



Agile Design Thinking Approach in Project Management for Healthcare

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Aim

To develop an agile design thinking approach in project management that adapts to the dynamic nature of public healthcare and deliver impactful products for our patients and healthcare workers.

Motivation

- Myriad of patient ailments present a high degree of dynamism for healthcare workers to find the best solution.
- Need to adapt to frequent changes[1] to cater to our patients' needs.
- Recent COVID-19 pandemic cements the need for agility in solving healthcare problems.

Methodology

1. Design Thinking

Design concepts were conceived based on user personas[2] of healthcare professionals. Functionality and design were refined continuously based on iterative feedback till conclusion.

2. Agile Development

Regular stand-up meetings were conducted for the development team to share progress and impediments. Product and Sprint backlogs were used to track work progress. Sprint goals were well-defined to deliver increments towards the product.

3. Collaboration

Regular Sprint meetings were conducted, either physical or virtual, to engage project stakeholders to understand the concepts and gather feedback on the deliverables.

4. Open Communication

Chatgroups were created for quick and open non-confidential communication in the project and development teams.

5. Seamless Knowledge Exchange

Use of collaborative platforms, such as Miro, Dropbox and GitHub, to facilitate faster non-confidential knowledge exchange.



Figure 1: Principles of the Agile Manifesto
Source: <https://www.scrumalliance.org/agile-organizations/manifesto>

