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Yes you can with kanban

5 reasons why digital kanban boards
are proliferating in project management
– and how visualisation improves work efficiency

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Content

Synopsis

Dispersed teams, multiple projects and co-workers on the go? As the need for improved overviews and collaboration increases, the use of digital kanban boards is spreading very fast; from software product development and IT departments to white-collar work and service sectors in such disparate areas as health care, marketing, HR and law. Learn more about the main drivers behind the development and how visualisation can be used to improve work efficiency.

About the author

Mattias Hällström, founder of Projectplace, is head of Research and Development at Projectplace International.

Hällström is in charge of a team of dedicated developers in the field of information technology and work organisation. He is passionately interested in human nature and new social technology for project collaboration.

Kanban is derived from the Japanese words:
kan = visual
ban = card

5 driving forces
There are five main driving forces behind the extended use of digital kanban boards:

1. Lean and agile uptake in IT is spreading

2. Visualisation accelerates learning and the ability to prioritise

3. Collaborative planning reinforces efficient project behaviour

4. Transparency provides management control with less overhead

5. The technology is ready

Yes you can – with kanban!

Think about when you write up a to-do list in different columns: To Do, In Progress and Done. It is all about separating and determining the task status by visualising them; it is simple and straight-forward, and most importantly, it works.

The above is a simplified description of a kanban board, a board with cards in different columns that helps you and your team understand what and when tasks are to be performed. Starting off in production systems, kanban is now a wide-spread tool used in many industries and business areas. It has unquestionable benefits for both individuals and teams because it allows visualising work, provides instant clarity on any project, facilitates collaboration and boosts team productivity.

Today, the traditional kanban boards are strongly influencing a new generation of visual management software tools for collaborative planning.

But why is the use taking off right now – spreading into project management? This whitepaper aims to explain the reasons behind the extended use and clarify the benefits of digital kanban boards when it comes to collaborative planning and project management.

1. Lean and agile uptake in IT is spreading

The IT sector, especially software development, has rapidly adopted values, principles and concepts from lean manufacturing and product development. Software development working methods are very influential everywhere, because they can be found in many organisations as a part of product development or in an IT department of any industry. For instance, IT project management offices that have improved project management are assisting other business units with related process and performance improvements, often using approaches adapted from lean management.

The use of kanban boards is now spreading very fast from software product development and IT departments to white-collar work and service sectors in such disparate areas as health care, marketing, HR and law, and especially to project management offices in larger organisations. It does so because, no matter the context, it is a tool that provides a whole range of benefits through visualisation.

Kanban originated from the Toyota production system and is a scheduling system to help determine what to produce, when to produce it and how much to produce. Today, kanban means different things to different industries. In software development, a kanban system has developed into a specific process, inspired by, but not aligned to the original Toyota production system. A major principle in modern kanban systems and processes is continuous optimisation by work in progress limits (WIP limits).

One common concept present in both lean and agile best practices is visual collaborative planning with kanban boards, or "card walls" – large boards with cards that let you to visualise ongoing workflows of your project, team or department.

2. Visualisation accelerates learning and the ability to prioritise

The board simply makes it easier to prioritise. All in all, these factors are crucial when it comes to efficiency.

As the market puts increasing pressure on organisations and companies when it comes to higher productivity and competitive edge, they are forced to become more efficient by doing more with less. But what are the key elements behind efficiency and what factors need to be fulfilled to empower a team?

A Gallup study on engagement shows that 90 percent of work involves decision-making, problem-solving, and creating new analyses and insights. Meanwhile, studies done by the Boston Consulting Group show that the number of procedures, vertical layers, interface structures, coordination bodies and decision approvals in firms has increased from 50 to 350 percent over the last 15 years. No wonder employees are struggling to find their way through the information overload in order to make qualified decisions.

Unfortunately, *according to the Economist Intelligence Unit,* about 60 percent, or 3 out of every 5 employees, feel they do not have the right information. Obviously, there is a serious need for a new tool that accelerates both individual and team work.

Kanban improves overall efficiency
Kanban boards have proven to be vital for empowering and engaging teams; they make it possible to self-organise, engage individuals, and focus on the right tasks; tasks that create perceived value for the customer. The board simply makes it easier to prioritise. All in all, these factors are crucial when it comes to efficiency.

