

R Validation: Getting Started

EU Connect 2023

Christian S. Christensen

Disclaimer



The opinions expressed in this presentation are those of the presenter and not necessarily Lundbeck.

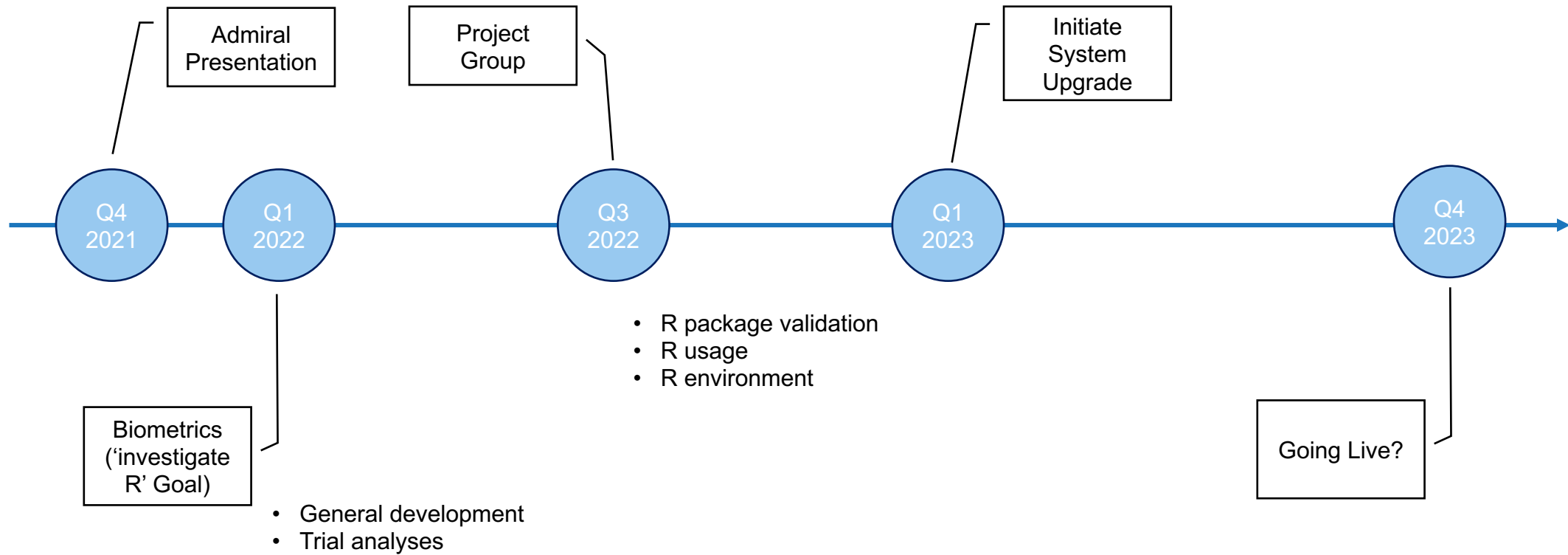
Goal



Share:

Resources
Experience
Discussions

Timelines



Project Group



Three people: Data Scientist, Statistician and Programmer.

Gathering information:

