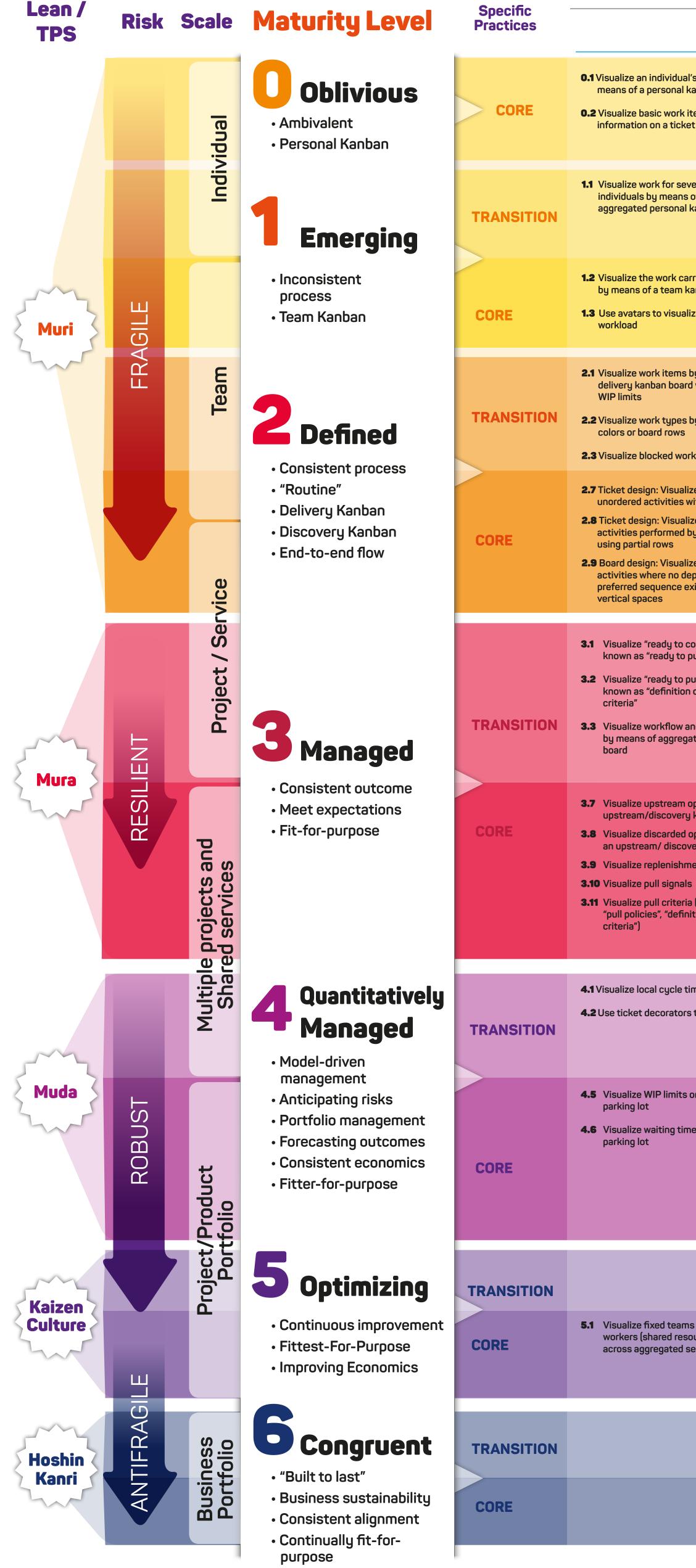


# Lean Kanban UNIVERSITY



# Kanban Maturity Model: Evolving Fit-For-Purpose Organizations

## **GENERAL PRACTICES**

			<b>CEREI</b>				
	VISUALIZE			MARSHALL OPTIONS - MANAGE FLOW	MAKE POLICIES EXPLICIT	FEEDBACK LOOPS	IMPROVE COLLABO EVOLVE EXPERIM
ual's work by al kanban board rk item related cket		Backlog     Next     In-progress     Done       Image: State of the s	<b>0.1</b> Establish personal WIP limits	<b>0.1</b> Define work types based on nature of tasks	<b>0.1</b> Define personal Kanban policies	<b>0.1</b> Make personal reflection	
several ns of an nal kanban board		Team     Backlog     Next per person     In-progress (3) per person     Done       Joe     Peter     Peter     Peter     Peter       Joann     Joann     Indext (1)     Indext (1)	<b>1.1</b> Establish per- person WIP limits				
carried out by a team n kanban board ualize an individual's	<ul><li><b>1.4</b> Visualize initial policies</li><li><b>1.5</b> Visualize teamwork by means of an emergent workflow kanban board</li></ul>	Backlog Next In-progress Done	<b>1.2</b> Establish team WIP limits		<b>1.1</b> Define initial policies	<b>1.1</b> Conduct Kanban meeting	
ns by means of a bard with per-person es by means of card vs work items	<ul> <li>2.4 Visualize development of options by means of a discovery kanban board</li> <li>2.5 Visualize individual workload on a discovery kanban board by means of per-person WIP limits, potentially implemented using avatars</li> <li>2.6 Visualize basic policies</li> </ul>	Horizontal position shows percentage complete Next	<b>2.1</b> Establish activity based WIP limits	2.1 Define work types based on customer requests	<ul><li><b>2.1</b> Define initial services</li><li><b>2.2</b> Elaborate further policies</li></ul>		<ul> <li>2.1 Identify sources of dissatisfaction</li> <li>2.2 Identify problematic policies</li> </ul>
valize concurrent or es with checkboxes valize concurrent ed by specialist teams valize sequential o dependency or e exists using rows or	<ul> <li>2.10 Visualize defects and other rework types</li> <li>2.11 Use CONWIP with an emergent workflow delivery kand board to provide workflow level relief from overburden and basic mechanics of a pull system, with separate replenishment and delivery cadences</li> <li>2.12 Visualize workflow by means of enhanced discovery/ delivery boards</li> <li>2.13 Visualize project progress on a portfolio kanban board</li> </ul>	ing i i i i i i i i i i i i i	<b>2.2</b> Establish CONWIP limits on emergent workflow	<ul> <li>2.2 Map upstream and downstream flow</li> <li>2.3 Manage blocking issues</li> <li>2.4 Manage defects and other rework types</li> </ul>	<ul> <li>2.3 Define blocking issue escalation policies</li> <li>2.4 Define policies for managing defects and other rework types</li> </ul>	<ul><li>2.1 Conduct internal team replenishment meeting</li><li>2.2 Make team retrospective</li></ul>	
