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The original article was published in Emerald Emerging Markets Case Studies. Publisher: Emerald Publishing Limited Bingley, United Kingdom Copyright © 2021, Emerald Publishing Limited

Cite this chapter as:

Nsereko I., Bignotti A., Farhoud M. (2021), "Creating change through social entrepreneurship: the case of girls' school dropouts in Uganda", Emerald Emerging Markets Case Studies, Vol. 11 No. 4.

<https://doi.org/10.1108/EEMCS-05-2021-0157>

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Creating change through social entrepreneurship: the case of girls' school dropouts in Uganda

ABSTRACT

Subject area – This teaching case focuses on social entrepreneurship in Africa, specifically looking at the behavioural characteristics of social entrepreneurs, their motivations to create social value, and the application of Personal Initiative Theory. The Social Business Model Canvas is used to analyse the social enterprise's business model.

Study level/applicability – Suitable for students of social entrepreneurship, development studies, sustainable livelihoods and asset-based development. The case is appropriate for customised or short programmes on social entrepreneurship or useful for students with a background in business to understand social entrepreneurship. As such, this case is written for Business Management and Entrepreneurship undergraduates, or students of elective courses in social entrepreneurship with a focus on the “understanding” and “remembering” learning activities under Bloom's taxonomy. When Personal Initiative Theory is employed, the case provides an initial understanding of social entrepreneurship in a developing context for postgraduate students and may be used for higher-order learning “analysing” and “applying” activities in Bloom's taxonomy.

Case overview – The case tells the story of Dr. Engineer Moses Musaaazi, a social entrepreneur and Managing Director of Technology for Tomorrow (T4T). Troubled with the persistent social problems in his country, Musaaazi, through T4T, strived for social innovations to reduce school dropouts of Ugandan girls. While exploring Musaaazi's journey for solving persistent social problems through social innovations, students will be able to (1) understand, remember, analyse and apply Dees' (2001) social entrepreneurial behaviours and Santos' (2012) theory of social

entrepreneurship, (2) understand, remember, analyse and apply what motivates African social entrepreneurs to start a social enterprise using Ghalwash, Tolba and Ismail (2017), (3) apply Personal Initiative Theory (Frese, Kring, Soose, and Zempel, 1996) to analyse the social entrepreneurial motives displayed in the creation of social enterprises, and finally (4) exemplify and analyse the different components of a social enterprise's business model using Sparviero (2019).

Expected learning outcomes –Objective 1: Students are able to remember, understand, identify, and apply the social entrepreneurial behaviours as defined by Dees (2001) and the elements of Santos' (2012) theory of social entrepreneurship to Musaazi's case as a social entrepreneur. **Objective 2:** Students can remember, understand, and identify what motivates social entrepreneurs in developing economies to create social value following Ghalwash et al. (2017). **Objective 3:** Early-stage postgraduate students are able to apply and analyse (also evaluate and create for higher-level postgraduates) Personal Initiative Theory to explain the emergence of social entrepreneurial behaviour and especially how innovation, self-starting and proactiveness may lead to social entrepreneurial venture start-up (Frese et al., 1996). **Objective 4:** Students can use the Social Business Model Canvas (Sparviero, 2019) as a tool to understand, analyse, and improve a social-enterprise business model.

Supplementary materials – Supplementary learning materials are provided in the Teaching Note, which include: (1) Table 1, which lists supporting learning materials and their description, as well as a link to Uganda's sustainable development index (the focus is SDG 3: Good health and well-being, SDG 4: Quality Education, SDG 5: Gender equality, SDG 10: Reduced inequalities); (2) a reading list for both the students and the instructor.

