

# Kanban Maturity Model

Beta Release

Evolving Fit-for-Purpose Organizations

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Excerpt created for InfoQ

Kanban Maturity Model: Evolving Fit For Purpose Organizations  
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# 2 Understanding Kanban Maturity Levels

The Kanban Maturity Model features seven levels, numbered 0 through 6. For consistency and ease of adoption by technology organizations already familiar with CMMI, levels 1 through 5 are aligned to the five levels of CMMI, with a slight difference in the naming of maturity levels 1, 2, and 3. We have found it useful to extend the model above and below these five stages. The additional levels are inspired by Jerry Weinberg’s maturity model from his *Quality Software Management, Volume 1: Systems Thinking*[6].

Level 0 is introduced to model individuals and organizations that are simply oblivious to the need for a process or managerial method. We observe such nascent, immature businesses in our case-study literature. They come to us when they have the epiphany that if their business is to survive and thrive, they do need a process, often choosing Kanban as a means to some management oversight with very little process overhead. Kanban provides some constraints without constraining the emergence of processes and workflows specific to their business.

Level 6 is introduced to provide for double-loop learning where an organization is questioning, Who are we? Is our identity still appropriate? and if not, Who do we want to be? How should we reinvent ourselves? What is our purpose to exist, and is it still relevant? Is our strategy appropriate? Do we offer the correct products and services? Are we choosing to serve the correct market segments, or do they need to change? How should we evaluate and identify market segments to target? Which existing segments should we drop?

We feel that this seven-level model offers a considerable advance and innovation over previous organizational maturity models, while maintaining continuity with models that have preceded it. We believe that our new model will better serve the pursuit of excellence in product and service delivery and encourage behavior for adaptability and long term survival of businesses. The following chapters describe each level in detail.

## Maturity Level 0 – Oblivious

At maturity level 0, individuals are responsible for handling their own tasks. Frequently, the person who performs the work is the user of its outcome as well; that is, the work is self-generated tasks rather than customer requested work orders.

### Observable behavior

The organization is oblivious to the need to follow a process. There is ambivalence about the value of management or organizational processes or policies. There is no collaborative working or, if there is, there is no recognition of collaboration. Collaboration may be fleeting, on an ad hoc basis without recognition of a pattern or repeated need. There is no concept of “a team”—a group of people who work collaboratively to deliver on a common goal.

The quality and consistency of work done, or services performed, is entirely associated with individuals and their capabilities, skills, experience, and judgment. The organization, and its performance, is extremely fragile to changes in personnel.

There is no instrumentation, as there is no defined process to instrument. Metrics and measures are not present.

Decision making tends to be reactive, emotional, spontaneous, and sometimes difficult to explain.

### Observable Kanban patterns

At maturity level 0, the focus is completely on handling personal tasks. Therefore, the observed Kanban patterns include three main types of Personal Kanban<sup>2</sup> boards, used primarily to visualize tasks. The designs observed reflect a growing level of personal maturity and capability at self-management. There is an intention to achieve a level of self-improvement using reflection, and often a cadence emerges as the use of personal kanban becomes habitual (Figure 1).

A *trivial* personal kanban visualizes invisible work, relieving the user of the burden of carrying the list of open tasks in their head. A *simple* personal kanban introduces WIP limits and recognizes a limit to human capacity, a desire for relief from overburdening, and a belief that multitasking causes individual tasks to take longer and their completion to be unpredictable. This second level could be described as a result of the epiphany that it is better to “stop starting, and start finishing.” The consequence is a feeling of personal achievement. The *true* personal kanban emerges when individuals realize that there is an existential overhead to a large backlog of unstarted tasks. This third, more mature design includes the act of personal commitment to items that will be done next, while there is recognition that backlog items are actually uncommitted, remain optional, and may be discarded. There is often a cadence to the personal reflection needed to select that which

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will come next. A personal triage capability develops to decide what will be done: now; later, and if later, then roughly when, based on a sense of urgency of the task; or not at all.

From an organizational maturity perspective, this third style of board is still a maturity level 0 (MLO) pattern; however, it reflects the thinking and actions of a more mature individual likely to want to participate in a more mature organization.

### Maturity Level 1 - Emerging

At maturity level 1, there is recognition that management adds value and that some organizational structure and transparency to how work is done will offer consistency. **Emerging** covers a wide range of aspects of process, management concepts, and behavior. At the lowest level, there would be no definition of processes, procedures, or workflows. However, some collaborative work will be happening. There is some form of “value-stream” rather than mere individual craft work taking place.

As maturity grows, some initial definition of process workflows, management policies, and decision frameworks emerge. Process definition is “emerging.” However, processes, workflows, and policies are not followed consistently and the use of decision frameworks is also inconsistent.

#### Observable behavior

There is no consistency of process, policy usage, or decision frameworks. There is no

