Businesses riding the AI wave

Some local companies are developing AI-powered solutions to address challenges in areas such as business, agriculture, healthcare, finance and education

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About seven years ago, representatives of bKash would visit the company's agent points and merchant outlets across Bangladesh to ensure that its point-of-sale and promotional materials, such as banners, posters and stickers, are properly displayed.

These materials were essential for conveying promotional offers and other marketing messages from the country's leading mobile financial service provider.

But in 2018, bKash partnered with Intelligent Machines, an artificial intelligence (AI) company, to complete such tasks using computer vision, which is a field of AI that enables machines to analyse and interpret visual data.

Called Biponon, the service was then introduced across all of its roughly eight lakh outlets, subsequently streamlining what was once the cumbersome task of managing trade marketing and sales operations.

The results were astounding as bKash achieved a 320 percent rise in productivity, with the AI tool enabling its merchandisers or representatives to serve 585 outlets compared to 139 previously.

This is just one example of how the wave of AI, which is sweeping the world like a tsunami while also sparking geopolitical tensions, has reached the country's shores.

Following the global trend of embracing AI to reduce human intervention and improve operational efficiency, local companies have started using it for predictive maintenance, inventory management and supply chain optimisation, albeit at a slower pace.

Now, some local AI development companies are driving innovation across various industries through their products. In essence, they are developing AI-powered solutions to address challenges in areas such as business, agriculture, healthcare, finance and education.

Globally, Walmart leverages AI for forecasting demand and inventory optimisation while Amazon uses it for warehouse automation and delivery planning. In the financial sector, AI is being utilised to analyse customer behaviour and detect fraud.

Likewise, some of the leading local companies, including Unilever, Grameenphone and Banglalink, alongside startups like Pathao, and e-commerce platforms like Foodpanda and Daraz, are adopting AI to optimise operations, personalise customer experiences and enhance efficiency.

McKinsey and Company, a US-based multinational strategy and management consulting firm, said AI adoption could contribute about $13 trillion to the global GDP by 2030, with the retail, healthcare and manufacturing sectors being key beneficiaries.

By automating repetitive tasks and enabling real-time decision-making, AI reduces costs and unlocks innovative growth opportunities, reshaping global business practices.

To harness AI's potential, two types of companies have emerged worldwide: those that use AI solutions and those that build AI while some are hybridising by developing tailored AI solutions.

And Bangladesh is no exception to this ongoing transformative trend.

COMPANIES THAT EMBRACE AI

Other than using AI to streamline its point-of-sale materials, bKash also deeply integrated AI into several core business functions, particularly customer service, data management and decision-making.

"For instance, we leverage predictive modelling to gain insights into customer behaviour, which enables us to identify trends and implement adequate interventions to enhance customer experiences and retention," said Azmal Huda, chief product and technology officer of bKash.

"In customer service, intelligent AI-driven chatbots provide instant responses to common queries, streamlining service delivery and reducing operational load," he added.

bKash also leverages AI to enhance the customer experience and optimise service delivery. Its recommendation engine analyses user preferences and behaviour to suggest relevant services, increasing customer engagement and satisfaction.

AI-driven credit scoring models facilitate micro-loan services by accurately assessing creditworthiness, ensuring timely access to credit. An AI-based loyalty engine distributes loyalty points, encouraging long-term engagement and driving revenue growth. Machine learning (ML) streamlines its customer onboarding by verifying identity documents and facial data. Predictive modelling and forecasting further enable bKash to anticipate market trends and adapt its offerings accordingly.

Demand forecasting powered by AI ensures that system capacities are optimised, reducing over-provisioning and underutilisation of resources. Additionally, we employ predictive modelling and anomaly detection techniques to identify and mitigate fraud, Huda said.

"AI will be a key differentiator, enabling companies to extend next-generation financial services, such as credit access and smart saving solutions, to underserved populations, thereby driving financial inclusion and market expansion," he added.

bKash prioritises skill development through knowledge-sharing sessions and workshops, fostering innovation and empowering employees for an AI-driven future.

Banglalink, a leading mobile network operator and digital service provider, has integrated AI deeply into its operations to enhance customer experience and efficiency.