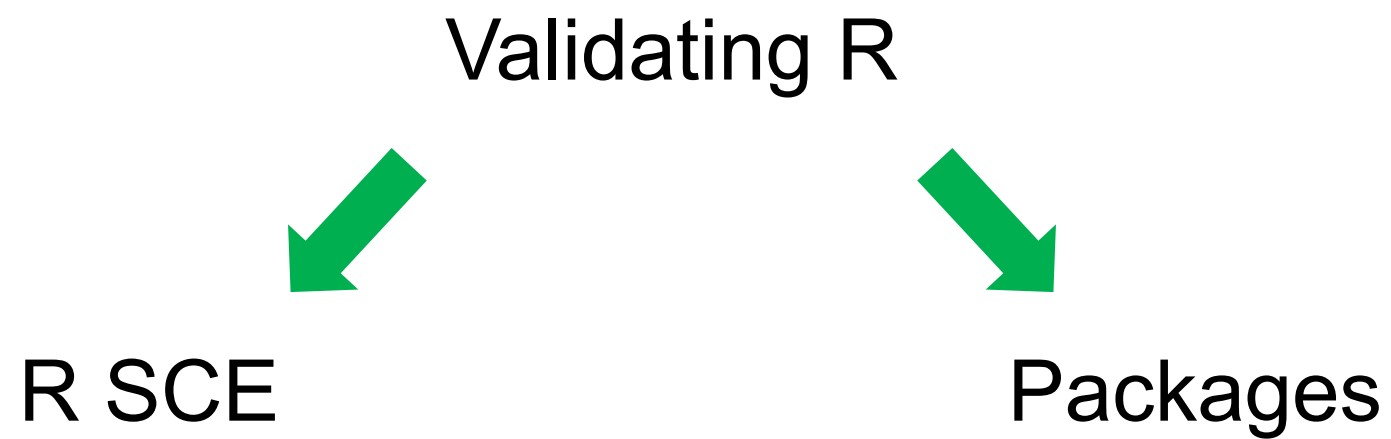
RConsortium Webinars ([YouTube*](#))

R Validation Hub ([White paper](#))

Phuse Working Group: [R Package Validation Framework](#)

[Trancelerate Modernization of Statistical Analytics](#)

*Playlists: "R Adoption Series", "Using R in a GxP Environment" and "R Validation Hub".