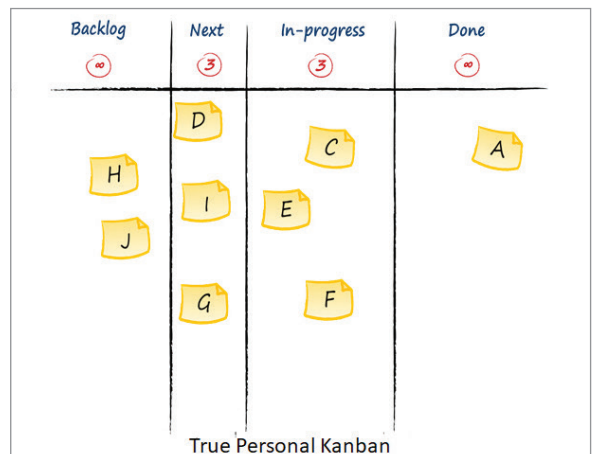
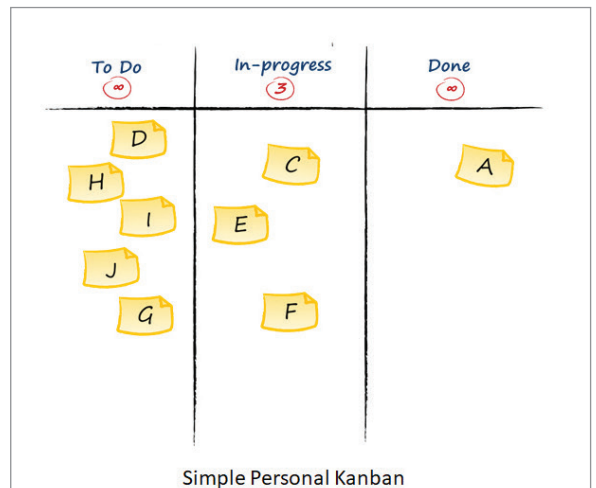
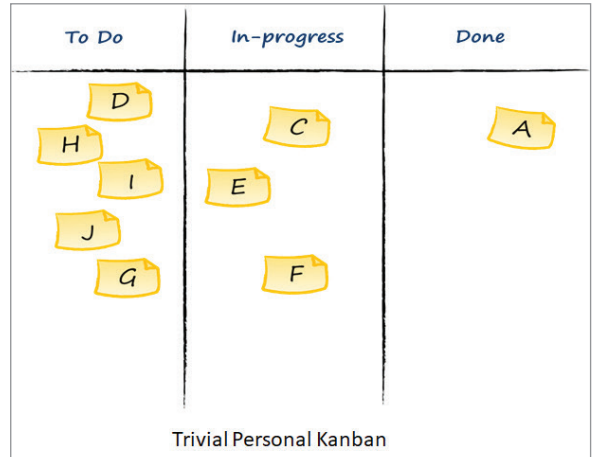


Figure 1 MLO Kanban patterns

consistency of desired outcome. Work is not seen as a combination of services, and customers perceive service delivery as unreliable.

There is an understanding of what the work is, but perhaps not how it should be done, what the finished product should look like, or the service delivery expectations of customers. There is little understanding of who the customer is or why they have requested the work. Consequently, there is an observable lack of alignment among teams. This affects the consistency of product design and implementation as well as service delivery.

Work is pushed into the process. Priority is set based on superstition, or political leverage, or is purely ad hoc and random. The process, system, or value stream is overloaded. Individuals are often overburdened. There is no concept of a capability or a capacity to the system. Hence, it is impossible to try to balance demand against capability. There is an expectation that everything requested will be done. There is no triage capability or opportunity to refuse work.

Analogously, if we were in the pizza delivery business, we would observe that the method of preparing, baking, and delivering pizza was inconsistent and that defined procedures were not followed consistently. We would also observe that often the pizza delivered was of the wrong type, missing ingredients, or of poor quality upon delivery; or that the delivery time varied dramatically. The customer experience would be to conclude that the vendor is extremely unreliable.

The workplace is stressful because of the inconsistency and poor quality, and there are significant amounts of rework. There is constant pressure to find new customers because existing customers, reacting to the unreliable service, fail to return.

There is considerable luck attached to whether a product or service is “fit-for-purpose.” There is a reliance on individual heroics.

Collaboration and the concept of teams is recognized. However, organizational capability and performance is extremely fragile and there is a tendency to rely upon and reward heroic effort and heroic individuals. Customers with sufficient transparency will show a preference or demand the involvement of specific individuals on their work requests as a means to mitigate risks of inconsistent, poor performance and disappointment.

It is highly likely there is loss of discipline when under stress and handling exceptional circumstances. When stressed, the organizational maturity is likely to slip back to level 0, and the organization relies entirely on individual heroics to pull out of the crisis.

Some metrics may be present, though these tend to be focused on individuals rather than on instrumenting still emerging and inconsistently followed processes. There is a tendency to collect and report that which is easy to measure and there is little thought as to whether the measure is useful or actionable. Some local activity measures may serve as general health indicators, though many may be of little actionable value and are essentially vanity metrics—they make a team or its individual members feel good, feel as if they are making progress, but they serve no meaningful purpose in improving business outcomes.



Decision making is emotionally driven and superstitious in nature.

### Observable Kanban patterns

At the transition to the level 1 stage, several individuals are working on a common function, but assignments are separated. There may be specialization of tasks to individuals with specific skills. Everyone is responsible for organizing and performing their own tasks, or tasks are assigned and dispatched by a supervisor.

An aggregated personal kanban board (Figure 2) is used to visualize all the tasks and their status for a department or function, typically using one lane per person. Hence, each lane is a personal kanban board, and displayed together they are aggregated. This design often facilitates the “supervisor as dispatcher” who assigns tasks to individuals. However, having awareness of what the other people do and with which work they may require assistance, fosters collaboration. It is the first step to creating a team and developing the understanding that working jointly produces better results more efficiently than working in isolation with limited comprehension of how one’s work affects others.

