

















We will not move towards a world filled with hunger, poverty, unemployment, fear of starvation, fear of being completely destroyed by nuclear war. We will look to a world where humanity is capable of great success in the era of astounding advances in science and technology. This future will be free from the threat of nuclear war. By the equitable distribution of all the resources and technical knowledge of the world, the door to such welfare will be opened where every person will have the minimum guarantee of a happy and respectable life.

Bangabandhu Sheikh Mujibur Rahman Father of the Nation, Bangladesh



4IR technologies can help us prepare for the future. For one decade, through our innovative a2i Programme, Bangladesh is championing the digitization of our economy. During this pandemic, we have effectively used some of the digital tools and technologies, like artificial intelligence and mobile phones to trace infections. To better prepare for the future, we can fast develop innovative solutions, especially in health, education, agriculture and supply chains. Utilizing Fourth Industrial Revolution technologies will be important and one where an institution like the World Economic Forum can take on an active role.



Our country has come a long way in the pursuit of building an educated and knowledge-based society. We have to move forward in the future. That is why the future generation must be ready to build an Innovative Bangladesh by 2041.

Sheikh Hasina

Honourable Prime Minister Government of Bangladesh







When we started our journey toward building a Digital Bangladesh, there was no department or agency of the government with the capability or mandate to work on technology in governance. a2i was set up as the sole group responsible for this all encompassing vision and they accomplished it with unprecedented speed and innovation. The team at a2i rose to each and every technological and bureaucratic challenge, implementing ideas at extraordinary speed and, key to success in a developing country, at minimal cost. They have also been innovators, generating fresh new ideas and ingenious solutions in applying technology to solving problems of governance. Without a2i, Digital Bangladesh would not have been possible.

Sajeeb Wazed Information & Communications Technology Advisor to the Prime Minister



In achieving Digital Bangladesh Vision 2021, a2i played the leading role in transforming government to make it more citizen-centric. We expect a2i to play a similarly pivotal role in steering the country towards Innovative Bangladesh Vision 2041.

Zunaid Ahmed Palak, MP

Minister of State for Information and Communication Technology Government of Bangladesh

a2i played a pivotal role both as a catalyst and sustainer of Bangladesh's digital transformation journey. Bangladesh's focus on citizen-centered digital services and its impressive achievements demonstrate how properly structured collaboration efforts between a government with strong leadership and its partners could lead to tremendous successes. We in Somalia desire to benefit from a2i's experience and insights from the lessons they learned so that we could contextually adopt them in our own digital journey.

H.E. Abdi Sheikh Ahmed

Hon'ble Minister of Communications and Technology Government of Somalia The new wave of planetary prosperity would be driven by the 4th industrial revolution, with breakthroughs from nanotechnologies and particle physics to gene sequencing, from renewable energies to computational mathematics and quantum computing, from the internet of things and artificial intelligence to precision medicine. I am pleased to learn that Bangladesh has recognized this and has taken practical steps to unleash your country's potential.

Dr Frank Anthony

Minister of Health Guyana

a2i is a trailblazer of digital development in the Global South. An exemplary model of vision, leadership and whole of government, whole of nation approach to digital development.

H.E. Mohamed Shareef

Minister of State for Environment, Climate Change and Technology Republic of Maldives



I vividly remember sitting next to the former UNDP

Administrator Helen Clark in a remote island Char Kukri-Mukri
on November II, 2010. Along with Hon'ble Prime Minister
Sheikh Hasina, she was launching a2i's 4500+ Digital Centres
across the country, ushering in an unthinkable transformation
to bridge the analog, rural, marginalized citizens to digital public
services. Now that a2i is a part of my office, it is leading the
charge to embed 4IR technologies in the functions of every
ministry to implement Bangladesh Vision 204I.

Khandker Anwarul Islam

Cabinet Secretary Government of Bangladesh

Not illegal, but irregular. And as innovation initiatives come, a2i is unique in the context of Bangladesh. The a2i team went outside the rules and went beyond the call of duty to realize the purpose that the spirit of the rules enshrined. In doing so, it managed to usher in a culture of citizen-centric innovation that leveraged ICTs to take government services to people's doorsteps and increasingly, their fingertips.

NI Khan

Former Secretary Government of Bangladesh a2i has been playing a leading role in steering the Digital Bangladesh revolution to transform our country into a knowledge-based, innovative nation. Now, our goal is to sustain this development to continue driving this journey of achieving the SDGs by 2030 and transforming our country into a poverty-free, high-income, equitable, and prosperous nation as we look forward to achieving Vision 2041.

Abul Kalam Azad

Former Principal Secretary Government of Bangladesh

Bangladesh has demonstrated with remarkable success that aspiration and inspiration can lead to transformation. A digital metamorphosis is taking place before our eyes and providing a roadmap for others who aspire to take this same path. This is at once a revolution and an evolution. Once on the digital path, a future of endless invention opens up, creating economic opportunity for all.

Vint Cerf

Internet Pioneer

a2i has won an impressive global reputation as a trailblazer for public innovation. It's admired because it has shown how to combine ambition, practicality and vision in using technologies not just to solve problems but also to listen to and understand the people's needs. I hope that it continues to thrive – and I also hope that we will see equivalents in many other countries over the next decade.

Professor Sir Geoff Mulgan

University College London



Digital transformation for a better world! Our collaboration with the government of Bangladesh and a2i on digitized public services saved \$8 billion, 2 billion otherwise wasted workdays and 1 billion office visits.

Achim Steiner

Administrator United Nations Development Programme

I congratulate the government of Bangladesh for its long-term commitment to delivering a digital nation. The fourfold increase in the population using the internet since 2009 is an impressive achievement which underlines Bangladesh's status as a rising economic star. Initiatives such as the national agriculture portal stand as an example for the rest of the Commonwealth. I am pleased that the Commonwealth Secretariat has been able to support a2i and I am proud of our commitment to further deepening the impact of the Commonwealth Connectivity Agenda in Bangladesh and across our whole family of nations.

The Rt Hon Patricia Scotland

OC

Commonwealth Secretary-General

Bridging the digital divide is a complex challenge which goes beyond just infrastructure to issues of affordability, safety and accessibility of content, and lack of digital literacy. UNDP is honoured to continue to support Bangladesh in their digital transformation. The a2i programme is a powerful example of how a whole-of society approach can help drive digital inclusion and the digital economy to achieve the 2030 Agenda for people and planet.

Robert Opp Chief Digital Officer UNDP

The United Nations Office for South-South Cooperation has been working closely with Bangladesh's a2i programme and its extensive network of partners through the South-South Network for Public Service Innovation since 2017. The a2i programme is a shining example of learning, adapting, and sharing. These are critical aspects of development in the Global South. The model involves building service-delivery infrastructure tailored to citizens' needs and their levels of digital capabilities. It integrates and expands service delivery through government and private sector services while focusing on scalable and adaptable solutions.

Adel Abdellatif

UNOSSC Director a.i.



As severe flooding continues to impact millions in South Asia, we're expanding our Al-powered flood forecasting to include Bangladesh where the Ministry of Water Resources, and a2i have teamed up with Google to provide greater detail on timing plus water depths in alerts.

Sundar Pichai

Chief Executive Officer Google and Alphabet

Innovation plays a vital role making public services more efficient and effective, especially for the most marginalized citizens. I am impressed by the work of a2i in embracing innovation and putting experimentation and insights from behavioral science at the heart of policy making, especially in the adoption of new digital technologies to improve access and accountability.

Dr Alix Peterson Zwane

Chief Executive Officer Global Innovation Fund

a2i has played a pivotal role in advancing the bold Digital Bangladesh strategy set out by the Government of Bangladesh. The Bill & Melinda Gates Foundation is proud of our long-standing collaboration with a2i to help build an inclusive digital financial ecosystem by catalyzing digital identification, implementing an integrated payment architecture, fostering innovation of pro-poor financial products and digital stack in Bangladesh, and accelerating women's usage of digital financial services. Since the onset of the pandemic, we have supported a2i's efforts to integrate data systems and strengthen data analytics to inform the COVID-19 response and bolster effective vaccine delivery at the central and district levels. We look forward to our continued partnership with a2i to further digital transformation of public service delivery, guided by the government's vision of Digital Bangladesh, on the path to helping Bangladesh achieve the Sustainable Development Goals.

Mark Suzman

CEO

The Bill & Melinda Gates Foundation

a2i's dream was also a lot of our dreams. I was a team member in the early days and we all dreamt that services will be at the fingertips of the people at the last mile. It's been a pure joy to see a2i grow and that dream getting materialized steadily over the years. My best wishes to the team.

Asif Saleh

Executive Director BRAC



























a2i: A Nation Builder

a2i, the flagship Digital Bangladesh program, was born in the Prime Minister's Office and was incubated there as a whole-of-government, digital innovation catalyst for 11 years before graduating to a much larger implementation program in the ICT Division and Cabinet Division, with support from the United Nations Development Programme. Since its inception, it has developed tentacles in all 60 ministries, all 400 departments, all 64 districts, all 492 sub-districts and all 5,000 plus rural and urban local government institutions in the country.

a2i was set up to disrupt the traditional civil service mindset. We have found success in practicing innovation as a bottom-up process. a2i has been methodically developing service simplification and innovation capacity within hundreds of thousands of administrators, teachers, doctors, engineers, students and researchers, creating a cadre of govpreneurs and working on refining various incentive systems to propel and sustain that bottom-up innovation revolution. a2i runs a Service Innovation Fund that has supported hundreds of innovators within the government, startup ecosystem and research communities.

However, to scale up an innovation one really requires policy intervention from the top-down. The combination of the bottom-up to create a solution prototype and top-down scaling up through policymaking is really what drives the unprecedented, citizen-centric digital transformation in Bangladesh. a2i's strategy has thus been to parallelly build and maintain 'policy Legos' – building blocks that facilitate the creation of new innovations by govpreneurs.





The Government

Countries are too often prone to follow a 'planners approach', which is, I-know-the-answers (often borrowed from the West), leading to centralized planning and top-down execution. But how do you bank on William Easterly's 'searchers approach' of experimentation coupled with local knowledge triggering bottom-up execution? Who are the searchers in government? We call them 'govpreneurs' public service providers who, driven by a strong sense of empathy and duty towards service seekers, increasingly think and act like an entrepreneur— acquiring tacit knowledge about how to get things done in the public sector, building new relationships, leveraging resources, working across sector lines, replacing the profit motive with the pursuit of enhancing public value, and acting, and sometimes failing, fast. How do you find them? How do you encourage them? How do you foster the culture of seeing through the

citizen's lens and walking a mile in the

citizen's shoes when designing innovations? How do you remove barriers to innovation for them?

The promise of Digital Bangladesh was that of a dream realized for the people by the government. A large part of actualizing Digital Bangladesh was changing the mindset of civil servants who are given the authority to make changes in the lives of millions. Without a clear sense of purpose and a different mindset, a different way of thinking and enacting, the potency of that authority remains unrealized, lasting change becomes impossible to achieve.

Keeping that in mind, a2i's sensitivity and empathy trainings provided for the smoother redesign of simplified services, again with TCV as the guiding star. Perhaps more importantly, they helped develop a more citizen-centric mindset among civil service providers, making govpreneurs out of many.

The People

Digital Bangladesh emerged as a promise not for a different world, but one for the same world, much better, much quicker, much more responsive, and less costly. In parallel, it's a different world to different people. To a student, it's higher quality of education and being market-ready; to a farmer, it's right information at the right time at the right place; to a patient, it's access to quality healthcare without having to stand in long queues; to a serving government officer, it's triumph of merit and performance over connections; to a retired government officer, to a freedom fighter, and to a widow, it's delivery of safety nets and pensions transparently. To all, it's services they deserve and expect at their doorsteps.

Delivering on that promise thus required putting citizens at the very heart of the

development process. It required a clear sense of purpose, a unifying objective that could permeate to different tiers of government and galvanize widespread collaboration and unprecedented innovation. It required a framework to measure progress towards that sole objective. All of this is encapsulated in 'TCV' - that is, reducing the time (T), cost (C) and number of visits (V) required of citizens for accessing services. It made it possible for the whole-of-government to rally around the notion that anything that reduced the time, cost and number of visits it took for citizens to access public information and services constituted the creation of public value and provided a metric that everyone understood.



From In line To Online











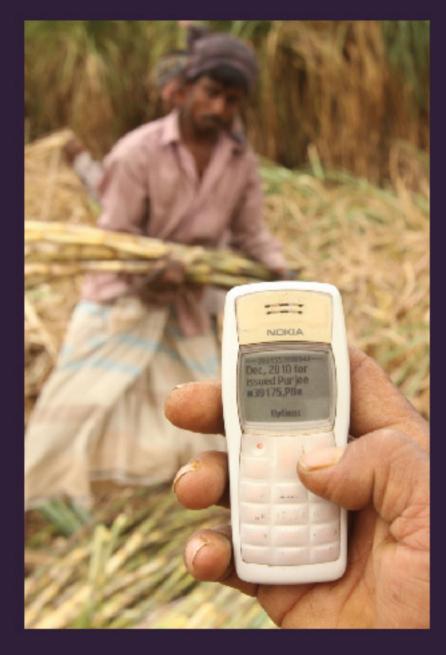
Enabling E-governance

esigned from bottom-up, Digital
Bangladesh was about delivering
solutions that would help the masses, those
without internet, those without smartphones,
and help bridge that digital divide - one which
undoubtedly still exists and threatens to widen
in the new normal as the world continues to
struggle to make COVID-19 a thing of the past.

Building forward better, Innovative
Bangladesh Vision 2041 requires an
uncompromising and relentless focus on
ensuring Digital Equity - the idea that
everyone should have the availability,
accessibility and affordability of information
technology needed for full participation in our
society, democracy, and economy.







