Chapter 1. **Overview**

What is this book about?

In this chapter, I provide an overview of the process described in this book.

This book proposes ideas for improving the quality of a product that is developed using an agile process. These proposals were developed over several years from the real-world experience of a business analyst working in several agile environments. The environments vary from small single product software development delivered on a regular release cycle to large-scale solutions involving many products over several platforms.

The Quality with Agile through Pictures process was primarily developed to integrate with the Scrum framework for a single development team working on a single product. However, it also scales to larger products with multiple development teams and recognizes the benefits that the Scaled Agile Framework (SAFe) brings to agile development.

1.1 **Agile Quality**

At the time of writing, nowhere in the agile manifesto or the 12 principles of agile development is the word quality used. Similarly, the glossaries on the Agile Manifesto, Scrum and SAFe websites have no definition for quality (or quality assurance).

- **See the Definitions section for references to the agile manifesto, Scrum and SAFe.**

This book is not a criticism of any existing agile process. My experience is that although Scrum encourages quality, it does not explicitly define quality. As a result, the activities that add quality are hidden within the process framework. The intent of this book is to define quality and identify activities that add quality during a development process. It extends an agile process (in particular the Scrum framework), by explicitly showing where quality is added to the process.

- **Although the process primarily references Scrum, this book applies to any agile development effort. It also includes examples of using the process with Kanban and SAFe.**

Consider agile principal #1 – 'Our highest priority is to satisfy the customer through early and continuous delivery of valuable software'. This is a measure of quality that is described in Chapter 3. However, readers of the agile manifesto may not associate this principal with quality. In fact agile focuses on delivering value to a customer as quickly as possible. My concern is that this value is short-lived if quality is not built into the product from its first release, and not maintained throughout subsequent releases.

- **Consider an example of a user interface prototype that uses real customer data. This may provide immediate value to a customer, but it is not going to be useful until architecture and backend system interfaces are built into the product.**
- **The point being that a prototype may provide value to the customer in terms of a user interface, but it is not usable because it has no quality behind it.**

Working as a business analyst on several agile and *Scrum-like* projects, I found myself involved with several activities that are not explicitly called out in the Scrum framework. These activities are outside of the sprint cycle. They are intended to add quality prior to development, or verify quality post development.

- **Scrum-like is used to refer to a project that includes a product backlog, sprint backlog, a development team and sprint release cycles.**

This book details these activities and demonstrates the benefits that the business analyst role can bring to an *agile* development team. In particular, I demonstrate how the quality of the end product is increased, the number of defects is reduced and ultimately, lower costs and higher customer satisfaction is realized. It identifies other roles that the business analyst collaborates with, and how they work together to add quality of the product.

1.2 **Overview Of The Process**

For the most part, this book is about a process that is an extension to the Scrum framework. I call this process the Quality with Agile through Pictures process.

The Scrum framework does not identify the role of Business Analyst. Neither does it explicitly identify roles that are responsible for quality assurance testing, user interface design, system architecture, release documentation or deployment and release management.

The Quality with Agile through Pictures process adds the activities performed by these roles to the Scrum framework. Figure 1 shows the complete Quality with Agile through Pictures process. The process includes the Scrum framework activities.

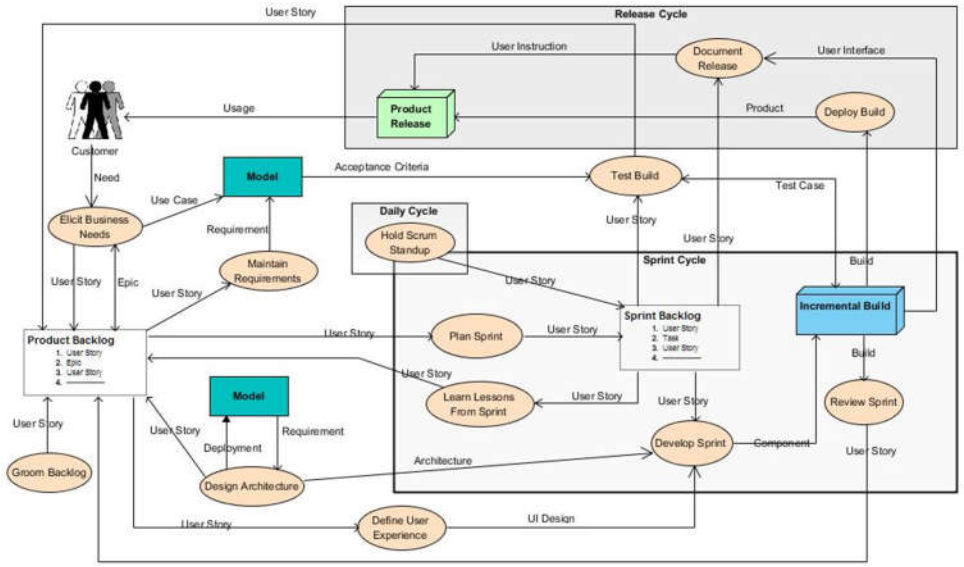

Figure 1 - Quality with Agile through Pictures Process

The process starts with elicitation of customer needs and ends with a product being released to the same customer. Artifacts are shown flowing between activities and repositories. Three cycles are used to time box activities in the process.

