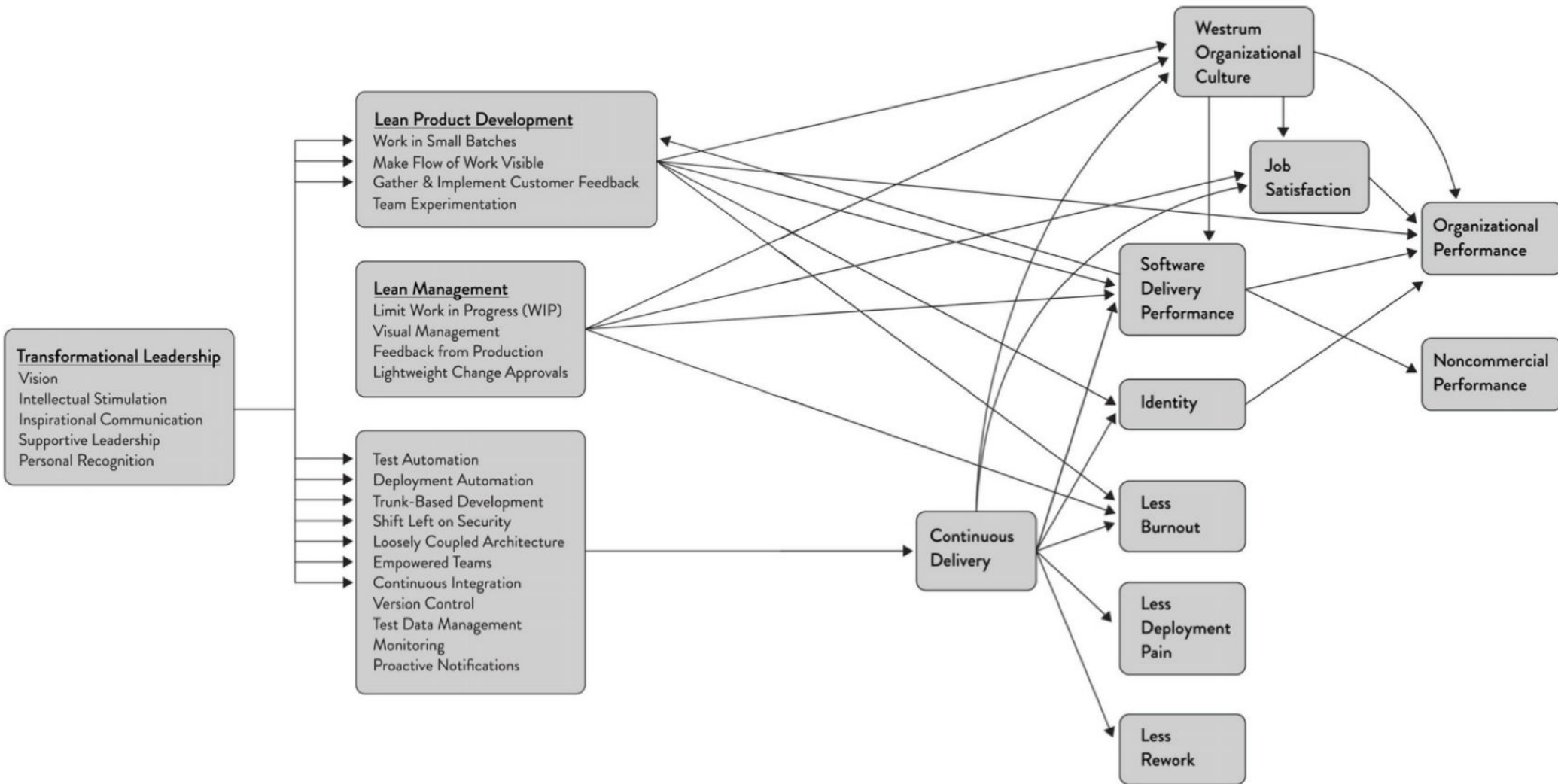# Overall Research Program

From "Accelerate: The Science of Lean Software and DevOps", by Nicole Forsgren, PhD, Jez Humble, and Gene Kim

High-Performance Team, Management, and Leadership Behaviors and Practices
by Steve Bell and Karen Whitley Bell