AI powers various aspects, including customer service, product development and internal processes. Generative AI chatbots provide instant and accurate support, significantly improving customer satisfaction.

The AI-driven platform RYZE offers personalised services like CV writing and profile enhancement, with more features underway. Also, the MyBL app curates relevant content, streamlining user experiences.

Besides, AI-driven data analysis enables Banglalink to segment customers, personalise offerings and optimise operations through revenue forecasting, stock predictions and credit scoring. The company also employs P.I. Works' AI-powered solutions with self-organising network (SON) capabilities to enhance network performance while reducing human error.

Looking ahead, Banglalink plans to expand AI adoption in education, health and fintech while training employees to maximise its potential, ensuring continued growth and innovation.

Unilever uses its precision marketing AI tool provided by Intelligent Machines, Fordo, to recommend personalised discounts to 2.3 million customers at about 4,500 kitchen markets all over the country.

The Unilever team has achieved successful conversion rates of 6 percent and above (often as high as 13 percent), up from 1 percent before using AI.

Unilever Bangladesh said it initially focused on software, but has now integrated AI and ML to automate key processes. Furthermore, AI-driven stock replenishment, sales strategies, and route optimisation have enhanced company efficiency. A dedicated analytics team leverages ML for market insights.

UNA, an AI-powered generative platform, supports employees by streamlining tasks, answering queries and providing quick access to essential resources, improving productivity and user experience across various functions.

British American Tobacco Bangladesh (BATB) has taken their Bangla keyword spotting AI, Shobdo, to track and improve 5,540 sales representatives' brand message deliveries at 200,000 outlets. The team has been able to increase the effectiveness of their brand message deliveries from 15 percent to 75 percent using AI.

BATB has also taken their predictive maintenance AI, Jontro, to determine the optimum time to replace the spare parts of the factory's machines.

IDLC Finance and Prime Bank are using a financial statement analysing AI, Dharapat, to process bank statements and the central bank's Credit Information Bureau report, bringing down the critical operations turnaround time from days to minutes.

Grameenphone and Ericsson recently announced a partnership for leveraging AI to enhance telecom services and drive digital transformation in Bangladesh. Their partnership focuses on upgrading Business Support Systems with AI-powered solutions, such as intelligent usage analysis, anomaly detection and automated service management.

Robi has introduced an AI-powered distribution bot to revolutionise its supply chain, addressing challenges in serving over 55 million subscribers across Bangladesh.

Besides, AI solutions have reduced its low-balance scenarios by 25 percent and improved service reliability.

Bangladesh's largest consumer tech platform, Pathao, is also leveraging AI and custom machine learning models to streamline operations and improve user experiences across its ride-hailing, delivery and fintech platforms.

These include calculating accurate fares, estimating trip durations, suggesting destinations and optimising ride pairings. Advanced geocoding ensures efficient parcel delivery routes while AI verifies eKYC for fintech and validates content for quick commerce.

Future developments include automating customer support, enabling conversational product discovery, performing credit scoring and determining the best customer lifecycle interventions.

The manufacturing sector is also embracing AI, with companies like Akij Group adopting predictive maintenance systems to minimise machinery downtime.

Retailers like Daraz Bangladesh and Chaldal rely on AI for personalised customer recommendations and demand forecasting, streamlining inventory management. Even education is evolving: Edtech platforms like Shikho and 10 Minute School use AI to tailor learning experiences, adapting content to individual student performances. These examples highlight how Bangladeshi industries are harnessing AI to solve local problems while boosting productivity.

Walton is transforming home appliances with AI-driven innovations. Its smart refrigerators use an AI-based multiple-speed optimisation algorithm to optimise cooling and reduce energy consumption.

For example, AI-powered air conditioners learn user preferences for personalised comfort.

Meanwhile, the company's IoT-enabled electrical appliances allow users to create customised automation scenes, with the Walton Smart Appliances app enabling remote monitoring and control.

AI-BUILDING COMPANIES

With demand for AI solutions or models on the rise, AI-building companies specialising in developing AI models and solutions for various industries have bourgeoned in Bangladesh in the last few years.

