



**BHADALE GROUP OF COMPANIES
- IT AND REAL ESTATE**



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Azure Automation Services Catalogue-detailed

Bhadale IT Developers Pvt. Ltd CIN: TBD | Bhadale Real Estate Developers Pvt. Ltd CIN: TBD

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Bhadale Group of Companies

Bhadale Group of Companies consists of Bhadale IT Developers Pvt. Ltd and Bhadale Real Estate Developers Pvt. Ltd.

1. **Bhadale IT Developers Pvt. Ltd** is an IT and Computer Engineering company

This company provides consultation in areas of cutting edge technologies, research outsourcing, and software consultation related to data center and related engineering practices

2. **Bhadale Real Estate Developers Pvt. Ltd** is a Real estate company

This company provides development of commercial, residential and farm based developments. It manages the renting and lease of the real estate properties

Bhadale Group of Companies has aggressive programs in place to serve the niche market. Below are the programs and service offerings for **IT Division**

Bhadale IT Developers Pvt. Ltd Programs and Services

IT Division programs – specific to Microsoft Azure technologies

- 1 Cloud Architecture- Azure Cloud
- 2 AI – Azure AI and ML
- 3 Digital – Azure Digital Enterprise platforms
- 4 Automation - Azure automation
- 5 R&D services- Azure research areas
- 6 Engineering services – Azure engineering board reviews, audit, diagrams, approvals
- 7 Data center services – Azure datacenter setup
- 8 Outsourcing – Outsource your Azure jobs like remote help, tutor

There are various services offered under each program, details are described below

IT Division program related services

Cloud Architecture – Microsoft Azure specific

- Cloud Enterprise Architecture – Azure Enterprise platform / frameworks, & processes
- Cloud Business Architecture – Azure business tools, & frameworks
- Cloud Information / Website data Architecture – Azure webapps/ mobile apps, Bing maps, & Sharepoint website design
- Cloud Solution Architecture – Azure Solutions as per your needs
- Data center Virtualization and Cloud services (IaaS) – Hyper-V, Containers, Desktop/ Network, & Storage virtualizations
- Cloud Technical Architecture – Project specific – Best practices , design patterns based on MSDN
- Cloud ERP Solutions (SaaS, PaaS) – Office365, CRM, ERP packages , & integration
- Cloud Strategy and Transformation – Workshops, roadmaps and strategy
- Cloud Systems Integration and consolidation – Salesforce, Google, SAP, MS CRM , & LOB systems
- Cloud Project Management – Agile, TFS, Scrum templates, & PMP based techniques

- Cloud Pre sales support - Assist in design of material for presales deals, bid documents, & client meetings
- Business Needs (RFI/RFQ/RFP assistance)- Documents with Azure and alliances specific details for inventory, pricing, RoI, & Management
- Cloud Quality Initiatives – SLA, OLA, performance, cost optimizations, Corporate standards, ethics, & values
- Cloud Business Analysis – Analysis as per BABOK and MSFT/ partner tools for BA
- Cloud Infrastructure Planning – hardware , network, storage , backup (IaaS, PaaS)- Datacenter IT systems design, provisioning, commissioning and planning for future growth
- Cloud business portfolio assessment services (workshops) – Assess, enrich and support your portfolio of services as related to Azure and allied technologies

AI Azure

- Artificial intelligence and advanced machine learning - Azure AI Compute, Data science, Azure ML , Cognitive intelligence, AI Infra, AI tools and AI Services platform , & Deep Learning
- Intelligent applications, Intelligent things - Azure AI for IoT , & DataLakes
- Conversational systems – BOT Framework
- Mesh app and service architecture – Azure Service bus, Azure Service fabric, Micro-services, Smart grid, Gateways, & Enterprise Integration
- Adaptive security architecture- Deep Learning and predictive analysis, forecasting using tools, & algos.