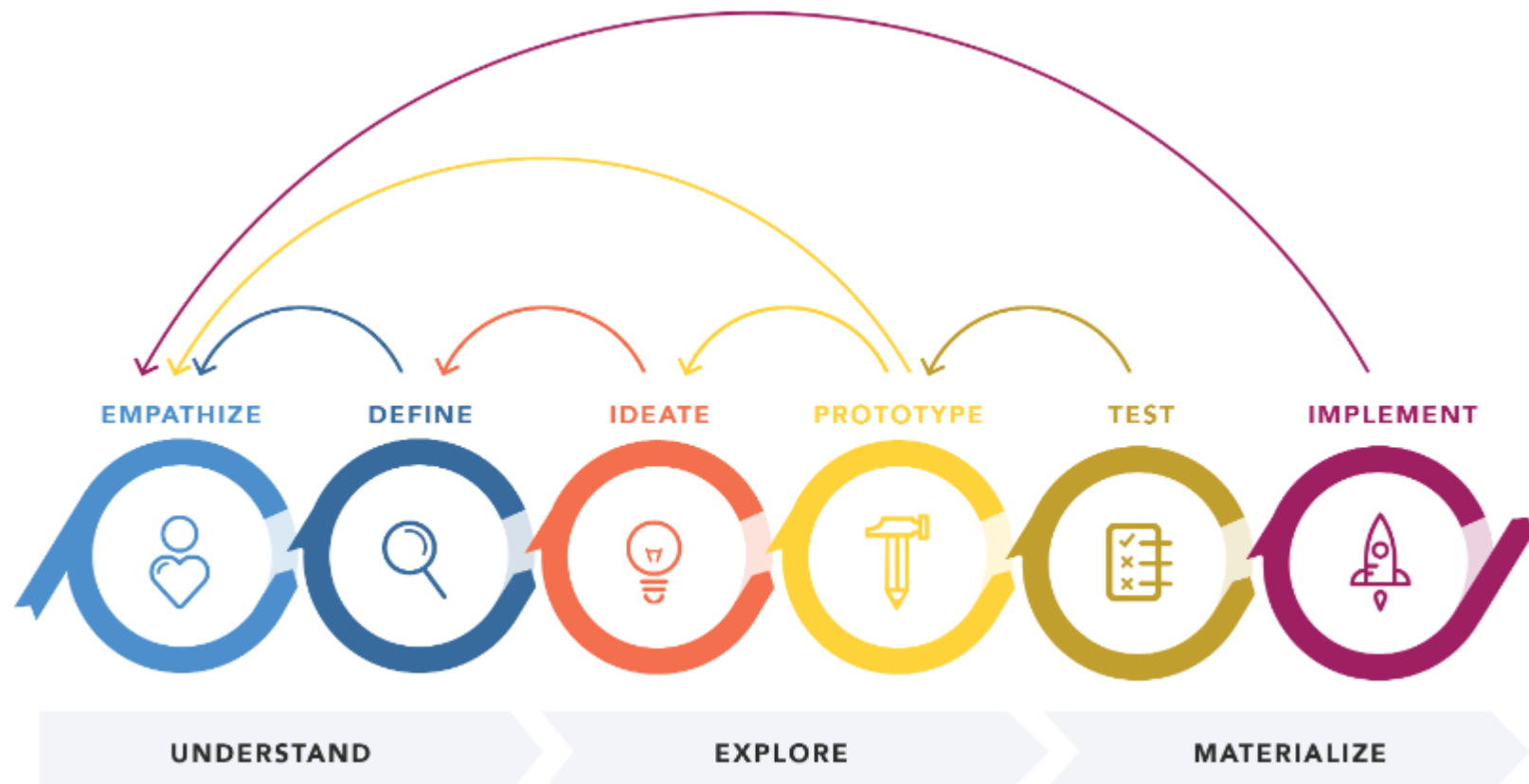


Figure 2: Design Thinking Process
Source: <https://www.nngroup.com/articles/design-thinking/>

