



Mastercard Challenge

Financial Inclusion for the SDGs | Solving for the Future

In partnership with



**STARTUP
BAHRAIN**

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Tamkeen**



THE PURPOSE OF THIS BRIEF IS TO PROVIDE ALL RELEVANT INFORMATION ABOUT THE COMPETITION, AND HELP STUDENTS FRAME THEIR PROJECT AND DESIGN THEIR SOLUTION.

“The Mastercard Challenge on Financial Inclusion for the SDGs: Solving for the Future” - *University Challenge*

Overview

Mastercard is launching ‘Financial Inclusion for the SDGs University Challenge: Solving for the Future’ which is a competition and an award that recognizes Bahraini students’ talent in the quest for new innovative ideas and data driven solutions which can help ignite the UN’s Sustainable Development Goals (SDGs) progress through financial inclusion.

The purpose of the challenge is to encourage students to come up with innovative solutions to enhance financial inclusion and use it as a powerful tool towards addressing several SDGs. Students are expected to explore real time challenges facing the SDGs from a multi-disciplinary perspective looking into sectors that include education, healthcare, climate, the environment, tourism, business sector and more; and discover how solutions can be built using financial inclusion and data from the financial services industry as a powerful tool.

Fintech, or the marriage of finance and technology, has crossed traditional borders to change industries, including healthcare, education, agriculture, tourism, logistics and more. We are therefore keen to see how data can be used to solve real-time problems making processes easier and more efficient.

Successful implementation of solutions to reach the SDGs depends on harnessing synergistic interactions among SDGs and effective engagement among a diverse group of societal stakeholders. Through this challenge, we wish to see how students can think outside the box and use the power of data and financial inclusion as a key enabler towards achieving the SDGs.

International organizations, such as the World Bank, United Nations (UN), and the International Monetary Fund (IMF) play an important role in pushing the financial inclusion agenda. For the World Bank, one of the core pillars of its



sustainable development agenda is to ensure universal financial access. Therefore, financial inclusion and sustainable development have become two development objectives with far-reaching beneficial consequences for society and the environment. As a result, the two agendas have recently received a lot of attention in the international development community.

Open to undergraduate and graduate students from universities in Bahrain, the challenge aims to foster practical solutions stemming from the financial services industry which can help in achieving several SDGs from multi-disciplinary perspectives and in a collaborative way.

Financial Inclusion: A Key Enabler Towards Achieving the 2030 Agenda

Financial inclusion is positioned prominently as an enabler of several SDGs, where it is featured as a target in eight of the seventeen goals. These include SDG1, on eradicating poverty; SDG 2 on ending hunger, achieving food security and promoting sustainable agriculture; SDG 3 on profiting health and well-being; SDG 5 on achieving gender equality and economic empowerment of women; SDG 8 on promoting economic growth and jobs; SDG 9 on supporting industry, innovation, and infrastructure; and SDG 10 on reducing inequality. Additionally, in SDG 17 on strengthening the means of implementation, there is an implicit role for greater financial inclusion through greater savings mobilization for investment and consumption that can spur growth.

There is academic evidence that financial inclusion models can support overall economic growth and the achievement of broader development goals. Digital finance alone could benefit billions of people by spurring inclusive growth and adding to the GDP of emerging economies around the globe.

With almost all citizens and residents in Bahrain owning at least one or multiple bank accounts, the scope of the challenge is tap into the innovation side and see how new solutions and ideas stemming from the financial sector can help solve development challenges across multiple sectors, the sky is the limit! We therefore want to see how far your ideas will take you!



Financial Inclusion Figures for the Kingdom of Bahrain

| Indicator | 2018 | 2019 | 2020 | 2021 | 2022* |
|--|-----------|-----------|-----------|-----------|-----------|
| Number of Banks ** | 29 | 29 | 29 | 29 | 29 |
| Number of Branches | 173 | 204 | 175 | 151 | 148 |
| Number of Branches per 100,000 in population | 11.5 | 13.7 | 11.9 | 10.1 | 9.7 |
| Number of ATMs | 479 | 515 | 505 | 461 | 476 |
| Number of ATMs per 100,000 in population | 31.9 | 34.7 | 34.3 | 30.6 | 31.2 |
| Number of Accounts *** | 1,907,307 | 2,108,637 | 2,026,890 | 2,457,448 | 2,885,562 |
| Number of Accounts per 1,000 in population | 1,269 | 1,421 | 1,376.8 | 1,633.6 | 1,892.6 |
| Number of Internet/PC linked accounts | 477,894 | 616,960 | 707,794 | 1,107,994 | 1,379,607 |
| ATM Cards (thousands) | 1,384.6 | 1,644.1 | 1,733.7 | 1,808.3 | 2,121.0 |
| Debit Cards (thousands) | 1,171.7 | 1,210.3 | 1,363.4 | 1,557.5 | 1,822.6 |
| Credit Cards (thousands) | 322.9 | 306.6 | 402.2 | 312.0 | 272.0 |
| Population | 1,503,091 | 1,483,756 | 1,472,204 | 1,504,365 | 1,524,693 |

*Preliminary data.