These companies focus on creating custom AI tools, such as ML algorithms, computer vision systems, and natural language processing models.

Youths have taken centre stage here, founding a number of companies focused on creating AI solutions for industries such as telecommunications and security. These AI-building companies help businesses automate processes, optimise operations and improve decision-making, driving digital transformation.

Sigmind, a local startup founded in 2017, is primarily leveraging computer vision, a branch of artificial intelligence that focuses on enabling machines to interpret and analyse visual data from the real world.

It now specialises in advanced AI-driven solutions for vehicle analytics, including vehicle identification, classification, number plate recognition, and traffic and toll management systems.

"Our technology enhances transparency and security in environments such as export processing zones by automating processes like vehicle counting and access control," said Md Abu Anas Ibn Samad, founder and CEO of Sigmind.

For human analytics, Sigmind offers automated attendance systems, real-time entry monitoring, identification and access control. This eliminates the need for manual attendance processes and ensures seamless security through anomaly detection and alerts.

Sigmind has deployed its solutions across seven countries, serving governments and enterprises with a team of 18 professionals.

"We are driving AI adoption to enhance efficiency and foster development. As AI continues to transform industries, the need for upskilling the workforce is crucial," Samad said.

CURRENT STATE OF AI IN BANGLADESH

Bangladesh's position in AI is still nascent compared to global leaders like the US, China and India.

According to experts, while local companies are leveraging AI for operational efficiency and customer engagement, the country lacks a robust AI ecosystem.

Key challenges include limited infrastructure, skill gaps and insufficient investment in research and development.

To compete globally, Bangladesh must prioritise a national AI strategy, invest in education and training, foster public-private partnerships, and encourage local innovation.

"Key challenges for Bangladesh include fragmented academia-industry ties, scarce R&D funding, and policy gaps. Prioritise tripartite collaboration among academia, industry, and policymakers," said Mohammad Mahdee-uz Zaman, an AI policy expert.

He further said academia should develop AI-focused curricula while industries should provide practical training and policymakers should incentivise innovation.

"Strengthen digital infrastructure, invest in AI research centres and promote rural AI literacy. By aligning demographic agility with strategic upskilling, Bangladesh can leverage AI for domestic problem-solving in sectors like agriculture and healthcare, while positioning itself for global market leadership," he added.

Zaman, also the founder of CloudCamp Bangladesh, said with 60 percent of its population under 30, Bangladesh's youth and 1 million freelancers are pivotal to harnessing AI.

So, upskilling this workforce in AI tools (data annotation and ML models) can position the country as a global outsourcing hub for AI-driven tasks.

According to Mohammad Oli Ahad, the founder of Intelligent Machines and a passionate AI practitioner, the world is much like where it was in the early 1990s with the internet when it comes to AI.

"Similar to how, with the exceptions of socioeconomic left-outs, every industry and business now uses the internet, they will be using AI in coming years," said Ahad, who left Intelligent Machines and founded a new startup called rmg.ai, aiming to help transform the country's leading export industry.

"AI will break down every business model and put them back together in new ways," he added.

Rakibul Hassan, one of the country's leading authors on AI and ML, said adopting AI at scale requires strategic best practices, and the government should spearhead a national AI strategy with sector-specific roadmaps emphasising agriculture and healthcare.

Hassan suggested that a dedicated council, comprising experts from academia, industry and policymakers, could guide implementation. Public-private partnerships (PPPs) are equally vital as collaborating with tech firms to develop AI solutions for public services, such as smart traffic systems in Dhaka, would demonstrate tangible benefits.

Meanwhile, investing in digital infrastructure, including high-speed internet and cloud computing, is essential to support startups like Chaldal and Daraz.