Citizen Centricity

Focusing on the End, Not the Means

A Sweeter Life

Jalal Akhtar, a poor sugarcane farmer, was struggling to figure out how to put food on the table for his family.

Due to Jalal Akhtar receiving his purjee (government issued purchase orders for sugarcanes sent out on paper) at the very last moment the previous season, he hadn't been able to maximize the value he got from selling his harvest.

"We get three days from the date the purjec is issued to deliver the canes to the state-owned mills. But, the problem is that often times it takes a considerable amount of time for the purjee document to actually reach us farmers. Middle men in the process extract rents at the expense of our entire livelihood. They don't realise the damage they do to us and our families. Or perhaps they do, and that's why they exert their power over us," explained Jalal Akhtar.

As a result, he couldn't earn enough to meet his family's basic needs let alone fund all the agricultural expenses for next season's crop.

Recognizing the information asymmetry in the market and the unscrupulous methods of middlemen entrusted to deliver the purjee to the farmers, a2i engaged both with the farmers and sugar mills to launch e-Purjee (short for electronic purjee) to replace the paper-based version notification system with an instant SMS notification which informed farmers that purchase orders had been issued so they could start preparing their harvests for supply to the mills. Following a successful pilot with 20,000 farmers in two districts, e-Purjee was quickly scaled up to benefit over 200,000 sugarcane farmers across Bangladesh.

"Now, we receive the e-Purje through sms. Getting the purjee on time helps us get the labour needed to harvest the field in time and arrange for transport to deliver the crops. Thanks to the e-Purjee system, I am not losing out on my income as the sugarcanes are not drying out in the sun and losing weight due to not being harvested on time. My business is prospering, my family is secure. What more could I ask for?"











Reaching the Unreached

Digital Centre

With the establishment of over 8,280 Digital Centres countrywide, the average distance that rural citizens need to travel to access government services has come down to a walking distance, approximately 4 km.

Digital Centres are one-stop shops that ensure that the underserved, such as women living in remote rural areas, people with disabilities and the elderly, regardless of their literacy and ICT knowledge, can access vital services. Each Digital Centre is located in a government office at the village level but run by two citizen entrepreneurs - one

male and one female, to cater to the needs of women in conservative rural Bangladesh. They are not formally appointed as government employees and do not receive salaries or compensation in any form from the government.

These one-stop shops thus represent a novel public-private partnership between public agencies, private sector companies and the Digital Centre Entrepreneurs effectively establishing a microenterprise in grassroots level government offices that allow the amalgamation of over 325 public and private services.







16,085 Digital Centre Entrepreneurs, over 5,000 of whom are women, charge money for the provision of popular private services which cross subsidizes the provision of government services.







1.68 Billion



\$63 Million
Earned by the 16K+ Entrepreneurs



680 Million+
Services in 10 years
(6 million/month now)







A Unique Helpline for Everyone

National Helpline - 333

'333', Bangladesh's National Service Access Helpline, is a voice-enabled platform for citizens with low literacy and familiarity with technology. A farmer, for example, could dial 333 from even a low-cost mobile phone or landline and ask for a service. It also serves as a means for reporting grievances.

333 takes advantage of the fact that our country of 163 million, now boasts around 180.25 million mobile phone connections and 90 million unique subscribers. According to a recent survey by LIRNEasia, Bangladesh has the highest percentage of mobile phone usage in South Asia. While smartphone

penetration is currently at 41 per cent, it is commonplace for even a casual rickshaw puller or marginal farmers, the poorest of the social segment, to use regular feature phones not only for social interactions but also for money transfer.

Pioneered in 2018, it provides numerous types of assistance with nearly 73+ million calls received since its launch. During the pandemic induced lockdowns, it was repurposed to provide vital food relief and telehealth services to vulnerable citizens; forward calls to field administration; and prevent child marriages in collaboration with district and sub-district administration.



Calls Received

73 Million+

24,499+



6,555+

Child Marriages Stopped





The Gateway to All Govt Info & Services

National Portal

The National Portal was designed to bring over 51,528 government offices and literally thousands of application forms to the myriad citizen-facing services they provide onto one single web address, www.bangladesh.gov.bd. The forms are editable and can be submitted online.

The National Portal has been one of the chief initiatives of the Bangladesh Government in its endeavor to establish e-governance. It is the foundational initiative towards streamlining the free flow of information to the public from the Union Council (the lowest administrative tier in Bangladesh) to the Ministry level. Launched in 2007, the step to integrate portals for all 64 districts of the country in 2010 expedited the goal of uniting all government services under one platform. The mobile-friendly National Portal offers a convenient channel to obtain information from public offices without hassle. This saves time, cost and number of visits for citizens. Over 150,000 citizens access the portal each day. They can avail one of 685 e-services or access information from the 33,312 websites with 9.5 million thematic contents that the portal offers. The National Portal has significantly supplemented citizens' access to information and government services.



One Platform, Multiple Solutions

myGov

MyGov is a single, central platform that not only brings the digital services from all ministries onto one app, but also features all auxiliary services such as online payments.

MyGov allows citizens to look for service applications and information regarding services. It allows users to complete service applications, know the status of service delivery as well as make necessary payments. '333', the National Service Access Helpline, is also integrated within the app. This helps users without internet access get information and request services and can even be used to locate the nearest Digital Centre.



1,935
Services Digitized



3,310,180

Use



2,288,609

Applications Submitted







BILL& MELINDA GATES foundation

Taking Care of the Most Caring Ones

Ma Telehealth Centre

'Ma' is Bengali for mother. Launched in June 2020, the Ma-Telehealth Centre enables expecting mothers and lactating women with newborns can receive consultations from certified doctors, counselling services, e-prescriptions, and follow-up health services. In case of emergency medical conditions (requiring immediate medical advice, ambulance and hospitalization support), a call centre operator ensures end-to-end support for the mother until she is out of danger.

As the launch date suggests, it was the COVID-19 pandemic that prompted the initiation of this dedicated telehealth service as movement restrictions made it difficult for many pregnant and lactating mothers to physically access health care facilities. Moreover, many women preferred not to seek traditional healthcare services or physically visit clinics due to the fear of themselves being infected with the coronavirus or transmitting it to their unborn babies.











Ensuring Vaccines for All

Surokkha

Within a month of the first person in the world receiving her COVID vaccine, the Government of Bangladesh had procured the first doses for its own citizens and put an ambitious vaccine distribution plan in place.

Crucially, just when the government was looking internationally for an electronic vaccine registration and rollout management system, a team of Bangladeshi software engineers from the Department of Information and Communication Technology (DoICT) of the government's ICT Ministry, presented their proposal for Surokkha – Bangladesh's digital vaccine management system.

After being vetted by the National COVID-19 Vaccine Committee, they were given just three weeks to complete the development of the system. The Surokkha App was finally launched on January 25th 2021, two days prior to the inauguration of the national COVID-19 vaccination drive by the Hon'ble Prime Minister of Bangladesh.

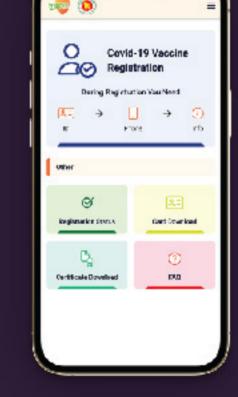


Surokkha is a shining example of the capabilities of homegrown information technologists in Digital Bangladesh.

User-friendly and with an access capacity of 50 million at a time, it takes only a few minutes for vaccine registration with the applicant needing a National ID and a few clicks on the website or the companion app. Once the registration is done, the user gets an SMS and the application is transferred to the appropriate vaccination centre automatically.

Users can download the vaccine registration card. After getting the first jab, the user's vaccine status is updated instantly along with the date of the second jab. After completing the two doses, citizens can download the vaccine certificate at their own convenience. There is also a QR code so that authorities anywhere in the world can verify the vaccination history.

Surokkha has also proven itself to be secure by being able to withstand a number of cyberattacks to interrupt the service.











Empowering Women Entrepreneurs

"I have created an identity for myself. Today,
I am confident, independent, and
self-sufficient. People who once frowned at
me now look up to me, all thanks to the
Digital Centre of a2i," stresses a proud
Digital Centre entrepreneur Fatema.

Orphaned and helpless, Fatema was raised by her relatives who refused to take further responsibilities after she was done with graduation. Unable to provide for herself, Fatema was forced to marry. After years of marriage, her husband left her with two children, throwing Fatema back into the cycle of helplessness that never seemed to leave her.

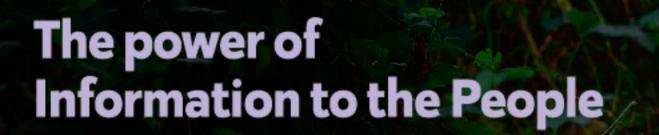
"I was left on my own with two young children. I had no one I could turn to or seek help from. The ground beneath my feet shifted, and I felt the weight of the world on my shoulders. Except this weight was the responsibility of caring for and raising my two children," shared an emotional Fatema.

On the verge of losing all hope, Fatema learned about a2i's Digital Centre initiative, which offers women a chance to become micro-entrepreneurs cross-subsidizing the mostly free provision of government information and services like birth registration, passport application, digital land services, and so on by charging fees for private services such as rural branchless banking, utility bill payments, computer training, etc.

"I was determined to not be forced into anything ever again. I wanted to carve out my own identity, and take back my power. I knew I had to make sure neither my children nor I were ever in this position again in life. The only way to make sure of it was to make something of myself, and that's exactly what I did."

Fatema, with strong willpower and dedication, availed of the Digital Centre training facility. She learned to use the computer and meticulously excelled in her skills. She has now become an entrepreneur in one of a2i's Digital Centres, trains people on how to use a computer, and earns roughly USD 290 a month.

Digital Centres of a2i are a great step taken to cast the darkness away, especially in the lives of vulnerable women.



Bablu Miah searched everywhere for his son. He looked in the neighbors' houses, the relatives' houses, the school, and the fields. His son was nowhere to be found. With night falling, his worries escalated for the safety of his child.

"My son can't speak, he is mute. He can't ask for help in the traditional way. I didn't know how I would find him, or if I would find him. I was in a state of despair, worrying about his safety," revealed Bablu Miah.

"At 9 PM, I received a call from an unknown number. My heart clenched and I was filled with dread. I couldn't help thinking of the worst-case scenario. Yet, I received the call. It was a call from a Government representative - Raju Mandal. He inquired about my name and address. He asked me if I had a son, what his name was, and his whereabouts. After verifying my information, he informed me that

my son had been found," said Bablu Miah.

"Your son found his way to a departmental store. He communicated he was lost to the owner, Saiful Kabir, through pen and paper. Saiful found the government office in Panchgachia through the National Portal and called us, informing us of a lost disabled child named Zaidul who could only write that his Father's name was Bablu Miah and he was from Panchgachia. Using that information, we were quickly able to locate you," explained Raju Mandal.

"After Raju Mandal connected me with Saiful Kabir, I immediately left to go get my son. It's a wonder, the way that I was able to find my son. I never imagined technology could help us in this manner too. Without the National Portal, my vulnerable child could have been lost to me," communicated a sentimental Bablu Miah.

"

It's a wonder, the way that I was able to find my son. I never imagined technology could help us in this manner too. Without the National Portal, my vulnerable child could have been lost to me.

- Bablu Miah

Land of the People, for the People

For many people in rural Bangladesh, agriculture and livestock rearing is the main source of livelihood. One such individual is Bindu, a resident of Ashulia, a suburban area of Dhaka. Bindu is the eldest of four daughters of an old livestock farmer who used to lease land from a local land-owner.

For Bindu's family, making ends meet was a daily struggle. They owned a small cattle farm, but with so many mouths to feed, there was constant rationing and privation. What little they earned from the cattle farm barely covered their essentials, as most of it went to the landowner.

With Bindu's aging father's medical needs rising, they could not afford to keep paying the landowner so much money. However, without his land, they could not keep the cattle farm at all. Desperate to help her family get out of this stalemate, Bindu started seeking advice from anyone and everyone. Soon, she learned about the Government providing long-term leases for Khas Land. Khas land is the term used for unoccupied land owned by the Government. However, even that proved impossibly difficult.

"I was in despair. I did not know if I would be able to afford my sick father's medical expenses and feed my family. It was made worse by my helplessness in navigating the complex and ambiguous application system; I knew that if I could just secure a lease of the Government Khas land on better terms, I would be able to take care of my family. I looked for a way to apply for a lease. But, without specific knowledge whichever government office I went to, I was bounced from desk to desk and office to office," explained Bindu.

When Bindu finally almost resigned herself and her family to her fate, she heard of the myGov app from a visiting relative. In a last-ditch effort, she enlisted the help of her husband and digitally applied for the lease of non-agricultural Khas land using the myGov app.

"The concerned authorities accepted my application and informed me that my application is under consideration. Within a very short time, I was granted the lease at much better terms. After my tiresome manual experience with the process, I cannot believe how simple and accessible digitization has made the process. Thanks to myGov, I am now able to bear my father's medical expenses, and put food on the table for my family," says Bindu.

With the help of the myGov app, government officials are not only providing e-mutation and e-land services but also have been holding online hearings too. For millions like Bindu, the digitization of land services has been a saving grace.