Digital –Azure

- Virtual reality and augmented reality: VR, AR and Mixed reality(MR) from Microsoft; Hololens for MR; VR headset, VR ready PCs, Unity SDK, & VR SDK
- Digital twins – Azure IoT , MSFT Cognitive platform, Big compute, Analytics, Mixed reality & related SDK
- Blockchains and distributed ledgers – Azure hosting, SQL/No SQL DB, Security, Bitcoin mining, serverless computing, BizTalk services, Business partner exchange, Integration with Accounting ERPs, I/O remittances, claims settlements, & AI based fraud detections.
- Digital technology platforms – Azure private/ public, hybrid clouds, Solutions, Cloud best practices, Ready to use base VM and Containers as per domain, business and industry needs

Automation - Azure

- Robotic Process Automation – Blue Prism intelligent automation powered by Azure AI
- IoT - Azure SaaS for IoT(IoT Central), IoT Edge, IoT Services, Windows 10 IoT, & SDK for Raspberry PI
- Manufacturing robots - IoT solutions for Manufacturing robots
- BPO call center robots – Runbooks based VM solutions for BPO domain for backoffice automation, AI based chatbots for CRM, RPA for form filling, taking orders, notifications, & help desk automation etc
- Chatbots –AI based chat bots with SDK, interfaces to CRM, Cloud, industry / domain specific interfacing with expert systems to offer clients better results, good search, filtering and rollups of results, & use of hadoop for unstructured content like voice
- Remote workers - Azure IoT hub, IoT Edge integration, wireless communications, control using mixed reality to accomplish the remote task, AI and ML to correct any errors and fatigue related omissions.
- Hazardous jobs robots(Mine bombs, nuclear waste, underwater, space etc) - Uses same technologies as remote worker, however will have rugged parts, fit for jobs in odd places like nuclear plants, fire, underwater, collapsed buildings and where humans dare to risk their life.

R&D services – Azure based

- PHD mentor, buddy - for thesis support projects using Azure technology
- BPO - Outsourced work in areas of research areas related to IT and Computer Engineering - mainly for offloading research work related to azure for cost effective valued added- returns

Engineering services (Only Engg) – for Azure solutions

- Engineering services for Data centers – Datacenter layouts based on business and Azure needs, Server engineering, cable layouts, rack provisioning, power cables, routing boards, patch panes, fans, motherboard systems engineering, failover mechanisms, fire, plant safety, fire exits, & backup power / UPS
- Engineering services for IT Departments - Private cloud installation needs of premise, IT equipments, hardware-software interfaces, admin consoles, emergency management, IT failure management, quality certification, hardware level security, OS hardening, network firewalls, & premise management
- Engineering architectures, drawings, road ways, town house planning, parking, safety, outdoor maintenance, lighting etc - Datacenter external environment , landscaping, parking, restrooms, food court, licenses, audits, & approvals
- All other aspects of engineering: Civil, electrical, water and sewage, safety and mechanical motors, pumps, refrigeration, cooling – Civil bylaws, Electrical quality and proper metrics, levels, HVAC, waste water management, safety, workers laws, factory bylaws, corporate laws, fencing, & legality support

Data center services (Engg + IT) – for Azure

- Data center Engineering services – Same as above
- Data Center IT Services - IT software licenses for Azure OS, Windows, devices, SDK / tools, laptops, & server boxes
- Data center Security services – as per Microsoft recommendations, SDLC, threats, AI for preventive measures
- Data Center QA services- Certifications for datacenter like ISO, Green, & Energy saver
- Datacenter Cloud services – Provisioning of tenants for internal / external service offerings, SLA, OLA, metering, white labeling , custom domains, SSL, & cross- datacenter connectivity
- Datacenter compliances services- mainly related to audit, certification, & maturity management
- Data center based business solutions – assisting clients get loans, offer great service and obtain RoI in less time using various management and business techniques

Outsourcing

- Insourcing – Helping clients in in-sourcing of off-shored Azure operations and business units
- Outsourcing – help clients to reduce internal load and offloading to low cost centers
- Near sourcing – helps clients to gain max profit and benefits of other types of resourcing
- Cloud sourcing – Remote work done
- BPO services – using help desk, RPA, & Chatbot based automation
- IT specific services - Any client specific IT services as per request
- Engineering specific services – Offshored engineering works like drawing, layout planning, & security
- Training specific services – being part of your partner team, help clients to offer our services to their local clients

IT Division programs – Automation Services – Azure



Image Courtesy (The web)

CATALOG OF Azure Automation Services - extension of generic cloud offerings adapted to Azure

