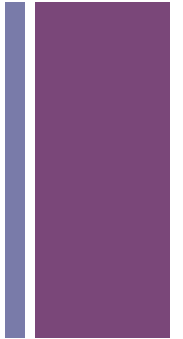




Write Standard Programs
your People will Use and Love!

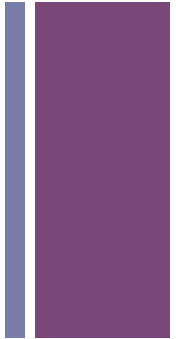
Jean-Marc Ferran
Consultant & Owner, Qualiance

+ Agenda



- **Stakeholder** Analysis
- Organisation Set-up **Case Studies**
- Implementation **Strategies**

+ McDonalds



- A Big Mac tastes the same where ever in the World...



...Standardisation?

+

QA

Threshold Analysis

Externals

Management

Clinical Projects

Programmers,
Statisticians, Medical
Writers

Requirements

Program

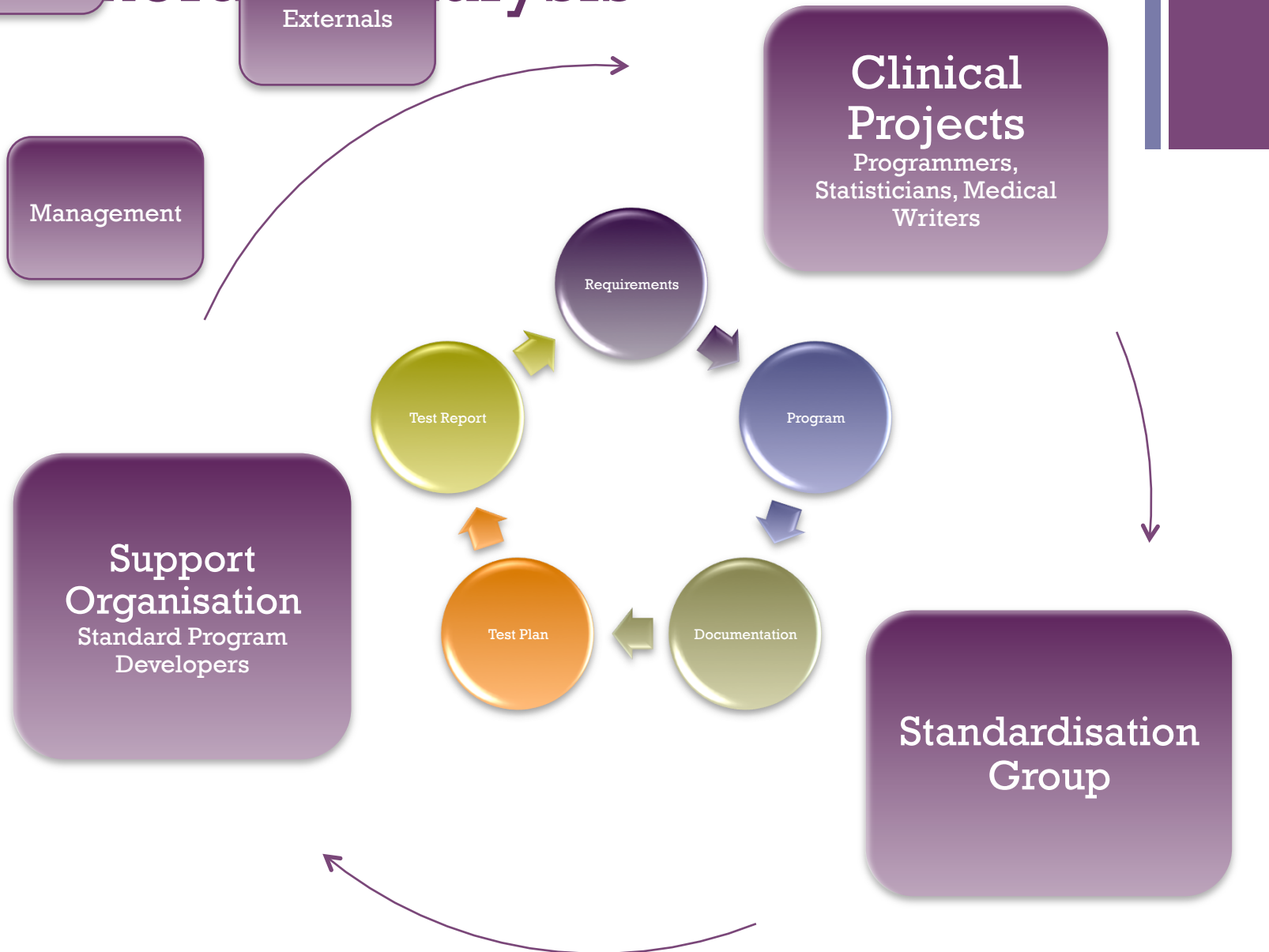