A Ray of Hope for a Worried Mother-to-Be

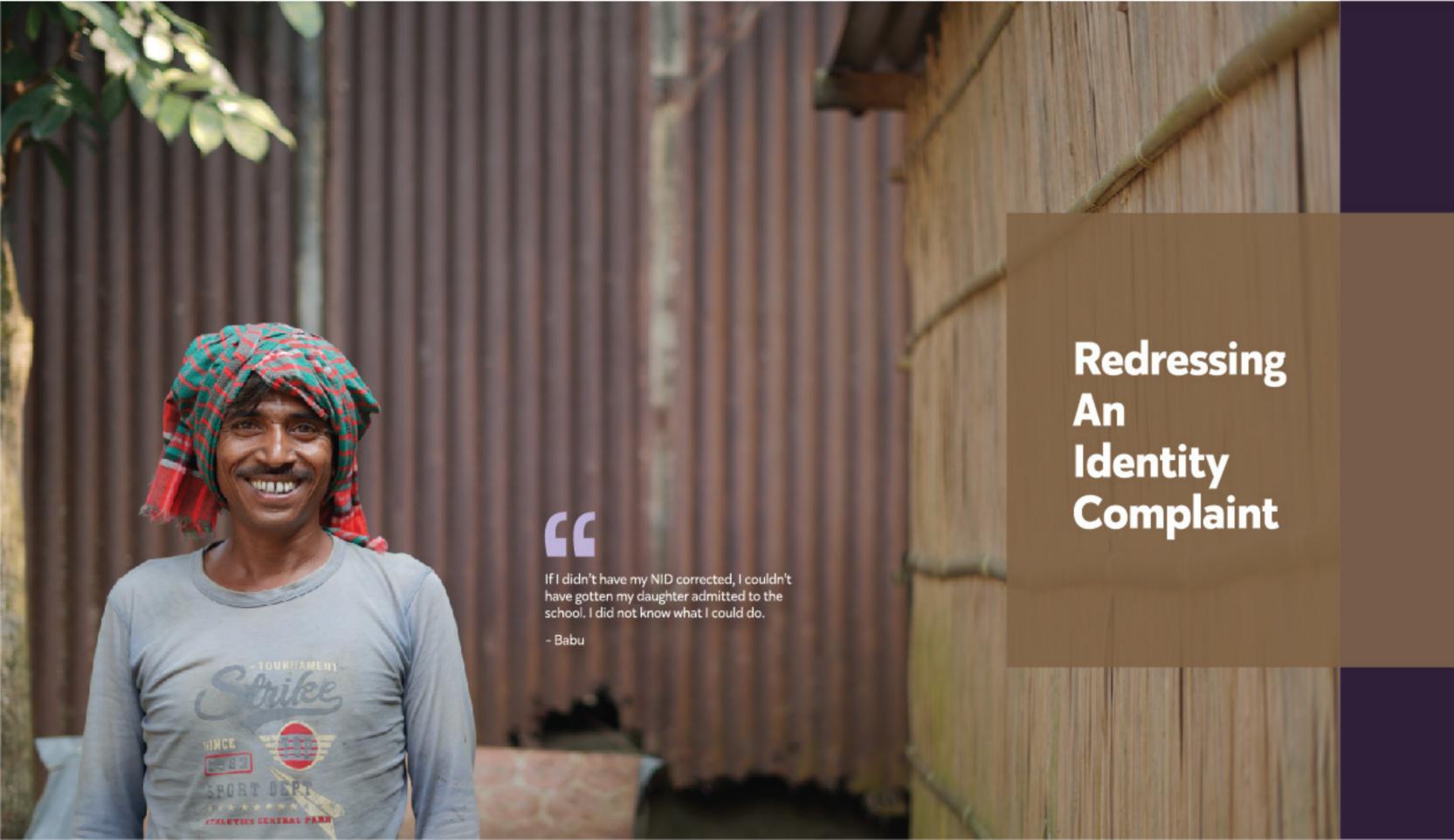
During the Covid-19 lockdowns, Sharmin, an expecting mother, 8 months into her pregnancy, was confined at home. With necessary medical services being difficult to access during the pandemic, Sharmin's worries increased over time. The fact that her husband worked abroad, and she and her mother-in-law were the only two people in the house further contributed to her anxiety about her looming delivery.

"I heard pregnant women are especially vulnerable to the coronavirus. I feared contracting the virus. I was terrified for my life and for the life of my unborn baby,"

"One night, I started having labour pains. The realization that my baby was coming was making my head spin. I felt lightheaded. My breath was coming too fast, and my breathing was too shallow. My mother-in-law wanted to rush me to the hospital but I remembered my husband's instructions; Call Ma Telehealth if there is any complication or difficulty," recalled Sharmin.

"So, I called Ma telehealth. The Doctor I spoke to, had a gentle and calming demeanor. She listened to my situation attentively and enquired about my state carefully. Then she helped me understand that I was not in labor. She informed me I was having Braxton-Hick's contractions. I had no idea what it was until she explained it to me. It is a way of the body preparing itself for actual labor. From my statements, she understood right away that I had been having an anxiety attack due to the stress I had been putting on myself," continued Sharmin.

"The gentle doctor calmed me down and helped alleviate my anxiety attack. Thanks to her efforts, my baby and I are safe and sound at home. The doctor also called me later to check if I was alright - a gesture that I will remember for the rest of my life. She has made me believe that when I need the help, I will receive it from Ma Telehealth," said Sharmin, her eyes alight with hope.



Babu, a rickshaw puller from Rajshahi, was in a tough spot. He had moved to Savar with his wife and daughter in search of better work and a better life for their work. He wanted to give his daughter a fighting chance. In other words, he wanted to get his daughter admitted to school so that she could get an education. He wished for her to get educated and have a brighter future than her poor, uneducated father.

"When we went for her school admission, they refused to admit her without matching documents. They said the father's name on her birth certificate, and my National Identity Card (NID) did not match. Apparently, the mistake was in my NID, and to correct it, I thought I would have to return to my hometown," shared a distressed Babu.

"It wasn't an easy thing for me to go back to my hometown. It would incur travel expenses and I would miss several days' worth of wages. If I did not have my wages, how would I feed my family? On the other hand, if I did not have my NID corrected, I couldn't have gotten my daughter admitted to the school. I did not know what to do," said Babu.

"It was then that I heard from another rickshaw puller that he had been in a similar situation. However, he had been able to receive help from a Digital Centre. I went to the Digital Centre and the Digital Centre entrepreneur helped me fill up the form digitally. I was able to pay the fee for the form through rural branchless banking. Finally, I was able to collect my NID's online version and was able to get my daughter admitted to school" said an emotional Babu.

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Words cannot describe how thankful I am to the government for taking this initiative and to 333 for addressing my family's needs rapidly. God knows what would have happened to my family had it not existed, we probably would have starved to death.

- Arup Das

The Night is Darkest
Just Before the Dawn



Things were going well enough for Arup Das and his family until the coronavirus pandemic reached Bangladesh and halted regular proceedings. The government subsequently shut off all economic activities and enforced a nationwide lockdown, confining the entire population barring essential service providers to their homes. As a result, Arup Das's business too was shut down.

Arup's entire family was dependent on him as he was the sole breadwinner. Relying on his daily sales to fund his and his family's living, Arup Das was hit hard by the lockdown and was in a dilemma thinking about how he would provide food for his family.

"I used my last bit of savings to buy one week's groceries (rice, lentils, salt, and oil) for my family and did not know how I would manage the rest. I had to pay my rent that was due, settle my children's school fees and take care of my elderly parents. I was devastated and could not figure out a way to make ends meet."

Then, he heard from locals about a national helpline '333', which was providing food assistance to the low-income population and daily earners to help them survive through the pandemic.

Arup Das dialed 333, and after a number of attempts could connect to an agent. He explained his situation, expressed how he and his family were out of food, and desperately needed help to survive. His concerns were redirected to the Fulbari UNO (Upazila Nirbahi Officer, the chief of the sub-district administration) and that very night, the UNO with some officials traveled to Arup Das's home and handed over a month's ration for his family.

"Words cannot describe how thankful I am
to the government for taking this initiative
and to 333 for addressing my family's needs
rapidly. God knows what would have
happened to my family had it not existed, we
probably would have starved to death,"
expressed elated and grateful Arup Das.

333, Bangladesh's National Assisted Service Helpline, has emerged as the most versatile and accessible platform for availing government information and services for poor, underserved people. During the pandemic, it was repurposed multiple times to enable people to self-report COVID symptoms, then for delivering telehealth services to millions during the national lockdowns, and even to enable p-Commerce -e-Commerce over regular landlines and feature phones.





A New Operating System for the 21st Century Government

nprecedented digitization and social media combined are challenging government institutions to shed archaic organizational structures and reorient themselves around the changing needs of citizens. As citizens increasingly experience speedy and innovative digital services from the private sector, their expectations of what governments should deliver rise as well.

Moreover, the abrupt and brutal disruption by the COVID-19 pandemic has catapulted public servants onto the frontlines in the response to the crisis without any clear roadmap, forcing them to deal with an ever-changing situation and improvising along the way.

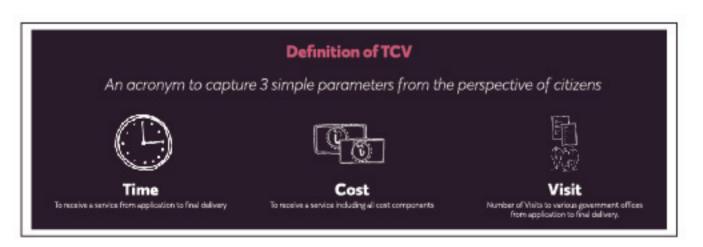
This shift does not just affect the way governments have traditionally been structured, it also affects the way that those who work in government institutions are recruited, guided and incentivized to innovate. To catalyze their transformation into 'Govpreneurs' - public service providers who, driven by a strong sense of empathy and duty towards service seekers, increasingly think and act like an entrepreneur- acquiring tacit knowledge about how to get things done in the public sector, building new relationships, leveraging resources, working across sector lines, replacing the profit motive with the pursuit of enhancing public value, and acting, and sometimes failing, fast.

a2i has introduced an empathy-triggered culture of public service innovation that is built on the 3 pillars of PURPOSE, AUTONOMY, and COMPE-TENCE.

Focusing on changing the mindset of the civil servants, a sense of PURPOSE was established through 'reducing TCV' – reducing the time (T), cost (C) and number of visits (V) it takes for citizens to access government services. "Reducing TCV" went viral within the civil service in

Bangladesh and became the byword for innovation. Starting from the country's Premier, most senior civil servants have now embraced this notion and publicly echoed that "failure is ok". This makes the spirit of the bureaucratic rules more important than their wording, the end more important than the means. It gives govpreneurs a sense of AUTONOMY and the 'Service Innovation Fund' provides them with the means to experiment and bring their ideas to life. COMPETENCE, the third pillar,

captures the intrinsic motivation that govpreneurs have to get better at accurately understanding the challenges that citizens face, and identifying the key pain points. 'Empathy Training' and 'Service Process Simplification' gives thousands of govpreneurs the tools and that sense of competence to walk the last mile of service access in their shoes; to experience challenges from their perspective and identify solutions that make sense for them.







Walking in Citizens' Shoes

Empathy Training

Perhaps the biggest benefit from a2i's efforts to cultivate empathy among government officers is that it shows them 'why' to do something rather than telling them 'how' to do it; thereby tapping into their innate desire to do good work and unleashing each individual's unique innovation potential.

Empathy Training was a twist on the mystery shopping idea, handpicking about thirty government officers from different sectors – education, agriculture, social service, law enforcement, etc. and orchestrating them to go to different offices. The police officer visits a school. The teacher goes to a land office. The land officer goes to a hospital. Without administrative knowledge and privilege, civil servants become mere customers, and they begin to understand citizen's problems much better. They bring back scathing criticisms about what is going wrong in each of these places. When they reflect together as a group, they begin to identify what must be done to improve things.





34,450

officials reached through 2,175 training courses organized by previous trainees



1,589

Innovation pilots initiated by Ministries/ Directorates/District Administration

- To Create Small Disruptions using 'Empathy Training'
- To Redefine the Problem in public service delivery
- Understand the Citizen's perspectives



SCAN TO KNOW MOR



A Tool for Reducing Citizens' Hassle

Service Process Simplification (SPS)

How do govpreneurs in Bangladesh innovate? How do we actually reduce 'TCV' - the time (T), cost (C) and number of visits (V) that it takes for citizens to access services?

'SPS' brings together civil servants working on the value chain of the same service at different levels - from the ministry right down to the field level - and helps them literally paint the big picture of the entire process flow and redesign them, eliminating unnecessary steps within and between ministries in order to optimize end-to-end processes and automate non-value-added tasks.

In doing so, SPS empowered them to fundamentally rethink how they do their work in order to dramatically improve the quality of services, cut operational costs and reduce TCV for their citizen clients.



600+

Services Simplified



SCAN TO



3,751+
Government Employees Trained









Serving Justice with Virtual Courts

MyCourt

The COVID-19 pandemic disrupted an already overstretched court system in Bangladesh. More than 80 percent of all detainees are pre-trial detainees and health restrictions and lockdowns made physical court hearings nearly impossible. Meanwhile, jails and juvenile detention centers were filled to the brim. Overcrowding made physical distancing and personal hygiene practices difficult and put each prison at considerable risk of becoming a COVID hotspot.

Within 12 days of the Honourable President of Bangladesh issuing an ordinance introducing virtual courts, a2i repurposed a digital decision support system called 'Nothi' – which was already in use in nearly 12,000 government offices ensuring faster processing of citizens' applications for services through the electronic movement of files across different administrative layers – to the context of a court.

During the months from May to June 2020, a2i trained thousands of judges, lawyers and court officials on the online system. During that time, 42,894 bail applications were received; 14,911 virtual hearings were held; and 10,523 people, including women inmates, were released on bail. This helped reduce the prison population by 11.95% in three months, a record in Bangladesh's history.

Lower courts and tribunals across the country again cleared 137,330 bail hearings in 46 days in the midst of the second wave of COVID-19, which appeared in April 2021.



