



FAILURE

REPORT 2019

SOCIAL INNOVATION LAB

Why should we celebrate failure?

One Laptop Per Child. New Coke. Google Glass. These initiatives span industries and sectors, but have one thing in common: they are considered spectacular examples of failure.

It seems rather odd to talk about failure. After all, organisations don't want to be known for something they weren't able to achieve. Yet often, the most influential projects, products, or processes are built upon a foundation of trial and error. To quote Microsoft founder and philanthropist Bill Gates, "It is fine to celebrate success, but it is more important to heed the lessons of failure."

So why capture and celebrate failures? Because failure at a moment in time provides an opportunity for future learning and growth. And failure by one individual, programme, or organisation can provide critical lessons to many others. Analysing our failures helps prevent us from repeating the same mistakes again, and also enables us to strategise how to do things better the next time around. It saves finite resources and increases overall effectiveness. It can mitigate harm and maximise positive impact for those we serve. If we remain uncomfortable with the idea of failing, then we cannot truly be comfortable with testing new ideas, learning, and iterating.

Over the past 48 years, BRAC has grown to become one of the largest global non-governmental development entities on the strength of our successes in designing and scaling services for social good. And many of our successes have been paved through failures that have taught us critical lessons on how to solve complex social problems. We realise a need to share our failures, to inspire others to learn from our missteps and design for effectiveness when trying out similar initiatives.

The **2018 Failure Report** shared projects that had failed at one of the six critical points in a project life cycle where failures were most likely to occur. For the 2019 Failure Report, Social Innovation Lab captured cases across a number of BRAC programmes that failed to meet project expectations or produce fruitful outcomes. This year's failures highlight the challenges faced in identifying and introducing a best-fit solution, particularly a technological one, if a user-centered design framework is not followed. As you will soon read, user-centered design principles are critical across three phases in project planning: Discovery, Concept Design, and Concept Validation. A misstep at any phase can ultimately contribute to a failed project outcome.

Each of the cases to follow has its own unique set of challenges and learnings, so don't miss a chance to read and share with us your thoughts!

Happy Reading,
Social Innovation Lab, BRAC



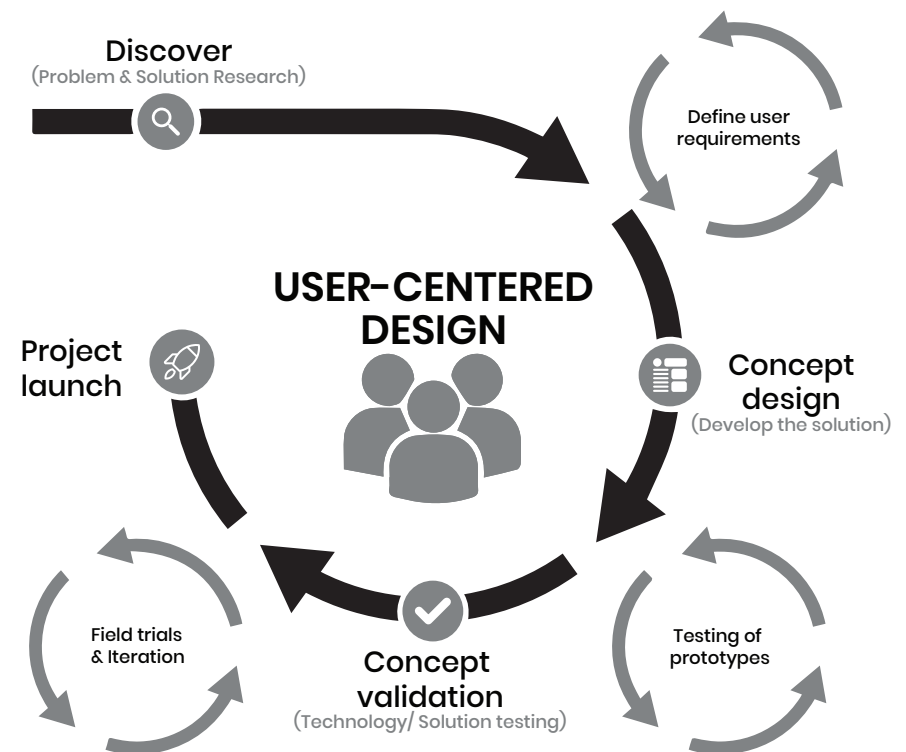
"I am here to guide you throughout the Failure Report 2019"

What is user-centered design?