At the core stage of maturity level 1, collaboration happens habitually in a small team performing work with a shared goal or shared responsibility and accountability. Pools of people with different specializations may exist. Each team member is still responsible for

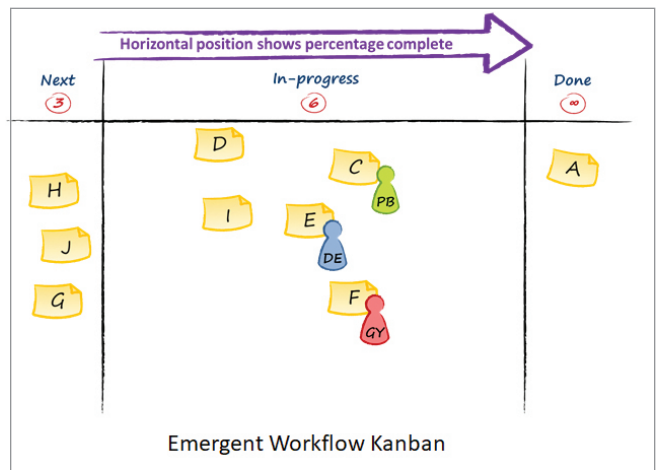
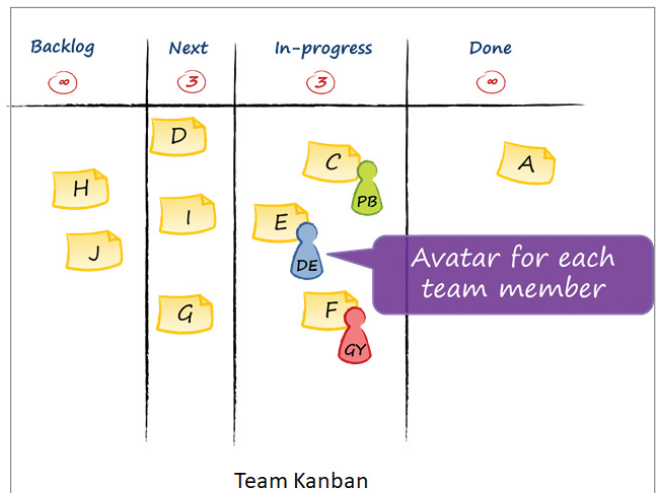
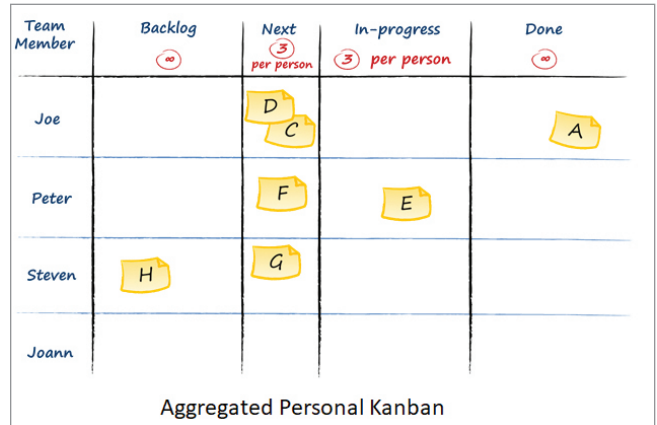


Figure 2 ML1 Kanban patterns

handling their own tasks; however, the team has an emerging comprehension of the overall development process, in particular how it begins and ends. This lays the foundation for maturity level 2, at which teams start seeing their jobs as a service conducted in response to a customer request or as a part of a larger workflow. Therefore, maturity level 1 is fundamental for making Kanban Service Delivery principles one and two work:

1. Understand and focus on your customer needs and expectations.
2. Manage the work, let people organize around it.

The team visualizes its work and meets daily to check its status. However, the process is not consistent yet, and under stress it is likely to lose discipline and consistency. Performance depends almost totally on the availability and individual efforts of the team members and varies as widely as the spread in individual capabilities across the team.

## **Maturity Level 2 – Defined**

At maturity level 2, there is a basic definition of processes, workflow, policies, and decision frameworks. These are followed consistently. There is recognition that the process definitions describe “the way we do things.” However, there is still a lack of consistency in the desired outcome. Customers will observe unacceptable inconsistencies in quality and service delivery, though less so than at maturity level 1.

### **Observable behavior**

The process, policy usage, and decision frameworks are consistent. However, there is still no consistency of the desired outcome.

There is an understanding of what the work is, and both how it should be done and what the finished product should look like, as well as the service delivery expectations. There may not be a full understanding of who the customer is or why they have requested the work. This is most often true for shared and internal services that lack visibility to the end customer and the motivation or purpose behind a work request or the risks associated with that work or its delivery. As a consequence, there may be an observable lack of alignment among teams and interdependent service workflows. This affects the consistency of service delivery as seen by the customer.

A basic understanding and definition of the workflow is developed. Nevertheless, work tends to be pushed into the process because policies are not strong enough or sufficiently internalized as to prevent it. There is little observable capability to prioritize work. Priority, if it exists, may be superstitious, political, or simplistic, such as first-in-first-out. The process, system, or value stream tends to be overburdened. There is a tendency to say “yes” to everything or too many things and an inability to balance demand against capability.

If we were in the pizza delivery business, we would observe that the method of preparing, baking, and delivering pizza was consistent and that defined procedures were now followed consistently. However, we would still observe that the pizza delivered was occasionally of the wrong type, missing ingredients, or of poor quality upon delivery; or that the delivery time differed dramatically from expectations. The customer's perception still would be that the vendor is unreliable.

There is increased collaboration that now spans across teams and facilitates workflow.

The workplace is notably less stressful because of the consistency of process and defined roles and responsibilities. Workers know what is expected of them and what they can expect of their colleagues. Poor quality is still an issue, though less so than at level 1, and there is still some rework. There is still some pressure to find new customers because some existing customers fail to return as a reaction to the unreliable service.

The product or service is often not completely “fit-for-purpose.” There is a reliance on line-level managerial heroics to ensure consistency and the meeting of expectations. There is a tendency to reward and venerate heroic managers.

Organizational capability and performance remains fragile. Customers may demand the involvement of specific managers, whom they trust, to mitigate risks of inconsistent, poor performance and disappointment.