TEACHING CASE STUDY

Creating change through social entrepreneurship: the case of girls' school dropouts in Uganda

It was a rainy morning in 2002 in a small suburb of Kampala in Uganda when Moses Musaaazi, a then lecturer of Makerere University, saw a lonely young girl dressed in school uniform, squatting in the street corner and crying into her palms. The girl looked miserable. Musaaazi felt concerned and hurt. He was prompted to comfort her and asked what had happened. The girl explained that when she stood up in class, the boys shouted and laughed at her while pointing at her blood-stained skirt. She felt so small and embarrassed that she ran out of the school with no intention to ever go back. The memory of this encounter stayed with Musaaazi for years and finally led him to start Technology for Tomorrow (T4T), a social enterprise that manufactures environmentally friendly, biodegradable sanitary towels for schoolgirls.

Sociodemographic and economic background

Uganda is a landlocked country in East Africa with a population of approximately 41 million people, with 8.5 million living in Kampala, the capital city. 54% of the population is below the age of 18 years, which makes Uganda one of the youngest nations in the world. Females constitute 51% of Ugandans. The Gross Domestic Product (GDP), according to the Uganda Bureau of Statistics report 2020/2021, grew by 3.3% during the COVID-19 pandemic although it was still below the pre-pandemic annual growth rate of 6-7%. Agriculture, a major source of livelihood for the majority of Ugandans, contributes 23.7% and the service sector contributes 41.5% to GDP. Notwithstanding the government's efforts to alleviate poverty, Uganda remains amongst the poorest nations in the world with 19.7% of the population being below the poverty line of US\$1.90

per day. This situation leaves many Ugandans deprived of basic needs, with many not having access to the minimum requirements of decent living such as nutrition, literacy, shelter, and health—including menstrual health for women and girls, as described later in this case.

The social entrepreneur Moses Musaazi

Musaazi was born in 1951 in the Kalungu district of Uganda, an area plagued by poverty and lack of infrastructure. The Kalungu district is predominantly agricultural with more than 5.8 million households engaging in subsistence agriculture. Musaazi's father died when he was one month old. At the age of nine, he also lost his mother just before completing primary school. One of his aunts took over his rearing, and one of his cousins paid his school fees. Musaazi attended Kako Primary School located in the rural Masaka district, 30 km away from his home. For his secondary education, he attended King's College Budo, a further 70 km away. The village of Mityana where he grew up suffered enormous challenges such as poverty, illiteracy, unemployment and illness, to mention just a few. On many occasions, boys would turn to drug and alcohol abuse. Girls, instead, would fail to complete school and be married off at an early age. Given the difficult environment in which he grew up, Musaazi had a deep understanding of social problems in Uganda. Also owing to his troubled childhood, over the years Musaazi developed an acute sense of empathy and compassion for other people's problems.

After high school, Musaazi enrolled for a Bachelor of Science in electrical engineering at Makerere University, Uganda, where he also obtained a Master's degree in the same discipline. In 1975, he was hired as a tutorial fellow to lecture at Makerere University College of Engineering, Design, Art and Technology. In 1985, he received his Ph.D. from London's Imperial College of Science, Technology and Medicine. He continued lecturing at Makerere University until reaching the

retirement age of 60 in 2011. For some time, he also served as Head of the Department of Electrical Engineering at Makerere's College of Engineering, Design, Art and Technology. Since his early adult life, Musaaazi was a humble, religious and creative individual (as he designed different things). He was a family man: he would often spend time with his wife and four children.

The first of Musaaazi's social entrepreneurship projects dated back to 1993 when he successfully developed low-cost housing by manufacturing cheap roofing tiles and interlocking stabilised bricks. Then he built toilets for schools and introduced incinerators for the disposal of sanitary towels¹. Musaaazi's status as a university professor, in addition to his challenging upbringing, enabled him to fully understand the local context. His dedication and proactive attitude also earned him the social support of both the local and international donor communities.

Owing to his successful impact-driven entrepreneurial projects, the Rockefeller Foundation entrusted him with the task of improving sanitation in primary schools and solve school dropouts amongst girls². In 2004, the foundation tasked and supported Musaaazi to come up with an affordable sanitary pad design that would meet the ever-increasing demand for sanitary pads for primary school girls in Uganda. Exploiting this opportunity to create value for marginalised and neglected young girls, Musaaazi launched the sanitary towel called "Maka Pad", which uses natural absorbing materials.

