**IT Management Business Process Description – NextTech**

**1. Introduction**

At NextTech, IT Management serves as the central nervous system that connects our smart manufacturing operations with our digital twin SaaS platform. With operations spanning the European Union and supporting ~5,000 employees, our IT function must maintain an optimal balance between technological innovation, operational stability, and stringent security requirements. This comprehensive process governs how we plan, deliver, and support all IT services that enable our business to thrive in an increasingly digital landscape.

Our IT Management framework is built on a powerful integration of core platforms: **ServiceNow** forms the backbone of our IT service management, **Microsoft Azure** provides our cloud infrastructure foundation, **SAP S/4HANA** ensures seamless ERP integration, and **Salesforce** connects our customer-facing systems. This interconnected ecosystem allows us to maintain business continuity while driving digital transformation across all areas of our operation.

**2. Key Objectives**

The IT Management process at NextTech is designed with several critical objectives in mind. First and foremost, we strive to deliver reliable, secure, and high-performance IT services that support our global operations without interruption. This includes maintaining exceptional availability standards for our mission-critical manufacturing operations and SaaS platform. Security forms another cornerstone of our objectives, with robust cybersecurity protections implemented to safeguard our sensitive data and valuable intellectual property.

We maintain a strong focus on cost optimization, ensuring our IT investments deliver maximum value while still enabling our ambitious digital transformation initiatives. Compliance forms another key pillar, particularly with evolving EU regulations like GDPR, NIS2 Directive, and the Cyber Resilience Act. Finally, we continuously explore emerging technologies such as AI, IoT, and edge computing to maintain our competitive advantage in the smart manufacturing space.

**3. Process Steps**

**3.1 IT Strategy & Governance**

Our IT strategy development begins with collaborative quarterly planning sessions between the CIO office and business unit leaders. These intensive workshops identify capability gaps and innovation opportunities through detailed analysis of current operational needs and future business objectives. The output is a dynamic 18-month technology roadmap that carefully balances essential operational maintenance with strategic transformation projects.

The governance of this strategy is maintained through three specialized committees. Our Architecture Review Board meticulously evaluates all proposed solutions against our enterprise architecture standards, ensuring technical coherence across the organization. The Security & Compliance Committee maintains vigilant oversight of our adherence to evolving EU cybersecurity regulations, conducting regular audits and risk assessments. Perhaps most crucially, our Digital Transformation Office serves as the driving force behind adopting Industry 4.0 technologies across our manufacturing network, working closely with plant managers to implement cutting-edge solutions.

**3.2 Service Delivery & Operations**

Service delivery at NextTech operates through a centralized model powered by ServiceNow, providing consistent, high-quality IT services across all our locations. Our comprehensive service catalog contains over 200 defined services, ranging from basic workplace IT support to specialized assistance for manufacturing control systems. We achieve exceptional visibility into our operations through Azure Monitor, which provides real-time insights across our entire IT stack, allowing us to predict and prevent incidents before they impact operations.

For our critical manufacturing systems, we've implemented a rigorous site reliability engineering model that delivers exceptional performance metrics. Our production control systems maintain 99.95% availability through carefully designed redundancy and automated failover capabilities across Azure regions. We've integrated predictive maintenance algorithms with our factory IoT equipment, significantly reducing unplanned downtime.

Our service desk handles an average of 15,000 tickets monthly with impressive efficiency. Through continuous improvement initiatives, we've achieved an 85% first-contact resolution rate for Level 1 issues, significantly reducing employee downtime. Our AI-powered chatbot now handles 40% of routine inquiries, freeing up human agents for more complex problems. Perhaps most impressively, we maintain an average resolution time of just 2.3 hours for critical incidents that could impact manufacturing operations or customer experience.

**3.3 Application Management**

Our application portfolio management covers over 150 business-critical applications, with particular focus on maximizing value from our core platforms. For SAP S/4HANA, we've implemented a disciplined release cadence with monthly cycles for minor enhancements and bi-annual major upgrades preceded by a 72-hour change freeze period. This careful approach has resulted in exceptional 98.5% uptime across all SAP modules.

The management of our Digital Twin SaaS platform follows a more agile methodology, employing continuous deployment with daily releases. We utilize feature flags for controlled rollouts and conduct extensive canary testing in dedicated Azure test environments before exposing new features to our customer base. This balanced approach allows us to innovate rapidly while maintaining platform stability.

Change management forms a critical component of our application management process. All modifications currently follow a standardized workflow in ServiceNow, requiring appropriate approvals based on the change's potential impact. We are seeking a new provider to meet our technical demands better. Our tiered approval matrix ensures that significant changes receive executive review, while routine updates follow an expedited path. We track all changes through a centralized registry and conduct post-implementation reviews for high-impact modifications.