User-centered design (UCD) is a problem-solving process that not only requires designers to examine and envision the way users are likely to consume a product, but also to validate their assumptions with regards to user behaviour in real world settings. These tests are conducted with actual users during each stage of the process, from requirements to pre-production models to post-production, completing a circle of validation back to and ensuring that "development proceeds with the user as the center of focus".

Such testing is essential as it is often very difficult for the designers of a product to intuitively understand or predict what a first-time user experiences, and what each user's learning curve may look like.

The foremost difference from other product design philosophies is that user-centered design aims to optimise the product around how users can, want, or need to use it, rather than forcing the users to change their behaviour to accommodate the product. The critical stages in UCD are reflected in the graphic to the right:



PLOUGHING THROUGH PROBLEMS

Can a private initiative complement a government offering to solve complex, land-related issues?

Land remains a critical asset and a source of livelihood for many in Bangladesh. However, land-related transactions are prone to corruption, resulting in 1 in every 7 households suffering from land disputes. To increase transparency surrounding land rights and reduce harassment faced by those receiving land services, the Human Rights and Legal Aid Services (HRLS) Programme of BRAC established Bhumi Bondhu.

Bhumi Bondhu was intended to be a sustainable, revenue-generating social enterprise offering a wide range of affordable and accessible land-related services to vulnerable groups across Bangladesh by removing the middleman. Some of these services included plot measurements, accurate tax calculations, counselling, and legal aid regarding land ownership. The enterprise aimed to identify potential clients and build their trust to fill loopholes that remained in government-led land administration and management.

What went wrong with the project?

From its conception, the project faced a series of complications. For starters, although the majority of team members developing Bhumi Bondhu were seasoned development professionals, they had limited business expertise. As a result, they skipped the necessary step of conducting a detailed market assessment before designing the business model for the enterprise.

Following a user-centered design methodology could have enhanced a market assessment in contributing to better client and service segmentation, in turn informing appropriate project locations. The HRLS team came to later realise that instead of complementing government land services, they were competing against them. Had government services been considered early in the assessment process, Bhumi Bondhu may have been able to focus on a different niche, like the provision of digital access to land measurement information or the establishment of a more equitable service delivery channel.

The marketing strategy was also not informed by client perception, resulting in a poor approach to customer acquisition. As BRAC was still then widely perceived to be a free service provider, many prospective clients were sceptical of Bhumi Bondhu's fee-based model.

The above missteps resulted in a misalignment of service offerings and less efficient business operations in the field.