Computing Environment



Initial conversation with stakeholders

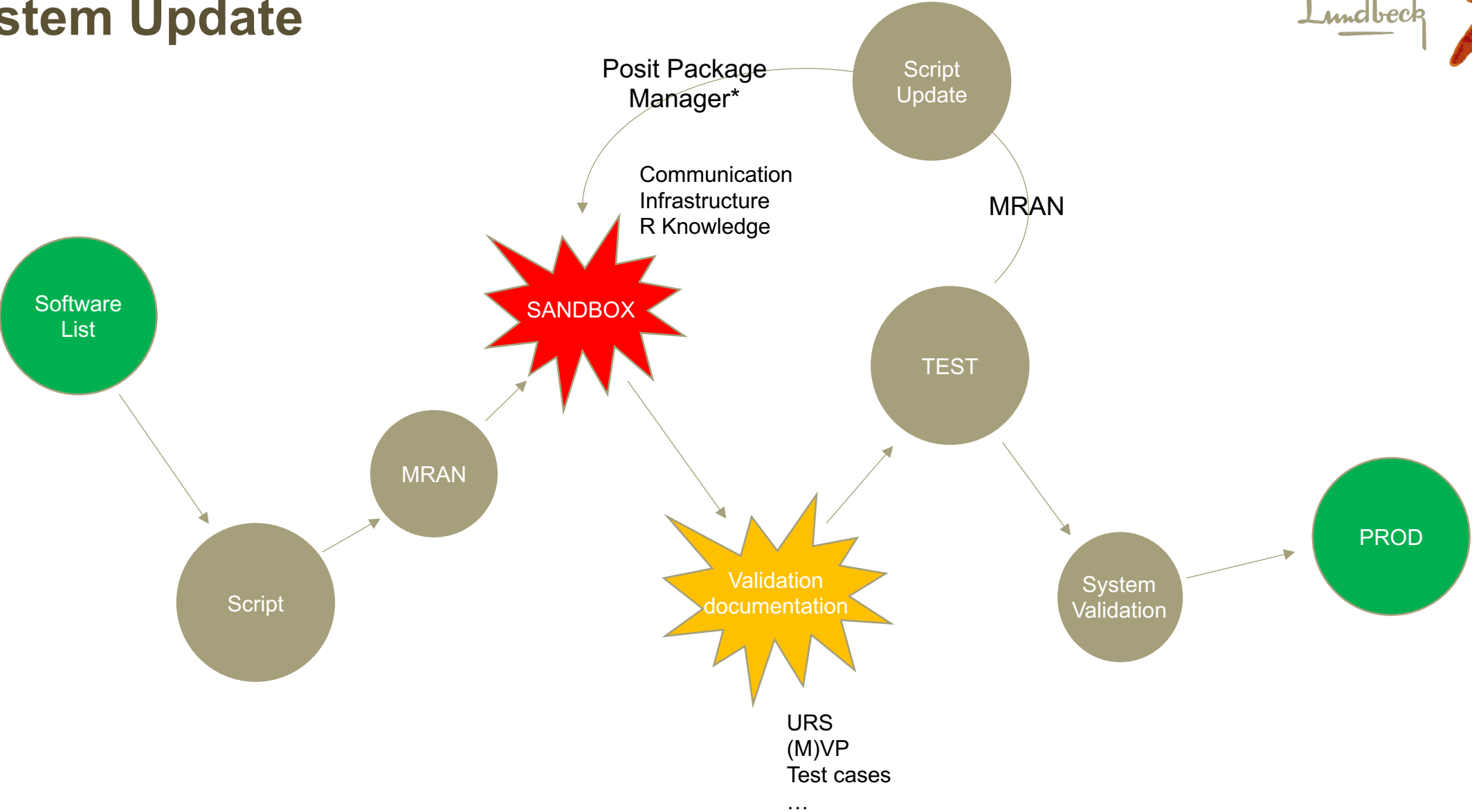
Cloud Setup w. Posit Workbench

or

Existing CDR w. R server

Decision: GxP validation and timelines.

System Update



MRAN: Microsoft R Application Network – snapshots of CRAN.
Posit Package Manager: <https://packagemanager.posit.co/>. *Note: We observed some discrepancies in package versions compared to MRAN and prior CRAN installation.

Package Configuration

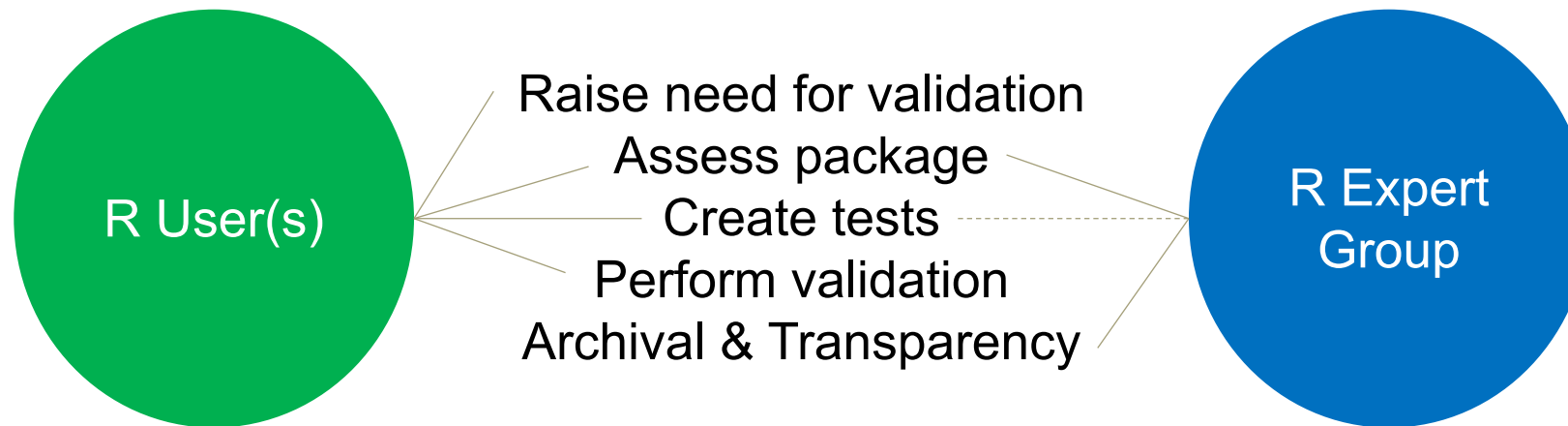


Legacy – not validated.