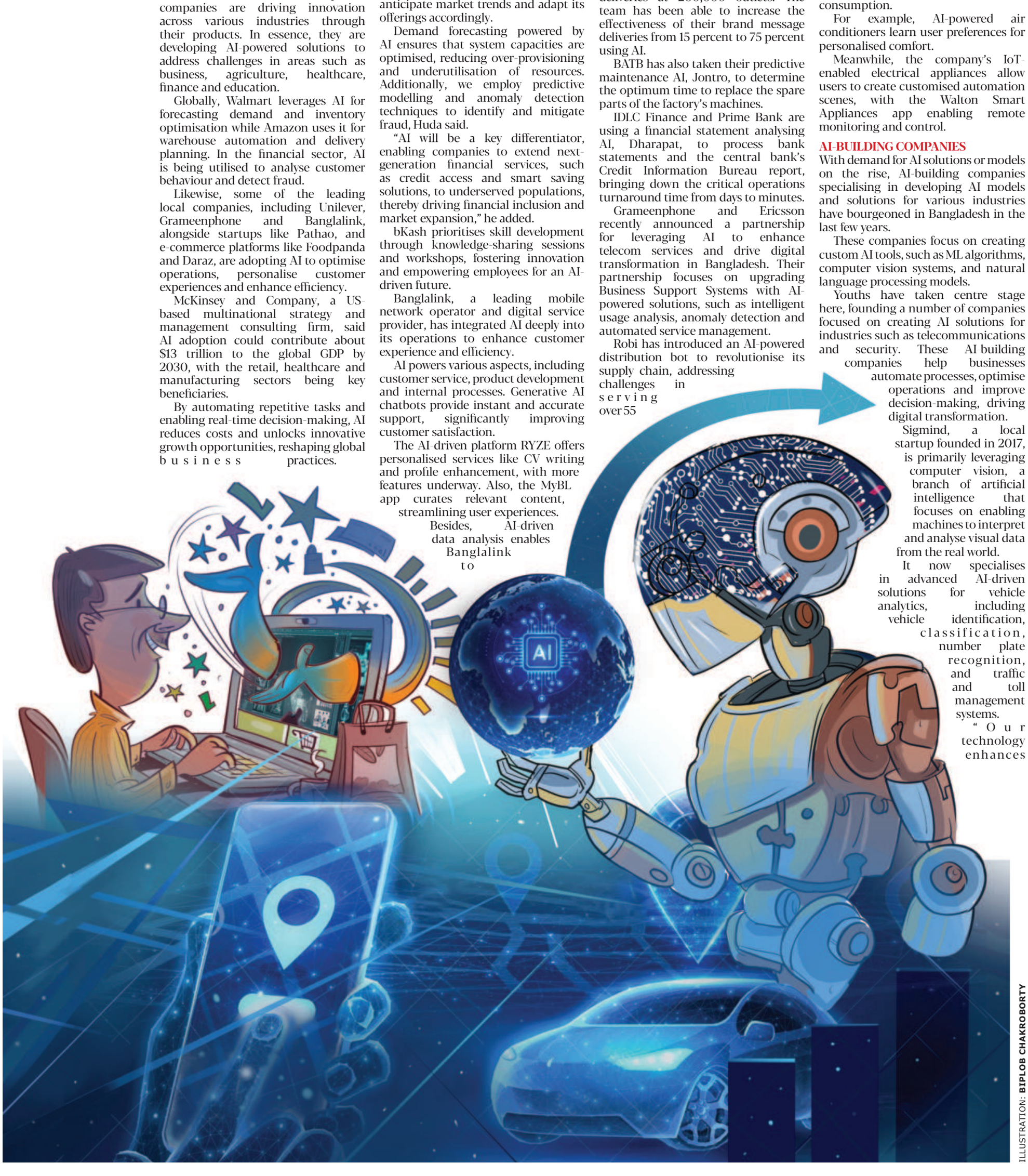
"Universities like BUET and all others must integrate AI into STEM curricula to nurture talent," said Hassan, who is also chief technology officer at CTO Link3 Technologies.

Projects in low-risk areas, such as using ML to predict water/power demand in Dhaka, can build confidence in wider deployment, he added.

He also said challenges persist, including limited data quality, skill gaps and resistance to change.

However, Bangladesh's young, tech-savvy population and thriving startup ecosystem offer unique opportunities.

"By prioritising ethical frameworks, infrastructure and collaboration, Bangladesh can position itself as a regional AI hub, using technology to tackle pressing issues like climate resilience, healthcare access and economic inclusion."



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