Service No	Service Name	Services offered
1	Robotic Process Automation -Azure	<p>Blue Prism/ Automation Anywhere intelligent automation powered by Azure AI</p> <p>Analyze the business requirements, business processes that are in scope, agree upon the percent of automation required for the business processes and where HMI interfaces are to be developed to interface with bots, robots, scripts and product services that will enable the reduction of manual work and human involvement.</p> <p>Work with stakeholders and technical team in arriving at the technical implementation steps, procedures, tools and developers that will help in the RPA. Few of the implementation steps we plan are:</p> <ol style="list-style-type: none"> 1. Select the targeted opportunities – few possibilities are processes, value add, reduction in human involvement, cost reductions 2. Modify the important processes – using work break down and requirements business processes are rationalized, consolidated, made redundant and new one developed 3. Create meaningful business case – these cases are new ones that use the requested changes for RPA 4. Robotic process automation vendor selection – Blue prism or Automation Anywhere, features, services, APIs, HMI, hosting, integration plans, licenses 5. Pilot RPA Development – Agile, prototypes and min viable product releases as per plan and client needs 6. Ramp up and continue building expertise RPA assets – With base assets help you plan for future design, develop and releases. <p>Our services include transforming your business process into clear service based layers that are easy for robots / bots to interface. We will design, configure, train and deploy the RPA agents/ bots in the desired target facility that will help replace</p>

		<p>or reduce human effort. Business users will then be able to manage technical tasks by use of such agents. Tools from Azure are Cognitive tools, NLP interfaces, Bot development frameworks, ML, REST/ API calls to Azure cloud, third party tools. Integrate and work with Blue Prism's Operating System for the Digital Workforce</p> <p>We will install/deploy, integrate, test and move to production with distributed agents and asset control from Azure cloud. We will assist in all activities of IT system design, development and engineering tasks that will help you to get most from us.</p> <p>We handle automation of human resource / other assets screening process, automation of first level help desk, MS Office-word based tasks. We deliver solutions based on Automation Anywhere, and Blueprisim that are friendlier to Azure. We have delivered solutions using Kofax.</p>
2	IoT-Azure	<p>Azure SaaS for IoT(IoT Central), IoT Edge, IoT Services, Windows 10 IoT, & SDK for Raspberry PI</p> <p>Analysis of your IoT requirements, defining the landscape, mapping the real world entities to Azure IoT entities, data flow at edges, gateways, message types (binary/ xml, JSON), HMI for control plane operations, virtual layers and protocols, .</p> <p>Design of solution components, logical layers, data flow paths, traffic control, overlays if required, data ingestion/ extraction/ normalization and making them fit for Analytics, other device feeds, ML, Insights, hardware device selections for Edge interfacing, end point security, and cross platform communications</p> <p>Designing the IoT landscape, IoT API interfaces for the external modules, gateways, target systems/ robot. We ensure you get the right IoT devices, servers, development kits and interfaces (wired / wireless) along with the right protocol, electric standards as per your location needs. We help you install the software modules, firmware / configuration of the devices. We use partner kits from Samsung, Vodafone, IoT Mother boards/ networking from Cisco, Intel, GE and Google.</p> <p>Design of control room for IoT monitoring, remote device configuration and provisioning using virtual pool of resources and IoT industry standards/ IIOT/ Industry 4 specifications</p> <p>We serve home automation, office automation, factory automation, smart grid integration to IoT gateways for remote data exchange for monitoring, cloud analytics and control. We provide licensed engineers for the Field work, engineering design and approvals</p>

3	Manufacturing robots-Azure	<p>IoT solutions for Manufacturing robots</p> <p>These are AI aware systems and are developed based on the available platforms using our Common framework/ services given below</p> <p>Services include design of IIoT/ Industrial Internet based robots, integration of AI and ML based feeds for quality and process improvement and use of wired/ wireless protocols based on the products to self-learn and heal robots. Machine and M2M big data from the process are relayed for fog and cloud computing. Suitable SCADA, PLC, FPGA Distributed Control Systems (DCS), Programmable Automation Controller (PAC), will be used to overlay the newer protocols onto the legacy systems and machinery. Suitable cloud platform integration will be developed to suite the newer business models.</p> <p>We leverage on the Engineering and partner technologies like Cisco's Industrial protocols , GE, IBM and partner kits/ recommendations for the Industrial layouts and overlay networks</p>
4	BPO call center robots-Azure	<p>Runbooks based VM solutions for BPO domain for backoffice automation, AI based chatbots for CRM, RPA for form filling, taking orders, notifications, & help desk automation etc</p> <p>Analysis existing BPO frameworks if any; plans to consolidation, rationalize, develop new processes, make unwanted processes redundant, sunset legacy products, and extract key business assets from the existing frameworks.</p> <p>Design of business layers / interactions, dialogues, data flow diagrams, bots/ micro robots that can be either be new or overlaid onto existing products. Map the layers entities to Azure solutions/ product components. Design of AI/ML algorithms for fuzzy logic, and intelligent responses; design of scripts, GUI and testing cases for the bots.</p> <p>We help you in the consolidation of voice, web based chat, emails, social, mobile, and other media channels into omni-channel and get them all into an AI based virtual customer assistance</p> <p>We develop your new repository on all the historical details, and precise resolutions to known issues and caller queries. Integrated with AI based Help content, self-service based console and escalation mechanisms to technical help desks are few features in the solution. We integrate various sources of inbound data and normalize them for AI based agents to read content (NLP feeds from emails, chats, voice) interpret, find an answer and reply in a near to real-time response.</p> <p>For example we can help you in a BPO system based on Azure Machine learning, Python, Kubernetes with TensorFlow all hosted in Azure</p>