¹ See Appendix 1 for a description of Musaaazi's social entrepreneurial projects other than *Maka Pads*.

² Rockefeller is an American privately-owned foundation established by the Rockefeller family to improve human well-being and unleash human potential through innovations geared to solving global challenges.

The social problem: menstruation stigma and girls' school dropouts

For a long time in Uganda, the issue of girls' school dropouts had been a major concern to the government, donors like the United States Agency for International Development (USAID), the European Union (EU), the United Nations High Commission for Refugees and other stakeholders such as local municipalities, educators and parents. In Uganda, as in many countries in sub-Saharan Africa, menstruation continued to be shrouded in myths and taboos, creating a problem for young girls and women alike. With no access to sanitary pads, girls would utilise rags during their menstrual periods. Some girls would even resort to dry leaves in emergency situations. Without government support and with the stigma, indignity, discrimination and social exclusion associated with menstrual periods, as well as the associated fear of being bullied, impoverished girls would often end up missing and eventually dropping out of school (Hennegan et al., 2019). The lack of ablution facilities allowing for privacy, the lack of access to water, the poor availability of pads, the lack of education about menstrual hygiene, and physical pain were the major issues behind school absenteeism during menstrual periods. Compounded by parents' perception about sending girls to school as a waste of time and resources, this issue had led to an alarming high rate of school dropouts amongst young girls in Uganda. On account of that, a staggering number of young girls in Uganda dropped out of education and resorted to early marriages, prostitution, and drug abuse (Uganda Bureau of Statistics, 2018).

Bringing about social innovation with *Maka Pads*

Growing in a village with severe resource constraints, Musaazi experienced first-hand extreme poverty, illiteracy, homelessness, poor education facilities, few medical facilities and inadequate infrastructure. This spurred him to do something to improve the lives of the people of Uganda. Driven by compassion and social responsibility—and equipped with his extensive social capital,

engineering experience, status as a university professor, understanding of the local context, and empathy—he created awareness about the social issue around menstruation, which, in turn, gained him the local support needed to pave the road for his *Maka Pads* social innovation—as affordable, safe and environmentally-friendly sanitary pads.

When the Rockefeller Foundation approached him to design and make the pad, he initially hesitated as he did not have first-hand experience of menstrual problems, had scarce knowledge about sanitary solutions to menstruation, and lacked expertise in sanitary-pad manufacturing. He had previous work experience designing an incinerator as one of his innovations, but not pads. However, he had always experienced around him the embarrassment of girls in various communities because of menstruation and the frequent school dropouts owing to the lack of appropriate sanitary solutions. Eventually, to exploit the opportunity at hand, he decided to take up the risk and challenge to design and manufacture affordable and safe sanitary pads.

In December 2003, he received a grant of US\$78 000 (Shs 202.8m) from the Rockefeller Foundation to produce a locally made sanitary pad to be sold at no more than half a dollar (Shs 1,300) for a packet of ten. He had to use local material using very simple machines. Reflecting on his rather difficult journey to come up with *Maka Pads*, Musaazi knew that he needed to pursue multiple goals. The product had to be environmentally friendly, affordable, yet economically sustainable, to solve menstruation-related social problems in Uganda and Sab-Saharan Africa (Elkington, 1998). Musaazi knew that cotton would be his first material to experiment with and initially bought samples of cotton sanitary pads. He attempted to produce pads using cotton, which he could find right in his garden, but he was surprised to find that it did not immediately absorb fluids. It needed to first be processed by machines, which would make the end product more

expensive, and Musaazi knew that he had to put an affordable product on the market. He continued to test other natural fibres such as banana fibre. He noted that banana fibre would take in the fluid, but it would quickly release it. He then tried out grasses like elephant grass, which worked but required a lot of time and processing, such as boiling to soften the material, crushing and further processing. The other issue with grass was that Musaazi would need a lot of resources to grow it because it was not readily available. He also tried water hyacinth, which was not easily available but could be found around lakes, but it decayed very quickly during production and was easily affected by weather since it is a water plant. At last, he tried out papyrus and found that it was what he was looking for. It had all the properties that he needed for a pad such as being disposable, a natural absorbent with a high absorption capacity, chemical free, odourless and not itchy.