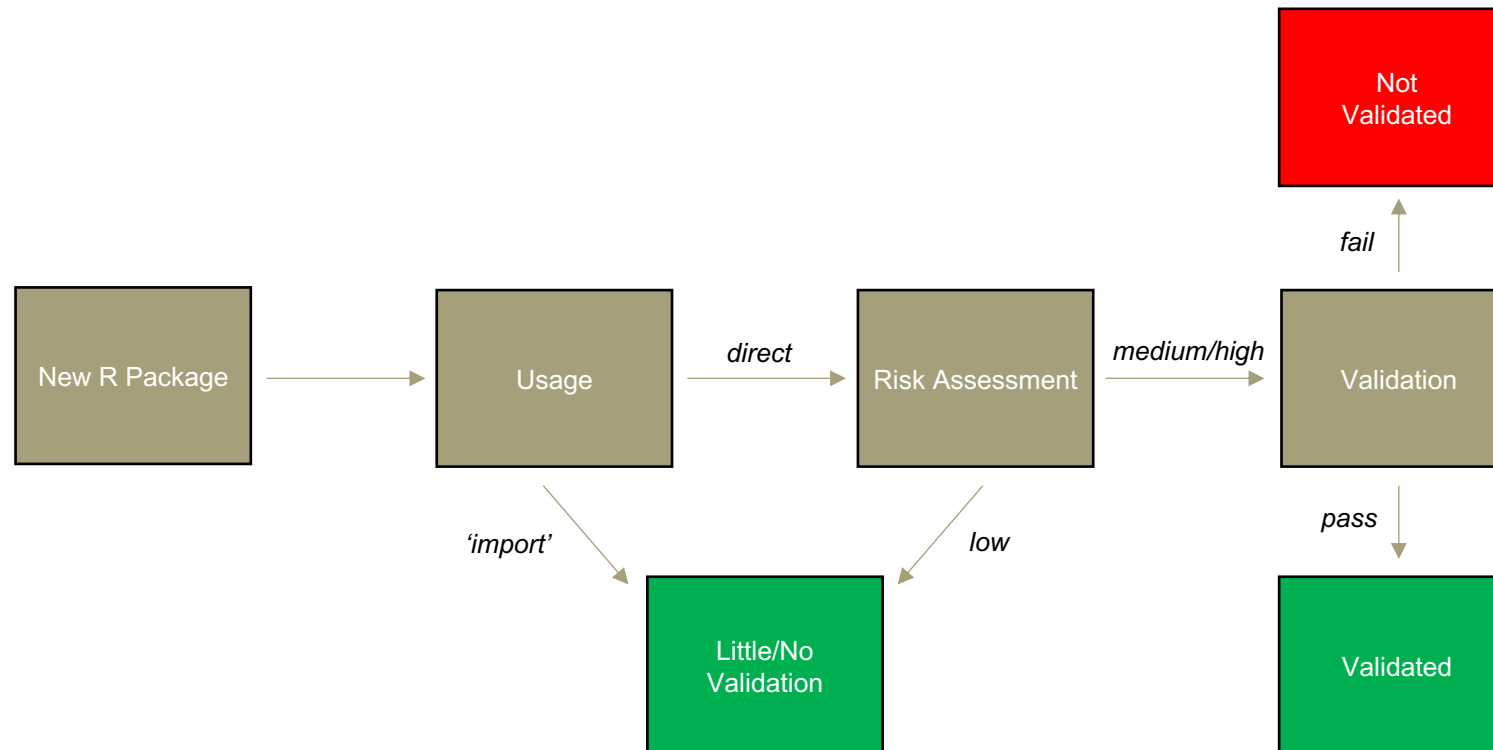
Update due to trial **need** and user *preferences*.