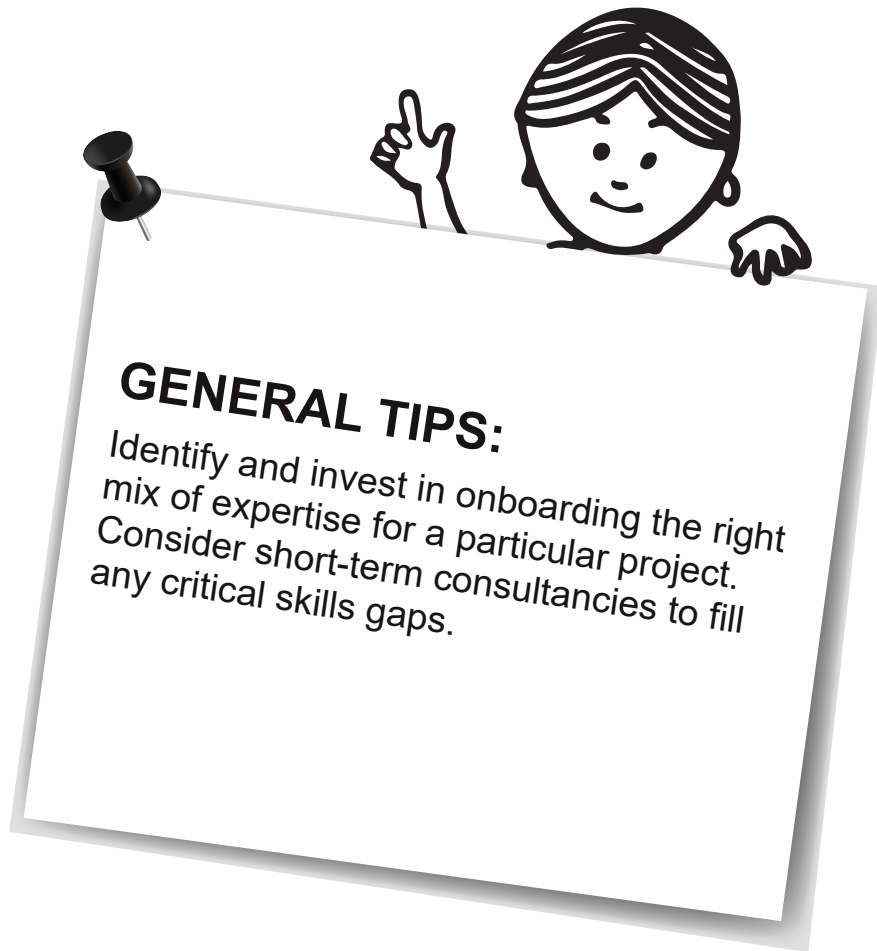


What could have been done differently?

Firstly, team composition is critical to the success of any new initiative, particularly when designing a social enterprise model. In this case, Bhumi Bondhu would have greatly benefited from the early addition of personnel with strong business acumen and the ability to conduct thorough market analysis. Coupled with rigorous customer segmentation, this would have led to the creation of an appropriate business plan with competitive price points.

Secondly, close consultation with existing land service providers (i.e. government) and end users during the concept design stage would have facilitated the development of differentiated offerings, enabling BRAC to serve as a unique and complementary force supporting the government to digitalise their service offerings instead of a competitor. If a user-centered design process and framework were followed, the team could have identified the untapped market and designed a set of on-demand services to sustain and eventually expand the business.

Another change that may have made a difference was to focus on overcoming the obstacles encountered during Bhumi Bondhu's pilot (i.e. poor customer segmentation, nebulous service offerings and operational inefficiency) through trial and iteration prior to scaling. Instead, the same model was replicated in new locations without concept validation.



UCD RELATED TIPS:

Conduct user research by talking to your target population about problems they are facing to identify unmet needs. Onwards, this should be coupled with an analysis of competitors' market offerings and used as a springboard to design more user-centric products.

Consider a series of iterative trials within one pilot to make necessary adjustments to the project prior to larger rollout.

To follow proper UCD processes to conduct User Research, Field Trials and Iteration (to identify user requirements), please follow the links:

- 1) [User Research Basics](#)
- 2) [Field Research](#)
- 3) [Iteration](#)

BRINGING THE FUTURE OF EDUCATION TO THE HERE AND NOW

Can we leverage technology to teach students to learn at the right level?

A global grantmaking institution pledged funding for a nine-month-long project to explore the potential for education technology (ed-tech) within the BRAC Education Programme (BEP), which was led by the BRAC Social Innovation Lab (SIL), BRAC USA, and the BRAC Institute of Educational Development (BIED). The aim of the ed-tech initiative was to design an evidence-based pilot to see whether learning outcomes could be improved for primary school students through the use of technology to facilitate a culture of teaching and learning at the right levels. Pilot design was shaped by a needs assessment study, a global partners mapping, and an evaluation of existing literature on the potential impact of technological interventions.