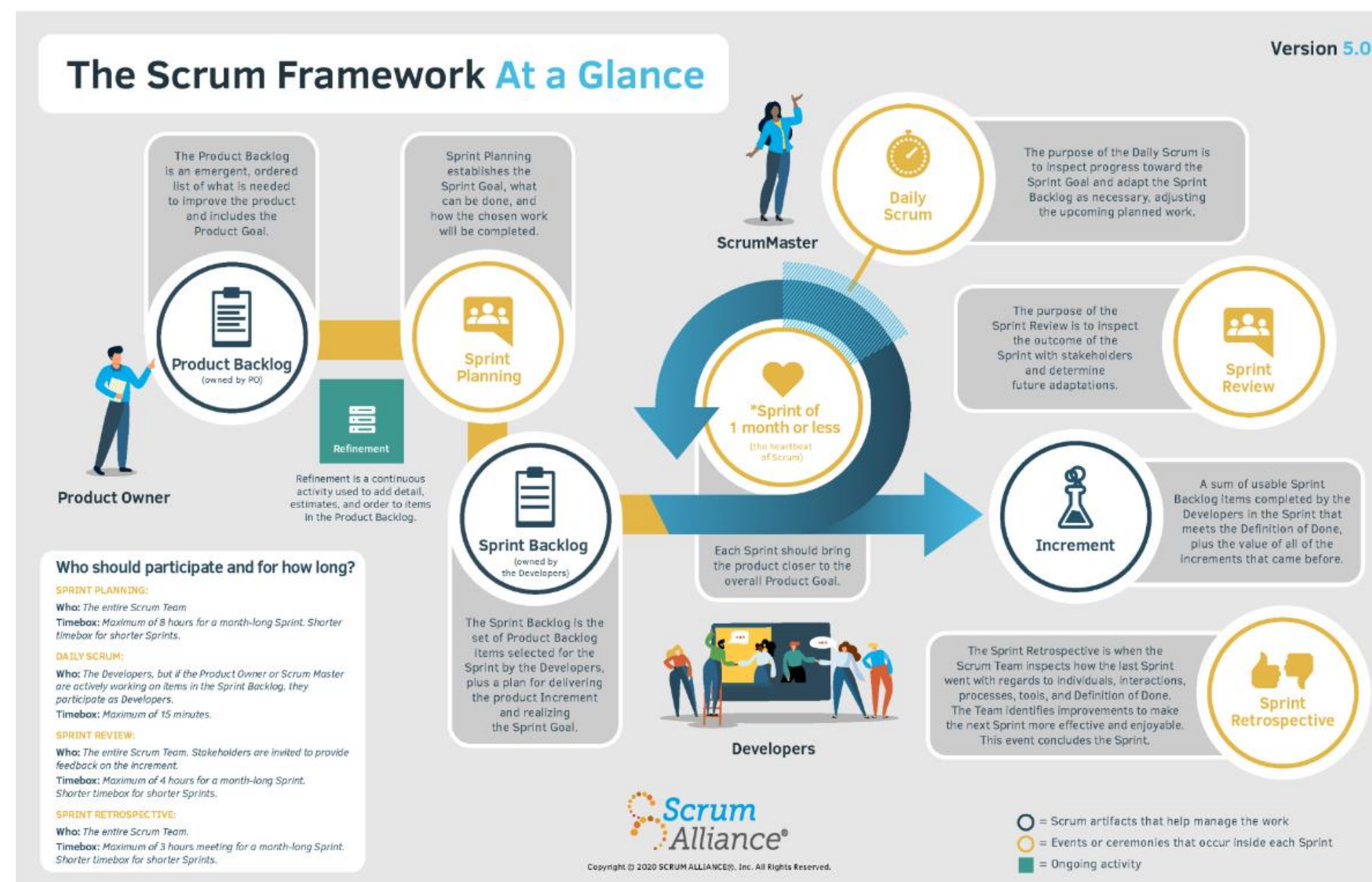


Figure 3: Scrum Framework
Source: <https://www.scrumalliance.org/about-scrum>

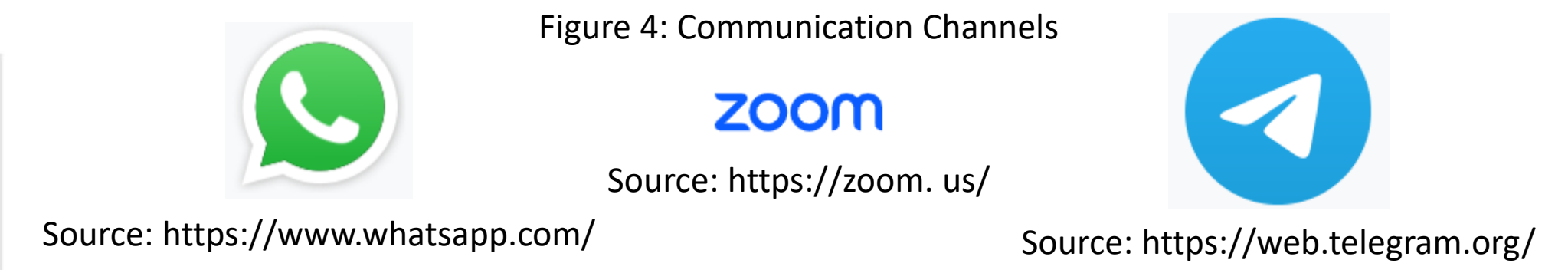


Figure 4: Communication Channels

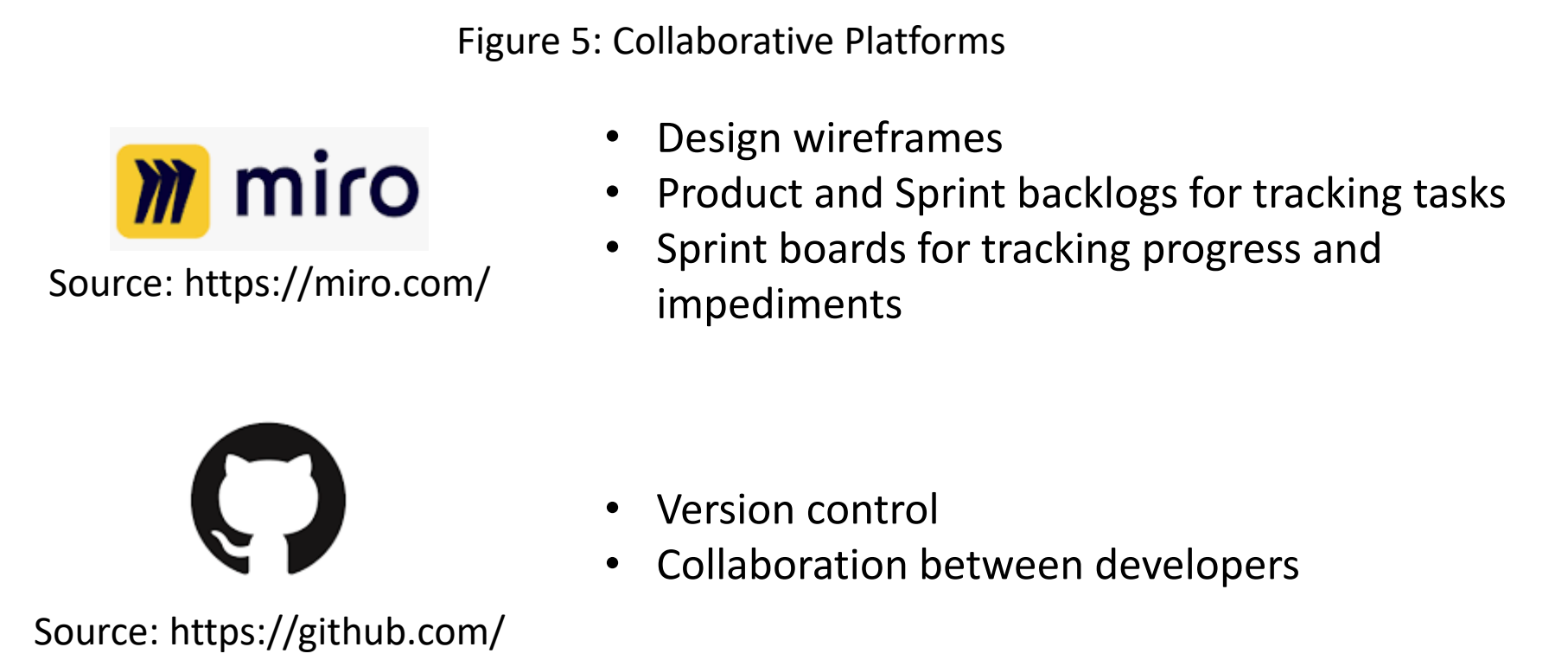
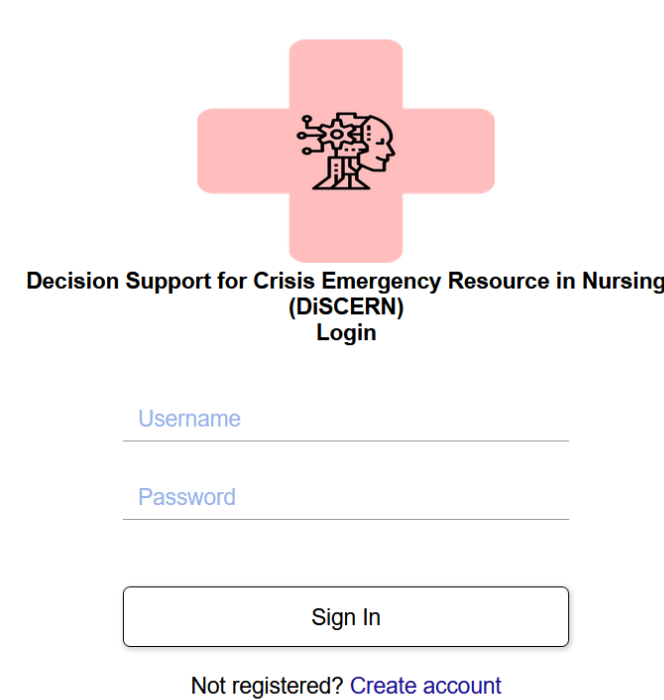


Figure 5: Collaborative Platforms

Results

- HSRC delivered pilot products that met user requirements faster.
- Projects gained traction and obtained funding for scaling faster, and yet minimizing the costs of unnecessary rework.
- **DiSCERN**
 - Decision support resource planning system for emergency response in nursing
 - Garnered support from senior nurse management
 - SKH now a part of project team for scaling
- **SST**
 - Simple segmentation tool for social means and services identification for frail patients
 - Received a multi-million-dollar grant to deliver the clinical workflow
 - Expanded development team for scaling



Conclusion

- With an agile design thinking approach to managing healthcare projects with dynamic requirements, HSRC has delivered impactful products fast.
- This is proven by the success of DiSCERN and SST, which gained traction and support from stakeholders.
- Moving forward, this approach can be applied to any healthcare project.

References

- [1] Agile Manifesto, Scrum Alliance, <https://resources.scrumalliance.org/Article/key-values-principles-agile-manifesto>
- [2] Design Thinking, Interaction Design Foundation, <https://www.interaction-design.org/literature/topics/design-thinking>

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