Employees in today's digital workplace use different devices like phones, tablets, laptops and pretty much work happens on the go, in travel or at meetings. There is an increasing demand for IT to develop enterprise scale, multi form factor apps in short time frame for niche business transactions and to improve adoption and employee productivity. The mobile revolution along with cloud capabilities, has changed our experience in using commercial apps, but the enterprise apps we use to perform niche business transactions have been slow to keep pace with the employee demand. Though organizations are moving to cloud, the business applications still remain predominantly on-premises, and the enterprise apps are not optimized for mobile, are not easily extendable for integration with other applications upstream or downstream, and not accessible where people need them most – and in the device of choice.

The purpose of this point of view is to introduce to you, Microsoft PowerApps, - the low code enterprise app platform from Microsoft, the salient features of PowerApps platform, look at some of the differences of PowerApps with Microsoft Access & facilitate you with all essentials to get started with PowerApps to unleash new business agility.
Abstract

- Enterprises, small or big, have processes to support their Business Models. Processes, however, are unique and built for the needs of every enterprise/industry. A bank, for example, has processes that are very different from that of a consumer goods/retail or a chemical/pharmaceutical company. Each process has a different level of maturity — varying from ad hoc and manual to well-documented and automated. What’s more, these processes need to be updated with changing business, compliance, and environmental needs.

- Keeping up is never an easy task. With the growing set of cloud applications and services, every enterprise should be concerned about how fast its processes and supporting application landscape can adapt to the changing business environment.

- There is a growing need for nibble and flexible processes, end-to-end process automation through a seamless handshake between legacy and newer SaaS-based systems and pressures to reduce open costs on BPM tools. Due to these requirements, a large number of enterprises are looking towards low code, serverless BPM platforms like Power Automate. The low code–no code Intelligent Process automation tools are not just a trend anymore, but a business imperative that can help organizations adopt a holistic approach towards BPM initiatives.

- This whitepaper is a prelude to how enterprises can leverage the Infosys CHAIN model (Comprehensive Process Automation In serverless Network) to scale Low code–No Code based serverless BPM platforms like Microsoft Power Automate.
Overview

Business Process Automation is critical for the success of any enterprise as it helps to cut down processing times drastically and facilitates the reduction of human errors. It improves job satisfaction of employees as they are no longer tied up with routine tasks. It enables organizations to focus on strategies for adding value and business growth as the leadership is empowered with a system supported decision making. A recruitment firm, for example, can achieve significant efficiencies by identifying suitable candidates through smart data capture and resume text extracts matching job requirements. This results in significant effort savings and minimizes work redundancy and human error in shortlisting candidates at source, as system-led scoring helps recruiters with supported decision-making in the hiring process. A recent Forrester study shows that within the last two years organizations adopting Business Process Automation, which is seen as a key strategic business differentiator, have shown exponential growth. The primary drivers of the adoption of process automation vary from digital transformation, customer experience improvement, worker productivity improvement, regulatory mandates, and cost reduction initiatives.

Though it is imperative that process automation must be a key strategic consideration and many organizations are driving Business Process Automation projects, there are varying levels of success in implementation. A Deloitte survey states that more than 30-50% of the Business Process Automation projects fail and 63% of the leaders driving Business process Automation projects cite unsatisfactory speed of implementation as the reason for failure. The study shows that only 3% of organizations have scaled process automation.

Current Challenges in BPM initiatives

Let us now talk about some of the key challenges faced by organizations using traditional Business Process Automation tools and the solutions that can be adopted by digitally nibble organizations.

1. Automating the Task, Not the End-to-End Process

One of the biggest benefits expected of Business Process Automation software is that it can consolidate automated processes across your enterprise under one overarching solution. Modern businesses tend to have a complex environment with a variety of disparate applications. As an enterprise grows, the complexity increases — new technologies are adopted, mergers and acquisitions occur, or custom code is written to meet new challenges. One solution for getting all these applications together is to enable point-to-point integration wherein a unique connector is implemented for each pair of applications involved. However, this type of integration isn’t scalable. The more applications you have, the more work is involved in integrating them with each other reliably. This often leads to a monolithic Business Process Automation architecture. This limits the organization’s ability to innovate process efficiencies across systems, drive AI/ML-based intelligence from the data across process and eventually resort to individual task-based RPA’s, and resource cost savings based KPIs.
Solution
The right digital Business Process Automation platform should offer a simple way to integrate all your business-critical applications under one umbrella, be it legacy programs, new applications, on-premise or cloud-based solutions. Server-less automation and Microservices-based architecture are the new norms and enterprises should be looking at platforms that provide these capabilities to enable true business process efficiencies.

