KANBAN

Kanban Introduction

- Kanban is a type of **agile project management** that provides its users with a high degree of autonomy, prioritizing the transfer of information and making it as efficient as possible. Intricate processes and projects are broken down into sub-components visualized on a Kanban, making it easy for their progress to be directed and guided.

- Kanban revolves around pull factors, meaning that production depends on customer demand, and in contrast to push factors, isn't limited to a certain quantity or amount. As such, it seeks to minimize losses without impacting production.

The Kanban Board

- The heart of Kanban project management is the so-called Kanban board. This serves to visualize the workflow, existing processes, and eventually, problems or issues which might arise. A Kanban board can take the form of a physical board (such as a whiteboard, or cork board) or be built digitally, using specialized software. For many companies, both physical, and digital Kanban boards are put into action.

- Index cards or post-its are added to the board (again, this holds true for both physical and digital boards), each of which represents a task or assignment. A traditional Kanban board is further divided into three columns:

The Kanban Board

- Tasks that haven't been started are placed in the to-do or backlog column (on the left).
- Should the task be in progress, it will be moved to the middle, in progress, or doing column.
- Completed tasks are moved to the right, to the done column.
- As noted above, cards (representing assignments) move from left to right as they are completed

The Kanban Board

Main benefits of Kanban

Kanban characteristics bring important benefits to the logistic system and, consequently, to the organization and its marketing objectives. Below, we see the 4 main advantages of using the methodology:

1. Cost reduction

The first benefit perceived with the adoption of the Kanban system is the cost reduction. This happens because the materials are produced according to the company's needs. In other words, as the stock is out of stock, it is possible to speed up the operation — and the same goes for full stocks, where the operation is paused.

Then, with tighter inventory control, you can only produce what's ready to be delivered—behavior that doesn't put business finances at risk.

Main benefits of Kanban

2. Waste reduction

Logically, the operation in the just-in-time model a also avoids wasting inputs. This is because it reduces the chance of losing products in stock with low movement. Thus, the company can have better financial health and no danger to the business future.

3. Greater productivity

Productive operations can also be seen as one of the characteristics of Kanban. This is realized by the creation of materials being ordered — only — as stock changes.

In other words, there is no waste of unnecessarily produced resources, if the stock is very full, in the same way that production can operate at full capacity if it is necessary to supply the stock.

Also, work on demand allows the reallocation of inputs between areas. Thus, if an area has a lot of materials, they can be transferred to areas that need support. This brings more flexibility and dynamism to the operation.

Main benefits of Kanban

4. Optimization of delivery times

Finally, as expected, we have a very important benefit in terms of delivery times, which are considerably reduced. This is made possible by greater productivity and reduced downtime, as we saw in the previous item.

In this way, we have customers who are more satisfied with the delivery deadlines and, consequently, more engaged in the relationship between the parties. And this provides a more solid and lasting relationship in the business, which positively affects the company's results in the long term.

Therefore, as we could see throughout the content, Kanban characteristics are indispensable for stock systems, which can work optimally to meet market demand with quality and efficiency.

BURNDOWN CHARTS

- A burn down chart is a visual representation of the remaining work versus the time required to complete it. By estimating the time it takes to complete tasks, issues, and testing, you can determine the project completion date.

- A burn down chart is used to efficiently calculate whether your team has enough time to complete their work, and is commonly used while working in short iterations. Not only can it help determine project completion dates, but it can also give you insight into how your team works.

- There are two types of burn down charts: Agile burn down charts and sprint burn down charts. An Agile burn down chart is used by Agile teams to enable tasks to move quickly. A sprint burn down chart is used by development teams when working in short sprints.

burn down chart
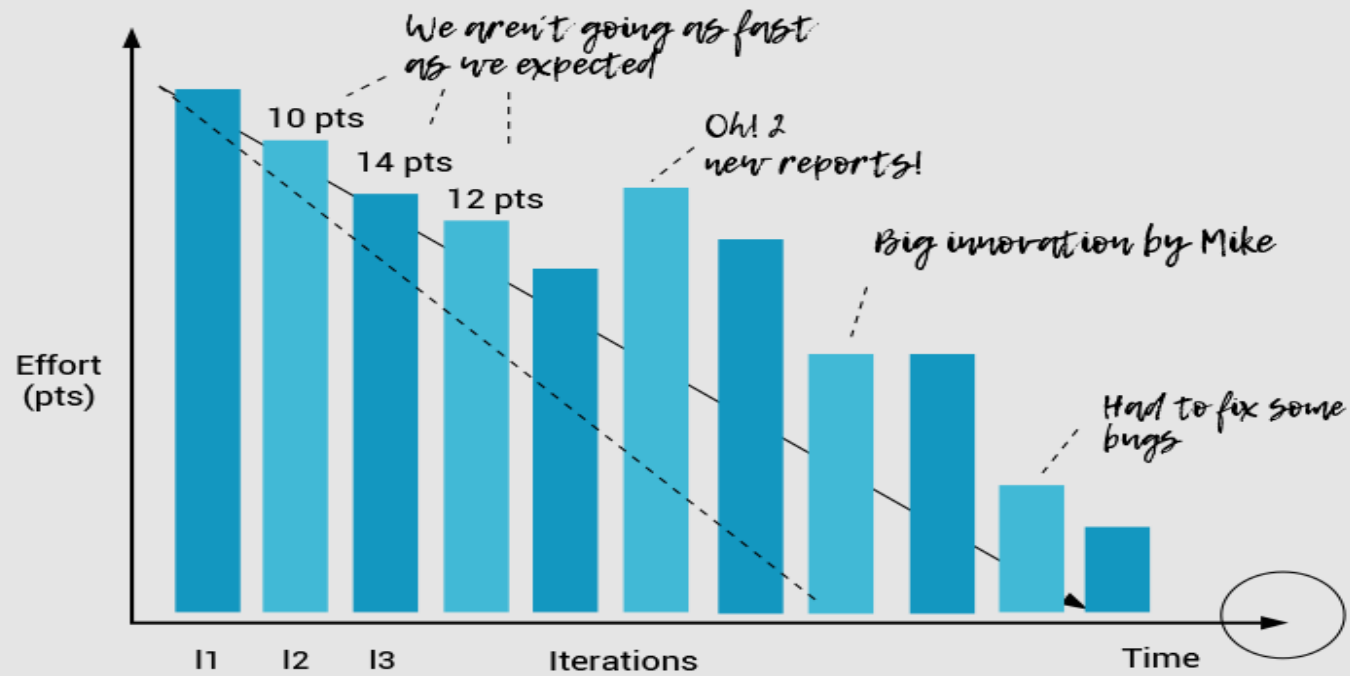
How does a burn down chart work?