There is some tendency to lose discipline when under stress and handling exceptional circumstances. When stressed, the organizational maturity tends to slip back to level 1.

There is rudimentary instrumentation of the defined process. There may be a tendency to measure and report that which can be seen or is easy to instrument. There is little or no alignment of reported metrics with customer expectations. Metrics and measures tend to be locally focused on performing the work, such as cycle times or throughput rates on specific activities or value-adding steps. Most measures are general health indicators, though some may be of little actionable value and should be seen as vanity metrics.

Decision making is usually qualitative in nature or emotionally driven.

### **Observable Kanban patterns**

The main characteristics of the transition from the Emerging to the Defined maturity level is the usage of the Defined workflow with per-person WIP limits on the kanban board (Figure 3). Here, a sequence of the main workflow phases substitute for the generic *In-progress* column of team kanban boards. The types of work are identified and visualized by different colors (in this example) or by different lanes across the board.

The team begins to understand that their performance depends on the amount of work-in-progress; that is, the more work-in-progress, the longer work takes and the less predictable its completion. There is recognition that work left unfinished in a waiting state is not helpful and can lead to much higher defect rates and increased rework.

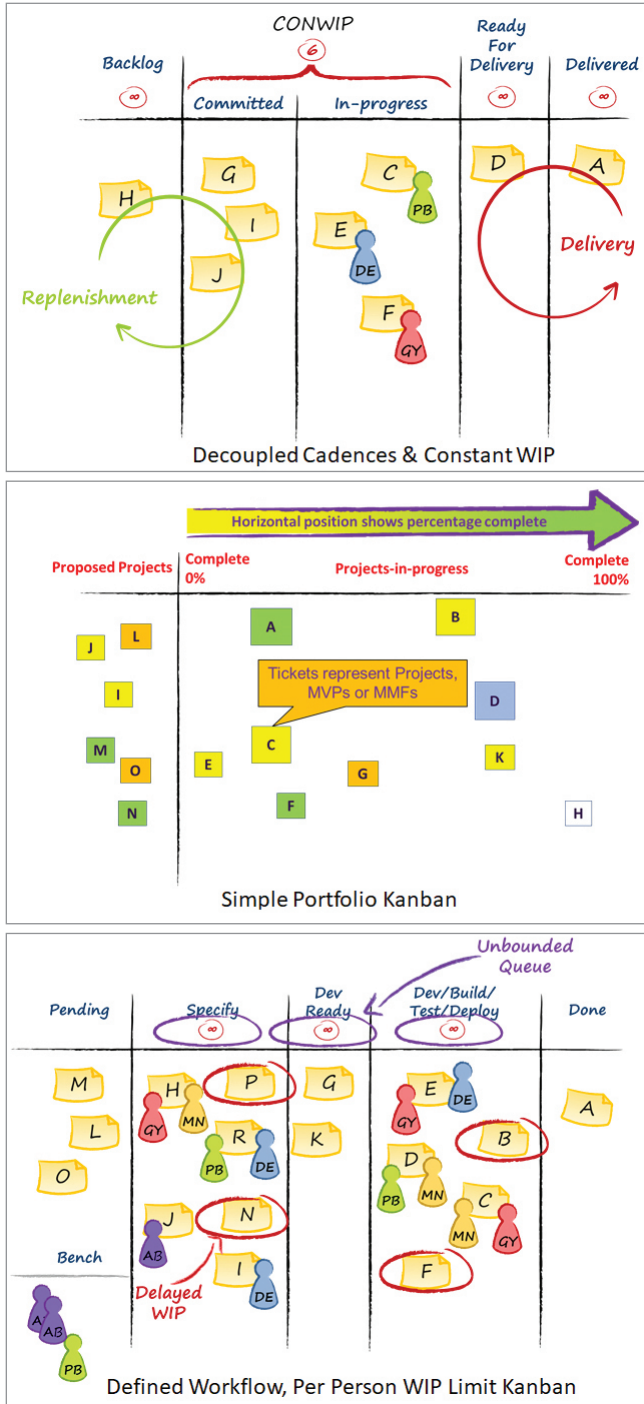


Figure 3 ML2 Kanban patterns

Nevertheless, teams using delivery kanban boards with per-person WIP limits deliver better quality results and feel relief from overburdening.

Although the workflow is still basic and the overall process is not consistent at the transition stage, there is emergence of customer focus. There is an understanding that work flows through a series of steps toward completion of something of customer value. It is realized that smooth flow of work is a desirable state for relief from unevenness. Unevenness in arrival of work creates temporary periods of overburdening. Unevenness in flow makes predictable delivery challenging and has a direct effect on customer satisfaction. There is growing appreciation and awareness of more of the Kanban Method’s values, but values such as “customer focus” and “balance” are not yet fully embraced and the cultural focus remains inward—“who we are” and “what’s in it for us.” Improvements are justified on selfish grounds at the team level. There isn’t yet an outward-looking altruism or a focus on contributing for the benefit of customers and other stakeholders.

The need to properly coordinate the teamwork (mainly among different specializations) appears to avoid peaks and troughs of workload.

At the core stage of maturity level 2, organizations are better able to coordinate activities with different audiences and decouple the cadences of planning, committing, or selecting work from the cadence of delivery. This reduces the

effect of losing rhythm due to concentrating team effort on packaging and handing over completed work and then restarting development. In addition, developing the ability to allow work to be in-progress while a delivery is being made requires strengthening other technical capabilities such as configuration management. Hence, decoupling the rhythm of planning, commitment, doing, and delivering creates positive stress to improve specific enabling practices such as configuration management.

