



Prof Rashed Al Mahmud Titumir, adviser to the prime minister on finance and planning, and Rana Flowers, country representative of Unicef Bangladesh, pose for a group photograph with participants of a roundtable discussion regarding strengthening investment in social sectors in the upcoming budget, jointly organised by Unicef and The Daily Star, with support from the European Union, at The Daily Star Centre in Dhaka yesterday.

PHOTO: RASHED SHUMAN

## How AI could fight mobile banking fraud



SHUVASHISH ROY and MD TUHIN RANA

As mobile financial fraud grows more sophisticated, an intelligent system that tracks how users type and swipe could offer a powerful shield for honest customers. Imagine a university student in Dhaka about to pay her final semester tuition, or a small business owner in a busy market counting monthly earnings. An urgent call arrives from someone claiming to be customer support from a trusted mobile banking provider. The caller sounds professional and warns that the account will be blocked due to a system upgrade unless details are verified immediately. Panicked, they comply. Within minutes, the tuition and hard-earned profits are gone. Such incidents are no longer rare. They are a daily reality across the country. Fraudsters have moved beyond simple tricks, using advanced social engineering to bypass standard security and devastate victims before they realise what has happened.

Mobile banking in Bangladesh has grown rapidly over the past decade. Platforms such as bKash, Nagad and Rocket have expanded financial inclusion, bringing more than 144 million registered users into the formal economy as of January 2026, according to the Bangladesh Bank. About 570,000 of these are youth accounts, considered more vulnerable. Rising internet penetration and widespread smartphone use have pushed everyday transactions onto digital screens. This growth has also attracted organised fraud networks. In May 2024, The Daily Star reported that 48,586 personal mobile financial service accounts were suspended by the Bangladesh Financial Intelligence Unit (BFIU) for suspected links to online gambling, betting and hundi. Fraudsters siphon millions of taka through fake investment schemes, cloned emergency numbers and coordinated social engineering. As daily transactions reach thousands of crores, the financial and emotional toll rises. Trust, the foundation of a digital economy, is under strain.

The weakness lies in how security systems work. Traditional defences rely on rule-based checks, such as repeated incorrect PIN entries or unusually large transfers. Yet modern fraudsters rarely force entry. Instead, they persuade victims to share one-time passwords or use stolen credentials to log in normally. If the PIN and password match, the system assumes the transaction is legitimate. It cannot easily tell the difference between the real user and a criminal operating remotely. Our research proposes a more adaptive approach based on behavioural biometrics. The principle is simple. How a person types, swipes and scrolls is as distinctive as a fingerprint. When this behavioural data is combined with transaction patterns such as location, timing and typical amounts, a detailed user profile emerges.

We developed the system in stages. An autoencoder first learned patterns of normal behaviour. We then applied models that capture time-based sequences and used gradient boosting techniques. Finally, we combined them into an ensemble model capable of analysing large volumes of data. The results are encouraging. The system achieved a 97 percent fraud detection rate with 95 percent precision. By contrast, the initial baseline model missed 67 percent of fraudulent activity. Higher precision also means fewer false alarms, reducing the risk of legitimate transactions being blocked. Our analysis found that geographic location, together with scrolling and typing speed, was among the strongest indicators of suspicious activity.

For Bangladesh, adopting such a framework could be transformative. The Bangladesh Bank and mobile financial service providers could integrate these predictive models into existing systems. Because the framework is adaptive and locally relevant, it can respond in real time to the social engineering tactics common in the country. Proactive security will be vital as Bangladesh moves towards a more cashless economy. Protecting the digital economy requires a shift from reactive troubleshooting to proactive, AI-driven defence. Regulators, banks and fintech companies should invest jointly in behavioural security. With the right safeguards, digital financial services can remain safe and empowering for millions.

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# Spend more, spend better on social sectors

Experts say as health, education spending remains among world's lowest, and half unspent

### STAR BUSINESS REPORT

The government needs to allocate more to education, health, and social protection in the upcoming budget, and ensure that the funds are properly utilised to create a better future for every child in the country, development specialists and donor agencies said yesterday.