Test Report

Test Plan

Documentation

Support
Organisation
Standard Program
Developers

Standardisation
Group





Organisation Set-up – Case study 1

One department doing it all

- **One department developing all standard programs for the rest of the organisation**

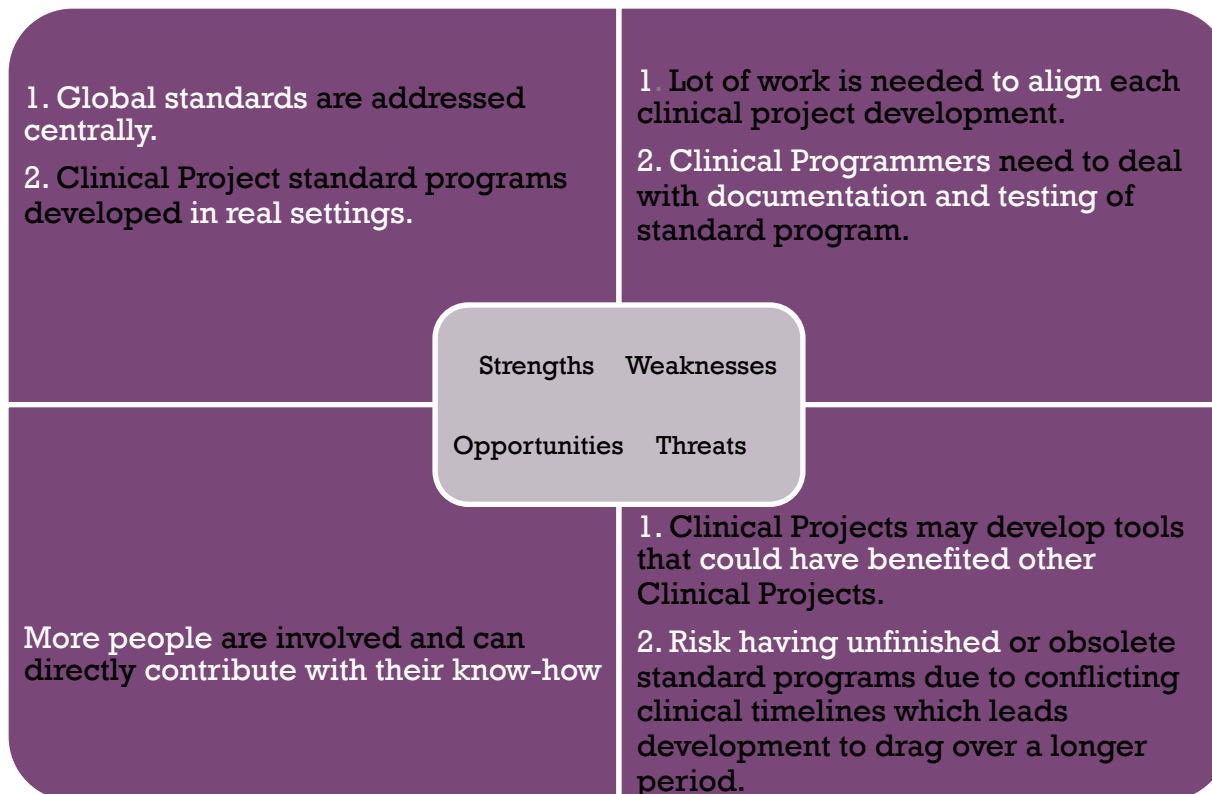




Organisation Set-up – Case study 2

Development shared between Support Department and Clinical Projects

- **One department responsible for the corporate level and processes and each Clinical Project develops their own tools in addition**