347,956

Bail Application



172,850

Released on Bail

Creating a Network of Govpreneurs

Innovation Teams

With each officer concerned primarily about what happened on their desk, the people responsible for delivering a service as a whole lacked both a shared understanding of the challenges and the means for coming up with collaborative solutions.

Thus, a2i supports the Cabinet Office to identify senior officials who exhibit a natural internalization of the shared purpose of citizen-centric innovation and an entrepreneurial zeal. It facilitates the process of them officially, through a government order, being designated as 'Chief Innovation Officers' to lead 'Innovation Teams' within all tiers of government – from the ministries all the way down to the sub-district level.

Nearly 1,000 Innovation Teams comprising over 6,000 officers have been formed. These Innovation Teams led by the Chief Innovation Officers are equipped with team building skills and feature a peer support structure with a deep understanding of the current design of services and their delivery mechanisms. Enabled by social media and departmental blogs, they identify transformational opportunities and areas where policy reforms would need to take place to ignite service delivery innovations at the field level.









Investing in Innovation

Service Innovation Fund

a2i was always conscious of the paradox of funding: you need some to bring an idea to life—but too much often diminishes the ability to stretch your imagination. Thus, the Innovation Teams are always encouraged to be entrepreneurial in identifying and utilizing funds from within their ministries to scale up innovative services and their delivery mechanisms nationally.

However, to facilitate the making of a stronger case to seek ministerial funds, a2i launched the 'Service Innovation Fund' to open up an unprecedented opportunity to incubate solutions from both government and non-government actors. Nearly half of the nearly 7,853 proposals to the fund have come from the private sector, NGOs, universities and even individual innovators. Successful case studies of innovation in service delivery are also showcased and celebrated through national and district level Innovation Fairs.

Recognition as Reward

Innovation Awards

The traditional incentive system of bureaucracy is designed to maintain the status quo. So, while there are no rewards for innovation, innovators can expect to suffer the consequences of experiments that fail.

The strategy thus became to employ 'recognition' as incentive. Outstanding efforts by individuals and Innovation Teams are identified and put on public display through a series of Innovation Fairs. They spark healthy competition among ministries, departments and individual civil servants alike. At the first such fair, the Hon'ble Prime Minister personally awarded the prizes for best innovation team and innovator. The effect was tremendous. Government officers, often working at the very grassroots level, people who had never even been to the capital Dhaka, were instantly propelled to fame both within their respective ministries, the government sphere and nationally.

Annual Public Administration Awards (PAA) have now become the single most exciting event of the civil service calendar. Recipients writing 'PAA' as a title next to their name has become a proud tradition.



Accelerating the Digitization of Govt. Services

Digital Service Design Lab

a2i's Digital Service Design Lab (DSDL) organizes workshops that bring together civil servants, ordinary citizens, local technology companies and international experts to visualize and analyze manual services end-to-end, simplify them by eliminating redundant steps required of citizens, design the digital incarnation of the simplified services, and prepare budgets and implementation plans. The workshop ends with the secretary of the relevant ministry or departmental head responsible for a service approving the plan for execution followed by nationwide

implementation. However, the DSDL team continues to interface between the ministry and the tech company that is awarded the final contract, for as long as necessary.

The uniqueness of this methodology is that both service recipients (citizens) and service providers (concerned ministries) are involved in the digital service designing process which not only caters to the requirements of both parties but ensures ownership of the concerned ministry as its officials are directly involved in the process. Moreover, participating in the workshops and interacting with citizens and ministries at the design stage have contributed immensely to developing and maturing the local IT industry's capacity to develop citizen-centric digital government services. To the extent that, Bangladeshi IT companies are now also working internationally, for example in Fiji and the Philippines, providing e-Government solutions.



SCAN TO KNOW MORE



The Ultimate Government Decision-making and Workflow System

e-Nothi (Electronic Filing System)

Nothi is Bengali for 'file', and refers to the humble, at the very heart of the government decision making process. They are like red blood that they filled in (themselves cells; nothing happens without them. Once submitted, every citizen request for a service is first put in a new nothi.

e-Nothi is a digital decision support system which is already in use in nearly 11,370 government offices ensuring faster processing of citizens' applications for services through the electronic movement of files across

different administrative layers. With e-Nothi, a2i created a government paper files that are virtual backend for government offices where citizens could submit the electronic forms or, with the help of Digital Centre Entrepreneurs) on the National Portal. It is the ultimate workflow system of the government not just for services, but all decision -making. Even decisions like project approval, procurement, etc. which are not citizen-facing services in their own right but rather intra-governmental G2G services.

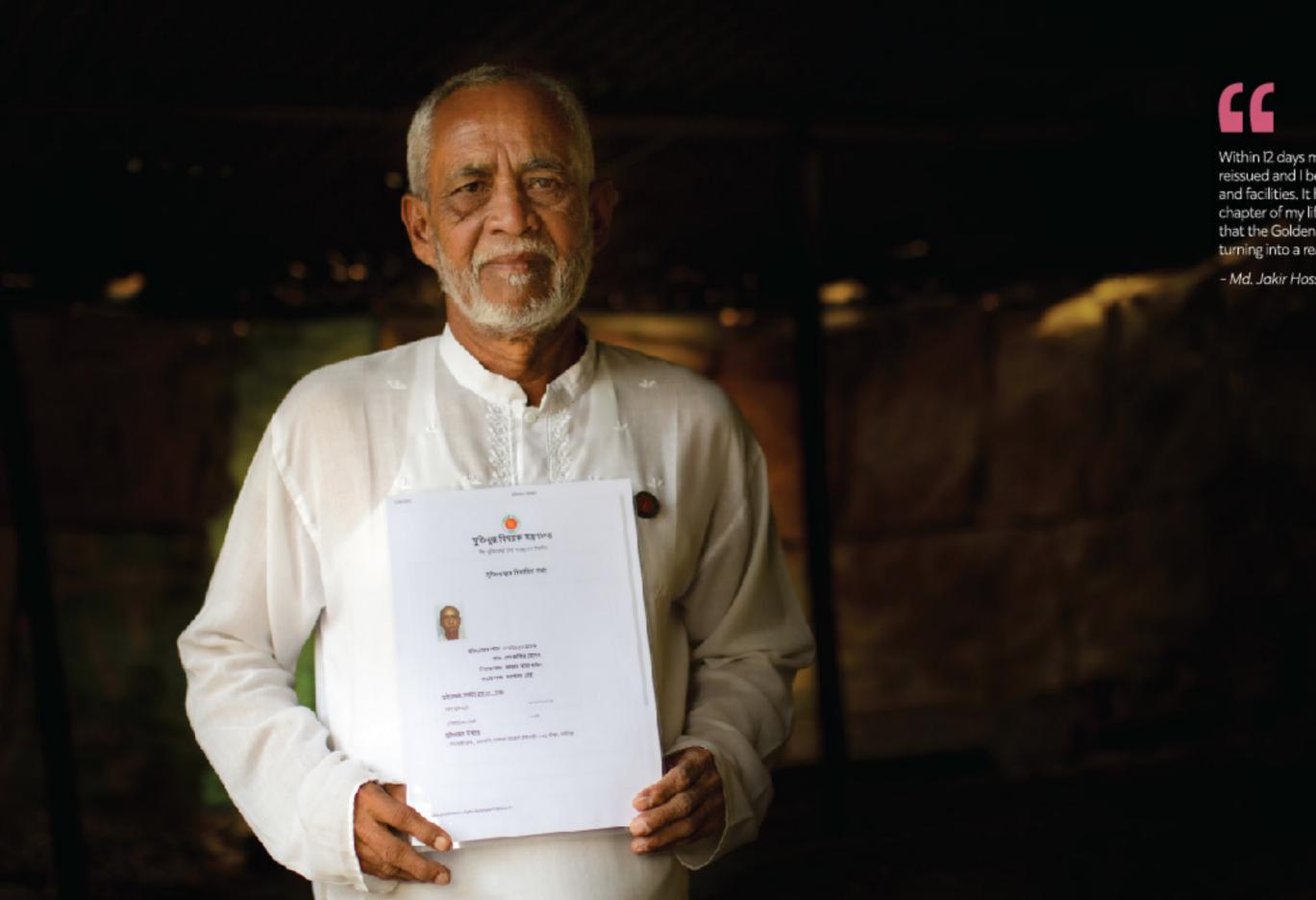


Revolutionizing the traditional filing system, e-Nothi provides a solution to several problems that plagued the previous manual system. Problems such as time taken to search for specific paper files out of literally thousands of bundles, misplacement of files and knowing the status

of files being processed have all been remedied through this innovative intervention. Connecting over 11,370 offices, the system has boosted the efficiency of tasks by creating transparency, accountability and coordination among the government offices and in the work process.







Within 12 days my 'Freedom Fighter Gazette' had been reissued and I began receiving the Government stipend and facilities. It has helped start a new and better chapter of my life. I'm proud of how far we have come, that the Golden Bangladesh we fought for is slowly turning into a reality.

- Md. Jakir Hossain

An Identity of Pride

Md. Jakir Hossain, a war veteran, had long been trying to get his Freedom Fighter Gazette corrected and reissued. He was unaware of the steps he needed to take to get the work done. Due to his failure to get his 'Freedom Fighter Gazette' reissued, he had been deprived of a lot of facilities that the Government provides freedom fighters.

One day, Md. Jakir Hossain ran into one of his former platoon members, Salim Khan, at the local market. Delighted to see his old friend, he told his friend about his current predicament.

Md. Jakir Hossain informed Salim he did not want to spend time and money running from ministry to ministry trying to get his gazette renewed. He had heard that people often lose their documents in the process and are left with nothing. But, his friend was insistent. Salim soon took Md. Jakir

Hossain to the Ministry of Liberation War Affairs, where they submitted the appropriate documents.

"When I expressed my concerns to the relevant authorities at the Ministry, they assured me that the e-Nothi system was very efficient. They told me that everything would go smoothly and once my paperwork was verified and submitted to the e-Nothi system, I would receive the allowance that I was entitled to," recollected Md. Jakir Hossain.

"True to their word, within 12 days my 'Freedom Fighter Gazette' had been reissued and I began receiving the Government stipend and facilities. It has helped start a new and better chapter of my life. I'm proud of how far we have come, that the Golden Bangladesh we fought for is slowly turning into a reality," said Md. Jakir Hossain proudly.



Embedding Empathy in Innovation

Ayesha Khatun was a patient with a long and complicated medical history. However, the closest healthcare centre to her was still a couple of hours away and the expenses for traveling there were difficult for her to bear. This was made even more difficult because of the time it took to actually see the doctor.

"Every time I come to visit the doctor, it takes a whole day away from me. Traveling there by bus takes two hours, I have to manage food for myself and then I have to stand in the long queues for hours on end until it is my turn," elaborated Ayesha.

"Many a time, it has happened that I wouldn't even be able to see the doctor on the first time I visit. In which case, I both lost a day of wage and I did not even get my treatment. Moreover, I would have to come

again the next day and repeat all of this hassle and incur additional expenses on top of my existing medical expenses," told Ayesha.

Dr. AKM Shamsuddin, a Health & Family Planning Officer in Barisal district, who had received innovation training from a2i, grew empathetic towards the needs of the beneficiaries and introduced "Health Card" - an innovative service delivery concept to improve access to free healthcare services.

ICTs were applied to develop a simple, online, dynamic database management system that can store patients' medical history and can be accessed by selected doctors anywhere-anytime. Moreover, the doctors can use the system to generate prescriptions where the medicine name, dosage unit, medical store details, and maximum retail price are shown, thus removing any kind of misinterpretation by the patient or the pharmacist.

"The introduction of the Health
Card has changed the way things
work. Now, I do not have to wait in a
queue for hours and I receive my
healthcare service swiftly.
Consequently, the number of visits to
the hospital have also gone down,
reducing my expenses. In addition to
that, the Health Card also qualifies
me for free medical treatment and
medicine," said Ayesha.

"Health Card has made treatment accessible to me. Now, I can get the treatment I need efficiently and at little to no cost. It has changed the lives of many others I know, who suffered like me previously."



Digital Financial Inclusion



Making Digital Financial Services Work for the Poor

ngladesh has shown tremendous prowth in terms of digital financial account access through the proliferation of branchless banking which has taken full-service retail banking to the doorsteps of rural citizens across the country, and soaring mobile financial services (MFS), which reached a client base of over 100 million. However, despite this increase in access, usage has remained stagnant and limited mostly to P2P (person-to-person) transfers - both symptomatic of lack of innovation in the digital financial services (DFS) space. While financial inclusion amongst the entire Bangladeshi population jumped from 31% to 50%, the gender gap has widened.

The Digital Financial Service (DFS) Lab of a2i brings together key ministries, regulators, financial service providers, academia, and international expertise to spearhead the Government of Bangladesh's efforts to digitize Government to Person (G2P) payments including social safety net programs, as well as Person to Government (P2G) payments by developing, piloting and scaling a citizen-centric, choice architecture for digital payments. Alongside, it also works on creating DFS access points for the rural poor and unbanked and catalyzing pro-poor innovations like e-KYC to unlock the full potential of fintech.



a2i's DFS Lab is working to expand and deepen digital financial inclusion of the nation's most vulnerable populations by:

- ✓ Catalyzing innovations and designing business models to incentivize service providers to use biometric identity, service interoperability, and data democratization to further extend financial services to the poor;
- Driving all major architecture for a digitally enabled integrated service delivery system;
- Building capacity to create leaders across government agencies, regulators and FSPs, and the fintech industry as a whole;

Engaging in policy advocacy and supporting policy makers to develop innovative DFS policy that enables commercial providers to adequately serve poor consumers while protecting consumer interests.

