

## Utilizing Proactive, Preventative, and Predictive (3P's) processes to Reduce Disruption in a Digital World

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Consumers of IT services in today's Digital world have high expectations; they expect reliable, available, and quality services. Many companies are consuming Infrastructure as a Service (IAAS), Software as a Service (SAAS), APIs, and Micro services to provide business capabilities to their consumers. When there are failures, warnings or disruptions in these services, there is high demand to alert customers. All of this is occurring in real-time with the expectation of highly accurate information. Dashboards, text alerts, message board postings, and automated error handling routines can be effective methods in delivering information. The challenge to delivering this information is capturing all the technical data available and translating it into business terminology that the customer can understand, so they, in turn, can inform their customers effectively. Simply put, "What does this mean to me and what is the impact to my business and partners?"

In order to meet the challenge of accurate and timely communicating of information and reducing failure and disruptions, there should be a focus on three processes. I use the following terms, **proactive**, **preventative** and **predictive** (3P's) to describe this concept.

**Proactive** is knowing a service before the customer and informing them of status, impacts and workarounds that is not "technical jargon." A key to providing timely information is the integration of multiple monitoring solutions, alerts, robotics and error messages that map to configuration management databases (CMDB) which correlate and translate to business systems (order entry, claims, billing). Publish and Subscribe tools can be implemented to provide consistent and timely messages to consumers and customers. Common proactive measures that can take action and reduce service disruption are processes that trigger specific error messages or events.

**Preventative** concepts are meant to reduce and/or avoid disruptions. Preventative examples include: continuous process improvement programs, automation methods that fix before fail, elimination of single points of failure, chaos engineering principles, and shift left initiatives.

The **predictive** process method is the highest maturity level of the 3P's and the most active market trend capability. Emerging tools and processes such as predictive analytics, artificial intelligence, and machine learning can be leveraged to manage the mounds of log data and generated alerts. These tools can attempt to avoiding disruption, reduce labor, forecast results, and provide conclusions. Think of it as an early warning system that foresees actions to be taken before an inevitable failure or disruption.

The 3P's concept is just as much a cultural shift as it is processes and tools. Service desks, IT Operations and Maintenance areas prioritize efforts with proactive initiatives. IT

Architects, IT Engineers and App Developers focus on preventative and predictive initiatives. 3P's outcomes have the potential to be large contributors to any quality or customer communication strategy. The right communications in conjunction with the 3Ps, will allow the goal of reduced disruptions in the digital world.