Speaking at a roundtable, they pointed out that utilisation of development budgets in both sectors has hovered around 50 percent for at least two fiscal years. The discussion, regarding strengthening investment in social sectors in the upcoming budget, was jointly arranged by The Daily Star and Unicef with support from the European Union.

Md Ashiq Iqbal, social policy and economic specialist at Unicef, said in fiscal year 2024-25 (FY25), utilisation of the development budget of education was 47.4 percent while it was 9.8 percent in the health sector.

According to him, the underutilisation of funds pointed to significant room for efficiency gains. "Over 50 percent gain is possible for education and health within the existing envelope."

But he stressed that efficiency alone would not close the gap, as overall investment remains critically low to begin with.

The social policy expert noted that Bangladesh's spending on education is one of the lowest shares in the world — just 1.5 percent of its GDP on education against a government target of 5 percent.

The gap between current and target investment is 70 percent, which has widened over the past decade, he added. "Significant budgetary steps are required to progressively reach the target."

Health spending stands at 0.7 percent of GDP, also among the world's lowest. "The same thing is happening in the social protection budget too."

Iqbal depicted the consequences of the spending failure, citing child welfare data.

Some 6.5 percent of primary school-age children are out of school, he said,

adding that attendance falls sharply after primary school while foundational skills improve but remain far too low. "Bangladesh's primary education progress is in stagnation."

The Unicef official also said, "serious" risks persist in public health.

Two in five children and one in 13 pregnant women show elevated blood lead levels. The neonatal mortality rate stands at 22 per 1,000. Nearly two-thirds of children aged 6 to 23 months live in food poverty, as social protection coverage shrank in recent times.

Iqbal welcomed the commitments made by the ruling BNP in its manifesto on education access and quality, child survival, and malnutrition.

He called for allocating at least 2 percent of GDP to quality and inclusive education of children, with increased funding for foundational learning and teacher development, and at least 1.5 percent of GDP for health, with ringfenced vaccine budgets and free medicine for the poor.

Prof Rashed Al Mahmud Titumir, finance adviser to the prime minister, said the government inherited an economy burdened with multiple problems, further aggravated by current global pressures.

He explained that with inflation persisting, the government could not adjust fuel prices and was instead focusing on proper utilisation of spending.

The official also said the government was moving toward a universal social protection system to eliminate inclusion errors, exclusion errors, and fragmentation with one card per family for service delivery.

In addition, he said, for the first time, farmers would also receive cards through scheduled banks, entitling them to multiple subsidies. The government hopes to reduce errors and create fiscal space through these initiatives.

The government was also focusing on transparency and accountability in spending, with budget implementation effectiveness and digitalisation of revenue collection among its priorities, Titumir added.

The PM's adviser also flagged that conditions attached to loans taken by the previous government from the International Monetary Fund (IMF) were creating pressure that "may not be child-friendly or women friendly".

Criticising the United Nations for reportedly not speaking out on these issues, he called for better coordination and harmonisation in the intergovernmental organisation.

Rana Flowers, country representative of Unicef Bangladesh, said she recognised that the government inherited an economy where debt obligations are rising, and economic uncertainties came from the global arena.

She pointed out that the situation demands figuring out how to use limited resources efficiently.

**In fiscal year 2024-25 (FY25), utilisation of the development budget of education was 47.4 percent while it was 9.8 percent in the health sector**

The Unicef official urged the government to focus on improving capital development, child education and social protection.

Rasheda K Choudhury, executive director of the Campaign for Popular Education, said education spending should be treated as an investment in human capital.

"If we curb corruption, if we curb violence against women and if we curb drug addiction, it will free up substantial funds for social sectors," she said, urging the government to actively court non-resident Bangladeshis for support.