Through initiatives like digital social safety net payments, Rural Branchless Banking and ekPay, a2i has helped redefine the meaning of financial transactions for millions. A citizen from the remotest part of the country can now avail their government allowances, access full-service banking facilities from a bank of their choosing and make payments for a wide array of government services, all digitally.





BILL& MELINDA GATES foundation

Paving the Path for Financial Inclusion

Citizen's Choice Architecture for Digital Social Safety Net Payments

To collect the USD 7 a month that the government sends as social safety net allowance (SSN), citizen-beneficiaries have to travel long distances to the nearest state-owned bank branch, spend hours standing in line, sometimes needing to come back the next day. Factoring in the cost of travel and food alone, they spend over 14% of the allowance before they even receive it.

a2i, in collaboration with the Ministries of Social Welfare, Finance, and Bangladesh Bank, developed the 'Citizen's Choice Architecture' for digital payments of SSN Programmes – such as elderly allowance, allowance for widowed, deserted, and destitute women, allowance for financially-insolvent disabled people. Guided by the 'AIM Principle' (Account + Identity = Mobility), it allows for the disbursement of allowances at accessible cash-out points at the union level (the lowest administrative tier comprising 9 villages), or even at the homes of the elderly or persons with disability.

Citizen-beneficiaries simply walk a short distance to the nearest Digital Centre or agent banking booth, and using biometrics under the supervision of the local entrepreneur or business correspondent appointed by an agent bank, cash out their allowance from their own full-service bank account that is tied to their unique national ID number. The whole technology setup requires only an active mobile data connection in order to function.



SCAN TO KNOW MORE



25 million+
Digital Payment Beneficiaries





One-stop Bill Payment Solution

ekpay

Paying utility bills is no less than a nightmare for most Bangladeshis. Long queue, mismanagement and tediousness are what every bill-payer had to experience when the process was fully manual. Although digital bill payment was introduced to the metropolitans and suburbans by different service providers individually; there was no such platform for the underserved ones.

a2i's DFS Lab has initiated ekpay, a simple one-stop bill payment platform for gas bills, electricity bills, school fees, traffic prosecutions bills, insurance bills, and more, at a lower transaction cost. Launched on 20th October 2019, ekpay has benefited 3.9 million citizens and collected USD 75 million in bill and fee payments. Ekpay covers the entire geographical location of Bangladesh. The infrastructure mechanism allows the users to pay the bills, anytime, anywhere. Ekpay users can either attain these services online, with integrated financial service providers such as banks and mobile financial services and fintech organizations or through a network of 250,000+ agents operating across Bangladesh.

ekpay ensures the service system is easily accessible, reliable, and secure for users by providing an interoperable platform. It can be connected with partner organizations via the backend through API, ultimately allowing them to provide bill payment solutions to their customers.



Banking for the Unbanked Ones

Rural Branchless Banking

Nearly half of all adults in Bangladesh remain unbanked. The majority of them are poor and lack access to even basic financial services. A major obstacle that prevents these poor and often uneducated citizens from availing banking services is their remoteness and hefty paperwork required at banks. Another major hurdle for mainstream commercial banks to service rural citizens is the extra cost they incur in terms of establishing branches - staffing, rent, electricity, etc.

Thus, in alignment with the strategic priorities of the Honourable Prime Minister's Office and at the invitation of Bangladesh Bank, a2i provided the support necessary to create an ecosystem hospitable to the introduction and expansion of rural their utility bills, make regular deposits, withdrawals and even secure loans or purchase insurance. Also, receiving government social safety net allowances, subsidies, and foreign remittances have been enabled through this channel.

branchless banking (RBB) in Bangladesh – starting with the drafting of the necessary policy guidelines and even popularizing the model through the countrywide network of Digital Centres.

Mainstream banks can now offer real time, full-service banking services by simply plugging into an existing agent network such as that of the 4,500+ Digital Centres and attain instant presence in rural areas across the country. The RBB points are helping people open bank accounts, pay for their utility bills, make regular deposits, withdrawals and even secure loans or purchase insurance. Also, receiving government social safety net allowances, subsidies, and foreign remittances have been enabled through this channel.



3.1 million

Accounts Opened



\$2.39 Billion

Savings from Rural People



\$372 Million

Worth of Loans Disbursed







A Saving Grace for An Elderly Widow

Sarbati, a 90-year-old widow living in Nagorpur, Tangail district lived all by herself since her husband died over 20 years ago. Both her daughters were only son lived separately with his wife and children. Though his home was less than a hundred yards away, he did not take care of her.

Sarbati was a dignified and proud woman. Even at this age and despite her condition, she refused to ask for help from relatives and neighbors or, beg. She swept the local bazaar in exchange for half-rotten vegetables and rice, which she cooked to feed herself. The only money she had to spend came from the BDT 1,500 (USD 18.95) quarterly widow's allowance she received from the government as part of a social safety net

programme. But it took her 3 hours of just travel time (not to mention the hours of waiting in long queues out in the open often in inclement weather) for her married and lived with their in-laws. Her round trip to the bank branch that was nearly 6 km away and cost her BDT 120 (USD 1.52). She needed someone to accompany her, as she was unable to travel such distances alone.

> Now, thanks to the biometrically enabled, digital social safety net payments architecture developed by a2i's DFS Lab, Sarbati can cash out her allowance from her nearest Digital Centre within walking distance of the bazaar or, if she's not feeling well, ask the Digital Centre Entrepreneur to bring over her laptop and finger-print scanner so she can avail the money from home.



In the Talent Race, No One Should be Left Behind

"Maa, I want to keep going to school. I want to grow up and be a doctor one day."

These are the words little Khadija Akhter's mother heard when she told her daughter they cannot afford to send her to school the next year. Khadija belonged to a family of seven, with four other siblings and her parents. Being a rickshaw puller, Khadija's father simply did not earn enough to be able to feed his children and provide an education for them.

"I went to school the next day and informed my class teacher about why I would have to quit school. My teacher immediately told me she was going to try and see what she could do to help me. The following day, my teacher helped me apply for a Government-provided merit and need-based stipend. With her aid, I filed the application describing my socio-economic conditions. But, I was scared to hope that a solution would present itself," described Khadija.

A few days later, Khadija's parents surprised her with books for the new school year. They told her she could continue going to school; Khadija's application requesting the Government stipend for needy and meritorious students had been accepted. Her parents had received the stipend through mobile banking upon the authority's decision.

"I am continuing my education. My dream to become a doctor is still alive because of the stipend the government provides. One day, I will help others the way I have received help," rejoiced a hopeful Khadija.

Like Khadija Akhter, countless underprivileged children across the country are availing their fundamental right to education through this stipend. The allotment of this stipend has truly been revolutionized with the introduction of the student database, created by a2i and the Cabinet Division, which helps select the most worthy students.



Winning Against All odds

without formal education. You'll always remain a failure; these are the things I

For Alamin, the traditional path of education and a desk job were never the right fit. He tried to do it for as long as he could, for the sake of his family. When he finally dropped out of university to start his own business, his disappointed

"At a young age, getting kicked out of my home for being true to my aspirations was a traumatic experience. I was so scared and confused about my immediate actions. However, my end goal was clear. I knew I wanted to establish my own poultry farm. However, without the financial backing of my father, and the traditional bank loans also out of my reach, it seemed like an

At a friend's suggestion, Alamin paid a visit to the Digital Centre, which also doubled as the Rural Branchless Banking point for the neighborhood. Rural Branchless Banking

(also known as 'agent banking') was an initiative to bring full-service banking to the doorsteps of underbanked people. An initiative championed by Bangladesh Bank through a2i's Digital Financial Services Lab. With the help from the Digital Centre Entrepreneur, Alamin succeeded in securing a loan from a private bank to finance the initial capital required for his poultry farm.

"As my poultry farm flourished, my relationship with my family too gradually healed. My successful endeavor has helped me prove wrong every negative comment and become self-sufficient. Without the immense support of the Rural Branchless Banking initiative, none of this would have been possible," exclaimed Alamin.

Alamin's story is one of hope and promise. It gives hope to countless others who, like Alamin, may not have been able to complete their education. It promises them salvation from the bleak future society paints for them. The Digital Financial Services Lab thus aims to provide greater opportunity and financial inclusivity for all.



Euture of Learning

Reimagining the Future of Education

Bangladesh's Strive Towards a Blended Education Ecosystem

B eing the seventh largest education system in the world, Bangladesh is relentlessly trying to ensure education for all and a2i has been playing a significant role in this journey.

Online learning platforms like MuktoPaath, Teacher's Portal, Konnect and other educational initiatives are embodiments of the nation's relentless strive to make quality education accessible and affordable for all.

The conventional perception of education is tied to going to schools. No school means no education. So, when COVID forced schools to close leaving all 50 million students stranded, these initiatives, which form the basis for the public EdTech ecosystem in Bangladesh, provided the means to bring education to their homes.

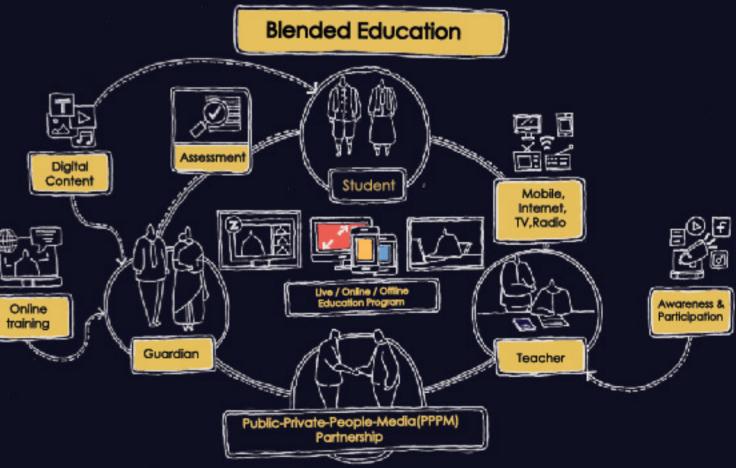




Bangladesh's approach to reforming the education ecosystem has been multidimensional. It is a collaborative effort between the Government, NGOs, and the private sector. Together, they have created a digital education ecosystem, which follows a multimodal approach - a combination of multiple high-tech, low-tech and non-tech learning modalities. It is integrated within an overarching education

strategy, anchored to the curriculum with an aim to reach every learner.

Keeping pace with the changing times, a2i has provided technical support to the education ministry to adapt a Private-Public-People-Media (PPPM) strategy to facilitate learning and teaching from home. This has helped bring a significant and positive change in the mindset of both learners and teachers.



Learning Made Easy

Multimedia Classroom

For decades, Government schools have been predominantly following the traditional blackboard-chalk-lecture method.

The Multimedia Classroom (MMC) initiative was amongst the first milestones towards a digital Bangladesh, inspiring the initial steps of EdTech in the country.

Launched in 2012, the MMC paved the way for integrating multimedia learning aids in the classroom, introducing innovative and advanced teaching

pedagogies nationwide. The initiative started its journey with just over a thousand schools during its pilot period and currently more than 45,000 schools are using MMCs.

MMCs encompass one projector, one laptop, a set of speakers, and an internet data package. The main objective of the MMC initiative is to ensure making learning more interesting and up-to-date, using audio-visual content.



110,000+
Schools Have Multimedia Classrooms



30 million+



50,000+
More MMCs are in the pipeline





Affordable & Accessible Learning for All

MuktoPaath

E-learning platforms are not something new, as we have already seen hundreds operating successfully in the world. However, a government-owned platform that is also for every citizen is undoubtedly remarkable, especially for a country like Bangladesh.

Launched in 2016, MuktoPaath brings skill-based professional and academic courses at affordable costs to every citizen's doorstep. It has varied courses for teachers, students, professionals, lawyers, healthcare professionals, migrant workers, and more. With 208+ courses available on the platform, both online and offline, MuktoPaath has helped enhance knowledge and skills of millions, including the poor and underserved. Completing a course also entitles the participant to a government-recognized certificate from the platform.

One of the recent strides of the platform has been to train more than 300,000 doctors & healthcare professionals on how to tackle the COVID-19 pandemic. During the pandemic, the platform was also utilized to train judges, lawyers and courtroom professionals on how to conduct virtual hearings and more.









Preparing Adolescents for the Future

Konnect

In the Edtech revolution of Bangladesh, the online adolescent portal called Konnect, launched in 2018, is another milestone. Konnect is a shortened term for 'Kishore Connect'. Kishore means teenage in Bangla. It's a multi-sectoral effort with government, NGOs, private sector companies, all contributing with resources and content.

Bangladesh is home to more than 36 million adolescents and youths. Guiding them towards a healthy and prosperous future requires a collective effort from both the society and the government. Konnect was developed by a2i and Shahjalal Science and Technology University (SUST) for the youth, to offer a healthy online social platform alternative that promotes their creativity and nurtures their talents.

The platform connects adolescents especially aged between 10 to 24 through both online and offline activities among themselves and also with various local and national NGOs and development partners. It also provides various online edutainment materials including online classes on photography, painting, life skills, mental health, etc. Teenage users can share, upload and learn from creative multimedia content and important life lessons that can help develop their social and personal skills.



3 million+

Students Connected



35800+
Contents Available

a::::::::a



SCAN TO KNOW MORE



Inclusive Education for the Visually Impaired

Multimedia Talking Book

In Bangladesh, a staggering 6 million plus people are falling behind in society because of the unavailability of accessible learning materials.

With support from a2i's Service Innovation Fund, the Young Power in Social Action (YPSA) – a local NGO led by a visually impaired project manager - has developed DAISY-standard accessible, printed and digital braille books based on the national curriculum, for students of grades 1 through 10.