2. Lack of IT-Business Alignment
In traditional Business Process definition and automation projects, the development team and business users meet upfront to define the application and set goals for delivery. But once development begins, business users are excluded from the process mostly because they can’t understand code. The result is that all too often, the application that is delivered isn’t what the business wants or expects. Sadly, the industry is notorious for this type of failure. The business is left with an inflexible application that doesn’t support their business process. The application either goes unused, or it forces the business into an inefficient process. Lack of business collaboration comprises more than 50% of the barriers to digital success.

Solution:
Enterprises today must look at collaborative BPA platforms that enable business users/Citizen Developers to innovate process efficiencies, without compromising on IT governance and controls. This is essential for a scalable Business Process Automation initiative.

3. Automating the channel, ignoring the journey
Chatbots, intelligent assistants, messaging, web self-service, email, social media, call centers - the channel/customer touchpoint list keeps growing. The pressure to be present across channels has led organizations to focus Business Process Automation efforts on specific channels, instead of thinking about a holistic customer journey. This leads to standalone development teams building unique logic into each specific channel, isolating intelligence, and creating disconnected processes and silos. When logic is hardcoded into each channel, experiences are inconsistent and incoherent. This also stems from the lack of adoption of a holistic process automation platform.

Solution:
Enterprises should look at adopting a single digital platform that can provide end-to-end process visualization, extensibility framework to cut across application stacks, robotic automation capabilities, interactive mobile-friendly forms, and infuse Artificial Intelligence and Machine Learning into the process.
Evolution of BPM

While the above-mentioned challenges are still very prevalent, we are also starting to witness some promising trends. Slowly but steadily, the industry is moving towards BPM initiatives that are more holistic and experience-centric.

**Distinctions between the front office and back office will disappear**: Customer journeys will become the defining road map for process automation, and organizations will realize that true automation means back-end operational excellence in support of front-end user experience.

**Organizational boundaries will become far more absorptive**: The trend in business functions optimizing to drive results and causing technology silos are rapidly fading. Processes will span organizational boundaries, and the ability to seamlessly interact with systems across the organization will be a key component of Business Process Automation software.

**Software development will become a diaspora, not a silo**: As every company becomes software-driven, they will require far more software support processes than they can build using traditional, IT-led approaches. Business developers, supported by IT, will fill the gap. Collaborative Business Process Automation platforms will be the key.

Given the need for nibble operations and process flexibility, organizations are increasingly looking at Low Code-No Code based intelligent Business Process Automation platforms on Cloud like Microsoft Power Platform which has seen a 700% increase in subscription over the last 12-15 months. Low code–No Code platforms like Power Automate provide the IT-business collaboration platform for BPA, flexibility and time-to-market advantage with inbuilt integrations, cost reduction through scalable server-less operations, and native extensibility to mobility platforms. The Power Automate platform is natively packaged with Machine learning capabilities to facilitate enterprises look at moving from Business Process Automation to intelligent process automation.

We at Infosys have a dedicated center of excellence for low code node-based digital automation, a proven track record of engagement at a strategic level, and an approach that places customer journey at the forefront. Our expertise in delivering Digital Process Automation and our breadth of services have borne testimonial, with Forrester rating Infosys as the leader in Digital Business Automation services.
Introduction to Microsoft Power Automate

CHAi.N

Power Automate is a low code digital Business Process Automation platform from Microsoft. The platform provides citizen and professional developers alike to design business logic using a point-and-click flow designer. The platform is natively integrated with over 270+ cloud applications and provides a server-less and microservices architecture to enable extensibility across enterprise systems. With a mobile-first approach, Power Automate helps ensure data consistency and user adoption for multi-staged business process flows through guided business process forms that can be rendered across devices and web applications. Power Automate is natively tied to cognitive services to facilitate Natural Language Processing and Machine Learning capabilities to facilitate intelligent process automation. While Low Code Business Process Automation provides all the ingredients to deploy business automation deeper and at scale, it is pertinent for enterprises to take a staggered adoption of the platform. Infosys, based on its experience on the platform has devised CHAiN- (Comprehensive Process Automation In serverless Network) - a maturity model-led service offering framework, that facilitates organizations to traverse the path from a prime mover to a transformer.