Some teams recognize the need to control the workflow and do it by using a delivery kanban board with a defined commitment point and constant WIP (CONWIP), which is a true pull system, but without a defined workflow. Basic policies for prioritizing, committing work, and visualizing work status are established. Parameters like *% Complete* are introduced and are used to provide additional information about project status and track its conformance to plan. Portfolio kanban boards are used for visualizing the status of multiple projects and making relevant decisions.

Nevertheless, the workflow management responsibility is not explicitly defined. Even in organizations with established project management processes, project managers' duties include planning, monitoring, and controlling project activities against plan but not managing the workflow. There is no one playing the service delivery manager (SDM) role. In some organizations, we've observed the emergence of a "flow manager" role at maturity level 2. This role tends to have an internal focus, actively managing flow for its benefit of relieving temporary overburdening due to unevenness.

At this level, established policies and workflow controls do not enable managing unforeseen events. This is because the feedback from the system is insufficient. Behavior is entirely reactionary. As a consequence, unforeseen events caused by the occurrence of specific risks or more complex situations, for which there is no specific guidance on how to handle them, can take a project or a service out of control. The result is a failure to meet expectations and, often, a regression in observed maturity level to a more individualistic, heroic culture.

## **Maturity Level 3 – Managed**

At maturity level 3, there is an agreed and understood definition of processes, workflow, policies, and decision frameworks. These are followed consistently, and, in addition, desired outcomes are achieved consistently within customer expectations and tolerances.

### **Observable behavior**

There is a consistency of process, policy usage, or decision frameworks. There is now a consistency of desired outcome. Customer expectations are being met. Product design, quality, and service delivery are all within customer expectations and tolerance levels.

There is an understanding of what the work is—both in how it should be done and what the finished product should look like—as well as the service delivery expectations.

There is a strong sense of unity and purpose along the value stream or across the workflow. There is a sense of a team collaborating to deliver a piece of work. There is a full understanding of who the customer is and why they have requested the work. There is a strong sense of fulfilment amongst the workers when delivering finished work.

There is an observable triage capability to prioritize work into three categories: (1) do it now; (2) leave it until later, comprehending when is ideal; (3) discard, reject, do not do it. Demand is balanced against capability and the system is relieved of over-burdening.

If we were in the pizza delivery business, we would observe that the method of preparing, baking, and delivering pizza was consistent and that defined procedures are followed consistently. Pizza is delivered consistently, correctly to request with high quality, and within service delivery expectations. The customer perception is that the vendor is very reliable.

The workplace runs very smoothly under both normal and exceptional circumstances. There is little tendency to panic under stress. There is a strong sense of process, roles, and responsibilities, and workers know how to react to unusual or exceptional circumstances. There is little urgency to find new customers because existing customers provide steady demand.

The product or service is now completely “fit-for-purpose.” There is now an absence of heroics. Instead there is reliance on defined methods, processes, and decision frameworks. When things don’t go as planned there is action taken to revise methods and procedures rather than blame individuals.

Organizational capability and performance is now resilient. Customers now trust that work is done consistently and there are no specific requests for individual personnel or specific managers.

The organization is now thinking explicitly about services from an external customer-facing perspective. The notion that the organization consists of a network of interdependent services is starting to emerge. There is some recognition of the power and efficiency of effective shared services.

The process is instrumented to collect and report customer fitness criteria metrics. There may be improvement driver metrics present and actively in use. Metrics and measures tend to be end-to-end, with only specific improvement drivers focused on local activities or value-adding steps. There is a clear metrics and reporting strategy with fitness criteria, improvement drivers, and general health indicators being used appropriately. Presence of vanity metrics is unusual and may exist for cultural reasons, or may be explained as evolutionary relics to which there is an emotional attachment and the conditions needed to successfully remove them have not yet materialized.

Despite the considerable instrumentation and availability of metrics, decision making remains mostly qualitative or emotionally driven.

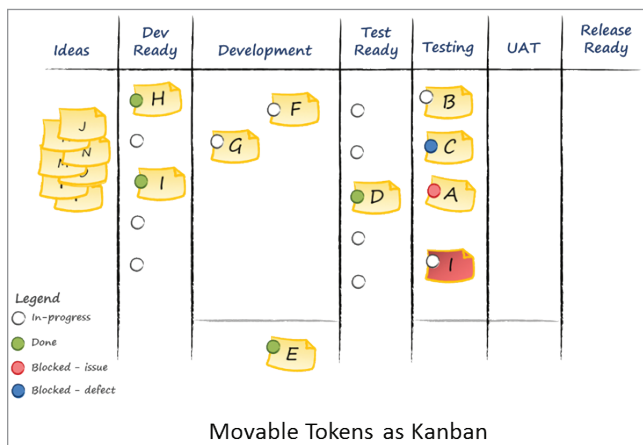
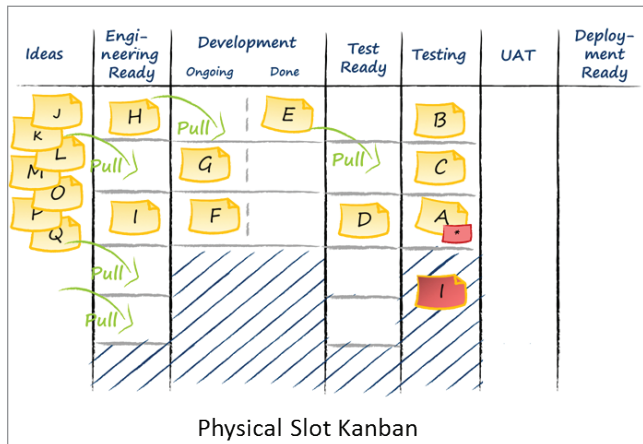
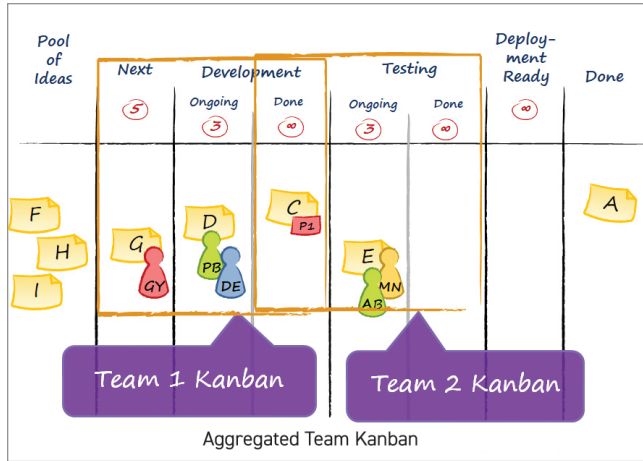