Prof Mustafizur Rahman, a distinguished fellow at the Centre for Policy Dialogue, said the government needs to prioritise its spending and draw up plans to adjust investment in the social sectors.

Gitanjali Singh, country representative of UN Women, called for higher social

### AFP, Beijing

China's long-term strategy of diversifying energy sources and building stockpiles is helping it weather disruptions from the Iran war, although some sectors still face major snags, analysts say.

China is a net importer of oil and more than half of its seaborne crude came from the Middle East last year, according to analytics firm Kpler.

The conflict triggered by Israel and the United States against Iran has halted almost all shipments from the Gulf area for six weeks now, with a shaky ceasefire deal struck this week extremely unlikely to lead to an immediate recovery.

However, Beijing's long-running prioritisation of energy security has left it well prepared for such shocks, analysts told AFP. A "general concern about the geopolitical situation" in recent years has spurred Chinese leaders to ensure sufficient storage construction and stockpiling of strategic reserves, said Muyu Xu, senior oil analyst at Kpler.

Those efforts mean China now sits in a far better position than several of its Asian neighbours, such as Japan and the Philippines, she said.

But so far Beijing has not been "in a rush" to initiate releases from its

substantial strategic reserves, said Xu.

This is partly because China's decades-long mission to diminish its traditional reliance on coal and fossil fuels is beginning to flourish.

The large-scale efforts to transition to renewable energy mean "China is relatively well placed" to deal with the

current situation, said Lauri Myllyvirta, co-founder of the Centre for Research on Energy and Clean Air.

Wind, solar and nuclear capacity has been added to China's populous coastal provinces, while improved grid infrastructure carries electricity to them from inland. "There would be much more

oil and gas imports needed to power those provinces" otherwise, said Myllyvirta.

While dependencies still exist — including in the vast manufacturing sector — renewable energy is "helping a lot on the margin", he said.

Li Shuo, director of the China Climate Hub at the Asia Society, told AFP that the current energy crisis "vindicates China's long-standing 'all-of-the-above' strategy".

President Xi Jinping is seeking to leverage the renewables build-out even further as geopolitical turmoil mounts. State broadcaster CCTV aired a segment on Monday in which Xi was quoted as calling for accelerated construction of a "new energy system" to safeguard energy security, although it did not mention the Middle East war.

For Beijing, the "more serious risk" is not immediate energy shocks but a potential global economic downturn caused by the conflict, the Asia Society's Li said.

Some sectors will inevitably feel the pinch, presenting new hurdles for leaders struggling to jumpstart sluggish activity.

Among them are "teapot" oil refineries — small, private outfits that have historically benefited from access to sanctioned Iranian and Venezuelan crude acquired at a discount.

## Brokers seek three-month extension on margin rules

### STAR BUSINESS REPORT

The DSE Brokers Association of Bangladesh (DBA) has asked the stock market regulator to extend the deadline for complying with new margin rules by three months.

In a recent letter to the Bangladesh Securities and Exchange Commission (BSEC), the association sought more time to meet the requirements set out in the Bangladesh Securities and Exchange Commission (Margin) Rules 2025.

The rules came into force on November 1 last year, and are designed to strengthen risk management, protect investors and boost market stability. Three key provisions must be implemented within six months, with the current deadline set for April 30.

In the letter, the association argued that the timeframe is too tight.

DBA said that brokerage houses need time for internal consultations, risk assessments, board approvals and integration of the new requirements into their operational systems.

The association said many firms are still finalising their policies and implementation plans due to a shortage of skilled personnel required under the rules, as well as limited technical support and client feedback.

The association also noted that aligning with risk-based capital adequacy standards requires system upgrades, staff training, internal audits and technology improvements.

Rushing the process could trigger operational errors or disrupt margin services, it added.

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# China's energy strategy pays off as war cramps supplies: analysts



An aerial view shows residential buildings with roof-mounted photovoltaic solar panels in Yinchuan, in northwestern China's Ningxia region.

PHOTO: AFP/FILE