The Model aims at facilitating

- Quick onboarding to Power Platform - use case and ROI identification framework
- Provide maturity model-led service offerings for deep automation
- Structured investments for organization, depending on the nature and maturity in automation cycle
- Enable a seamless business-IT collaboration process

![CHAiN Prospective curve](image)

**Prospective curve**

- **Straight line process**
  - Single step process
  - Fixed workload
  - Siloed relationship

- **Triangle association**
  - Multi varied relationship
  - Three way connection between systems
  - Event management workflow

- **Circular processing**
  - End to end workflow connection
  - Multiple business process Automation
  - Auto scheduling the process based on events completion
  - Dynamic infrastructure for server less networking system
  - Advanced Analytics

**Business value**

- Reduce manual work
- Cost reduction
- Remediate problems
- Increase in IT efficiency
- Cost optimization
Stage 1: Prime Movers - Enabling Systems That Do

This stage of the prospective curve focuses on identifying a simple straight-line business process and turning the simple manual work to Power Automate solution. Example of straight-line automation includes single-step process flows, automating repetitive process flows like excel data import, user inclusivity scenarios of approval through mobile devices, multiple approval process flows for purchase order/Demand requisition process, etc.

At this stage, enterprises should also be looking at working with BPM enablement partners who can look at facilitating citizen developers leverage low-code no-code development, and also establish a strong governance framework around environment management, data loss prevention, and monitoring mechanisms for distributed development.

**Case Study 1:**

**Business Problem:**

Our customer is a retail chain of stores that offers products for home improvement, agriculture, lawn and garden maintenance, livestock and pet care, and tractor supplies in America. Every quarter, the C-Level Executives are required to certify the financial reports across departments as part of the Sarbanes-Oxley Act. This was carried out through word documents memos, physically handed over to the audit team for review and consolidation. The Audit team maintains the responses and approvals for around 250+ users across departments, across 10 departments which took almost 200 person-hours of effort on coordination, and more than 500+ email reminders and communications done monthly/quarterly to Power Platform.

**Solution & Benefit:**

Infosys, working with the customer, offered a Power Automate in a day session to demonstrate the capabilities of the platform, and leveraged the platform to take the SOX compliance process to facilitate the move from manual paper-based compliance tracking involving 3 stages of approval, to a completely automated digital process, saving over 200 person-hours of coordination, an audit of approvals and changes digitally.

**Case Study 2:**

**Business Problem:**

Our customer, one of the large oil and gas upstream service providers, has rigs and well, and safety training data being imported into their database manually. This was performed by 5 administrators, and this was leveraged using on SQL premise database which also incurred annual maintenance cost, and Database administration activities.

**Solution & Benefit:**

Infosys, working with the customer, enabled Power Automate to run serverless jobs for reading and importing data from the rigs to the azure servers for further processing. This had helped reduce maintenance cost of on-premise servers by 100,000 USD/year and also looked at cost savings in terms of human efforts involved in maintaining and updating the jobs.

Enterprises at this stage should be looking at engaging with partners who can identify the simple business process to automate and facilitate employees to adapt with changes in their manual process and faster time to market. Usually this curve demands, process interaction forms/triggers built using PowerApps.
Stage 2: Transformers - Automating the Stakeholder journey across systems

In this stage, organizations should be converging rule and event-based processes across applications i.e. systems acting and talking to each other based on events to complete an end-to-end journey.

This stage involves implementing model-based apps that provide an end-to-end view of the process across application and the current stage, aging of stages, and rule/event-driven integration. It also involves forming architectural guidance for integration, Data connectors, defining systems of records to prevent data duplication.

At this stage, enterprises should be looking at setting up a Power Platform Centre of Excellence with capabilities to build end-to-end process automation through model-driven apps and Power Automate.

An end to end Process visualization for a Purchase Order Process Spanning across Requisition and Provisioning systems

Case Study

Our customer was one of the leading Health Care service providers in the USA providing Medicare services to members (Medicare beneficiaries), chosen by the federal government. Our customer had to provide a wide range of services to the federal and state insurance beneficiaries, which included ID card requests, physician allocation, nominee allocation, family member addition, etc. Over 9 processes were to be enabled, which required integration with their respective back end applications, segregated by states. Lack of a platform that can provide an end-to-end process view of the request created a bad member experience. Moreover, the call handling time at contact centers was very high owing to the lack of integrated systems for a unified process. These were key KPIs for the health care service provider set forth by federal and state governments.