Figure 4a ML3 Kanban patterns

### Observable Kanban patterns

A key characteristic of a maturity level 3 transition organization is the usage of kanban systems that visualize a service-oriented, customer-focused workflow. An aggregated team kanban board is used to visualize workflow across different teams (Figures 4a and 4b).

Pull criteria, work item dependencies, defect/rework, and blocked work items are consistently visualized. This facilitates the deeper understanding of the system that performs the work. Initial actions for stabilizing the workflow are in place, in particular, establishing WIP limits for different states and for the entire system, as well as through plotting and interpreting the Cumulative Flow Diagram.

Replenishment Meetings are held to move work items over the commitment point and control the workload to avoid destabilizing the entire system, although the customer might still tend to push starting work in spite of the pull criteria defined by the team.

The processes are repeatable and the teams follow their routines, although they can still abandon them in crisis.

At core stage of ML3, managers and teams have developed a good understanding of the workflow based on experience, collected historic data, and established feedback mechanisms (delivery planning, service delivery, and Risk Reviews). They make decisions using recent information about what is actually happening. In addition, they are able to flexibly manage work in order

to effectively deliver expected results. Policies and processes are respected by managers and teams and are followed even in crisis.

The deeper understanding of the workflow allows managing larger and riskier projects with a greater degree of success. Multiple project and service management is in place and dependencies between projects and services are taken into account. Initial Operations Reviews are conducted to understand and address service dependencies.

Higher level management is convinced of the benefits brought by properly managing work. The roles of service request manager and service delivery manager are introduced to ensure correct management both upstream and downstream.

Workflow data is collected and plotted to charts. Although data quality is not very good yet and the entire process is not stable enough to produce meaningful measurements, the available data provides information that allows comparing actual and desired project/service state and definition of relevant actions. Analyzing data facilitates the understanding of the processes and starts developing a culture of making decisions based on quantitative information.

Delivery Planning Meetings are held to plan deliveries to customers and to make specific delivery date commitments. The act of committing to doing something is separated from the act of committing to a specific date for delivery. In doing so, customer expectations are better managed and service delivery effectiveness improves. Service Delivery Reviews are conducted to monitor and improve service effectiveness. Risk Reviews are conducted to understand and respond to the risks that impede effective delivery of services.

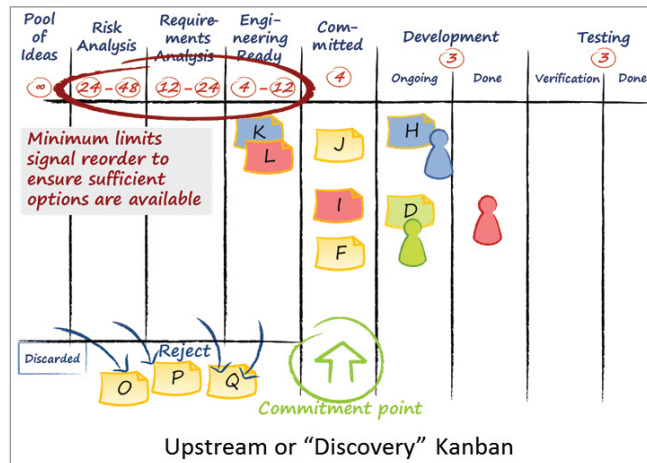
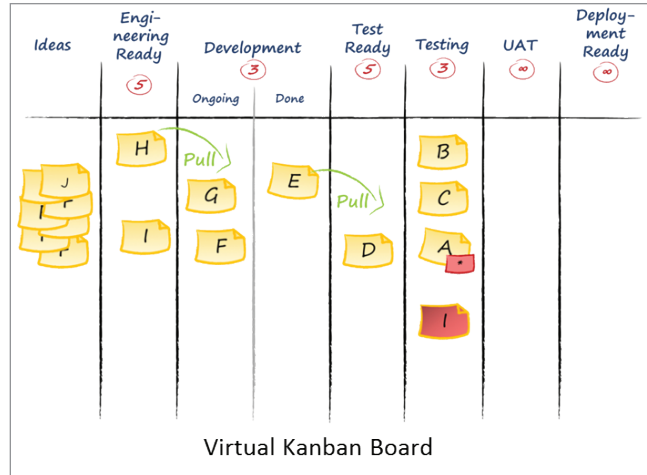


Figure 4b ML3 Kanban patterns



## Maturity Level 4 – Quantitatively Managed

At maturity level 4, design, implementation, and service delivery have become routinely “fit-for-purpose.” Consistency of process and consistency of outcome have the effect of relieving a lot of stress, and the organization moves its focus to economic outcomes as well as developing robustness against unforeseen events and exceptional circumstances. Attention is now given to quantitative risk management and economics. The question is now whether consistency of delivery can be achieved within economic expectations of cost or margin, and whether performance can be robust to unforeseen circumstances through appropriate risk hedging. Quantitative analysis of metrics and measures becomes more important. The goal is to be ever “fitter-for-purpose” from the perspective of a variety of stakeholders.