The Multimedia Talking Book is a standard digital platform providing digital multimedia books, e-books, and digital braille books for the primary and secondary levels, available for free to visually impaired persons in Bangladesh. Students can access the books on their own with just a click on their computers, or mobile phones without any assistance. They can even continue their studies outside the classroom.

Alongside a2i, with the technical support from DAISY Consortium, Accessible Books Consortium and WIPO, YPSA has already converted all 33 primary school textbooks and 72 secondary school texts books to the DAISY-standard. The Honourable Prime Minister hands out DAISY-standard books every year on Textbook Day (1st of January) to visually impaired students.

Multimedia Talking Books have raised the passing rate of visually impaired students to 74% in last year's Higher Secondary Exam. This has made primary and secondary education more inclusive (SDG 4.a), more accessible for all girls and boys (SDG 4.1), and contributed to improving their literacy and numeracy (SDG 4.6).

a2i and YPSA are now working to foster the production of low-cost digital braille display books and DAISY low-cost DAISY multimedia book players locally.

















Leaving No Student Behind

Shangshad (Parliament) TV

When COVID forced all schools to close indefinitely, putting the future of an entire generation at risk, the government started making every effort to minimize the

Given that only about 35% secondary school students and less than 20% primary school students have access to the internet, TV was conceptualized as an effective education content delivery mechanism. An idea that was put forward several years ago based on the largely underutilized infrastructure of Parliament TV with the Hon'ble Prime Minister, Hon'ble Speaker of the Parliament, and the Hon'ble Education Minister all endorsing the idea.

The urgency and sheer weight of the massive need created by COVID-19 finally enabled Parliament TV to be repurposed so it could broadcast thousands of lessons -19 classes daily, from morning to early evening - for primary, secondary, madrassa, and vocational education, this time reaching students in tens of millions.

Thus, Parliament TV, once a TV station that was largely under-utilized by airing parliament sessions every few months, transformed into delivering thousands of daily lessons -- a transformation that took just 6 days.





Upskilling the Educators

Teacher's Portal

The journey of Teacher's Portal started with 23 teachers who asked a simple question - "Who should make the content for teaching the students?" They went on to create a social media platform and start sharing teaching content prepared by them with fellow educators. Their philosophy was that teaching content should be customized to each classroom and created by teachers themselves, instead of consultants and companies.

That innocuous portal, started by 23 teachers in 2011, has now grown into a popular, full-fledged social media site and is now the largest online educational content storage and professional

development platform in Bangladesh, boasting more than 575,000 teachers as active members. Teacher's Portal works as a peer-to-peer capacity development hub for teachers where they can collaborate to create more quality educational content that meets the specific needs of the pupils in their classrooms. It also embodies recognition for the teachers and motivates them via intrinsic and extrinsic means.

The transformation of digital education in Bangladesh has really been teacher-led, teacher-driven and learner-focused. The Teacher's Portal is playing a crucial role in this transformation journey.



590,000+



585,000+

Teaching Content Materials



17,000 Daily Average Users



A Saving Grace in a Time of Need

When COVID-19 started to spread all launched a training on MuktoPaath in over the world, healthcare professionals had to jump in as the front-line fighters. Mehedi Hasan, a doctor from a remote village in Cumilla's Laksam sub-district, was among the front-line fighters serving the last mile community. The situation, for him and thousands of other front-liners, was complicated as the fight was against an unknown and invisible enemy.

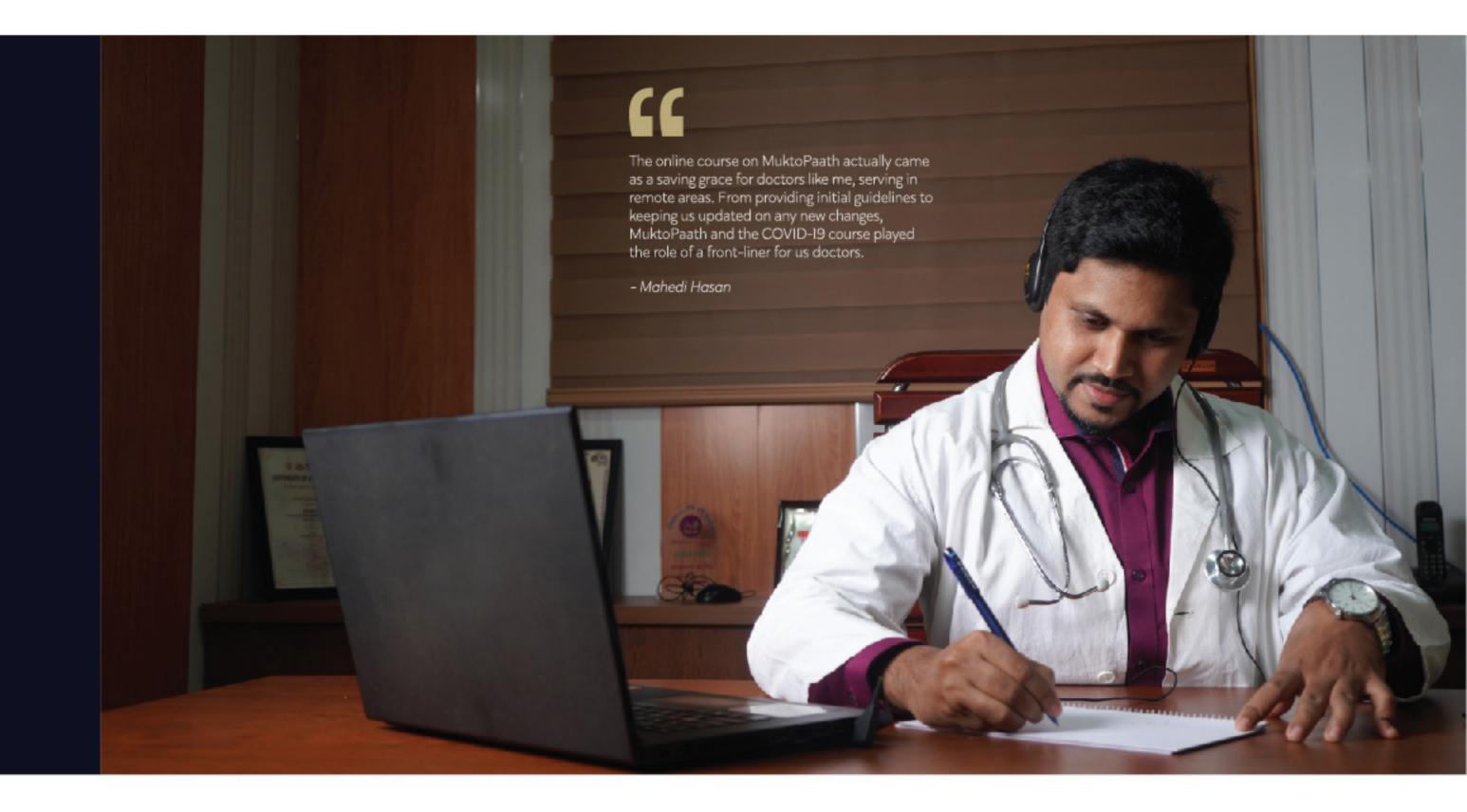
"We did not know what to do. We did not know how to treat these people. We were getting sick ourselves, and yet we had to figure a way out. The situation was getting grimmer by the day, and lives were getting lost as we almost helplessly stood by," lamented Dr. Mehedi Hasan.

This crisis required an immediate solution. To provide advanced level Covid-19 training for doctors, the Directorate General of Health Services (DGHS) and a2i jointly

March 2020.

"When the whole country was at a loss about how to fight the pandemic, we front-liners had no choice but to learn quickly," stressed Mehedi. "The online course on MuktoPaath actually came as a saving grace for doctors like me, serving in remote areas. From providing initial guidelines to keeping us updated on any new changes, MuktoPaath and the Covid-19 course played the role of a front-liner for us doctors. Without MuktoPaath, many more lives of patients and doctors alike would have been lost."

A total of ten online COVID-19 awareness courses were developed by different institutes and added to MuktoPaath. The platform allowed free participation in the courses allowing thousands to play a vital role in disseminating correct information and saving hundreds of lives by providing adequate medical treatment protocols.



The Sky is the Limit

Tapu is a young, enthusiastic eighth grader from Karimuddin Public Pilot High School in Kaliganj of Lalmonirhat district. Young Tapu dreamt of becoming a journalist one day. However, with schools and libraries closed, he did not have access to the knowledge he so craved and his dream felt farther away than ever before.

"I felt trapped at home. Books are my refuge. They let me go on all sorts of adventures and teach me so much more than anything else. However, because of the pandemic, I cannot go anywhere to purchase a book or even to the library to read. If I had a computer, I could have read on Konnect like my friends. I wouldn't be left behind and I could work towards achieving my goals," expressed Tapu.

Seeing Tapu's exceptional passion and enthusiasm for learning, his family managed to get him a computer. This was thrilling to Tapu. It meant he could finally have access to Konnect and the resources that he had heard about from his teachers. It was the first step towards realizing his dream.

"Connecting to Konnect was nothing short of a dream come true for me. I am able to access many different topics and read up on the ones that excite me the most. I no longer fear being left behind. I am racing towards my goal," said Tapu. "Thanks to Konnect, I was able to do a course on journalism. I'm proud to announce that I now work as a child journalist in the local newspaper," expressed an excited young Tapu.

Like Tapu, Konnect has introduced a new dimension of learning and empowerment to over 300,000 students, changing their lives for the better.



A Tale of Learning and Adaptation to Prepare the New Generation

Aleya Siddiqui was a teacher at Muktagacha High school in Mymensingh district. Her life revolved around her family and her students at school. However, as technology and the use of computers progressed in education, she found herself struggling to keep up due to her inability to operate computers.

"Throughout my career as a teacher, I have never struggled like I do now. The children appear to know even more than I do. It's hard to keep up when they are able to ask questions on subjects I barely know about; my knowledge is limited compared to the information available on the internet," said Aleya Siddiqui sadly.

Aleya wanted to learn and adapt to computer technology to develop herself professionally but did not know how to get started. She shared her distress with her school headmaster. Days went by as she struggled to teach her students. Some time later, the headmaster informed all the teachers of a new platform called Teacher's Portal.

"We quickly enrolled ourselves onto the Teacher's Portal. It had thousands of contents on various subjects, which allowed us to learn and provide better education to our students through more interesting audio-visual learning content. Nowadays, I upload my own content on the platform and provide assistance to other teachers seeking help," stated Aleya Siddiqui with a sense of pride.

Aleya Siddiqui is one of over 590,000 teachers on Teacher's Portal, giving her access to thousands of quality educational content and peer-to-peer support to provide better education to the future generation of the country.





Future of Work







Taking Advantage of the Fourth Industrial Revolution

Future of Work Lab

a27's Future of Work Lab, aims to address the changing nature of work, workforce and workplace, whilst exploring the potential of a data driven adaptive system for skills and employment in Bangladesh. The specific objectives of this lab are ensuring full and gainful employment through entrepreneurship and skills development; supporting responsible business practices; accelerating inclusive and sustainable economic growth; facilitating knowledge, and sharing the expertise among the relevant stakeholders and partner countries of the Global South.

Acknowledging the fact that the exercise of 'visioning' is as important as any vision in and of itself, a2i organized a series of policy workshops with government ministers, secretaries, CEOs, heads of business chambers, etc. These workshops were informed by commissioning research studies with all appropriate stakeholders - for both domestic and global markets.

Simultaneously, to push the boundaries of future thinking, a2i catalyzed a series of 'Future Skills' projects within the government and private sector. 50 4IR skills projects were launched in 2019. In 2021, the Cabinet Division and a2i facilitated the scaling up of 86 4IR skills projects undertaken by several govt. organizations. 4IR based curriculum for 30 occupations have already been developed and most notably, skills development programs have started on several 4IR occupations such as Smart Electrical and Electronics Systems, Blockchain Technology, Maritime Autonomous Surface Ship (MASS) Operation, Augmented Reality and Virtual Reality (AR/VR), 3D Printing, etc.



Matching Labour Supply and Demand

National Intelligence for Skills, Education, Employment and Entrepreneurship (NISE)

Bangladesh's labor force of 82 million is growing with the addition of 2 million youths each year. Many of these new entrants are facing difficulties in finding employment as they are unaware of which skills are required for which jobs. While there are approximately 13,000 public and private skills training providers, they mostly offer supply-driven courses.

The National Intelligence for Skills, Education, Employment and Entrepreneurship (NISE) is a one-stop data platform that offers a broad spectrum of unique services. On the supply side, it offers real-time data which can allow skill service providers to identify the skills in demand through job forecasting and analyzing market-driven occupations. Participants in various skills training programs are automatically added to a central youth database. This database offers the youth a number of facilities such as career counselling and apprenticeship opportunities. The relevant ministries and government departments can also make use of the platform's real-time data to formulate more informed policies.

On the demand side, NISE acts as an integrated job recruiting platform for public and private job providers alike, automatically filtering for suitable candidates. It allows industries to directly place demand for skilled human resources to specific skills service providers. NISE's 4IR dashboard provides data to industries and entrepreneurs about emerging trends on job opportunities and job replenishment, paving the way for better decision making in business plans.



