1.  **Slide**

**David Anderson was among the first to formulate the Kanban method, for application to** [**knowledge work**](https://en.wikipedia.org/wiki/Knowledge_work)**.**

2.

Kanban - scheduling system used in manufacturing to help companies improve their production process.

Companies use Kanban, cause it’s really easy way for enhancing quality of teamwork by visual tools of project management.

There are a lot of big companies which use Kanban system.

**(Fig. companies)**

3. Simple Kanban Board

(Fig. kanban\_board)

(Fig. for\_developers\_kanban\_board)

Kanban board helps to virtualize what is going on in our project.

Mapping out the process steps on a Kanban board — and using Kanban cards to represent work — provides visibility into the process and gives insight into many aspects of the work, including how the work flows.

**OWN TABLE!!!**

Overlook of dashboard.

To Do -

Doing -

Done -

1. To Do : put your tasks to that column. For example, u have some tasks.

If you work in team , team members can add notes, and invite others to participate

Dashboard helps understand what’s going on in a given time

One by one team can pull out card from one column to next

When TODO is empty , and tasks are completed - the project is done.

4.

Kanban has 3 simple steps:

1. **Visualize** the workflow

Split the work into pieces, write each item on a card and put on the wall

* **Workflow** is inherently **invisible**
* **Visualization is core** to Kanban
* Enables people to take a **quick look** **at state** of the workflow
* Use of **story cards** can be used
* Development **process** is **divided** into **columns**
* Each **task** is specified on **a story card**
* **Cards move** along the board to show workflow

**(Slide. 1-step)**

2. Limit WIP (work in progress).

Assign explicit limits to how many items may be in progress at each workflow state.

* Apply **limits** on WIP in each **phase** of development
* Limits are basis for **implementing** a **pull based system**
* Improves quality by giving greater focus to fewer tasks
* **Reduces** lead **time for work** **by** **reducing** number of **concerns** for developer
* Get the most important **things done,** **one by one**, with clear focus
* **Things** get **done** faster, **better**, stronger than before.

**(Slide. 2-step)**

5. Let’s compare some more process tools on the prescriptive vs adaptive scale:

**(Fig. adaptive\_line)**

RUP is pretty prescriptive – it has over 30 roles, over 20 activities, and over 70 artifacts. An overwhelming amount of stuff to learn. You aren’t really supposed to use all of that though, you are supposed to select a suitable subset for your project. Unfortunately this seems to be hard in practice.

XP (eXtreme programming) is pretty prescriptive compared to Scrum. It includes most of Scrum + a bunch of fairly specific engineering practices such as test-driven development and pair programming.

Scrum is less prescriptive than XP, since it doesn’t prescribe any specific engineering practices. Scrum is more prescriptive than Kanban though, since it prescribes things such as iterations and crossfunctional teams.

Kanban leaves almost everything open. The only contraints are Visualize Your Workflow and Limit Your WIP. Just inches from Do Whatever, but still surprisingly powerful.

Lead Time - time taken from request of feature to its completion

Cycle Time - time taken to finish the task

WIP Limit Value Stream - this refers essentially to your development process

Swarm - collaboration on a problem

6. Pros

**Advantages of Kanban**

Kanban is easy to learn and understand the methodology. It improves the workflow and minimizes the time cycle. Some major advantages are listed here:

* + - Kanban methodology increases the process flexibility.
* It reduces the wastes from the process.
* Kanban is easy to understand the methodology.
* It improves the delivery flow.
* It reduces the time cycle of the process.

7. Cons

**Disadvantages of Kanban**

Most of the disadvantages of Kanban is due to misuse or mishandling of Kanban board. Some common disadvantages are given:

* Outdated Kanban board can lead to issues in the development process.
* Some time Kanban team make the board overcomplicate.
* Lack of timing is another disadvantage because there is no timeframes are associated with each phase.

8. Enjoy Kanban

**(Fig. enjoy kanban)**