The beauty of a kanban system is that it can be used to visualise any type of work item. The kanban board is simply a visual representation of the work in progress, and it gives up-to-date information on how work is flowing through the process. By looking at the kanban boards, you see where specific work items are in the system, where there may be blockages and where there is a good level of "flow". This can often lead to insights of areas to improve, such as bottlenecks and general processes.
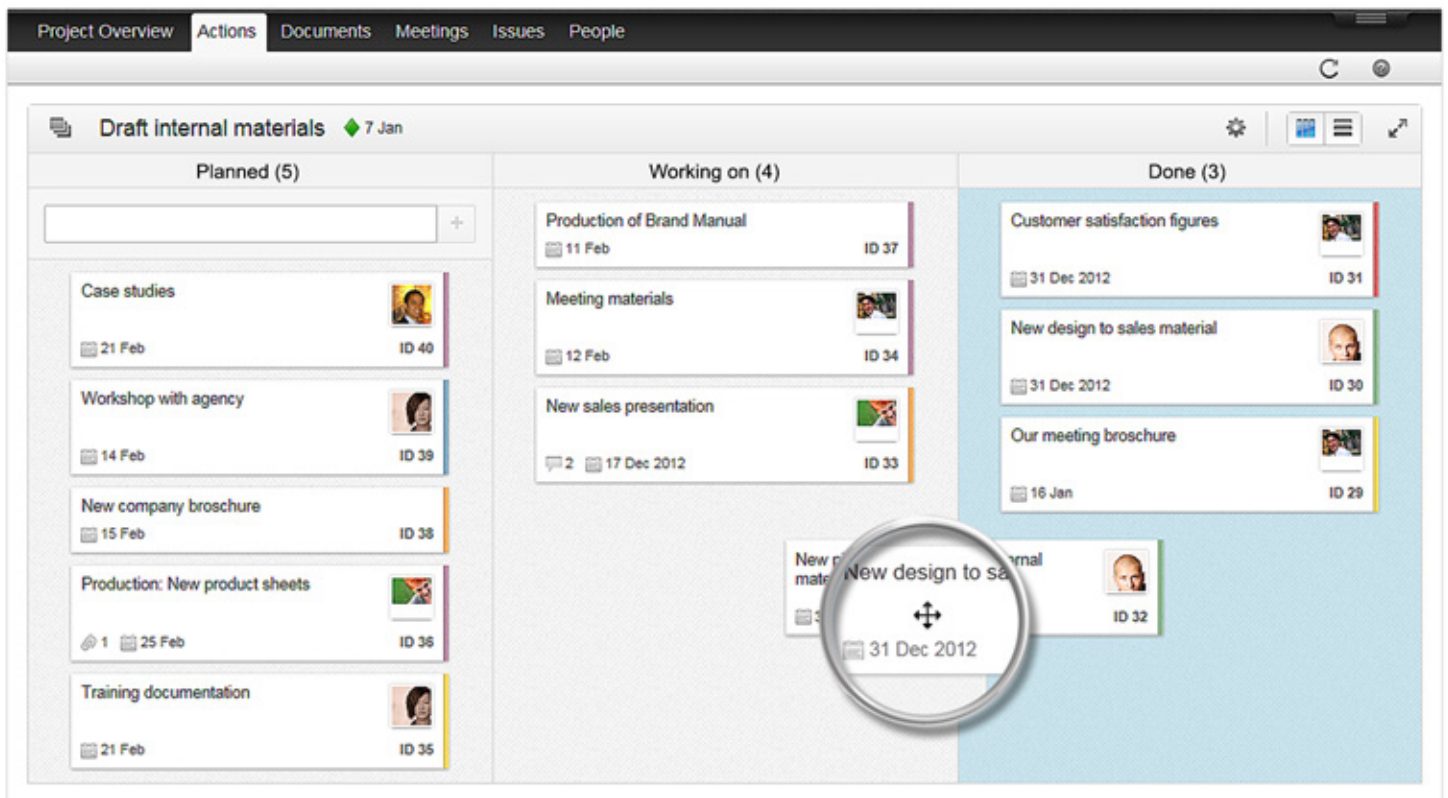
Projectplace kanban-inspired action board

How does visualisation work?
The saying, "A picture is worth a thousand words" refers to the notion that a complex idea can be conveyed with just a single image. It also aptly characterises one of the main goals of visualisation; namely, making it possible to absorb large amounts of information quickly. This is exactly why visualisation is a key element of kanban.

Why? Because science tells us the human brain loves visual images and is able to process visually presented information more easily than data in standard "linear" formats.

Arguably, the brain can process images more easily than text, and there is much to gain if knowledge workers can share their knowledge through visualisations rather than long documents consisting of text only.

...science tells us the human brain loves visual images and is able to process visually presented information...

Kanban is visualising and limiting work in progress.

> Visualising work allows us to transform our conceptual and threatening workload into an actionable, context-sensitive flow. (We see what we are doing.)

> Limiting our work in progress helps us complete what we start and understand the value of our choices.

Why does visualisation work?
Well-grounded research in group psychology and behavioural science explains why the kanban principle of visualising workflows neutralises cognitive overload, dispelling uncertainty and promoting follow-through; e.g. the Zeigarnik Effect.