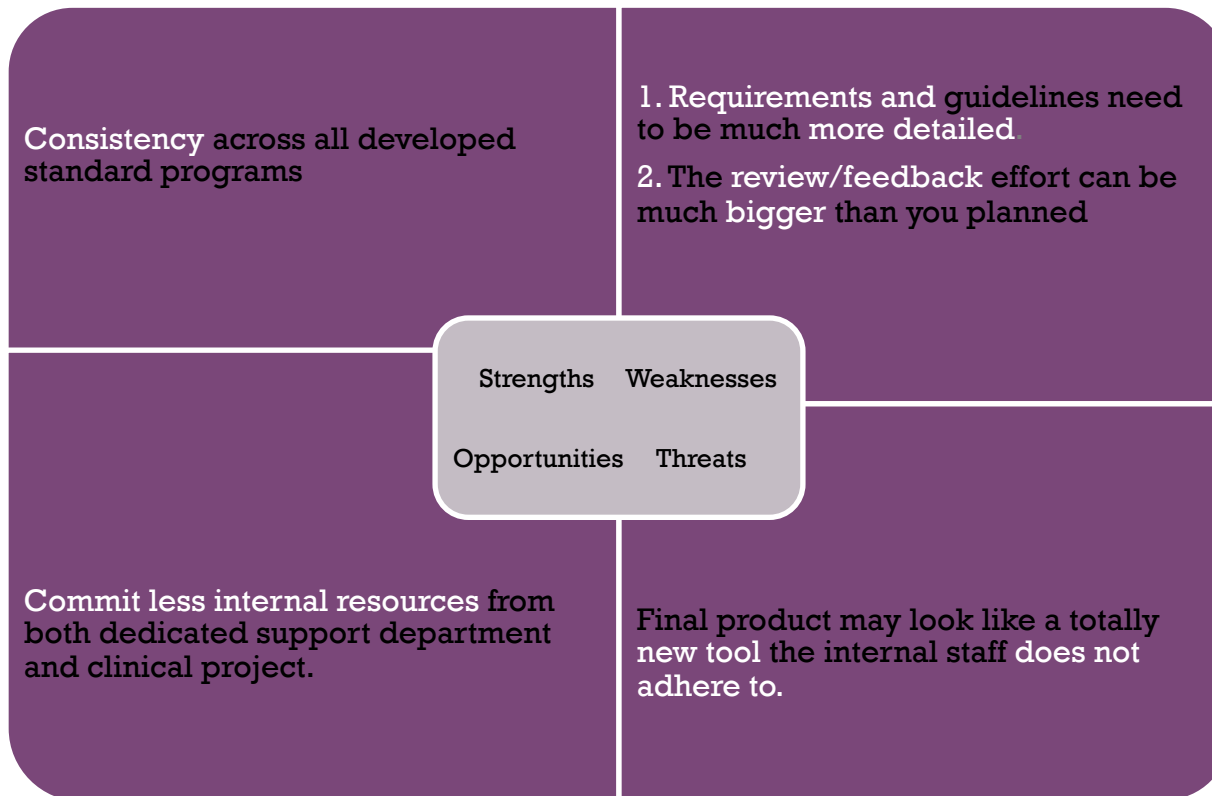




Organisation Set-up – Case study 3

Requirements in-house, Development outsourced

- **Requirements written and reviewed in-house and development outsourced, final product delivered with review rounds in between.**