### Observable behavior

In addition to all maturity level 3 behaviors, a maturity level 4 organization has a consistent economic performance, such as particular cost targets and margins are being achieved steadily.

Work is now classified by customer risks, and a variety of classes of service is offered. Demand shaping or capacity limitations by work type and class of risk are present. Triage is now driven by risk assessment, and class of service is directly linked to risk. Scheduling is influenced by cost-of-delay and a quantitative understanding of service delivery risks such as the probability distribution of lead time.

If we were in the pizza delivery business, we would now be running an economically successful business offering a number of different classes of service such as an express delivery menu. We successfully cope with ebb and flow in demand and understand the cyclical nature of our business. We are optimally staffed most of the time and our costs are tightly controlled without affecting our delivery capability or impacting customer satisfaction.

Under stress, the organization follows emergency or exception procedures and takes mitigation and remedial action to reduce likelihood and/or impact of occurrence, or completely prevent recurrence.

Organizational capability and performance is now robust. Risk hedging is effective against the occurrence of unforeseen, though not unforeseeable, events. Customers now trust that work is done consistently, and there are no specific customer requests for individual personnel or specific managers. Managers, shareholders, and other stakeholders such as regulatory authorities now trust that work is conducted within defined constraints and that economic outcomes are within a defined range of expectations.

There is extensive systems thinking and service-orientation present in the organization. Organizational units are now forming around defined services with known and

understood dependencies. Shared services are recognized as a highly effective and efficient approach and therefore are desirable economically. Shared services are seen as providing an advantage to organizational agility—the ability to reconfigure quickly to changing market, regulatory, or political conditions.

There is a notable shift to quantitative decision making, and a cultural norm is established that decisions must be underpinned with solid data, risks assessed, and adequately hedged prior to action.

### Observable Kanban patterns

Maturity level 4 is realized more through use of metrics and feedback loops. It is characterized more by adoption of Kanban Cadences and adoption of the Fit-For-Purpose Framework than specific kanban board designs. However, an organization that is solidly at ML4 visualizes and successfully manages different services and classes of services using shared resources. Capacity is allocated to each service so as to respond to a particular organization’s goal or strategy. In addition, capacity allocation is used flexibly as a risk-hedging mechanism against a fluctuating or unpredictable arrival of unplanned work (Figure 5).

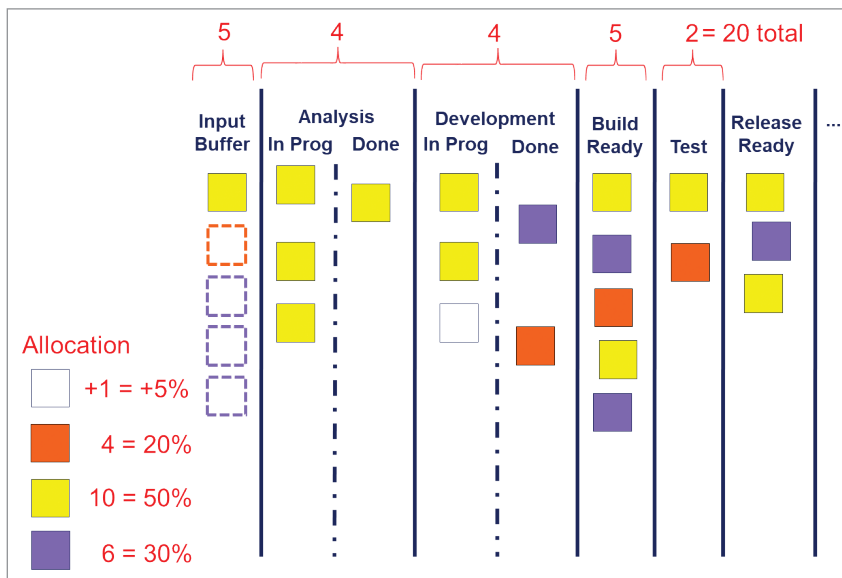


Figure 5 ML4 Kanban patterns

## Maturity Level 5 – Optimizing

At maturity level 5, not only have design, implementation, and service delivery become routinely “fit-for-purpose,” the business is now entirely “fit-for-purpose” from a shareholder’s perspective. The focus is now on optimizing for efficiency and improved economic outcomes, increasing productivity without sacrificing quality, increasing margins, extracting premium prices for premium classes of service or quality, minimizing costs, and optimizing the value of work done through a superior prioritization and triage capability. The goal at ML5 is to be “fittest-for-purpose.” A strong culture of continuous improvement has emerged and we observe acts of leadership at all levels contributing to improved performance. The workforce feels empowered to suggest and implement changes. Workers have a sense of ownership over their own processes and a sense of pride in their capabilities and outcomes. There is a culture of “seeking forgiveness” rather than “asking permission” and consequently the organization is able to act and move quickly. Individual units can act with autonomy while remaining aligned to strategy, goals, and objectives. The organization has agility and is readily reconfigured to offer new services and/or classes of service. The business is now solidly robust to changing customer expectations and other externalities.

### Observable behavior

At level 5 we see all the observable behavior we associate with levels 3 and 4, and in addition we see a strong *kaizen* culture—an organizational focus on improvement, with feedback mechanisms aimed at optimizing performance.

There is extensive process instrumentation. Improvement opportunities are aligned to customer fitness criteria metrics. Improvement driver metrics are formally established. Improvement drivers have achievable targets. Improvement initiatives are predictive, model-driven, and there is a known causation between improvement action and forecasted outcome. Significant job satisfaction is now derived from delivering improvements, as delivering customer requested work within expectations and to the customer’s satisfaction is now routine and is taken for granted.