Having found the right material, Musaazi founded Technology for Tomorrow (T4T), the social enterprise behind the production of *Maka Pads*. At the same time, he turned his house into a sanitary pad factory located near a Kampala suburb called Kawempe. This process alone took a year and a half. He spent another year designing and assembling machinery to make pads from papyrus. In June 2005, the first sanitary pad made from 95% natural fibre using manual labour and solar-powered energy was produced. The pad was named “Maka” (for Menstruation, Administration, Knowledge, and Affordability), which also means household in Luganda (one of the major languages spoken in Uganda). The Rockefeller Foundation started ordering the pads to supply girls for free in 36 schools, and a local Rotary club also bought *Maka Pads* for women in prisons. The subsequent success of *Maka Pads* grabbed the attention of other organisations such as UNHCR and USAID, which also financed T4T and conferred legitimacy to *Maka Pads*. UNHCR started distributing *Maka Pads* to women refugees in the Democratic Republic of Congo.

When asked about what ultimately drove him to start *Maka Pads* and about his persistence until the product made it to the market, Musaazi would mention that there are six traits that motivate a social entrepreneur to do what he or she does in a bid to create social change. He would call them “the six motivators”: (1) love for others, (2) passion, (3) helping solve social problems, (4) inspiration, (5) social networks, and (6) previous personal experiences.

Looking inside Technology for Tomorrow: The production of *Maka Pads*

The manufacturing of *Maka Pads* from raw material to final product was done manually by mainly women refugees. The primary raw materials were recycled paper and papyrus—the latter being a major absorbent freely available throughout the country and growing alongside water basins. The manufacturing process started with cutting rods of papyrus into small pieces, which were processed near the water basins and then taken to the factory for further processing. There, the semi-processed papyrus was then ground into powder and later mixed and soaked with recycled paper to create an absorbent. This absorbent was either dried in the sun or using solar power. Thereafter, the dried absorbent was softened with rollers, cut, and mixed with non-woven materials. The final product was sterilized and shaped into actual sanitary pads, which were bundled into packs of ten ready for distribution³.

Maka Pads were environment friendly and 100% biodegradable. They were priced as low as 900 Ugandan shillings (\$0.23) for a pack of 10 pads, a much cheaper option than other pads on the market which cost on average from 3500 to 4000 Ugandan shillings (\$1.26). The affordability and availability of *Maka Pads* made this product one of the most sold sanitary pads in the country. In

³ Table 1 provides a list of videos that document the process from start to end, as well as the business model explained by Musaazi.

addition, the environmentally friendly nature of the pads made them acceptable among Ugandan women as a safe option.

70% of the profits made from the sale of *Maka Pads* was distributed among T4T's workers. Moses was primarily passionate about the *Maka Pads* business model because not only did it help vulnerable young girls, but it also created jobs at the bottom of the pyramid.

T4T started selling pads in 2006. But soon challenges started arising. In 2015, the contract with the UNHCR was terminated. This contract was an important milestone in the initial stages of the social enterprise, as it envisaged producing pads at a factory based in the Kyaka II refugee settlement, where pads were made and distributed, for free, to women and girls. Even the office of the then Ugandan Prime Minister, which run the refugee settlement with the UNHCR, supported the termination of the contract owing to the pads not being effective and refugee women and girls preferring other brands. The pads had failed an inspection by the Uganda National Bureau of Standards (UNBS), which ensures that items produced in Uganda meet certain quality standards. The UNBS noted that the pads were “found wanting”, according to the public relations officer. The UNHCR did not clarify whether it declined to renew the contract because of the UNBS report. This major incident did not stop Musaazi from continuing to submit *Maka Pads* for periodic inspection until UNBS approved the product.

