$SmartGxP^{TM}$ - Why now?

Opportunities beyond flexible labor options exist to reduce technical debt and deliver intelligent automation solutions within specific groupings of business critical and critical unmet need areas. The focus of this summary pairs shorter-time work horizons (and effective use of automation) with compliant enablement of cloud services supported between managed and self-service models widely-available across industry. For these cases providing a pay-as-you-go service option in many cases captures increased (or new) value by application of more careful controls to prevent/counter technical debt accumulation while improving digital enablement and overall customer experience and satisfaction. [By technical debt, it is meant design or construction approach that's expedient in the short term, but that creates a technical context in which the same work will cost more to do later than it would cost to do now.]^{1,2}

An example is presented here to describe the service option involving an actual request that occurred in late April 2023 yet without discussion of complex clinical use cases or nuance between automated validation and qualification for specific software components (although IQOQ is covered by the service). Names and identifiers are modified to protect privacy but the facts are presented to motivate adoption of pay-as-you-go service opportunities by means of a real-world example discussed at a high-level to promote understanding across all technical skill levels. Pay-as-you-go involves digital payment [AMOP/ACH/ICD] for immediate delivery under the existing integrated service cloud model.

Motivational Example: An unsolicited request was received at the MSA partner to provision a 'stable vm' [by stable is meant IQOQ/IAPP Compliant] at once. The request was processed immediately by application of a sequence of 26-steps in just under two hours time with successful provision of the stable vm at the customer software-defined data center for long-term support. The request was motivated by a data factory requirement and ongoing operational dependency using an 'unstable vm'. Although mundane, the task to provision the 'stable vm' (note the technical debt already accumulated) requires details and skills which may not be easily translated through existing and approved documentation and likely resulted in the unstable vm getting provisioned in the first place. Enhanced enablement uses computer technology in an assistive capacity to flatten the mundane by interpretation of the technical details in automation. Providing the end-user a single-page natural language-based digital intake option or interactive voice intake option reduces the engagement to several minutes in IVR or Web UI with no human actions beyond the request. The compliant hardware/software resource gets provisioned correctly the first time with full integration to configuration management databases covering full SDLC lifecycle from planning through retirement. Scores of 1, 2, and 4 hour "shorter-time work horizon tasks" can be flattened using this approach of automation driven by parameter-based structured architectural data processed using in-house or external agent tool sets. The path of least resistance is to flatten the technical debt-generating processes going after ones with less than thirty steps across all success courses. Confidence levels are high since required parameters are defined by configuration for high-availability at each cloud service provider. Using the natural language interface to ingest each request gets translated successfully every time since the parameter families are pre-configured for support as part of the defined SLA.

The time window for deployment of such digital enablement services is early 4Q 2023 with an expectation of enterprise integration during 1Q 2024 for a selection of 1, 2, and 4 hour windows.

¹ S. McConnel (2011) Managing Technical Debt, Construx

² 2012 Joint Working Conference on Software Architecture & 6th European Conference on Software Architecture

• Overview of the proposed solution / platform – in a "product box" type model if practical.

The branded mark refers to service patterns and not a product or product platform. Indeed the service patterns are platform independent with emphasis on four key practices to deliver parameter-based structured architectural data automation using in-house or external agent toolsets to deliver value with modern controls applied to technical debt accumulation. [A solution architecture employing static website for request ingestion with single-page user interface or interactive voice and internal/external service integration is sufficient to capture the value-add statement improving process controls to prevent the accumulation of technical debt while providing just-in-time value based upon immediacy of customer requests.]

• Detail of the problem it is addressing in the market.

According to Gartner 79% of Application Modernization Projects fail within 16 months and at a cost of \$1.5M [USD]. The service patterns embraced by the SmartGx $P^{\mathbb{I}}$ brand will improve those numbers for companies sage enough to better manage their technical debt challenges combining the four key practices with their intelligent automation lighthouse targets. Between 2021 and 2022, industry analyst IDG witnessed the category of "Application Modernization" skyrocket from the #8 to the #3 top priority for CIOs. Additionally, IDG predicts that by 2024, the majority of legacy applications will be getting an update.

Overview of the target market and size of the same.

Application Modernization Services Market Size was valued at USD 7.2 billion in 2021. The application modernization services market industry is projected to grow from USD 8.4 billion in 2022 to USD 24.9 billion by 2030, exhibiting a compound annual growth rate (CAGR) of 16.80% during the forecast period (2022 - 2030).³ Two sources cite 94% of all companies have cloud presence. Large enterprises should remain the focus of the brand service through FY 2030.

• Some information about the competition in the market.

The Application Modernization Services market includes many large product platform providers. However, the focus of this brand is to provide services directly to customers both internally in association with their integrated services platforms and externally as an agent providing modernization capabilities across all vendors and contractors. Given the service offering of procurement by anyone online at any time introduces a new market pattern into the space. Platform leaders in the space include ServiceNow, SAP, and SalesForce and the brand bolsters the leading platforms with integration patterns that drive efficiency, effectiveness, with customer engagement and digital enablement. Others include leaders IBM, Wipro, and Virtusa.

• Investment required to bring the product to market.

A fair estimate is ~\$100,000 [USD]. In most cases bringing a product to market reaches into the millions of dollars. However, given the expertise and resourcefulness of the principal driving the brand the figure comes in around the cited investment level to reach market, then sustain and grow.

• Commercial model (Subscription, Project Type Revenue, Embedded Engineering Revenue, etc).

The commercial model is a pay-as-you-go service model open to anyone globally with need to reduce technical debt in the application modernization space. Payment options include AMOP, ACH, ICD, and cloud credits.

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³ PRNewswire 16 MAR 2023

• Operational costs (to deploy and maintain).

Operational costs to deploy including development approaches \$60,000 [USD] with one unit of human resource to support including all global regions to maintain. Monthly cloud costs vary with demand but include cloud services [storage, API, gateway, digital payments (with cost per transaction and chargebacks for guaranteed services]. Monthly operational costs including maintenance and human resource approaches \$20,000 [USD] at production roll-out at 1Q 2024.

Price points.

As noted, the SmartGx $P^{\mathbb{M}}$ brand refers to service patterns and not the product platform. Price points are typically discussed in context of recommended pricing for product or service. The guidelines are very clear as hourly (in automation) based upon the cloud service provider pay-as-you-go rate for each deployed service (at time of fulfillment) and should also include standard subject matter expert rate should human presence be required/requested during installation and/or operational qualification periods. At maturity the end-to-end automation should be completely machine driven using best generative intelligent automation best practices.

Rol & Payback.

Given the cited market trends for Application Modernization and the existing industry base, the Rol and Payback will occur within one FY after production rollout in 1Q 2024 including total cost of ownership with many years of profitability during the peak growth periods noted by Gartner.

Along with our partners we continue in our efforts to emphasize the need for both *cooperation* and *agency* to meet or exceed the highest standards of excellence and industry leadership. Thank you.

Faithfully Yours,

Robert Devine

Key

AMOP - Alternative (Digital) Methods of Payment [Credit Cards, Debit Cards, Digital Wallets(Apple, Google)]

ACH - Automated Clearing House [Pay by Check]

ICD - International Contracts Database [e-Biz Payment - Recurring]

SDLC - Software Development Life Cycle

IQOQ - Installation Qualification / Operational Qualification

IAPP - Information Asset Protection Policies

MSA - Master Service Agreement (Partner)

SLA - Service Level Agreement

IVR - Interactive Voice Response

UI - (Web) User interface