SCAN TO KNOW MOR

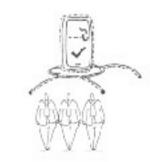




NISE has been declared as a global best the platform practice by UNDP's Chief Digital

- * 400,000 unemployed youth registered
- Department of Youth Development (DYD) under Ministry of Youth and Sports is taking data driven decisions providers under DYD are providing real time data to the platform
- Bangladesh Industrial Technical Ministry of Industry is taking data BITAC are providing real time data to

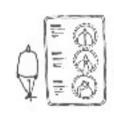
- Piloting started by SME Foundation Bangladesh to ensure access to skills
- for the skills development and decent employment of 5.32 million youths
- NISE in the name of "Digi Maharat" to provide skills development, employment and entrepreneurship support to



Migrant Workers Trained



Women Entrepreneurs Trained



Apprentices



Imams & Muezzins

Incubating and Scaling Up **Social Innovations**

iLab

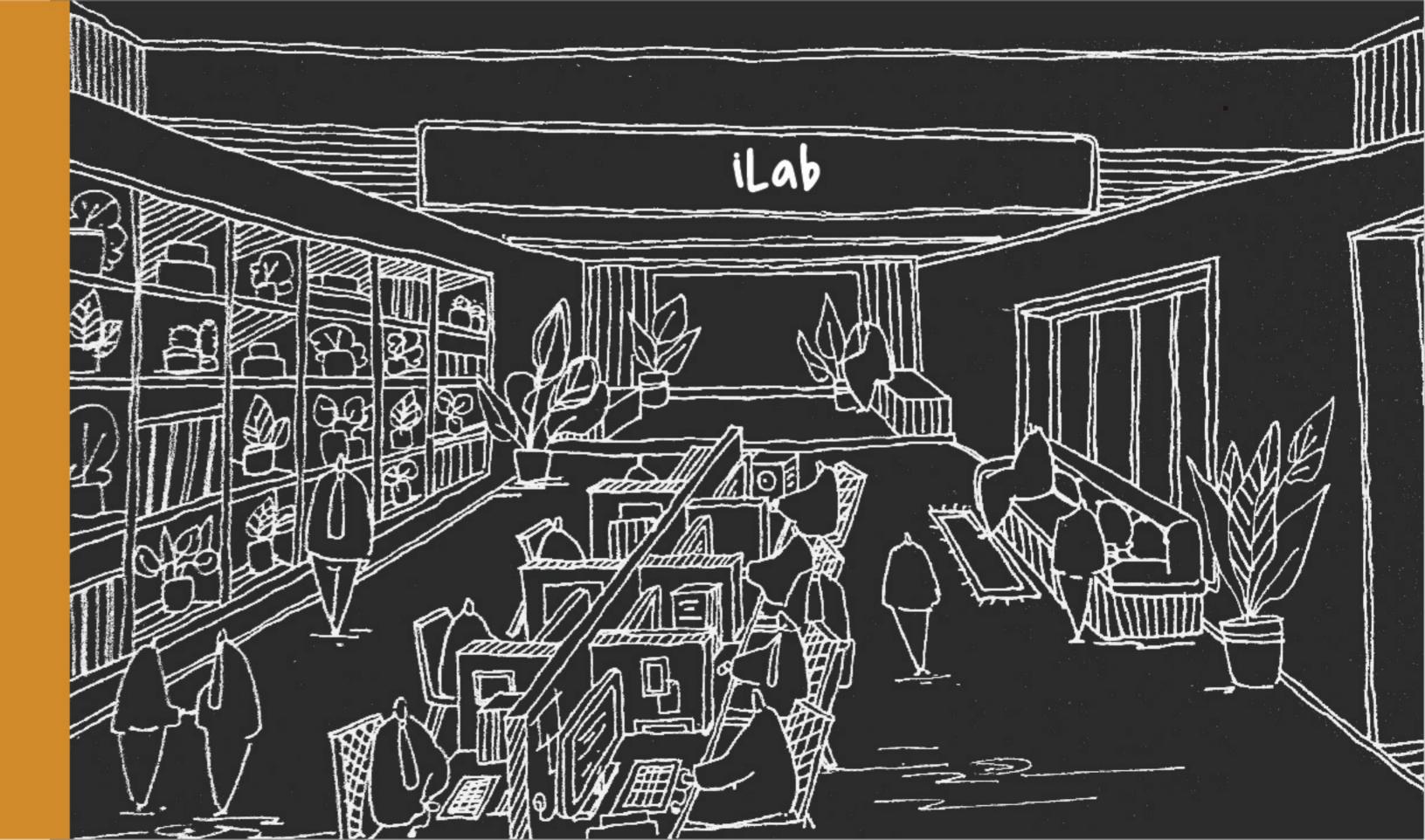
Like a self-fulfilling prophecy, by constantly depicting government as boring, unimaginative, bureaucratic leviathans, we have boxed them into a corner where we struggle to think of them as capable of being anything else. However, historically, it has been the public, rather than the private sector, that has actually been the vanguard of accelerating revolutionary innovations and transforming the world.

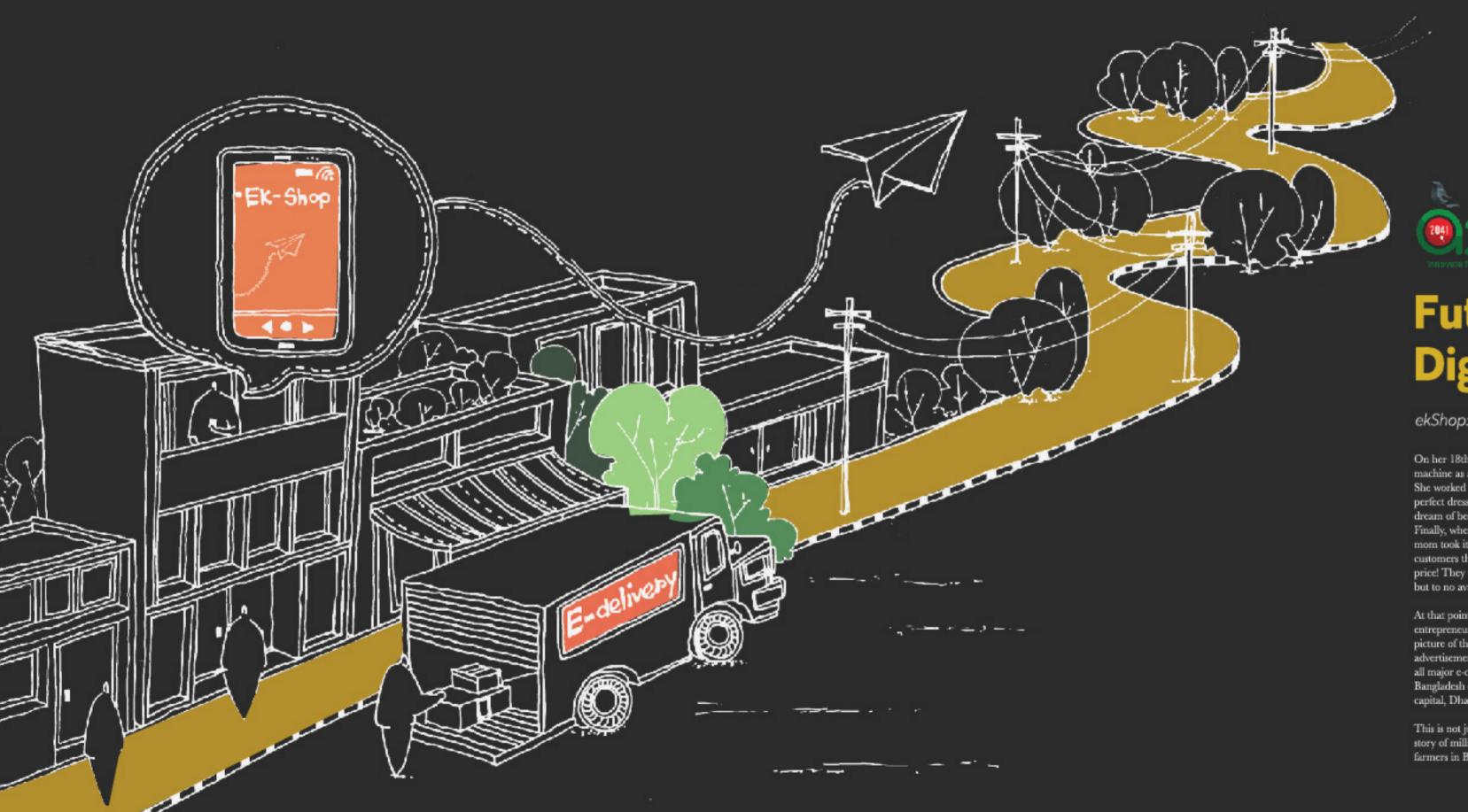
a2i's iLab incubates and accelerates innovations to tackle some of the most pressing societal and environmental problems that Bangladesh faces today by leveraging technology; particularly, electro-mechanical devices, Internet of Things and renewable energy.

It reaches out to individual innovators, students and startups through innovation and challenge competitions. Promising innovators receive seed funding from an innovation fund, access to a Maker Lab, and mentorship by experts from both industry and academia.

guidance for young innovators to turn prototypes into practical and viable solutions. "Prototype to product" development is iLab's last but most significant area of support before scale-up through commercialization. Innovators are further supported with copyright and patent filing to protect their intellectual property.













Future of Digital Economy

ekShop: Digital Livelihoods for the Youth and Refugees

On her 18th birthday, Rity got a sewing machine as a birthday gift from her aunt. She worked day and night to create the perfect dress; first step towards realizing her dream of becoming a fashion designer. Finally, when it was ready, Rity and her mom took it to the nearby bazaar. Alas, the customers there couldn't offer her a fair price! They tried again at a nearby town, but to no avail. Rity was very upset.

At that point, Mita, a Digital Centre entrepreneur from Rity's village, snapped a picture of the dress, and uploaded an advertisement on ekShop so it appeared on all major e-commerce marketplaces in Bangladesh enabling customers in the capital, Dhaka, to see Rity's dress and buy it.

This is not just the story of Rity. This is the story of millions of rural youth, artisans and farmers in Bangladesh unable to secure a

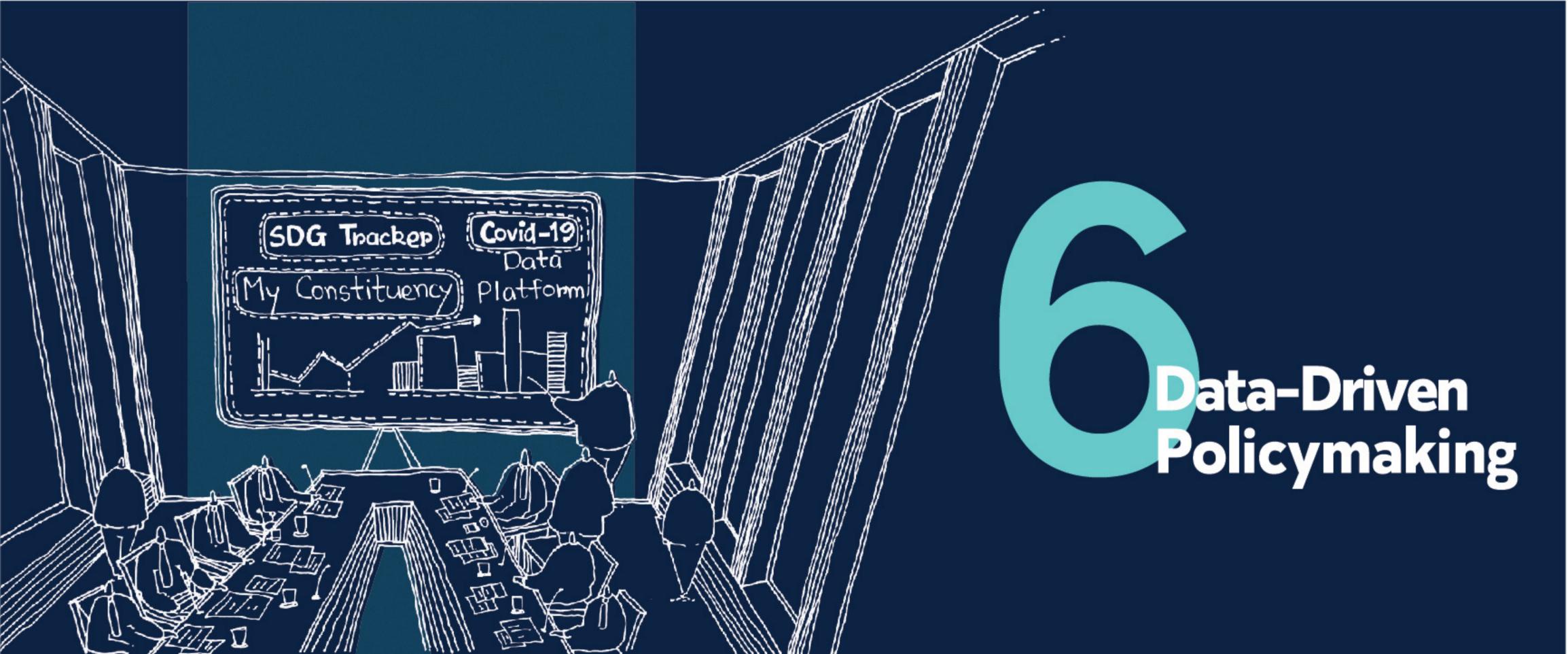
fair price for their products. And this is what inspired a2i, the flagship innovation and digital transformation program of the Government of Bangladesh supported by UNDP to establish ekShop.

ckShop is a unique assisted rural eCommerce model that integrates the countrywide physical network of nearly 7,000 Digital Centres. Through ekShop, Digital centre entrepreneurs assist rural youth, artisans and farmers to reach new, urban customers directly, bypassing multiple layers of intermediaries and secure a 'fair price' for their produce.

In collaboration with UNDP's Crisis Bureau and its SDG Impact Accelerator, a2i is now exploring ways to leverage ekShop to potentially help millions of refugees in Turkey, Colombia, Uganda and Jordan to secure digital livelihoods.