In fact, new findings in neuroscience confirm this. A recent experiment conducted by Mindlab International found that both individual and groups of office workers waste valuable brain resources, perform less efficiently and retain less information when using traditional office software. The experiment used neurometrics to measure the brain's electrical activity to see how efficient people were in completing everyday office tasks, using technology to visualise information.

How can visualisation help in project management?
A common problem in project management is that team members and project managers tend to be confronted with a large amount of information, which leads to "information overload". Research on visualising knowledge of project-based work shows that visual planning tools significantly improve joint problem-solving and the ability to coordinate individual commitments. Knowledge transfer between team members is also significantly improved.

Furthermore, research has found that visual management methods can integrate diverse knowledge and handle interaction in complex projects. The visual kanban board works as a gathering point, where the project team can meet and discuss current issues to reach a consensus on which step to take next.

Methods like kanban boards help managers prioritise tasks and make project team members more involved in decision-making than before they used the method, implying a larger degree of de-centralisation and ability to self-organise, which is a well-known key to high-performance teams.

3. Collaborative planning reinforces efficient project behaviour

"When it comes to shaping and reinforcing effective project behaviour, kanban boards have obvious benefits:
they make behaviour clearly visible."

Everywhere in society, there is a growing interest in how people behave in various situations and what influences their behaviour. A lot of solid psychological research, especially in applied behaviour analysis, has been done in this area.

In light of this, it is no exaggeration to say that a scientific revolution in management theory has occurred: today we know how people learn, how people are motivated and how to shape efficient behaviour of high-performance teams. Furthermore, we also know what is critical for creating trust and coordinating commitments to succeed in professional projects. All in all, this has completely changed the prerequisites for how we can organise human work for greater efficiency.

Research on humans and the human driving forces shows why the project should be run from a social viewpoint. And besides theoretical knowledge, we can now benefit from new technology to release the team's full capacity. This is where kanban, visual planning tools and digital boards have the potential to play a leading role.

Digital kanban boards reinforce positive behaviour
When it comes to shaping and reinforcing project behaviour, kanban boards have obvious benefits: namely, they make behaviour clearly visible. Who has done what and when? Who did not perform their task in time? Who has what information?

By introducing additional elements to the digital kanban board, such as a higher level of interaction, the tool can be refined and people's positive behaviour shaped even further. How? Think about the success behind social media, where visibility, feedback functions and a feeling of belonging are important features. What it is really about, is that social technology, such as conversation tools and activity streams, has created new opportunities for showing, rewarding and shaping behaviour.

Dedication breeds successful organisations
According to a Gallup study on employee engagement, organisations that have optimised engagement among their employees demonstrated a 26-percent gain in profits and an 85-percent increase in growth. Unfortunately, the McKinsey Research Institute, at the same time, revealed that 65 percent, or two-thirds of employees, are not emotionally engaged at work.

How can digital kanban boards combat this lack of engagement? By using the same mechanisms as the ones in social media: a digital kanban board with social features emphasises work behaviour among colleagues. This is a great hotbed for creating a work atmosphere characterised by responsibility, willingness to help and the ambition to strive ahead. By using an open, transparent dialogue–everyone shares the same information–obligations become obvious and the level of engagement increases accordingly.

"It´s all about shaping human behaviour. The rest is social technology."

4. Transparency provides management control with less overhead

By facilitating an open work culture with full transparency, where self-organisation and engagement are main ingredients, there is suddenly no need for managers to attend endless touch-base meetings.

Management, regardless of industry or business area, is the act of getting people together to accomplish agreed-on objectives, while using available resources efficiently and effectively. However, too many managers spend far too much time on detailed planning instead of focusing on issues of more strategic value.

Studies conducted by the Boston Consulting Group show that in complex organisations (20 percent of organisations) managers spend 40 percent of their time writing reports and 60 percent coordinating meetings.

While the pressure for top performance is constantly increasing, independent of sector, so is the need for a higher level of management. One modern alternative to the time-consuming, traditional way of managing is to establish a foundation that makes it possible to monitor project work transparently. Here, digital kanban boards are vital.

Gain insights and control with kanban boards
By facilitating an open work culture with full transparency, where self-organisation and engagement are main ingredients, there is suddenly no need for managers to attend endless touch-base meetings.

However, a digital kanban board is more than just going wall-less. More importantly, managers can use it to focus on observing, fostering as well as shaping positive project behaviour and on removing barriers in order to push the team toward the goal.

> **Digital kanban boards** give managers and stakeholders **visibility** without hassles for the team (reducing organisational complexity, number of meetings, etc.).

> They also give everybody in the team **full insight** into who is doing what and what is most important to do right now. This enables individual initiatives, without managers losing control–it increases perceived control through transparency.

> Moreover, they **eliminate** turf wars since everyone has access to the same information.