Figure 2 shows the same Quality with Agile through Pictures process with the Scrum activities removed. The Scrum framework is captured within the Sprint Cycle region. The activities shown outside of the sprint cycle region are new.

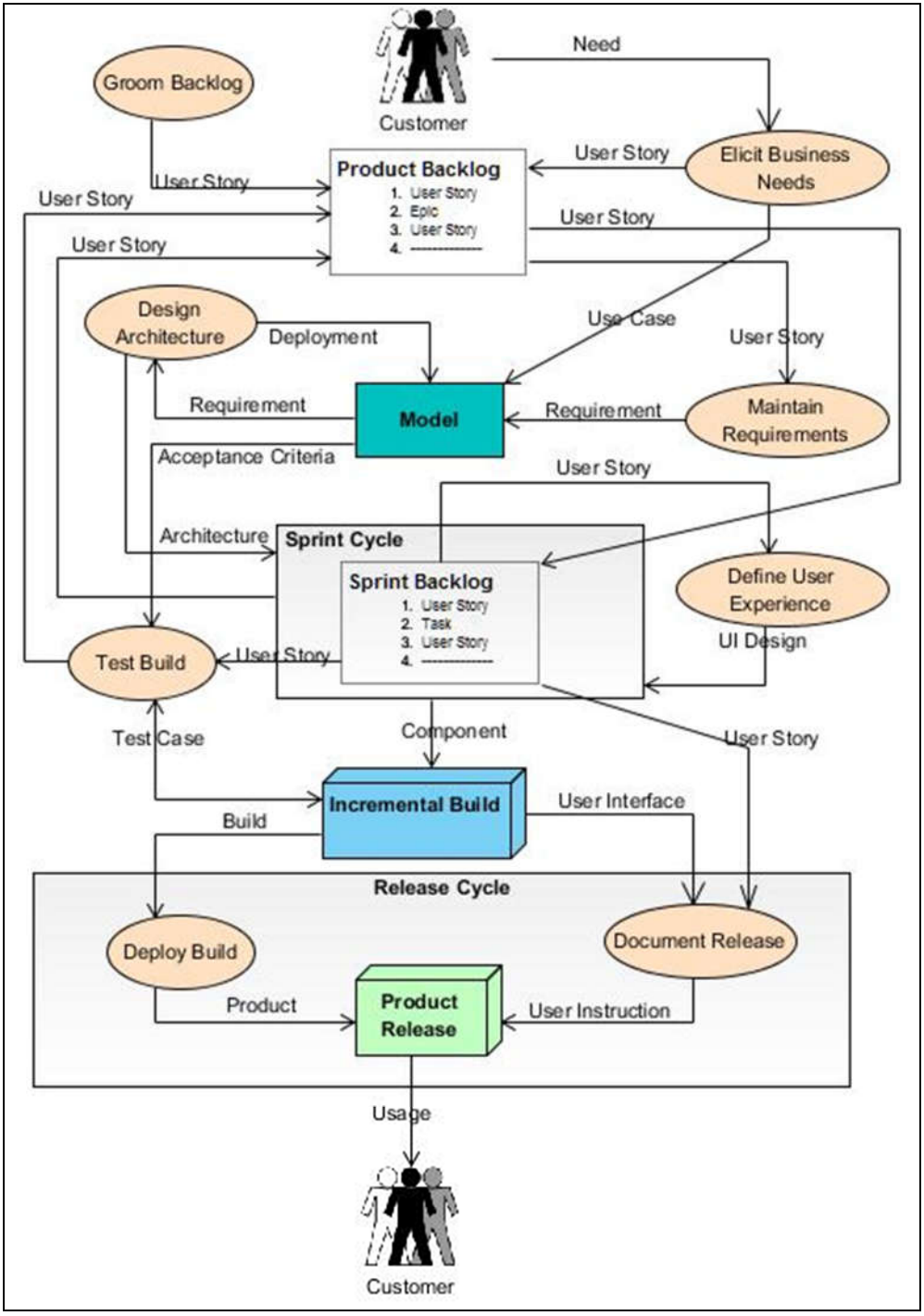

Figure 2 - Quality with Agile through Pictures Portrait View

Reading from top to bottom, the diagram contains the following activities:

- Groom Backlog - the product backlog is groomed in order to maintain user stories
- Elicit Business Needs - business needs are elicited from the customer and used to create user stories and use cases
- Design Architecture - using the requirements for the product, an architecture is designed
- Maintain Requirements - requirements are derived from user stories and maintained in a model of the product
- Design User Interface - product user interfaces are derived from its user stories
- Test Build - test cases are developed from sprint user stories and use case acceptance criteria
- Document Release - user instructions for a the release of a build are documented from the sprint user stories and the product user interfaces
- Deploy Build - an approved build is deployed to the customer and the customer uses the deployed product

The rest of this book describes the additional roles that perform this work, their responsibilities and deliverables. It justifies the benefits of these additional roles in terms of impact to the quality of the delivered product. It also discusses modeling techniques, traceability and how the process is applied to other agile methods, such as Kanban and SAFe.