What went wrong with the project?

Ed-tech is a relatively new frontier for BRAC. Therefore, programme partners were naturally cautious in approaching pilot design, concerned that a heavy-handed introduction of technology even in pilot phase could significantly disrupt the existing classroom management structure and student performance.

BRAC started by proposing a year-long pilot focused on the application of tablet-based technology to assist in the teaching of one subject, and kickstarted the process by designing the pilot structure accordingly. However, after investing significant time and energy into the design, the project team was met with a request from the donor to redesign the proposal to accommodate the addition of academic subjects and a multi-year timeline extension, which required significant time and resource commitment from the BRAC team.

Given such extensive redesign, BEP decided to limit pilot phase testing to a small number of schools. However, this did not meet donor expectations for the minimum number of schools covered, extent of technology incorporated, and total children impacted. The donor decided not to fund the pilot, leading to a sense of confusion, frustration, and disappointment among the BRAC team.



What could have been done differently?

Open and consistent communication around donor expectations may have minimised frequent design changes and mitigated late stage disappointment. If the design team developing the pilot proposal had been provided with timely guidance on the maximum available budget and minimum impact requirements, that guidance could have in turn been quickly communicated to all necessary internal stakeholders before designing the pilot. In this way, BRAC would have been better-positioned to either negotiate with the donor on design, or forgo the opportunity.

Early dialogue with the donor to discuss concerns with complexity of pilot design could have potentially resulted in a more flexible approach to testing that would satisfy all parties' requirements, such as a pre-pilot period for proof-of-concept validation or gradual scaling to a greater number of schools.

Experience within the BRAC ecosystem has shown that strong pilot designs which generate a great deal of enthusiasm early on tend to be quickly abandoned if they do not receive immediate support for implementation. In the future, we should aim to explore multiple funding opportunities simultaneously to maximise chances that a pilot moves from design to implementation.



UCD RELATED TIPS:


Conduct proof-of-concept **sprints** with quick prototype testing prior to tech-based pilots to generate sufficient evidence for senior leadership buy-in. This will also build programme confidence in conducting a more extensive field trial.

You may follow these specific UCD processes for a better outcome:

- 1) **User Requirements Specification**
- 2) **Product Concepting**



GENERAL TIPS:



First of all, before committing to a project, understand the expected outcomes, and especially what is non-negotiable.

Secondly, explore multiple funding opportunities for a pilot design simultaneously.

Lastly, while designing projects that requires multi-stakeholder involvement, be mindful to engage and update all parties about any relevant changes in planning or implementation.

A MATCHMAKING APP FOR JOBSEEKERS

Is an app the panacea to issues like unemployment and under-employment? Can we help vulnerable groups to increase their incomes by leveraging technology?

Kormo started its journey in 2016 in Bangladesh, morphing from a high touch, low-tech model to an app-based platform developed by a leading technology company's in-house incubator in collaboration with BRAC's Skills Development Programme (SDP). The goal of the project was to provide an online marketplace where underprivileged and marginalised groups working in the informal sector could have access to job opportunities and increase their career growth. Kormo was first introduced for the construction sector across four districts. Partnering with SDP, Kormo had the opportunity to gain initial market traction as SDP was already working across those four districts. The objectives of this technology were to create a transparent and competitive labour market, to assist job seekers in making more informed decisions, and to amplify placement. ement.

What went wrong with the project?