Over time, Musaazi received multiple cash awards for his role as a social innovator⁴. He reinvested all of these funds into T4T to improve its Research and Development operations and modernise its

⁴ See Appendix 2 for Musaazi's awards for his work.

laboratories. This allowed T4T to continue producing its sanitary pads and create value for a larger population in Uganda and neighbouring countries.

Market competition

Even though Musaazi was an experienced social entrepreneur, he was operating in a complex and dynamic environment where many companies existed with quality products not manufactured locally. Going through the testing processes needed a lot of comparison with other players in the market. T4T's competitors had aesthetically appealing pads from China, the United Kingdom, other European countries and the United States, but these were largely not affordable to the local population, both in rural and some urban areas. Musaazi's goal and dilemma was to not only manufacture a product that had a competitive edge over rival products but also provide an affordable, safe, aesthetically appealing and well-packaged product. Hence, Musaazi partnered with Design Without Borders to improve the look of the product.

There were a number of companies that started producing reusable sanitary pads and created competition within the industry. For example, Lucky Pads, Shuya Pads and AFRIpads provided reusable menstrual kits that offered complete protection for a minimum of 12 hours but that were not cost effective, waste reducing and quality certified. Bana Pads, another competitor, made environmentally friendly sanitary pads from processing banana pseudo-stems and herbal leaves with anti-microbial properties to prevent rashes during menstrual periods.

Musaazi, however, still believed that *Maka Pads* were different from most other sanitary pads and had a competitive advantage. His pads were affordable, biodegradable, chemical free, odourless and environmentally friendly. The product had a cost leadership competitive advantage since

papyrus could be found in abundance in Uganda's ubiquitous swamps; hence, the production cost of *Maka Pads* was low compared to other suppliers on the market.

Impact on Ugandan girls and women

T4T and its *Maka Pads* product had a tremendous impact on the lives of girls and women in Uganda. Over time, *Maka Pads* became even more affordable and accessible to disadvantaged girls—they cost one third compared to other sanitary pads (\$0.23 vs. \$1.50). In effect, *Maka Pads* have largely contributed to reducing the rate of school absenteeism and dropouts among girls in poor urban and rural communities. Older women made widespread use of the product as well. T4T also impacted refugee women positively by offering them employment.

Moses sadly passed on in 2018, but his contribution to the creation of social innovations that improve the lives of people at the bottom of the pyramid lives on. His legacy at T4T endured the test of time as the company still carried out research and development to ensure that *Maka Pads* remained a recognised brand not only in Uganda but also in Africa at large.

In 2021, T4T hired above 100 workers from refugee camps around Uganda. The *Maka Pads* innovation achieved the four A's (i.e awareness, affordability, availability, and acceptability—for more details on the 4 A's and bottom of the pyramid in Africa, see: Muthuri and Farhoud, 2020) and was popular among young girls, thereby boosting their school attendance and protecting them from embarrassment, bullying and social segregation.

To celebrate this success, in 2015, the United Nations High Commission for Refugees (UNHCR) signed a contract with T4T to produce more *Maka Pads* to be distributed amongst women and girls in the Kyaka II refugee settlement. T4T expanded its operations in collaboration with the UNHCR to reach more than 45 000 girls in different refugee camps throughout Uganda.

Not only did Musaazi manufacture environmentally friendly, chemical-free, and affordable sanitary pads, but he also empowered needy women refugees from the Democratic Republic of Congo, which borders Uganda, with skills and knowledge to produce *Maka Pads*. Owing to the large and steady need for *Maka Pads* over the years, in 2021 T4T manufactured 5 million packets of its sanitary pads.

Looking ahead

Musaazi's care toward girls and women was to provide affordable, durable, chemical-free and biodegradable sanitary towels. He had been thinking a lot about sustainability for his company, T4T. Musaazi wanted to see girls stay in school rather than drop out because of the challenges of menstrual hygiene. He also wanted to see many women, especially from the refugee camps, get employed and earn a living from the production of *Maka Pads*. A change was required to see the company produce social innovations that were both price competitive and desirable by customers. Musaazi was facing stiff competition with local and international brands of sanitary towels that had a good look and feel but were also expensive for most Ugandans. His major worry was how to scale up and compete successfully with these brands, as well as solve the challenges of poverty and inequality among poor girls and women. However, he was facing a dilemma: to scale his business, he had to consider raising his prices so as to draw in more financial resources, but this would counter the social value proposition of bringing an affordable, environmentally friendly sanitary pad to the market. How would T4T compete while continuing to create social value for its customers? Could there be other ways to grow while staying true to the social mission?