Solution & Benefit:

Infosys, working with the customer, implemented a model-driven platform on Power Automate, at their contact center to enable end-to-end enablement of service request form members (insurance beneficiaries). The model app provided a guided process for the contact center agents and provided an end-to-end view of the current status of the requests. Power Automate facilitated in event-based API services to connect the model-based application with external legacy system.

Implementation of model-driven apps and Power Automate has helped reduce the average call handling time by 40%, and an improved service rating for the contact center by the agents by 20 Basis Points, which is reflected through the increased number of member service allotment to the Health Care provider by the federal government which stands at 4 Million members calling contact centers.
Stage 3: Leaders - System That Learn

This stage indicates the possibilities of using Machine Learning and Intelligent Process Automation. Enterprises should leverage Machine Learning, Virtual Agent and Natural Language Processing capabilities to look at providing an intelligent business automation platform. Power Automate provides the single digital platform that is required for an organization to look at automating not only the channels but also the process in totality.

At this stage, enterprises should look at partners who provide a holistic service offering across low code node mobility solutions, portals, Machine Learning, Bots, and look at expanding the Centre of excellence/digital cells team to drive channel and process automation capabilities. Also, enterprises are looking at embedding customized component frameworks increasingly, where partners with point solutions can help add components, and personalize process flow (E.g., a process flow can be moving vertically from top to bottom, then from left to right. This may be better suited for a call agent completing a customer information form, or a map control on a form can be better suited to locate a nearest banking center to facilitate contact center agent responding to a customer call).
Case Study 2:

**Business Problem:**
Our customer is one of the largest Councils in the United Kingdom. Every month there are more than 500+ queries, compliant, and work orders for maintenance that come from the residents of the society. The Council did not have enough staffs to address these, and there were growing issues of SLA not being met, unsatisfactory work orders, and reactive communication of cancellation of work orders pertaining to maintenance.

**Solution & Benefit:**
Infosys, working with the customer, embarked on an end-to-end journey of tenancy complaints management process automation using Power Platform, whereby we have implemented a Power Portal for customers/tenants with smart data capture on service requests/view tenancy contracts. The channel was through Virtual BOTS and has also been used to enable Machine Learning to read and understand customer comments and analyzes sensitivity to assign case priority based on keywords, and accordingly route to case managers. We are continuing to engage with the council to infuse insights of complaints, frequency root cause using customer insights, which is a Machine Learning-driven insights dashboard on customer behavior and transactional analytics that can help proactively drive complaint reduction. The implementation has helped the council get 65% more tenants to use the digital portal and was awarded the most engaging council for the years 2019. It reduced excel-based processing times by 50% and turnaround time reduction by 30%. The platform has also provided the required flexibility to capture Brexit related process changes and information capture and the Council has been able to automate this in a matter of a few weeks using the Low code-No code platform.
Conclusion

Low code-No code BPM is here and is transforming the way organizations are working with traditional BPM tools. Infosys, having enabled BPM for over 200+ customers and ranked by Forrester as a market leader in Digital Business Process Automation can help you in your journey in moving from Business Process Automation to Intelligent Process Automation. The Chain Maturity Model facilitates customers to determine the kind of service required and the level of automation and take small yet definitive steps toward progressive and purposeful automation. Are you ready for the paradigm shift yet?
About the authors

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Sushil Radhakrishnan, Principal Consultant, Infosys comes with over 16 years of experience in Customer Experience Platform design strategy, design thinking and implementation. As a Global Delivery lead on Microsoft Power Platform, he is responsible for driving digital experience and innovation from ideation to actualization for large enterprises, using low code no code platform.

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Sarath Mohan is a principal consultant at Infosys ltd with 12+ years of experience. He is proficient in technical and solution architecting, designing and leading Microsoft technology stack which includes Microsoft Dynamics 365, PowerApps, PowerBI, Power Automate. He has wide experience with global clients across multiple verticals like Oil & Gas, Retail, Hospitality Manufacturing, Telecom, Government, Retail etc. He is passionate about learning new technologies. Trends: Music, Reading and Football.

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