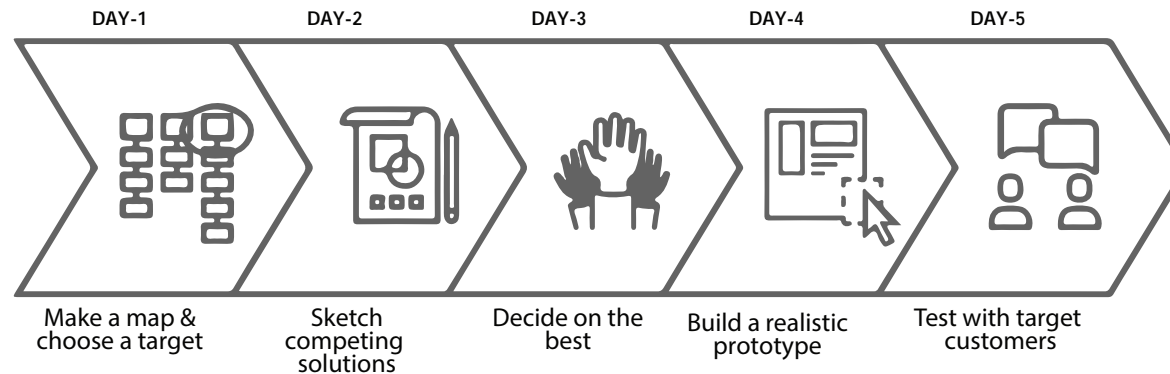
In 2016, Kormo commenced its pilot in Madhupur and gradually expanded operations to other parts of Bangladesh. After two years of operation in the mid 2018, due to lack of anticipated traction and ongoing operational friction, the management team decided to scrap and redesign the entire business model.

A baseline study and pilot were conducted from the outset of this project, but when Kormo was operationalised in different locations, numerous challenges emerged. The original idea for the project was a matchmaking platform for the construction sector that would connect job seekers with higher-paying employers. However, it was later realised that the platform was falling short of its intended impact to enhance access, capacity, and opportunity for informal workers. Firstly, employers were not able to find required skill levels within the available candidate pool. Secondly, many employers and job seekers struggled to comfortably operate the Android-based app, given lower levels of literacy. As a result, the number of app users quickly stagnated. Later, Kormo redesigned its model and shifted focus from construction to other sectors to connect job seekers with employers. Lastly, the app was operated and maintained by an overseas team based remotely which hindered timely accommodation of required adjustments or updates. The whole procedure was lengthy and complex, requiring multiple layers of approval.



What could have been done differently?

The Skills Development Programme (SDP) could have initially validated their employment matchmaking concept with a quick, isolated sprint trial rather than with a longitudinal, multi-location operation from the outset. The sprint process (as captured below) would have given the team an opportunity to more quickly identify sector-specific and redesign recruitment processes to the mutual benefit of the job seekers and employers.



In designing a project targeting marginalised groups of people, designers should be cautious when it comes to selecting the appropriate technologies. Many factors must be taken into consideration, such as the literacy rate of the target population, smartphone affordability and accessibility, internet penetration, and overall appetite to adapt to and adopt new technology. A successful tech-centric pilot should account for these factors by incorporating measures such as digital literacy trainings, or phone loans/subsidies. It can also consider a variety of use case incentives, if carefully vetted and appropriately applied.

In terms of technology management, working with a local vendor to operate and maintain the app interface could have made the entire process much smoother, enabling quick, contextually relevant changes to the platform.

GENERAL TIPS:

When trying to mainstream a technology-heavy solution, consider the barriers and challenges users may face while adopting the solution. Incorporate measures such as tech literacy training, hotline support, etc. to overcome the barriers.

Operate and maintain app-based interventions through local vendors who are easy to reach and have an understanding of local context.

UCD RELATED TIPS:

Validate proof-of-concept through fast cycles of usability testing with defined and relevant persona before implementing.

Usability testing takes into account user behaviour patterns and lifestyle to inform whether a solution or product prototype is the best fit for its intended users, and also suggests how to gradually improve the final design.

Please follow the links to define persona and conduct a proper usability test:

- 1) Personas
- 2) User Case Approach



I NEED SOME ADVICE, AND I NEED IT NOW

Can technology bridge the gap between experts and inquirers?