**Retail Banks only (Conventional and Islamic).

***Includes saving deposits as they are used for payments in Bahrain.

Source: CBB and IGA.

About the Competition

While focusing on financial inclusion and fintech, the competition requires that the projects and ideas align with at least one of the [17 Sustainable Development Goals](#) (SDGs). These global goals recognize that addressing development challenges must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

Although the SDGs should be implemented by nations, they also represent a framework for any government, company, university, or even a single activity. We therefore aim to stimulate a better understanding of the complexity of sustainable development and the different aspects of the SDGs. Thus, the students will undertake a self-assessment of how their solutions will affect the Global Goals using [SDSN's SDG Impact Assessment Tool](#).

This competition hopes to provide an opportunity for students and young change-makers to be curators of the next generation solutions.

- The competition is open to all undergraduate and graduate students currently enrolled in the universities that are taking part in this competition.
- All participants must be students at the time of submission.



- Projects require a multidisciplinary approach, which is essential for innovative financial solutions to accelerate progress towards achieving the SDGs in several sectors.
- Applications can be made on an individual basis or in teams consisting of no more than 3, preferably from different fields of study, to cover the technological, legal, economic, and social aspects of the problem to be addressed.
- The selected teams will be supported by mentors from Mastercard, Benefit, Tamkeen and Startup Bahrain who will help the students enhance their proposals throughout the contest.

The winning solution is awarded a trip to Mastercard EEMEA HQ, a one-year enrollment in Mastercard's Academy and a paid internship at Benefit, valuable support packages, including access to technical expertise, mentorship and training to develop the solution further. The winning solution will also be presented on the sidelines of the Bahrain Fintech Forward Event in October 2024.

About the Solutions

We are looking for solutions with a disruptive potential that are aligned with the SDGs and are technically feasible. The proposals can be at any development stage - they can be an idea, a pilot project, or an existing project that needs further development. They do not necessarily have to be unpublished.

The potential outcomes of students' work should include analysis of needs, potentials, barriers, and opportunities to utilize the capabilities of business and industry offerings. They should enhance understanding of technical, legal, economical, or sociological aspects of how the solutions can help advance the sustainable development agenda using financial inclusion as a tool.

They can also design, analyze, and suggest concrete solutions for narrowing, slowing, and/or closing developmental gaps and loops using data and ideas driven from the financial sector as a powerful tool.



Proposals are evaluated according to their level of novelty, feasibility, disruptive potential, alignment with the SDGs, and quality of the presentation.

The Challenge:

We need to solve these problems with innovative technology, economic schemes and policy decisions, as well as new partnerships, and students can play a key role with their ground-breaking proposals.

This competition therefore welcomes solutions from an array of disciplines that can viably support the SDGs. Here are some ideas!

Climate Fintech:

Climate Fintech holds promise for leveraging digital transformation and retooling the financial sector to benefit people and the planet. By taking the edge off climate change risks, it can support climate action by unlocking the potential of climate finance and realizing the Paris Agreement goals for reducing greenhouse gas emissions and improving resilience to climate change.

Driven by the supportive policies and government initiatives, many climate Fintech business models are emerging. Applying digital technologies and financial product innovations can help overcome climate finance challenges by connecting banks, insurers, nonbanks, start-ups, big tech firms, technology providers, regulators, and consumers.

Climate Fintech solutions include:



Climate risk assessment: Software-as-a-service cloud-based platforms using big data, artificial intelligence (AI), machine learning, and sensors coupled with remote sensing technology are helping financial institutions to geospatially map specific loans to specific climate risks. These technologies help users make informed decisions on monitoring loan portfolios. They also improve the comparability of “green” financial market product offerings and borrowers' understanding of the risks along the supply chain and where they concentrate.



Carbon credits and offsets: Carbon tracking fintech providers now enable businesses to understand how the carbon impact of their transactions. And carbon offsetting providers are helping them to compensate for the emissions. The basis for calculating emissions is daily payment transactions tracked for carbon footprint using open banking tracking software.



Regulatory technology for enhanced climate stress testing: Regtech solutions can enable financial institutions to measure and assess the impact of climate risk regulations and policies by expanding regulatory reporting and incorporating climate-related disclosures. In addition, regulators can use hypothetical data sets created with the help of statistical tools for generating climate-specific scenarios and conducting simulations for better stress testing to enhance climate risk management and governance.

Fintech in Healthcare:

Fintech is actively solving the problem of the increasing cost of healthcare expenses by broadening financial access to reduce complex transaction costs and expedite payment processes.

Fintech solutions in healthcare include:



Health Lending: Healthcare lending entails getting funds for medical resources on credit. This lending program helps to cover payments for dental care, physician care, and other personal medical services. Numerous tech startups issue loans for healthcare seekers in short of funds. Some of these service providers include: Argoya Finance and Credihealth.