to commit" status, also to pull" to pull" criteria, also ion of ready", "entry w and teamwork items egated team kanban	<ul> <li>3.4 Visualize project work items on a two-tiered project kanban board</li> <li>3.5 Visualize parent-child and peer-peer dependencies</li> <li>3.6 Use parking lot to visualize dependent work requests of another service or system currently waiting or blocked</li> </ul>	Pool of Ideas Next Development Testing Peelog- ment Ready Done © angoing Done © angoing Done © @ @ @ @ © F H Team 1 Kanban Team 2 Kanban		<ul> <li>3.1 Organize around the knowledge discovery process</li> <li>3.2 Defer commitment (decide at the "last responsible moment")</li> <li>3.3 Use cumulative flow diagram to monitor queues</li> <li>3.4 Use Little's law</li> <li>3.5 Gradually eliminate infinite buffers</li> <li>3.6 Report rudimentary flow efficiency to understand the value of reducing buffers and the leverage of eliminating sources of delay</li> <li>3.7 Actively close upstream requests which meet the abandonment criteria</li> </ul>	<ul> <li>3.1 Establish explicit purpose of metrics</li> <li>3.2 Establish initial request acceptance policies</li> <li>3.4 Establish replenishment commitment point</li> </ul>	<ul> <li>3.1 Conduct replenishment meeting</li> <li>3.2 Make suggestion box review</li> <li>3.3 Conduct service capability review</li> </ul>	<ul> <li><b>3.1</b> Suggest improvements using a suggestion box</li> <li><b>3.2</b> Identify sources of delations of the second sec</li></ul>
m options by means of a ery kanban board ed options using a bin on covery kanban board shment signals hals eria (also known as finition of ready", "exit	<b>3.13</b> Visualize work item aging	Proposed Project       Complete (%)       Projects-in-progress       Complete 100%         I	<ul> <li>3.1 Use an order point (min limit) for upstream replenishment</li> <li>3.2 Use a max limit to define capacity</li> <li>3.3 Bracket WIP limits for different states</li> </ul>	<b>3.8</b> Develop triage discipline <b>3.11</b> Use classes of service to affect selection <b>3.9</b> Manage dependencies <b>3.12</b> Forecast Delivery <b>3.10</b> Analyze and report aborted work items <b>3.13</b> Apply qualitative Real Options Thinking	<ul> <li>3.5 Establish pull criteria</li> <li>3.6 Establish a delivery commitment point</li> <li>3.8 Define classes of service</li> </ul>	<ul> <li>3.4 Conduct delivery planning meeting</li> <li>3.5 Conduct service delivery review</li> <li>3.6 Conduct options review (upstream)</li> </ul>	<ul> <li><b>3.3</b> Analyze blocker likeliho</li> <li><b>3.4</b> Analyze Lead time tail r</li> <li><b>3.5</b> After meetings: discuss spontaneously – bring it service delivery review</li> </ul>