To ensure better access to personal information and wellbeing services, BRAC Urban Development Programme (UDP) collaborated with an external partner in 2017 to initiate a phone-based online app aiming to serve 200,000 ready-made garment (RMG) workers. The app-based solution promised to connect the RMG workers with experts for timely advice on health, legal, and psychosocial issues. To familiarise the end users with the app, BRAC installed digital kiosks at the One Stop Service Centres (OSSC) and tabs in Community Information and Resource Centres (CIRC) at the community level, enabling users to submit queries anonymously and receive feedback on the go from subject matter experts.

What went wrong with the project?

After approaching several RMG factories, BRAC kickstarted the project by installing kiosk machines, setting them up at three One Stop Service Centres (OSSC). The service was then extended to 13 CIRC through mobile tablets. This was to allow RMG workers to drop by the kiosk anytime and easily test out the wellbeing app. The collaboration anticipated reaching 200,000 RMG workers in 4 years, but less than 20% of the lofty goal was met overall.

The initiative did not work as expected due to various unforeseen issues. Firstly, the RMG workers were not well oriented with availing online services and technologies, which limited their ability to independently operate the app. Most female workers were not smartphone users, and therefore unfamiliar with navigating apps. The project did not account for the time and resources needed to train the workers on using the software.

Secondly, mismatches between user expectation and kiosk functionality caused RMG workers to rapidly lose interest in the technology. The kiosk machines were often delayed by several hours in delivering responses to users who expected instantaneous feedback. Furthermore, participants were not made clearly aware of key services and benefits provided through the app; they often expected a level of support not available through the kiosk, such as medical prescriptions or legal advice.

Thirdly, design and infrastructure challenges discouraged RMG workers from repeated use. Less than optimal design of the kiosk (i.e. screen placement above average height of worker, absence of seating arrangements while waiting and less acquainted to typing) meant that it was non-user friendly. Moreover, the app would regularly disconnect from the internet, requiring a lengthy and complex process to reconfigure. Unfortunately, the majority of machines remained out of order for the duration of the pilot due to inadequate maintenance support by the technical assistance team.



What could have been done differently?

In order to introduce the kiosk technology and the app in a contextually-relevant, appropriate, and meaningful way, the team should have conducted an initial assessment during the concept design stage to fully understand user requirements. Capturing the target group's overall level of technology orientation, literacy level, internet access, and smartphone accessibility would have informed critical components of pilot design. For example, the team could have then embedded targeted messaging and intensive training sessions into the pilot to generate awareness of the kiosk's benefits and better prepare the RMG workers to test out the new technology.

Having mapped user requirements, the team could have then validated the functionality of the technology through sprint prototyping in one setting. This would have enabled them to quickly test, pinpoint, and correct issues in kiosk design, set up, and performance prior to deployment in multiple field settings for piloting.

UCD RELATED TIPS:

Define clear persona and conduct thorough user testing prior to the development and introduction of a tech-based prototype.

Stress test functionality of the prototype with end user in mind.

Consider and aim to account for potential operational hazards.

Please follow certain procedure to address these issues:

- 1) Defining Personas
- 2) Testing Fidelity Mockups
- 3) Usability Testing Methods



GENERAL TIPS:

Educate end users on how to use the solution ahead of rollout. This can be done through training, public service announcements, fliers, etc.

Manage expectations and mitigate user frustrations by creating a channel for feedback.

Failure Report 2019 would not have been possible without our authors and collaborators.
We would like to thank:

Editorial Team:

Jane Alex Robinson, In-charge, SIL
Sajid Iqbal, Research & Insights Lead, SIL
Shafqat Aurin Siddiqua, Interaction Designer, SIL

Contributors:

Jenefa Jabbar, Director, HRLS
SK Mojibul Huq, Programme Manager, UDP
Md. Faruk Hossain, Senior Manager & Design Lead, SIL
Shofi Md. Taneem, Senior Manager, SDP
Raiya Kishwar Ashraf, Manager, SIL

Thank you for reading the 2019 Failure Report.
If you want to collaborate on analysing your case stories, shoot us an email at
innovation@brac.net