References

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Exhibit 1. Dr Moses Kizza Musaaazi. Source: Royal Academy of Engineering



Appendix 1. Musaaazi: a serial social innovator

Apart from *Maka Pads*, Musaaazi' career as a social entrepreneur also featured other innovations, such as:

Incinerators: He designed and manufactured incinerators that turned solid waste (except metals and glass) into ash, including non-biodegradable waste such as plastic and sanitary pads. The incinerators reached 950°C. These were installed in hospitals, homes, schools, towns and villages. These incinerators were sold for cheaper than other incinerators and aided the disposal of sanitary towels.

Maka Stove: An environmental activist, Musaazi was approached by villagers from the Isingiro district in the western part of Uganda to design a cheap cooking stove that would use at least 50% less firewood. This was done by manufacturing a hybrid stove in which food was cooked and water pasteurized at the same time. This helped to reduce the rate of deforestation owing to firewood being the main fuel used for cooking.

Interlocking Soil Stabilising bricks: Musaazi wanted to transform countless lives by redefining low-cost housing. He saw that there was a lot of wastage involved in construction practices in Uganda, since a lot of lime and water were used to make cement bricks. People also used firewood to fire clay bricks, which contributed to deforestation. He devised interlocking stabilizing bricks which used less water and were made primarily from soil. Also, less firewood was needed for the kiln when making these bricks. The interlocking soil bricks were solid and could hold up any housing structure.

Appendix 2. Awards for good work

Over time, Musaazi has been recognised as a change maker. In 2006, he won the Presidential Scientific Innovation Excellence Award, worth approximately USD 350 000 in recognition of his innovative research and its high impact on society. In the same year, he received an award from the Mashariki Innovations in Local Government Awards Programme (MILGAP) organized by

UN-Habitat. In 2012, he won an African Initiative Grant worth CAD 10 000. In 2013, the *Maka Pads* innovation won second prize (EUR 30 000) under Siemens Stiftung's Empowering People Award. T4T also received a Makerere University Vice-Chancellor's Award for Excellence and Innovation of USD 20 000. In 2015, Musaazi was appointed by Uganda's Royal Academy of Engineering as a member of the Judges Committee for the inaugural Africa Prize for Engineering Innovation.

TEACHING NOTE

Synopsis

Despite the continued efforts by government to solve social problems like extreme poverty, poor sanitation, unemployment, crime and drug abuse, as of 2021 Uganda still has about 8 million people below the poverty line. This case shows how Dr Engr Moses Musaaazi, a lecturer of Makerere University, started a social enterprise called Technology for Tomorrow (T4T) which created social change by coming up with innovative solutions to the social issue of girls dropping out of school. Musaaazi, a then Managing Director for T4T a company located in the capital city Kampala, Uganda, recognised that the solution for girls missing school would be the introduction of affordable, biodegradable and chemical-free sanitary pads, known as “Maka Pads”. Musaaazi as an individual faced many challenges, such as difficulties in testing the actual pad, hiring unskilled workers, competition, and limited support from various institutions. Despite this, Musaaazi kept on introducing innovations.

The key concepts the students will learn are the characteristic behaviours of social entrepreneurs such as opportunity seeker, mission leader, and innovator. Students will also learn factors that motivate social entrepreneurs like current social problems, inspiration and social networks. They may also use Personal Initiative Theory to explain Musaaazi’s case. Finally, students may be asked to differentiate between the social and commercial business models.