	Team Practices	Management Practices	Leadership Practices
Culture	*Foster generative culture	*Foster generative culture	*Foster generative culture
	*Build quality in, continuously measure and monitor	*Focus on quality, protect teams to ensure quality	*Focus on quality, protect teams to ensure quality
	Focus on promoting organizational learning	Focus on promoting organizational learning	Focus on promoting organizational learning
		*Provide teams with time for improvement and innovation	*Provide teams with time for improvement and innovation
Organizational Structure			*Align, Measure and Manage to Flow (matrixed, cross-functional value stream organization structure)
		Establish small, cross-functional, multi-skilled teams; support bridging structures so teams can easily communicate and collaborate	Enable and support cross-skilling to reduce expert-dependent bottlenecks, and form communities of expertise
			Establish and support internal coaches and the appropriate infrastructure to scale and sustain them
Direct Learning and Alignment to Value	*Engage, learn from, and validate with customers (Gemba)	*Engage with and learn from customers and teams (Gemba)	*Engage with and learn from customers, teams, supply chain partners, and other stakeholders (Gemba)
	*Understand & visualize customer value, - identify measurable targets for quality	*Understand & visualize customer value, - identify measurable targets for quality	*Understand & visualize customer value, - identify measurable targets for quality
	* Practice creativity as part of overall work	*Practice creativity as part of overall work, encourage team members to utilize this time to learn and innovate	*Budget for and allocate time for creativity (i.e. Google's 20% target)
Strategy Deployment	*Visualize team goals and targets, understand how these targets advance enterprise strategy	Help teams to set and visualize goals and targets, understand and communicate how these advance strategy (catch ball)	Practice strategy deployment, visualize all goals, and near-term targets, communicate this clearly to managers and help them set appropriate targets and initiatives
	*Actively monitor and visualize performance to goals/targets	*Actively monitor and visualize performance to goals/targets	*Actively monitor and visualize performance to goals/targets
			Eliminate unnecessary controls, invest instead in process quality, and team autonomy and capability (*Teams that reported no approval process or used peer review achieved higher software delivery performance)
Improve flow through analysis and disciplined problem solving	Visualize & analyze work flow, identify obstacles to flow, (Process/Value stream mapping & analysis); *understand the connection between the work they do and its positive impact on customers	Visualize and analyze work flow, identify obstacles to flow, (Process/Value stream mapping & analysis) help teams understand how they support larger value stream	Visualize and analyze overall value stream flows (enterprise architecture), identify systemic obstacles to flow, prioritize and support mapping and analysis of lower level supporting flows
	Prioritize obstacles to customer value and experience, and team targets and goals	Prioritize obstacles to customer value and experience, and team targets and goals	Prioritize systemic obstacles to flow
	Apply disciplined problem solving to prioritized problems, analyze to identify root causes	Apply disciplined problem solving to prioritized problems, analyze to identify root causes	Apply disciplined problem solving to complex systemic issues to identify strategic improvement themes and targets (strategy deployment), apply learning to update standard work
	Escalate cross-functional and systemic problems	Coordinate cross-functional problem solving, solve or escalate systemic problems	Cascade prioritized problem solving targets to the appropriate stakeholders through catchball PDCA
	Form hypotheses about root causes, design and conduct controlled experiments, measure results, communicate learnings, repeat if needed, incorporate improvements into	Form hypotheses about root causes, design and conduct controlled experiments, measure results, communicate learnings, repeat if needed, incorporate improvements into	Learn from organization-wide PDCA cycles, and repeat learning/improvement cycles
Way-of-Work Rhythm & Routine	*Visualize, measure and monitor work flow, monitor for deviations, respond to deviations appropriately	*Visualize, measure and monitor work flow, monitor for deviations, respond to deviations appropriately	*Visualize, measure and monitor work flow, monitor for deviations, respond to deviations appropriately
	*Break demand into small elements (MVP's) and release regularly and often		
	*Visualize Demand, WIP, and "Done" (Kanban)	*Visualize Demand, WIP, and "Done" (Kanban)	*Visualize Demand, WIP, and "Done" (Kanban)
	*Minimize and visualize WIP	*Minimize and visualize WIP	*Minimize and visualize WIP
	Prioritize demand to goals and targets	Prioritize demand to goals and targets	Prioritize demand to goals and targets
	Develop & practice team standard work (rhythm & routine)	Develop & practice leader standard work (rhythm & routine)	Develop & practice leader standard work (rhythm & routine)
	Conduct daily stand-ups with standard routine, escalate obstacles as needed (catchball)	Conduct daily stand-ups with team leads, standard routine, resolve or bridge/escalate obstacles as needed (catchball)	Conduct stand-ups with direct reports with standard routine on a regular cadence, resolve escalated obstacles (catchball)
	Support team and peer learning	Coach team members; support team learning	Coach managers, have your own coach
	Conduct regular cadence of retrospectives (work, and way of work)	Conduct regular cadence of retrospectives (work, and way of work)	Conduct regular cadence of retrospectives (work, and way of work)