Health Wallets: This is a digital wallet account created by Fintech firms to save up funds for health services. Since health wallets help provides a means for saving towards both preventative and curative medicine, Fintech health wallets can help eliminate the problem. Examples include: Bend Financial, Wellpay and Medxoom.



Improving Healthcare Access: Fintech introduces new and improved digital service models to healthcare. Fintech companies are leveraging blockchain, artificial intelligence and machine learning to eliminate gaps in the current healthcare system. Procedures that require complex payment



schemes and operations can be made easily accessible, even through assistive technology making health payments easily accessible to the disabled. Examples include: Cuesquare and Cedar.

[How FinTech is Transforming the Healthcare Industry in 2024 \(spdload.com\)](https://spdload.com)

Fintech in Agriculture:

Farmers are leveraging the power of fintech to alter the way they handle finances, access credit, and optimize operations as demand on the global food supply chain grows and sustainability becomes more important. This article delves into the collision between finance and agriculture, looking at how digital platforms are empowering farmers and transforming an age-old business.

Fintech Solutions in Agriculture:



Data-Driven Farming: Data-driven digital agriculture can improve every element of the agri-system value chain and create better links between farms and consumers. Unlike previous technological revolutions in agriculture, which began on farms, the digital agriculture revolution is being sparked at multiple points along the agri-food value chain. The change is driven by the ability to collect, use, and analyze machine-readable data about nearly every aspect of food production and distribution.



Use of blockchain technology: This will allow for greater transparency and traceability across the supply chain, as well as ensuring secure transactions and reducing the risk of fraud.

Fintech in Education:

Fintech's disruptive potential in education is dependent on a variety of factors. Accessibility is a distinguishing feature. Fintech has the potential to democratize education by allowing anybody, regardless of location or socioeconomic class, to access high-quality content and courses. Another aspect is customization. Fintech, like robo-advisors, can offer individualized learning routes that respond to individual talents, weaknesses, and interests. Blockchain technology could be used to securely record and verify educational qualifications, reducing bogus claims and expediting employment processes. Furthermore, the use of fintech-powered smart contracts can automate



administrative procedures such as enrollment, fee payments, and course completion certificates.



Collaborations between EdTech and FinTech are on the rise: Fintech's disruption in education may take the shape of partnership with existing educational technology (EdTech) platforms rather than outright replacement. EdTech companies are already altering education by leveraging technology for pedagogical innovation. Fintech and EdTech collaborations can result in synergistic solutions that provide full learning experiences.



Financial Literacy and Microlearning: Microlearning, a technology that distributes bite-sized knowledge for speedy consumption, is one-way fintech is influencing education. Microlearning has the potential to significantly improve financial literacy. Users can learn how to manage their finances properly by using mobile apps that provide financial suggestions, budgeting tools, and investment insights

Benefits for Students

The competition aims to give university students a chance to be part of the solution as an innovative driving force towards the achievement of the SDGs. Participants selected for the competition will benefit from:

- Enrollment in Mastercard's Academy for one year
- Mentorship with top experts from Mastercard, Benefit, Tamkeen, Startup-Bahrain and other knowledge partners.
- All participants who complete the bootcamp will receive a certificate from the UN Resident Coordinator's Office designating them as SDG Ambassadors, and winning solutions will benefit from enrollment in cutting-edge training and internship programs.
- Certificate of participation
- Dissemination of the solution on Mastercard's communications channels

Timeline

The competition extends over four months, beginning in July 2024 and ending in September 2024. Completion takes place with an awards ceremony on the sidelines of Bahrain Fintech Forward Event in October 2024. Throughout the



challenge, students are assisted by coaches and mentors from Mastercard, Benefit, Tamkeen and Startup Bahrain.

Milestones

- **July 8:** Challenge announcement is made.
- **July 31:** Deadline to apply.
- **August 1-8:** Secretariat choose qualifying applicants.
- **August 11-29:** Students who advance to the second phase will have 4 weeks to improve their solutions by participating in a summer bootcamp
- **September 10:** Selection of semi-finalists through a jury.
- **October 03:** The final winner will be selected by a High-Level Jury during the Final Pitch Round on the sidelines of Bahrain Fintech Forward 2023.



Videos

Introducing Sustainable Development:

Presented by Jeffrey Sachs, President of the SDSN\

Why Financial Inclusion is Key to Building an Inclusive Economy:

by Devex

Managing Data for the SDGs:

Presented by the SDG Academy

Engaging with Data: Communications and Citizen Empowerment

Presented by the SDG Academy

Courses

IMFx: Financial Development and Financial Inclusion

IMF

University of TorontoX: Payment Innovations

University of Toronto

IBM: Big Data, Hadoop, and Spark Basics

IBM

Readings

The Sustainable Development Agenda (FAQ)

United Nations

Bahrain's Second Voluntary National Review (VNR) 2023



Websites

[Bahrain's SDG Portal](#)

[SDG Impact Assessment Tool](#)



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