Intended audiences/recommended courses

The case is designed for courses on entrepreneurship, social entrepreneurship, social innovation, and (social) entrepreneurial venture creation. It is written mainly for an undergraduate audience and may also be used as part of short programmes on the above topics. The case may also be

suitable as an introduction to business administration undergraduate students to expose them to social entrepreneurship, business models and Personal Initiative Theory as applied to social entrepreneurs.

Methods

The case study was developed following a face-to-face interview with Musaazi by Dr Isa Nsereko and Dr Diana Ntamu in 2017. Follow-up interviews were conducted by telephone. Additional information was gathered from the video interviews, *Maka Pads* YouTube videos and other online sources.

Learning objectives

By the end of the case, students should be able to:

1. Remember and understand social entrepreneurs' behaviour as defined by Dees (2001) and the core elements of social entrepreneurship as defined by Santos (2012).
2. Remember and understand what motivates social entrepreneurs to create social value as identified by Ghalwash, Tolba and Ismail (2017).
3. For postgraduate studies: apply and analyse Personal Initiative Theory to explain the emergence of social entrepreneurial behaviour, and especially how innovation, self-starting and proactiveness may lead to social entrepreneurial venture start-up—in line with Frese, Kring, Soose, and Zempel (1996).
4. Design/analyse a social business model for a social enterprise using the Business Model Canvas (Sparviero, 2019).

Keywords and subject code

Social entrepreneurship, social entrepreneurial venture creation, personal initiative, innovation, business formation/start-up, discrimination, social value, social change.

Assignment questions

The questions below may guide individual and group discussions. The recommended time period for the discussion is 10 to 15 minutes. The questions can also be used to assess students individually or in groups. During group discussions, the facilitator should pay attention to the quality of submissions and questions asked.

Question 1: Is Musaaazi a social entrepreneur? Outline and explain if and how the social entrepreneurial behaviours of Dees (2001) and the elements of Santos' (2012) theory of social entrepreneurship are applicable to the case study to motivate your answer. Using the same theoretical frameworks, also highlight what may differentiate Musaaazi from commercial entrepreneurs.

Question 2: As a consultant who specialises in social enterprise creation, explain what motivates social entrepreneurs to create social value as identified by Ghalwash, Tolba and Ismail (2017) and argue whether Musaaazi exhibits these motives.

Question 3: Apply your knowledge of Personal Initiative Theory to the case and discuss the factors that explain the emergence of social entrepreneurial behaviour in Musaaazi, in line with Frese, Kring, Soose, and Zempel (1996).

Question 4: Analyse T4T's business model using the Business Model Canvas. Discuss whether T4T's business model has a good balance between the commercial and social aspects.

Definitions

S/N	Concept	Definition
1	<i>Social enterprise</i>	A social enterprise is defined as the organizational pursuit of blending social mission and market oriented income generation (Kerlin, 2017).
2	Social innovation	A social innovation is a novel solution to a social problem that is more effective, efficient, sustainable, or just than current solutions and for which the value created accrues primarily to society as a whole rather than private individuals (Phills et al., 2008).

Additional materials

The additional learning materials in Table 1 below may be used by instructors to present the case in class and/or to assign content in preparation for class, following a blended learning approach.

Table 1: Additional learning material on the case

Links to additional material	Description
1. Locally Made Biodegradable Sanitary MakaPads	A video showing the process of making Maka Pads (3:54)
2. Makapads: Ugandan wins accolade for biodegradable sanitary towels	A video showing the accolade Award winning ceremony for biodegradable sanitary towels for Uganda (Maka Pads) (3:18)
3. MakaPads - Moses Musaazi - "Spotlight on Solutions"	A video showing the Siemens Stiftung Award winning ceremony having Musaazi explain his social innovation (3:24)