e time ors to indicate risks	<ul> <li><b>4.3</b> Visualize risk classes with different swimlanes</li> <li><b>4.4</b> Visualize split and merge workflows</li> </ul>	5 4 4 2 2 input Analysis Buffer In Prog Done Split Sp		<ul> <li>4.1 Collect and report detailed flow efficiency analysis</li> <li>4.2 Use explicit buffers to smooth flow</li> <li>4.3 Use two-phase commit for delivery commitment</li> <li>4.4 Analyze to anticipate dependences</li> <li>4.5 Establish refutable versus irrefutable demand</li> </ul>	<b>4.1</b> Fitness for purpose explicitly defined and managed based on metrics	<ul><li><b>4.1</b> Conduct risk review</li><li><b>4.2</b> Conduct portfolio review</li></ul>	<b>4.1</b> Develop qualitative understanding of comm vs special cause for pro- performance variation
its on dependencies time in dependencies	4.7 Visualize SLA exceeded in dependencies	Allocation 4 = 20% 6 = 30% 5 $4$ $4$ $5$ $2 = 20  total10  prog Done10  prog Done Done10  prog Done10  prog Done Done Done Done Done Done Done Done$	<b>4.1 Limit WIP on dependency parking lot</b>	<ul> <li>4.6 Determine reference class data set</li> <li>4.7 Forecast using reference classes, Monte Carlo simulations and other models</li> <li>4.8 Allocate capacity across swimlanes</li> <li>4.9 Allocate capacity by color of work item</li> <li>4.6 Determine reference data set</li> <li>4.10 Make appropriate use of forecasting</li> <li>4.11 Assess forecasting models</li> <li>4.12 Use statistical methods for decision making</li> </ul>	<ul> <li>4.2 Establish demand shaping policies</li> <li>4.3 Establish SLA on dependent service</li> </ul>	<b>4.3</b> Conduct operations review	<ul> <li>4.2 Identify impact of shared resources</li> <li>4.4 Identify coordia of shared unders</li> <li>4.5 Develor unders</li> <li>4.3 Identify bottleneck and resolve it of or propertor perfor variation</li> </ul>
				<b>5.1</b> Utilize hybrid fixed service teams together with a flexible labor pool	<b>5.1</b> Align strategy and capability	5.1 Conduct strategy review	
ams and floating resources) Id services		Engine     Teams					<b>5.1</b> After meetings: Discuss Suggest - Take actions Seek forgiveness
							<b>6.1</b> After meetings: Take congruent actions

More information: www.kanbanmaturitymodel.com

beta release

© Lean Kanban Incorporated. All rights reserved. Reproduction by permission only.

## ABORATIVELY, RIMENTALLY **Cultural Focus** Leadership **Cultural Values** Achievement Collaboration Who lam Transparency 5 Who we are Flow Agreement Customer Service Respect Understanding Why ociety od and impact we exist Purpose Balance တ s a problem Ű, it to the 👘 Leadership ntributor Regulatory compliance Ŷ $\square$ $\mathbf{O}$ $\square$ $\mathbf{C}$ Ŷ Behavior process **Market focus** What S Short-term we do fy transaction and stic results nation costs , UNI Altruis υρ γυαπι standing nmon vs nce cause ocess mance Thinking Z ΣZ **Business focus** E E **Systems** Long-term How investment we do it (patient capital) Experimentation Business survivability Challenge How, What, Diversity Why & Who Tolerance

congruent actions with confidence