5	Chatbots-Azure	<p>AI based chat bots with SDK, interfaces to CRM, Cloud, industry / domain specific interfacing with expert systems to offer clients better results, good search, filtering and rollups of results, & use of hadoop for unstructured content like voice,</p> <p>Analysis of the business domain and the need to automate the process. Requirements elicitation, use cases, request/ responses, alternative paths to handle non- usual dialogues, fraud analysis, online ID verifications and offloading to human for further case handling</p> <p>Design of bots with intelligent behavior embedded, logic flow of the use case, HMI dialogues, operator/handler notifications, NLP commands from user for voice, gesture and for any mixed reality feeds that are to be integrated for better response to requester.</p> <p>These are AI aware systems and are developed based on the available platforms using our Common framework/ services. Implementation using typical services like</p> <ul style="list-style-type: none"> • Azure AD for Authentication • Cognitive Services: LUIS • Application Insights • Cortana • Graph API to Office 365 • Dynamics CRM <p>Assist in maturing towards Smart chatbots that do deep learning to self-train and improve on each reply is the key for good design. We use suitable ML and AI algorithms to interface the user GUI and process the response in a human readable NLP form. We help tuning of the chatbot attributes so that they can easily summaries large sets of results and read morphed content.</p> <p>We provide help in designing and developing various chatbot services for commerce(hotel's concierge services- email, phones, bookings, alerts), information retrieval, concierge chatbot, sales chats, personal assistant, tour guide, event bookings, ordering food, home remedies, cooking menus , and well being tips</p>
6	Remote workers-Azure	<p>Azure IoT hub, IoT Edge integration, wireless communications, control using mixed reality to accomplish the remote task, AI and ML to correct any errors and fatigue related omissions.</p> <p>Analysis of the remote wireless controlled robot system that can be controlled from far off (in meters) for reconnaissance, providing first aid, retaliating a possible attacker and for remote monitoring for safety purposes</p> <p>Our service offering is design of AI agents that can be deployed remotely in a remote station work place. This is a more complex robo that is multi role and multi function and multi disciplinary. It can be preprogrammed or remote controlled like</p>

		<p>a Drone. It uses Azure IoT, Intel motherboards, NLP analyzer, DSP algorithms/ chips, wireless signal sensors, modulated protocols like OFDM, DWDM, ZigBee, Blue tooth etc</p> <p>We help in design of the components, assembly and testing of the various modules. Typical use case is an International robo-cop that can be transported to target location, deployed remotely via wireless/GPS coordinates and managed. This is useful for far off space stations modules, satellite systems etc. These workers can also be used in getting remote jobs done quickly</p>
7	Hazarders jobs robots(Mine bombs, nuclear waste, underwater, space etc) -Azure	<p>Uses same technologies as remote worker, however will have rugged parts, fit for jobs in odd places like nuclear plants, fire, underwater, collapsed buildings and where humans dare to risk their life.</p> <p>Analysis of the dangerous situations/ ambient that the robot has to work with. Plan for the right set of devices , tools, protocols and hardware</p> <p>Design of subcomponents, assembly, shielding, noise suppressor, hardened systems, and testing in similar conditions</p> <p>Special testing, monitoring of time, space domains using various models, functions and develop a hi-quality testing cases</p> <p>A group of licensed engineering professionals from various streams will design, develop and test the system that will assure you with a good quality product</p> <p>Features are extension of the remote worker offering however will have special grade materials that are needed for the harsh conditions</p>

For more information, please contact us.

Bhadale IT Developers Pvt. Ltd

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