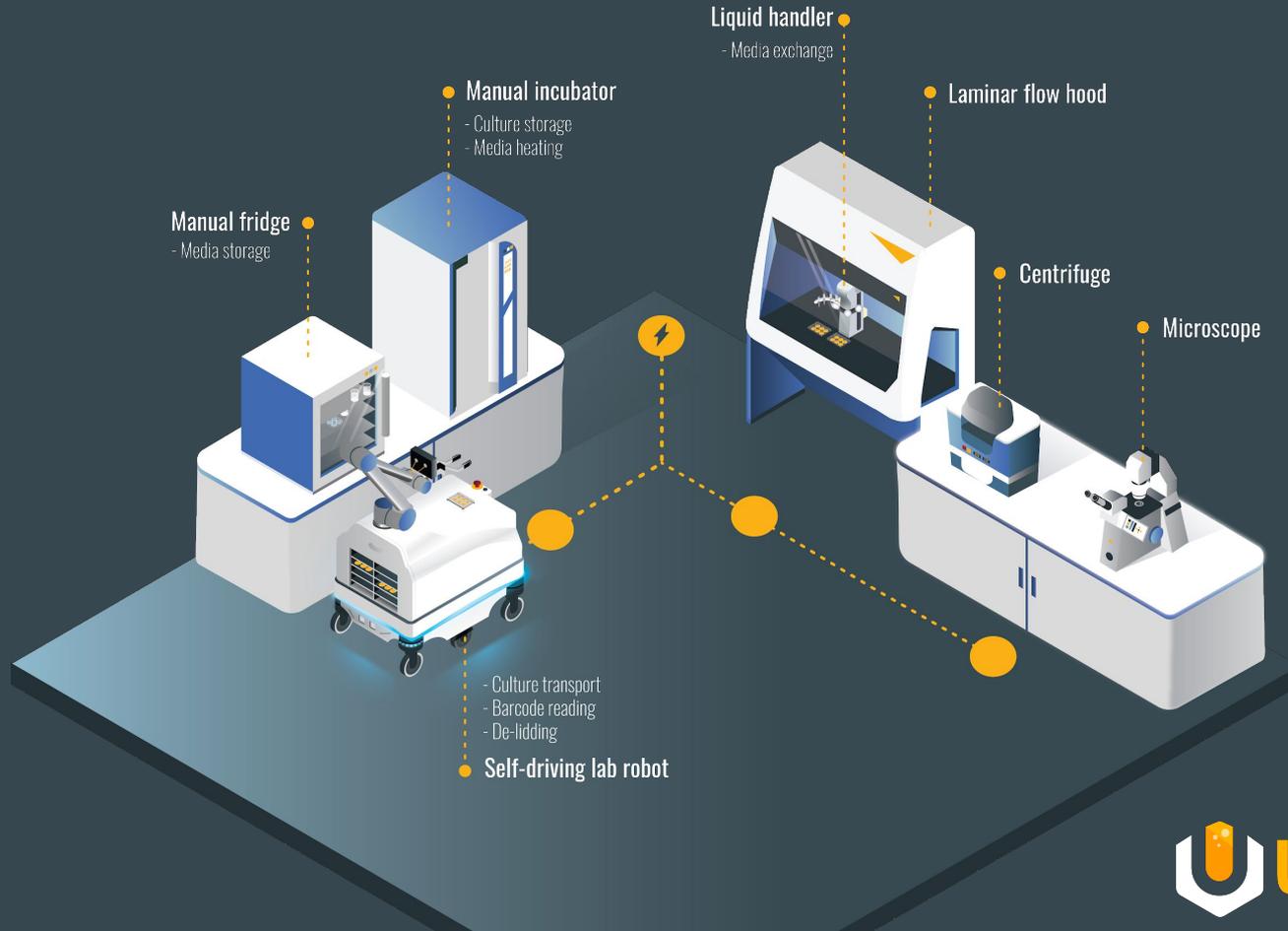
# Robotic lab assistants

Transport samples and operate instruments 24/7

- Autonomous navigation and instrument localisation
- Keep your lab layout as it is, the collaborative robot operates the same instruments
- It's a tool you can quickly deploy to another laboratory or a new workflow
- It's not the future, it's now!



