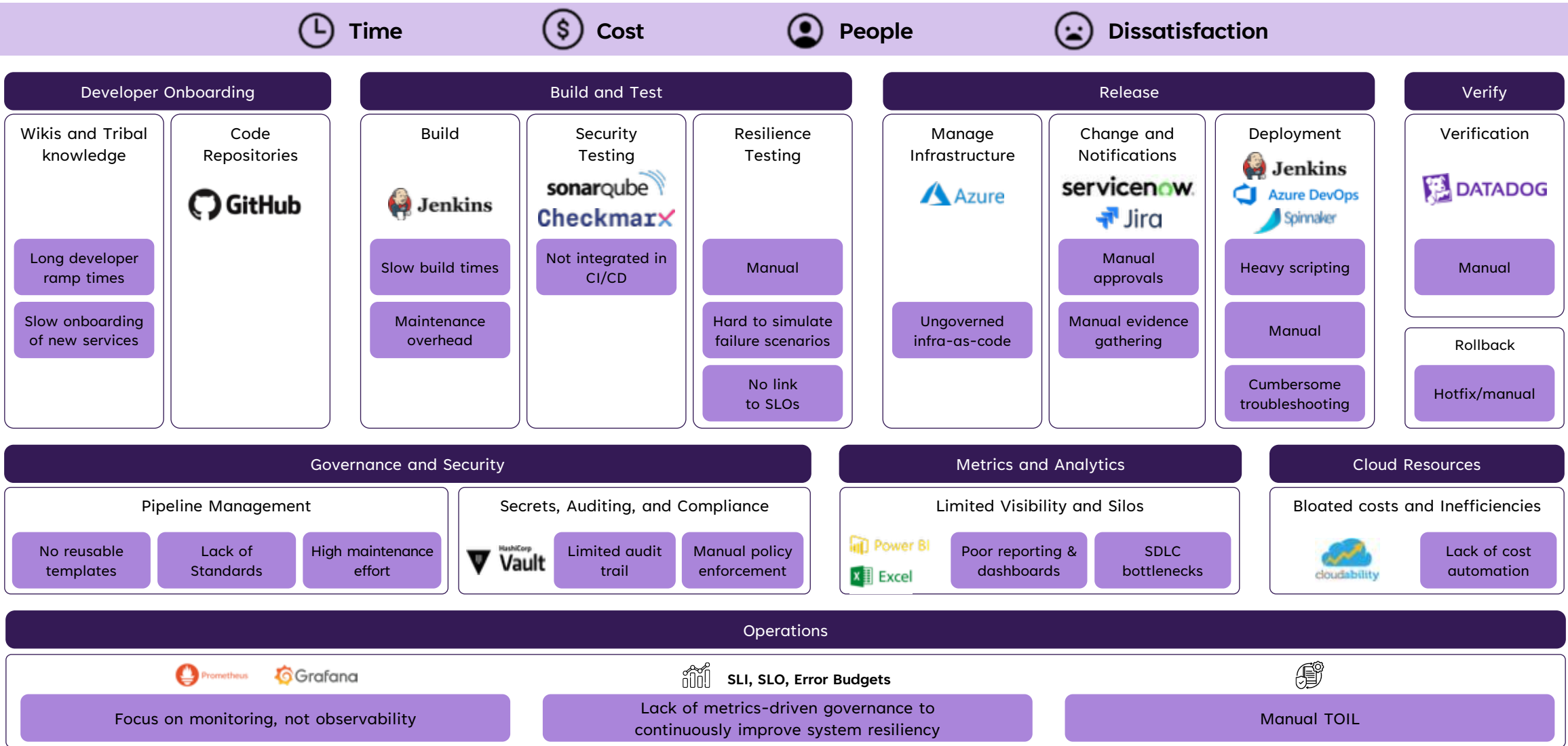


Typical Engineering Challenges we have seen in the industry

We believe Platform engineering helps address the challenges and improve engineering excellence

 Engineering Areas	 Challenges	 Impact	 How does platform Engineering help
 Managing infrastructure complexity	Manually managing complex infrastructure setup encompassing • Various cloud services, • On-premises tools, • Networking components, • Third-party integrations	• Error-prone configurations • Inconsistent infrastructure leading to inefficiencies in infrastructure management	Abstract the complexity by creating • Standardized, automated, and self-service platforms that enable teams to provision and manage resources reliably and quickly.
 Enhancing developer productivity	Significant time spend by developers in non-value-added activities like • Configuring environments, • Troubleshooting deployment issues • Managing dependencies	• Developer productivity in core development tasks	Enabling automated self-service capabilities through internal developer portal for developers to • Manage infrastructure • Pre-configured environments • Standardized templates • Pre-configured CI/CD pipelines, • Isolation of development issues
 Ensuring consistent & reproducible environments	• Parity differences between lower (development, test) and higher environments (pre-prod, prod) unreasonable	• Development bugs, deployment failures, performance issues	Provides reproducible and consistent environments through • Infrastructure as code • Containerization • Standardized deployment pipelines
 Supporting scalability & System reliability	• Efficient scaling of infrastructure, driven by demand	• Performance issues • Unplanned downtimes • Cost inefficiencies	Provision scalable infrastructure through • Auto-scaling • Automated load-balancing • Disaster recovery solutions
 Addressing security & compliance	• Complex security risks and regulatory compliance requirements	• Undetected security vulnerabilities, • Missing regulatory compliances, • Increased lead-time and costs to manage security risks and regulatory compliance requirements	Integrated security best practices such as • Automated security scans, • Role-based access controls • Audit logging
 Reducing operational overhead & manual interventions	Manual • Monitoring • Operational housekeeping tasks • Incident management • SOP workflows	• Burnout of operations team • Operational inefficiencies	Promotes SRE ways of working involving automated • Routine housekeeping activities, • Monitoring, • Alerting • Incident management
 Breaking silos and promoting cross-team collaboration & standardization	• Siloed team • Disparate tools & processes	• Restricts collaboration • Constraints standardization	Promotes • Shared platform • Standardized tools & processes • Common API's • Standardized workflows These foster collaboration and standardization
 Accelerating delivery cycles	• Non-adoption of DevOps best practices • Manual deployment	• Deployment issues • Longer release cycles	Provides • Reliable and fully automated deployment processes, • Templated pipelines to ensure consistency, • Reduced release cycle time
 Facilitating Technical governance & policy enforcement	• Manual code quality checks • Manual Security vulnerabilities checks	• Sub-optimal and potentially insecure code promoted from lower to higher environments, • Increased cost of re-work	• Automated and policy-enforced code quality and security vulnerability checks, before promoting from lower to higher environments,

Engineering challenges when mapped to SDLC, can be concerning for organizations



Our Solution vision to address Engineering challenges

Wipro's Digital Rig includes an orchestrator model which holistically oversees the entire IT estate of a client, including E2E software delivery, processes, tools and infrastructure, independent of methodology, automation, or tool vendor.

Our representative solution is powered by Azure & Its services

Azure & GitHub trained/certified

 **300+**
Trained

 **30+**
Certified