Going wide with fixed configuration, scripted installation.
(validate subset)

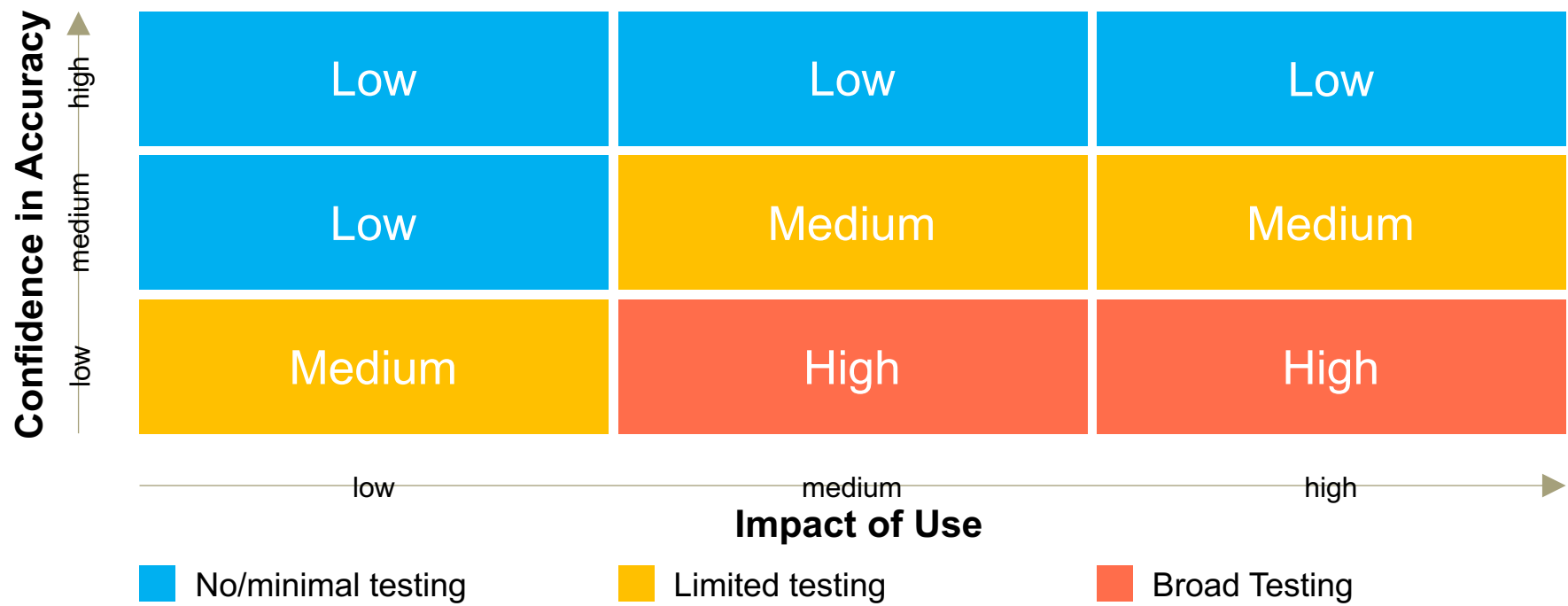
Processes



Validation Flow



Risk Assessment



Grid adapted from [Trancelerate Modernization of Statistical Analytics/](#)
Useful in this context: The riskmetric package – see [CRAN - Package riskmetric \(r-project.org\)](#) and [R Validation Hub {riskmetric} videos](#)

Considerations



Full vs. partial validation?

Effort, transparency

Rerunning a validation

Re-assessment, unit tests

What does agreement look like?

Seeds, algorithms, infrastructure

Future



Early days still but what may be coming is:

- Training: R and System
- Experience with the setup
- R user engagement
- Local snapshot?
- Lundbeck Cloud for Scientific Computing

Questions?



Contact:

Christian S. Christensen

CRSI@lundbeck.com