- A burn down chart works by estimating the amount of work needed to be completed and mapping it against the time it takes to complete work. The objective is to accurately depict time allocations and to plan for future resources.

- Burn down charts are used by a variety of teams, but are most commonly used by Agile teams. That's because these charts are best at analyzing short iterations such as sprints. Now that you know how a burn down chart works, let's find out how to read a burn down chart.

benefits of using a burn down chart

A burn down chart is a great way to visualize the work needed to be done versus the time it takes to complete it. This makes it a perfect tool for teams who work in sprints.

Additional benefits of using a burn down chart include:

1. **Shows a direct comparison:** A burn down chart shows a direct comparison between the work needed to be done and the effort needed to complete the sprint. This helps teams connect tasks to larger goals and can keep tasks moving on pace with sprint goals.

2. **Keeps teams on the same page:** With a daily effort log and a place to visualize the work needed, team members have one source of information that they can track and connect to about the tasks at hand.

3. **Gives insight into team productivity:** Not only is a burn down chart great at visualizing work, but it can also give you insight into how productive your team is and how quickly they work. If your actual work is drastically different from your ideal, then you can work on helping your team be more productive.

The Four Core Practices of Kanban

#1: Start With What You Do Now

When introducing Kanban, you won't need to make any huge changes, but rather, ensure that you have a complete understanding of existing processes and procedures within the organization or business which you're examining.

#2: Agree to Pursue Incremental, Evolutionary Change

One of the most important aspects of Kanban is the pursuit and embrace of (small or incremental) changes that develop organically within the organization. Significant or dramatic changes should be avoided since these can create disharmony or conflict. Depending on the current situation, baselines should be generated for efficiency and performance, which can be used to measure future changes.

Large organizations are often comprised of branched networks of different, independent nodes. Kanban suggests three special service delivery principles for these. As might be guessed by the name, these focus upon customers and providing them with the best service possible. To realize this:

1.   Focus on the needs and expectations of your client/customer.

2.   Manage work, but allow your colleagues to organize themselves.

3.   Develop guidelines for improving customer and business outcomes.

The Four Core Practices of Kanban

#3: Respect the Current Process, Roles, and Responsibilities

Kanban doesn't attempt to reinvent the wheel or negate existing processes, responsibilities, or ways of doing things, but rather to develop new solutions that improve upon them. In this way, the incremental changes which it suggests are merely that, suggestions, and not set in stone.

By involving everyone and respecting their existing positions when reaching decisions, resistance to change is reduced. This is because those who adhere to the current ways of doing things are often unable to see the benefits and drawbacks of the existing or new processes.

#4: Encourage Leadership at All Levels

The newest of the four core practices of Kanban involves everyone, not only management, in pursuing continual improvements. Everyone within an organization, especially those at the 'front-line' should exercise leadership and initiative in improving existing processes. This overlaps almost entirely with the Kaizen principle.

The Six Rules of Kanban

In addition to the four core practices, David J. Anderson also identified six rules or guidelines for Kanban, which **organizations should integrate into their work processes**:

1. **Visualize the workflow:** All tasks and assignments need to be visualized in order to monitor their progress and ensure that the workflow is actually flowing, and not stagnant. To ensure this, it's also important that all **participants be able to see the workflow in the form of a Kanban board**. As tasks are completed, they move from left to right on this board.

2. **Limit work in progress:** This means that only a specific number of tasks or assignments (tickets) are **worked on in parallel**. As a result, taking on too many tasks concurrently is avoided, with the focus instead remaining on **results**.

3. **Make process policies explicit:** Policies need to be **made clear for all participants**. This helps ensure that everyone knows how they are supposed to work, and in which manner. One important element of this, for example, is the **"definition of done"** or **DOD**, which refers to a team having a mutual understanding of what qualities or functionalities a completed task or assignment should have.

The Six Rules of Kanban

4. Manage flow: Kanban only works when everyone shoulders responsibility for and actively pursue **the improvement of existing processes**. As such, the workflow must be managed, but not necessarily the individuals who are tasked with propelling it.

5 .Feedback loops: These ensure that organizations respond properly to changes and that information is transferred between different stakeholders. Ultimately, more efficient solutions should always be sought.

6. Improve collaboratively: It's important that Kanban processes undergo regular analysis to **rectify output, cycles, or delays**, boosting efficiency.