Managing a mobile, project-oriented workforce
According to an IDC study, by 2015 the world's mobile worker population will have reached 1.3 billion, representing 37.2 percent of the total workforce. At the same time, it is the team-work format that drives business forward, where collaboration is moving from a departmental-wide to an enterprise-wide domain, and often cross-organisationally.

Managing a mobile workforce, where an increasing proportion is part of multiple teams, requires trustworthy tools for real-time information sharing. Considering this, digital kanban boards can provide just the real-time visibility, collaboration possibilities and transparency required.

"Kanban boards give managers and stakeholders visibility without hassles for the team."

"The digital kanban board fits like a glove on smartphones, tablets and large TV screens."

5. The technology is ready

While several trends are pointing in the same direction, the digital kanban board's final fate is determined by one thing only: whether the technology is ready or not. And it is, thanks to the combination of several key improvements: screen size, high-resolution screens, touch screen capabilities, real-time functions, ubiquitous internet connection, price and accessibility.

Nowadays, as a smart device is in everyone's pocket, the use of digital planning boards will most likely take off just like the word processor did in the late eighties, thanks to the proliferation of affordable and easy-to-use smartphones, tablets and large TV screens. The digital planning board–the digital kanban board–simply has fantastic potential when it comes to helping people visualise, plan and coordinate their work in an easy and playful way. Use it!

Projectplace digital kanban boards with social features are optimised for online devices and different screen sizes.

Projectplace kanban-inspired actions board

The Projectplace actions board, with a visual representation of a project plan, is a collaborative planning feature designed for high-resolution screens and tablets. It is inspired by the original kanban board and by the "card wall" concept you often find in agile software development, like Scrum.

The tool enables real-time digital kanban collaboration – it is a central hub for communication and information about your projects with a clear, visual overview of how the project is progressing. The web-client implementation focuses on simplicity and ease-of-use, with functions, such as drag-and-drop into different columns, and social features, such as feeds, notifications and conversations, which increase interaction and efficiency even more.
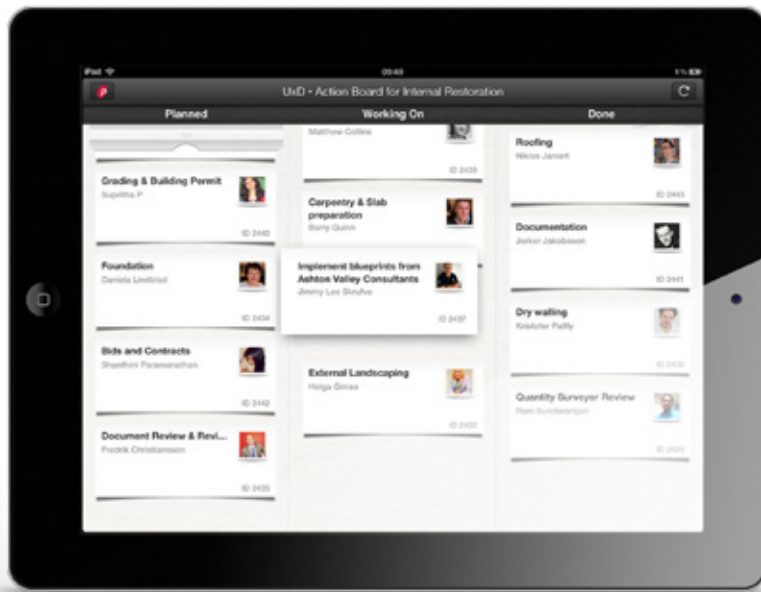
Are you and your organisation ready to embrace and take advantage of the new technology – the digital kanban board?

Conclusion:

The ways in which we organise our work, together with external pressure, are bringing about a growing need for new tools for better overviews and collaboration. Several factors point to why particularly digital kanban boards may have an increasing role in the future:

> **The kanban method** itself is well-established in many industries as visualisation is proven to give positive effects when it comes to improving and speeding up daily work.

> **As the digital version** of the kanban board adds more dimensions in interaction between employees, the tool can now be used to further shape and reinforce positive behaviour; an invaluable factor in the success of projects.

> **The digital kanban board provides** an instant overview to both team members and project managers, making it easier to engage employees, prioritise, make the right decisions and move toward a common goal.

> **The necessary technology** required to take advantage of digital kanban boards is now in place in most organisations and companies.

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About Projectplace

Projectplace International is the European leader in project collaboration on the Web. Since 1998, Projectplace has been driving the development of online project tools, inspired by Social Project Management. Today, the service is available in seven languages and has helped over 800,000 users to improve communication and collaboration in their projects. The company has 160 employees based at the headquarters in Stockholm and in local offices in Oslo, Copenhagen, Frankfurt, Amsterdam and Bangalore.

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