User management is equally rigorous, with all access requests routed through formal approval workflows in ServiceNow. Our role-based access control system ensures employees only receive permissions appropriate to their job functions, with mandatory quarterly access reviews conducted by department heads. Specialized approval processes exist for privileged access to sensitive systems, requiring additional justification and multi-level authorization.

**3.4 Infrastructure Management**

NextTech operates a sophisticated hybrid infrastructure environment that combines cloud agility with on-premises reliability. Our cloud footprint on Microsoft Azure now hosts 80% of our workloads, including Kubernetes clusters for containerized applications and cold storage archiving for compliance data retention. This cloud-first strategy has delivered significant operational flexibility and cost optimization.

Our on-premises infrastructure remains vital for specific use cases. Manufacturing edge computing nodes provide real-time process control capabilities where latency is critical, while our secure data centers continue to host regulated workloads that require physical isolation. Our SD-WAN network seamlessly connects 35 production facilities across Europe, ensuring reliable connectivity for operational technology systems.

Infrastructure automation has become a key differentiator in our operations. Currently, 90% of our provisioning occurs through Infrastructure-as-Code templates, dramatically reducing deployment times and configuration errors. We maintain a 95% compliance rate with patch management SLAs, and our dynamic scaling algorithms ensure the SaaS platform can handle variable workloads without manual intervention.

**3.5 Security & Risk Management**

Our security operations center operates around the clock to protect NextTech's digital assets. The SOC leverages Azure Sentinel to analyze over 2TB of security logs daily, using advanced analytics to detect potential threats. Every endpoint in our network is protected by next-generation EDR solutions, and we conduct weekly phishing simulation tests to maintain employee awareness.

Data protection receives particular attention in our security framework. We enforce encryption for all data in transit and at rest, with comprehensive key management procedures. Our GDPR-compliant data lifecycle management system ensures proper retention and disposal of sensitive information. Regular penetration testing by accredited security firms provides independent validation of our defenses.

Business continuity planning is integrated into all aspects of our operations. We maintain a 4-hour recovery time objective for critical systems and a 15-minute recovery point objective for manufacturing data. Quarterly disaster recovery drills test our preparedness, with lessons learned incorporated into continuous improvement plans. These measures ensure we can maintain operations even during significant disruptions.

**4. System Integration & Automation**

The power of NextTech's IT Management process lies in the seamless integration of our core platforms. ServiceNow serves as our central nervous system, managing IT services, maintaining our configuration management database (CMDB), and orchestrating governance workflows. Microsoft Azure forms our primary cloud platform, hosting the majority of our workloads while providing integrated security capabilities. SAP S/4HANA delivers crucial financial transparency for our IT investments, while Salesforce integration ensures customer-impacting incidents receive prioritized attention.

**5. Key Performance Indicators (KPIs)**

**5.1 Service Quality**

* **Critical System Availability**: Currently at 99.92% against a target of 99.9%, measured through Azure Monitor's synthetic transactions and real-user monitoring
* **Mean Time to Resolve (MTTR)**: Maintaining 2.3 hours against a <4 hour target, tracked through ServiceNow's incident management module with timestamps for each resolution phase
* **Unplanned Outages**: Averaging 3 per quarter against a ≤5 target, recorded in our major incident register with root cause analysis documentation

**5.2 Operational Efficiency**

* **IT Cost as % of Revenue**: At 2.8% against a ≤3% target, calculated monthly through SAP's financial consolidation reports
* **Automation Rate**: Currently 68% of routine tasks automated against a 75% target, measured through workflow analysis in ServiceNow and Azure Automation logs
* **Incident Prevention Rate**: Achieving 40% prevention via predictive monitoring against a 50% target, calculated by comparing predicted vs actual incident volume in Azure Sentinel

**5.3 Security & Compliance**

* **Critical Vulnerabilities Patched**: Maintaining 100% within 72 hours against a 100% target, tracked through our vulnerability management system with patch verification workflows
* **Security Incident Detection Time**: Averaging 22 minutes against a <30 minute target, measured from first anomalous activity to SOC alert generation in Azure Sentinel
* **Audit Findings**: Currently 2 minor findings against a ≤3 target, documented in our compliance management system with remediation tracking

**5.4 Business Alignment**

* **Digital Transformation Projects Delivered**: Completing 3 per quarter against a 4 target, tracked through our project portfolio management system with business sign-off verification
* **Business Satisfaction Score**: Achieving 4.6/5 against a 4.5 target, measured through quarterly surveys of business unit leaders
* **Employee Digital Experience Score**: Maintaining 8.7/10 against an 8.5 target, collected through continuous feedback mechanisms in our employee portal