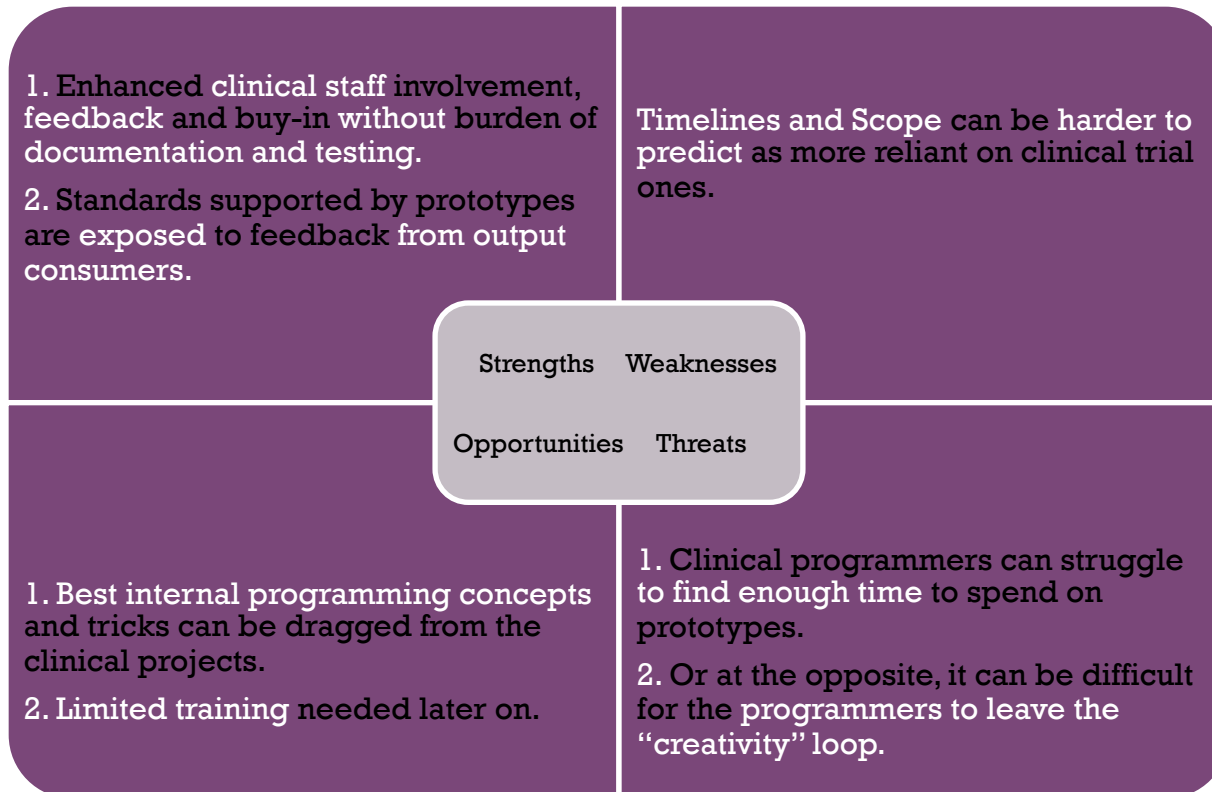




Organisation Set-up – Case study 4

Support department provides prototypes to clinical projects

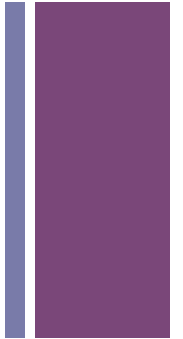
- **One department doing it in collaboration with representatives from the different Clinical Projects where prototypes are being developed.**





Implementation Strategies

Sequential vs. Iterative



■ Sequential

- Easy to outsource
- Easy to estimate timelines
- **Relies on strong programming guidelines and gold-reference standard programs**
- **Relies on detailed requirements**
- **Relies on up-to-date test data**
- Risk to build a tool that end-users do not adhere to

■ Iterative

- Small wins early!
- **Provides feedback from output consumers**
- Gives opportunity to clinical programmers to shape the program and add their touch
- **Requirements analysis in real settings by users and consumers at low cost of change**
- Better usability and standards adherence
- Easier to learn when released
- However, it can be difficult to leave the creativity loop
- **Someone must have strong mandate to get programs into production**
- Timelines and scope are harder to control

+ Google

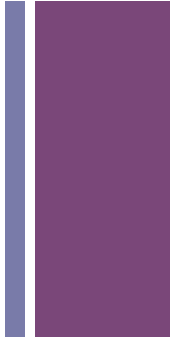
- Gmail or Google+ were both first made available to all Google employees, then via invitation...



...Prototyping?

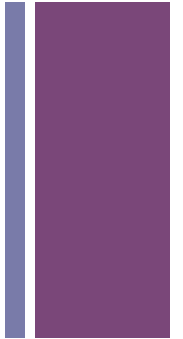


Conclusion



- Allow some **prototyping in real settings** if feasible
- **Exchange** of people **between Clinical Projects and Support Organization** on a regular basis
- People with **strong mandate** to get programs **into production**
- **Update** your set of **test data** regularly
- If you **outsource** standard programming, do it **progressively!** (e.g. test/documentation first on in-house standard programs)

+ Thanks!



Jean-Marc Ferran

Consultant & Owner, Qualiance ApS

JMF@qualiance.dk