

Memo 5 Team 6  
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In the article, *The IT Manager's Guide to Continuous Delivery: Delivering business value in hours, not months*, the author talks about the practice of **Continuous Delivery**. According to the article from XebiaLabs, it is the "a set of processes and practices that radically remove waste from your software production process." \*

**Continuous Delivery** has the following goals:

- Fast Delivery
- High Quality functionality
- Sets up rapid and effective feedback loop between Business analysts and users.

The features of **Continuous Delivery** includes:

- Constant communication between the developers, clients, business analysts, and QA teams. All parties are involved at all phases of the project.
- Testing and test cases are created at the same time as requirements and is performed before coding and implementation ever begins. The test cases are developed with the intention to make the system fail. This creates a concept called "Automatic Acceptance."
- Codebase is shared to all developers on the project. All modules are regularly combined, or integrated into a single version and tested. By doing this all errors are detected and corrected as soon as possible.
- The development environment is designed to be created and destroyed on the fly. This is in order to manage rapid change in the requirements. Sometimes the production environment itself or part of it is provisioned as part of the development environment. This has the advantage of ensuring immediate delivery and acceptance by the client.
- Builds are made sure to pass testing in the production environment before it is announced to the client for acceptance testing.
- This process is designed specifically for the Agile Methodology.

**Comments:**

## Advantages:

**Continuous Delivery** eliminates the need for traceability between requirements, design, implementation, and testing. All acceptance test cases are developed at the requirements are made. This concept is coined by the author as “Automatic Acceptance.” The test cases are in essence the requirements, design, and test case all in one. The only trace needed is the associate the individual test case to the line of code. Changes are simply made to the individual test cases.

## Disadvantages:

In order implement **Continuous Delivery**, “buy-in” is essential to not only the Agile development team and the vendor organization, but the client and business partners as well. This may be problematic if the client perceives the initial or “first” version of the product as incomplete and not meeting expectations. It is incumbent on the development team to convince the client that product is not a “final” product and they should expect incremental versions.

The first problem with any solution is to convince the client that an incremental approach is the best approach. The reality is that most organizations have a “It has to work perfectly the first time” mentality. While it is important that the first version has to meet requirements and is almost error free, the scope has to be severely reduced and expectations of the client have to be tempered. The first version may not have all of the ideal features the customer may have in mind, but it must at least meet the most important that meets their needs. The client must understand that the scope of the first version must be limited in order to meet the realistic time constraints and requirements. Once this is achieved, incremental versions will be released in the future to meet larger scope goals.

The QA team must also establish a high degree of communication and transparency with the client. As mentioned by the article, the client, business analysts, QA and other testers, developers, and other members of the vendor must be involved in the development of the requirements and the test cases from the very beginning. The acceptance test is developed on the spot with the understanding that they can change any time.

## Source:

\* Phillips, Andrew. Michiel Sens, Adriaan de Jonge, Mark van Holsteijn. *The IT Manager's Guide to Continuous Delivery: Delivering business value in hours, not months*. Forward by David Farley, Continuous Delivery, XebiaLabs.