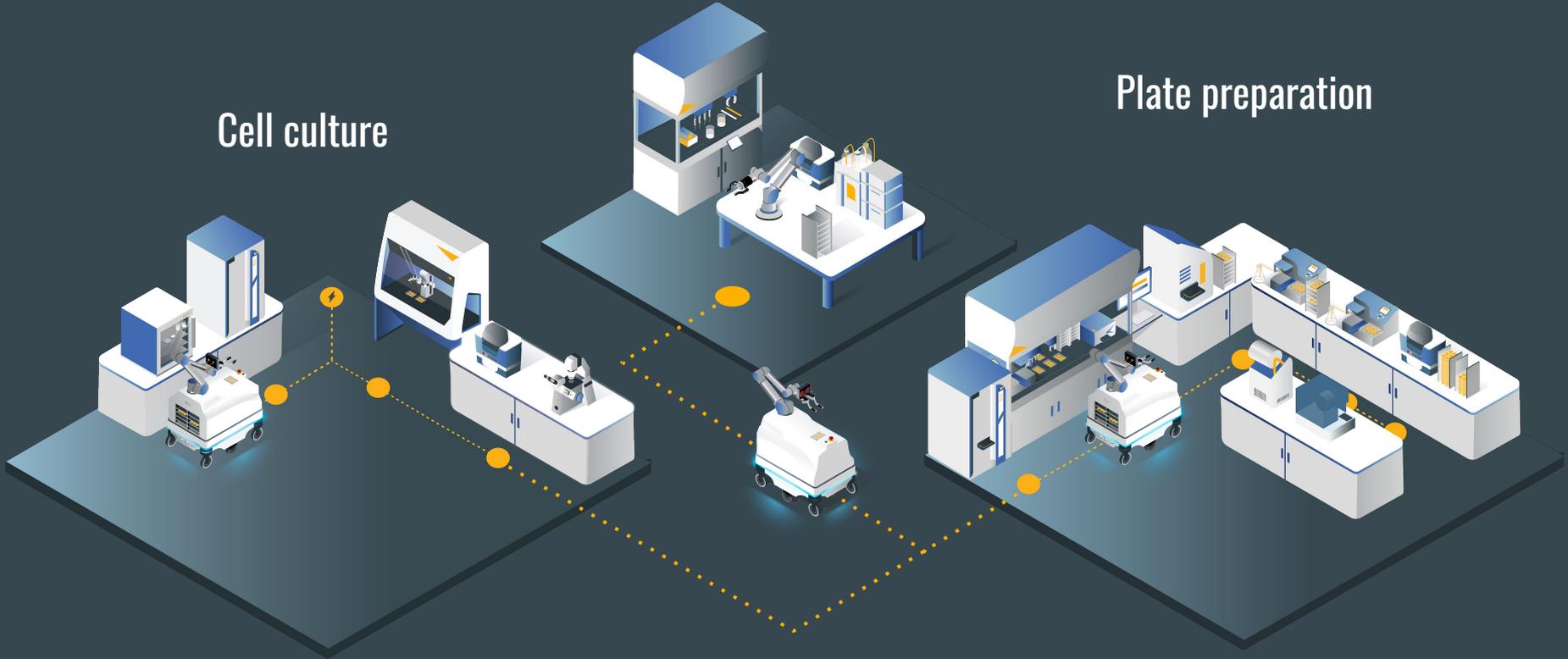
# Cell culture



Cell culture

Screening

Plate preparation



# On-demand automation

How could we:

- Make automated protocol design faster and easier?
  - Standardised connection allows you to integrate any instrument in minutes
  - Draw your workflows intuitively with UniteFlow software (ask for a demo!)
- Change the automation system in hours instead of months?
  - Flexible & intelligent robots adapt to your environment, not the other way around
  - Robotic lab assistant has infinite reach to instruments you already use
- Build systems that are more versatile?
  - With the flexible robots, the instruments set the limit, not the automation
- Reach all this while reducing costs?
  - Let's see ;-)





Thank you!

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