Economic performance is improving consistently. Process improvement is used as a competitive weapon and an enabler of new services, new classes of service, new markets, and new market segments. Competitors are being outmaneuvered by superior organizational agility, enabling new and better products and services faster than ever.

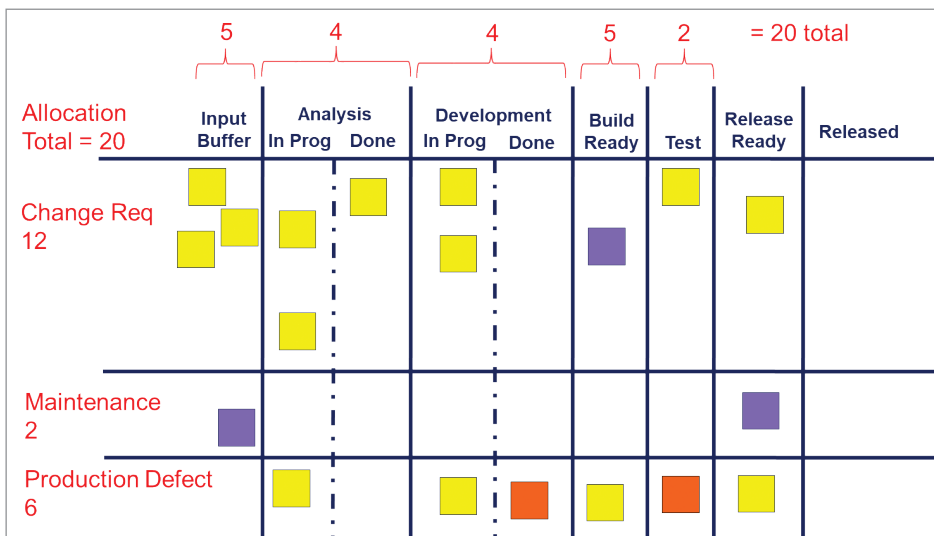
New services can be rapidly defined and composed of calls to a network of existing shared services. Reconfiguring the organization to serve different markets with different classes of service is now a routine action causing little to no disruption.

## Observable Kanban patterns

Maturity level 5 is most definitely characterized by behavior: the use of models, quantitative analysis, extensive use of feedback mechanisms—with most or all of the Kanban Cadences present—and perhaps augmented by additional feedback mechanisms for product management and integration of other evolutionary change methods such as Lean Startup, A3 Thinking, Toyota Kata, or Theory of Constraints. Innovative visualization at ML5 tends to focus on advanced risk management techniques, or the use of simpler kanban boards to visualize and manage improvement initiatives, or the use of additional work item types and capacity allocation for improvement opportunities (sometimes called *kaizen* events).

Across a set of aggregated services, it is possible to visualize fixed or permanently allocated personnel or teams versus floating personnel who can be quickly assigned to assist on any service.

In Figure 6, permanently assigned fixed team members have their names displayed on rows of the board allocated for specific services. At the same time, more generalist, cross-trained personnel are visualized using avatars with their initials. The avatars can be moved from row to row to help where their skills are most needed at any given time.



**Figure 6** Staff liquidity visualization

## Maturity Level 6 – Congruent

Maturity level 6 is when we can claim that a business is truly “built to last.” At level 6, we observe several double-loop learning capabilities. The business is capable of questioning:

- Is the way we do things still competitive? Are new technologies, processes, methods, or means becoming available that we should be investigating or adopting?
- Do we offer the right products and services? and if not, how should we change?
- Are we serving the right markets? and do we have the capability to serve our chosen markets adequately?
- Who are we as a company? and is our current identity relevant and appropriate? or do we need to reinvent ourselves?

These would correctly be characterized as strategic concerns, and defining the answers to these questions is a key part of strategic planning. Although the ability to challenge some of these four areas (the use of “double-loop learning”) may be observed at shallower maturity levels, a level 6 organization can challenge all four—how, what, why, and who. A level 6 organization not only has the capability to do this strategic planning work but it will also exhibit alignment of capability and service provision with that strategy. When the strategy needs to change, the organization will quickly reconfigure to align with the changes. This concept of strategy being continually aligned to operational capabilities is referred to as “congruent action.” Congruent action is leadership that everyone can believe in. A congruent organization is set up for success. Such an organization is extremely robust to changing externalities, including disruptive, discontinuous innovation, and hence will not only exhibit longevity but will absorb dramatic changes to its strategy relatively easily without significant impact in economic performance.

### Anticipated behavior

At level 6 we should see all the observable behaviors we associate with level 5. In addition, we should see a strong strategic planning capability and the use of strategic planning reviews questioning current market segmentation, questioning product and service mix, comparing observed capability with strategy, and defining a strategy against which the organization is capable of successfully delivering.

There should be extensive market instrumentation to provide feedback on whether the firm’s products and services are viewed as “fit-for-purpose.” Market segments should be oriented around customer purpose. The entire business should be service oriented and driven by service delivery. There should be assessment of design, implementation, and service delivery capabilities against expectations in each market segment. The organization

should be capable of transparently reporting its fitness-for-purpose in each segment. Improvement actions should be driven by a desire to amplify a segment or switch it off.

There should be a strong sense of identity and an institutionalized understanding of “who we are” as a business and how that affects decision making. However, while identity is well understood, there shouldn’t be a dogmatic, blind attachment to it. There should be a recognized willingness to evolve and move with the times. Senior leaders should understand their role as social engineers in defining and managing the identity of the business and its workforce as a social group. Defining and actively managing the culture of the firm should be recognized as the main task of senior leaders. Identity management should be an organizational capability. Tangible actions to manage the identity of the business and the sociology of the workforce should be observable.