SCAN TO KNOW MORE





From Data to Development

angladesh is going through a pivotal phase, making a transition from being an LDC to being one of the fastest-growing economies in the world. The government realizes that in order to successfully achieve the SDGs, it needs to systematically plan and monitor the impact of its policies, and be able to benchmark data and see year-on-year progress, allowing the potential to make the most impact.

Innovative Platforms such as the SDG Tracker, My Constituency, National Socio-economic Dashboard and National COVID-19 Data Intelligence Platform are at the core of the nation's systematic approach to data-driven policymaking and planning across all the sectors. Moreover, the country's data-driven response to ongoing management of the COVID-19 pandemic has also received plaudits from the global community.

Bangladesh's Development **Mirror**

SDG Tracker

In order to successfully meet the SDGs, measuring progress at a national level is not enough. We need to measure progress at the local level.

The SDG Tracker (sdg.gov.bd), was developed to enable precisely that - the localization and continuous tracking of SDGs. It is a web-based data repository for monitoring the implementation of development initiatives, strengthening timely data collection, and improving situation analysis and performance monitoring of achieving the SDGs.

Launched during the UN General Assembly in 2017 by Prime

Minister Sheikh Hasina, it helps stakeholders, be they policy makers, government agencies, the private sector, civil society organizations, international organizations, or researchers to keep track of the progress against each target of the respective SDGs, and prioritize resource allocation and service delivery accordingly.

Thanks to this novel institutional arrangement, the SDG tracker has gained the capability to show the sector specific development status of Bangladesh. For example, it could tell us how education was faring in Kishoreganj district, or what the employment scenario in Sirajganj district looked like.

92 Agencies from 43 Ministries are Associated

177 Indicators Data Have Been Availed out of 231 Indicators







Data-driven Decision Making that Leaves No One Behind

My Constituency

Unlike Senators in the United States, MPs in Bangladesh are not simply lawmakers enacting legislative duties but also act as local development champions for their respective constituencies.

This distinction is vital in Bangladesh. A voter from Bandarban does not vote based on the laws he thinks his MP would act. Rather, the voter expects them to aid in local development, be it the need for improved public health facilities, the quality of schools, requirement for a bridge or advice on the allocation of social safety nets.

'My Constituency' is a unique data platform developed by a2i, in collaboration with the Bangladesh. Parliament Secretariat and UNDP Bangladesh. It builds on the foundation of the SDG Tracker and creates a localized lens of development that enables MPs to know both the development progress and the development targets set nationally, while simultaneously helping shape those targets and achieve progress locally, in their respective constituencies. It also supports the overall progress of the SDG agenda of the central government by enabling decentralized monitoring of area-based development. 86 Indica



25 Ministries/Departments Connected







The Invisible Armour to Fight the Invisible Enemy

National COVID-19 Data Intelligence Platform

Getting past the Covid-19 pandemic called for a combined effort from all sectors. Developed at the height of the pandemic, the 'National COVID-19 Data Intelligence Platform' has been one of the country's most effective interventions to stop the spread of the virus. Designed with the support of Bill and Melinda Gates Foundation (BMGF) and in collaboration with Directorate General of Health Services (DGHS), the platform is a Collective Data Intelligence System that brought together private sector, civil society, academia, media and development partners from around the world to form an unprecedented partnership and establish a novel, Collective Data Intelligence System.

Through the use of advanced Artificial Intelligence and Machine Learning tools, the system analyzes data coming from citizen self-reports from different telecom services, hospitals, telehealth centres, websites, RT PCR labs, vaccination centres, etc. It presents them in the National Statistics Dashboard, Hospital Information dashboard and the Vaccination Dashboard. By enabling syndromic surveillance, mortality surveillance, contact tracing and epidemiological modelling, these dashboards have been the most important tools during the pandemic for policymakers in terms of health response planning and management.





Enabling Agile Governance in the Face of Uncertainty

Socio Economic Dashboard

Dependency on traditional, manual data collection processes means government data is usually unavailable before it becomes outdated. This delay makes it impossible to catch and fix issues while they occur. Often times, the problem does not become apparent until it is too late to fix.

As COVID-19 pointed out so ruthlessly, government interventions need to be fast, adaptive, and highly responsive to a rapidly evolving situation on the ground.

- Who should be the target for economic or financial assistance?
- Are poor households receiving social transfers?
- Which occupational groups suffer the highest food insecurity?
- How are districts experiencing changes in per capita remittance?
- To what extent is remote education helping children from poor families during

pandemic-induced school closure?

- Where is child marriage increasing?

In the face of such urgent, major policy questions, the socio-economic dashboard supports agile decision making by the government through real-time sectoral data availability. It engages research organizations, bridges public sector data and private sector data, integrates them and visualizes key findings to enable informed decision making that optimizes outcomes for citizens. Post-intervention, it also provides the means for rigorous, detailed measurement of policy impact.

This makes the socio-economic dashboard a key element of a2i's efforts to support the government in building forward better in order to protect years of impressive development progress including the proximate milestone of LDC graduation, and the country resuming progress towards the Sustainable Development Goals.



Bringing Dynamism to Bangladesh's Disaster Management System

Google and a2i Team Up to Improve Flood Forecasting and Warning for Millions

For millions of marginalized people and communities living in the world's biggest flood-prone delta, Bangladesh's annual floods pose a serious risk.

The Bangladesh Water Development Board (BWDB), with technical support from a2i and Google developed a system that predicts when and where flooding will occur—and keeps people safe and informed.

By processing BWDB's existing 5-day flood forecasting data, Google uses AI-powered Hydrologic modelling to provide more precise and granular forecasts of various types — including safety advice with contact details for emergency services and supplies, and even harvesting advice — as well as warnings through improved flood maps to the local community. The system works on an instantaneous basis, providing three days to three hours warning before the onset of floods. Another key value addition is the interpretation of the technical forecast into language that is easily comprehensible.

However, relative to the population of Bangladesh, the number of Android phone users in remote areas is still low. To address this, there is ongoing discussion with mobile networks to find a way of sending predictions via text messages.





South-South Cooperation

In his first address at the UN General
Assembly in 1974, Father of the Nation
Bangabandhu Sheikh Mujibur Rahman spoke
passionately about the need for countries to
come together to build "...a world where
human creativity and the great achievement of
our age in science and technology will be able
to shape a better future...based on sharing of
technology and resources on a global scale so
that people everywhere can begin to enjoy the
minimum conditions of a decent life."

Since 2017, a2i has been successfully functioning as the Secretariat for the South-South Network for Public Service Innovation (SS4NPSI) – a flagship initiative of the United Nations Office for South-South Cooperation – growing the network's membership to over 43 countries and creating hundreds of matchmaking opportunities that facilitate the transfer of technologies across nations.

As Bangladesh completes the formalities of graduating from LDC status, it has simultaneously moved on from being a net importer of knowledge to a net exporter, especially in the areas of digital transformation and public service innovation.

For example, ekShop, a digital aggregator platform that enables thousands of youths living in refugee camps in Bangladesh, South Sudan, Turkey, and Yemen (amongst others), to earn a livelihood online by training to become freelancers and registering on crowdsourcing marketplace websites.

The National Intelligence for Skills, Education, Employment and Entrepreneurship (NISE), offers another example. It is a collective intelligence platform to mobilize data, tacit knowledge, business insights and evidence to help labor markets adapt quickly and efficiently in Jordan and Somalia.

The ingredients of success for Digital Bangladesh can be replicated quickly and easily in other LDCs. Through a2i, Bangladesh has supported the digital progress of many developing countries including Fiji, Peru, and the Philippines, with advice and technologies.



A Global Collaborative Platform for South-South Cooperation

SSN4PSI

The South-South Network for Public Service Innovation (SS4NPSI) was launched in 2017 at the Global South-South Development Expo in Antalya, Turkey. The Network utilizes South-South and triangular cooperation approaches to empower southern countries to learn from and support one another in identifying vital innovations, particularly in the area of the public service delivery. It uses a 'Matchmaking Methodology' to ensure that countries which have successfully tackled public service challenges "export" solutions to countries that need them the most. Thereby, it facilitates and catalyzes the process of developing countries in the Global South achieving the Sustainable Development Goals (SDGs) by customizing the necessary tools and strategies to their unique country contexts thereby enabling the scaling up of novel solutions to public service challenges.

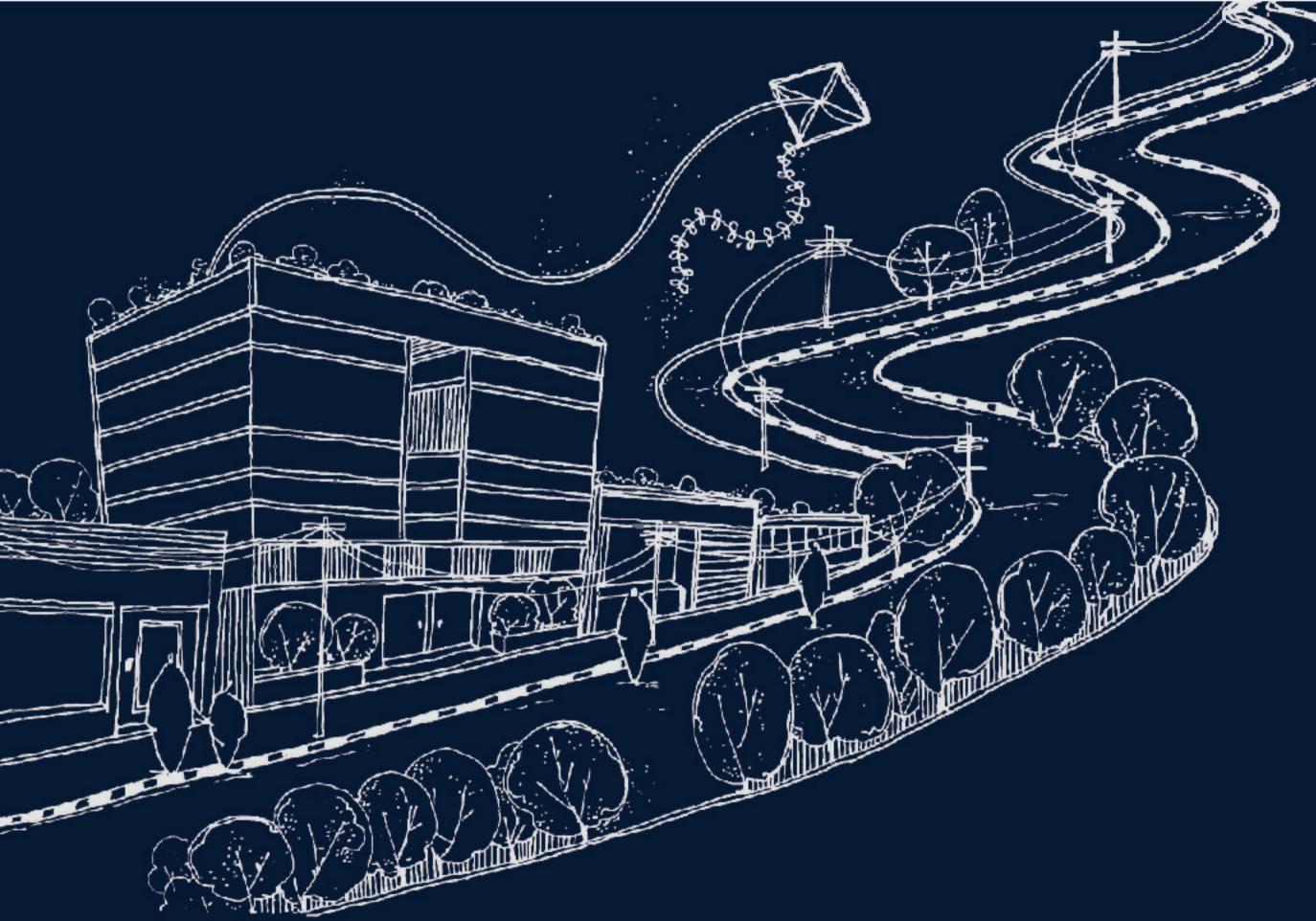
SSN4PSI focuses on six thematic areas:

- i. Future of Public Service
- ii. Future of Civil Service iii. Future of Digital Finance Services
- iv. Future of Work
- v. Future of Data Innovation
- vi. Future of eCommerce



The South South Network





Into the Future

"Talent is universal, but opportunity is not." - Kennedy Odede

On December 12th, 2021, the Digital Bangladesh Day, we stood together, the people, the government, private sector, civil society, academia, and celebrated with great pride our shared achievements of Digital Bangladesh in the golden jubilee of our nation's independence.

However, the father of the nation Bangabandhu's philosophy and Prime Minister Sheikh Hasina's vision teach us development means nothing if it's not equitable.

Trickle-down economics doesn't always work. While more than five million people became millionaires by US standards across the world in 2020, many poor people became poorer during the Covid-19 pandemic.

Designed from bottom-up, Digital Bangladesh has always been about delivering solutions that would help the masses, those without internet, those without smart devices, and help bridge that digital divide. However, our celebration brings to surface the recognition that digital divide undoubtedly still exists and threatens to widen in the new normal.

The Prime Minister's clarion call of building an equitable, high-income, Innovative Bangladesh by 2041 requires an uncompromising and relentless focus on ensuring Digital Equity enabled by:

- Deep empathy for the marginalized: a government that is ubiquitous and yet invisible, proactive to prioritize the needs of the marginalized above all else.
- Civil servants as entrepreneurs: a government run by of govpreneurs who are driven by a profit motive defined as public good excellence.
- Opportunities for all to innovate: a society that prepares its youth to voice out with conviction: "I am the solution."
- Collective intelligence: government and society that co-innovate new solutions to old problems and new problems.

Vision 2041 is our collective opportunity to see the invisible.

Only those who are able to see the invisible are able to do the impossible.

- Dr. Bernard Lown

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