First, I will present the concept and analyse and evaluate 2 methods Agile and Scrum:

* Agile is a flexible software development method to get products into the hands of users as quickly as possible.

**Agile features:**

* **Iterative**
* The project will be performed in repeating segments. These segments (called an Iteration or Sprint) are usually short timeframes (1-4 weeks).
* In each stage, the development team performs all the necessary work such as planning, requirement analysis, design, implementation, testing (with varying degrees) to produce a small portion of product.
* **Incremental and Evolutionary**
* At the end of the segments, the development team typically produces small portions of the final product.
* These sub-pieces are usually sufficient, capable of running well, carefully tested and immediately usable (called potentially shippable product increment of functionality).
* Over time, segment after segment, these runners will accumulate and grow until all customer requirements are satisfied.
* **Adaptive**
* Since segments last for only a short period of time, and planning is also constantly adjusted, changes during development (change requirements, technology change, change direction on target etc.) can be met in a suitable way.
* Accordingly, Agile processes often adapt very well to changes.
* **Scrum**
* Scrum enables people to easily adapt to complex problems, increasing efficiency and creativity in the production of products with the highest possible value.
* Scrum includes teams and the inter-team linkages in terms of roles, events, and rules in Scrum. In order to successfully use Scrum at work, each of the components within it must have a specific purpose.
* Scrum uses an iterative step-by-step approach to optimize situational predictability and limit risk.
* **Scrum has three principles for maintaining the control over the execution of tasks:**
* Transparency: Scrum tasks must be fully disclosed to those responsible for the results. Transparency is defined by a common standard, so everyone on the team can have a general understanding of what they see.
* Inspection: Scrum users must regularly check on their progress in achieving specified goals and not go astray. Don't check the sub-points too often, but focus on the main ones.
* Adaptation: if the QA detects that development is going off course. That process will have to be adjusted as soon as possible. Scrum defines four main events for monitoring and compatibility: Sprint planning, Daily Scrum, Sprint review, Sprint retrospective.
* **Scrum defines rules for four key events (meetings) to create the working environment and code of conduct and collaboration for project members.**

**Sprint Planning**

The development team meets with the product owner to develop a work plan for the Sprint. The planning work includes selecting development requirements, analysing and identifying tasks to be completed, and estimating the time required to complete tasks.

Scrum uses a progressive and continuous planning approach, so planning won't happen once in the project's life cycle, but will be repeated over and over again to adapt to realities in the process product.

**Daily Scrum**

The Scrum Master organizes the Production Team to meet daily for about 15 minutes for the Development Team to share the progress of the work as well as share difficulties encountered in the software development process during the Sprint.

* **Advantages of Agile and Scrum**
* Flexibility and Adaptivity

An Agile/Scrum approach is best-suited for a relatively uncertain environment. In that kind of environment:

* It is very difficult, if not impossible, to accurately define the requirements and design for the solution in detail prior to the start of the project
* Flexibility and adaptivity are essential to further define and elaborate the requirements and design of the solution as the project is in progress
* Creativity and Innovation

In the highly competitive environment that we live in today, no one wants to buy average, run-of-the-mill products.  People expect a higher level of excellence and that requires creativity and innovation.  An Agile/Scrum approach emphasizes creativity and innovation to maximize the business value of the solution. An over-emphasis on planning and control tends to stifle creativity and innovation.

* Time-to-Market

Agile / Scrum method often shortens time to market due to shorter release time. Incremental development work will also allow early delivery of at least part of the solution, without the need for the entire 100% complete solution.

* Lower Costs

An Agile/Scrum approach can lower the costs of a project in several ways:

Significantly reduced overhead resulting from reducing unnecessary documentation and control requirements

Higher productivity of the project team

Reduced “feature bloat” from using an incremental development effort and prioritizing the requirements. Using that approach, it will become apparent when the project begins to reach a point of diminishing returns where the incremental value of the features no longer exceeds the incremental development cost

* Improved Quality

In an Agile/Scrum project, quality is an integral part of the development process rather than a sequential activity.  The developers know that quality is not “someone else’s responsibility”

* Customer Satisfaction

An Agile/Scrum approach should result in higher customer satisfaction and more effective solutions because the customer is heavily involved in providing feedback and inputs throughout the development process

* Employee Satisfaction

An Agile/Scrum approach should also result in higher employee satisfaction from all employees that are engaged in the effort because they are much more engaged to take responsibility for their own work as part of an empowered team

* Organizational Synergy

An Agile/Scrum approach can improve organizational synergy by breaking down organizational barriers and developing a spirit of trust and partnership around organizational goals.

* **Disadvantages of Agile and Scrum**
* Training and Skill Required

An Agile/Scrum approach requires a considerable amount of training and skill to implement successfully.  Many project teams don’t fully understand the need for training and skill or don’t want to put the effort into it. They attempt to do Agile/Scrum mechanically without fully understanding the principles behind it and that is typically not very effective

* Organizational Transformation

An Agile/Scrum approach may also require some level of organizational transformation to make it successful.  It require the business users to work collaboratively with the development team in a spirit of trust and partnership.  That may require breaking down some organizational barriers that make that difficult or impossible to do

* Scalability

For large and complex projects the Agile / Scrum approach is quite difficult to scale.There are a few models that can do this (Scrum-of-Scrums, LeSS and SAFe) but the models require. The complexity is so difficult to execute them.

* Integration with Project/Program Management

Agile and Scrum approaches are sometimes not suitable for some projects that require a plan-driven approach to make the levels more predictable. But, there are many ways to combine the traditional planning approach and the Agile / Scrum approach to fit the plan.

* **Key Study**

In this exercise, the requirements that are not high are:

* People should be able to sign up for glassblowing classes.
* This requirement is not high level because this is a specialized website used for selling online and not for teaching and the workers also do not want this part of the website.
* As a Customer I want to choose whether or not I am sent marketing information so that I do not get loads of junk mail.
* As the Glassblower Artist I like the idea of having an e-commerce website, but I don’t want tours of the facility and I don’t want to teach people how to do it. Do not put that part in the system – tell them it cannot be done in time.
* As a Customer I want daily emails to let me know the status of my order because I get nervous when I don’t know what is going on.
* As a customer I want to be able to process returns via the Web site so that I do not have to phone up and answer all of those stupid questions before being put through to a human being.
* The site must load quickly.

The above requirements are not a high level requirement because without them the website will function properly. Because the functionality for a website is sufficient to be able to interact with the customer and the system of website administrators.

B1.2

Tìm thêm 8-10 cái high level

Dùng MoSCoW để sắp xếp + thêm 8-10 yêu cầu mới được thêm vào ở trên

Giải thích bảng trên

Khái niệm LSEP,

Nhưng tính liên quan đến xã hội có trong ứng dụng của sasa thì dưa vào

Khái niệm phần in đậm, vai trò

4 hanhf vi ung su , cho ví dụ trong thực tế slide 50 trong lecture10

Slide 10 trong PP