4. Sustainable and affordable sanitary pads for women and girls in Uganda	A video showing a partnership between Technology for Tomorrow and Design without Borders trying to improve the design and packaging of Maka Pads to improve their comfort and attractiveness to customers (3:18)
5. Simple Idea, Major Impact - Ugandan professor invents MakaPads	A video showing Musaazi explaining the process of making Maka Pads (4:06)
6. HIP interview with Moses Musaazi (Technology for Tomorrow)	An interview with Musaazi at the inaugural conference of the Humanitarian Innovation Project (HIP) on “Refugee Livelihoods, Innovation, and the Private Sector” (2:40)
7. Image of MakaPads	An image of Maka Pads
8. This Man Can't Stop Innovating – Inc.	An essay from the “Inc.” Magazine on Musaazi’s journey as an entrepreneur and inventor in Uganda
9. Makerere’s Dr Musaazi praised for inventions – Daily Monitor	A newspaper article and obituary to Musaazi from a leading Ugandan newspaper, the Daily Monitor
10. Papyrus and scrap paper: a monthly blessing for refugee women in Uganda	An essay showing UNHCR and Technology for Tomorrow launching an innovative pilot project to employ refugees at their factory for handmade hygiene products
11. PADMAN Official Trailer Akshay Kumar Sonam Kapoor Radhika Apte 9th Feb 2018	A video on an innovation similar to Maka Pads
12. Uganda’s SDG Dashboard	A page showing Uganda’s Sustainable Development Goals
13. The World Bank in Uganda	Country facts from the World Bank on Uganda

Readings

Core reading list for students

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Sparviero, S. (2019), “The case for a socially oriented business model canvas: The social enterprise model canvas”, *Journal of Social Entrepreneurship*, Vol.10 No.2, pp. 232–251.

Supplementary readings

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Teaching plan and timing

90 minutes in total.

Introduction: 10 minutes. The instructor opens the session by introducing the case study (this can be done in an interactive way by asking students key questions). S/he may then facilitate an introduction of Uganda’s sociodemographic and economic information by asking students to report some of this information to the class; this is to ensure that the students can understand the context in which the social enterprise emerged. The instructor plays two videos on founders of social enterprises: the Padman video [Table 1, #11] and the one on Musaaazi [Table 1, #1]. The instructor may run polls among the students on whether Padman and Musaaazi are social entrepreneurs. Students may be asked to identify similarities and differences between the two. The concept of social entrepreneurship and social entrepreneurs’ behaviours are introduced. The instructor may choose among the other videos. The instructor may refer to Dees’ (2001) definition of social entrepreneurship and its core elements/characteristics or use another conceptual framework. This framework, in particular, focuses on a) adopting a mission to create and sustain social value (not just commercial/economic value), b) recognizing and relentlessly pursuing new opportunities to serve that mission, c) engaging in a process of continuous innovation, adaptation,

and learning, d) acting boldly without being limited by resources currently in hand, and finally e) exhibiting heightened accountability to the constituencies served and for the outcomes created.

15 minutes: The instructor then briefly explains Santos' (2012) theory of social entrepreneurship and asks the students to argue whether T4T is a case of social entrepreneurship. The instructor then facilitates a class discussion on which of these elements are apparent in the *Maka Pads* case. The class discussion could be led in a couple of different ways:

1. Individual participation: students are given a few minutes to think about which attributes are applicable to the case and are then asked to share their analysis with the rest of the class by giving examples from the case of each of the elements of social entrepreneurship they deem applicable. The instructor could pause to ask for contributions from the class once all applicable attributes have been covered satisfactorily.
2. Group participation: students are asked to form groups of 3-4 with their neighbouring classmates and to discuss the answer to this question in their respective groups. Then the instructor asks the groups to share their analysis with the class until all applicable attributes have been covered satisfactorily.

The instructor then refers the students to some commercial entrepreneurs commonly known by the students. The instructor may share information about such commercial entrepreneurs before class or during class—using videos, short readings, etc., or asking students to give real-life examples they are familiar with. Then, following a similar format to the above, the instructor can facilitate discussion on the differences between social and commercial entrepreneurs using Dees' (2001) and Santos' (2012) theoretical frameworks, or other applicable frameworks.

10 minutes: The instructor asks the students to explain the motives of social entrepreneurs for creating social value as identified by Ghalwash, Tolba and Ismail (2017) and compare them to the six motivators defined by the protagonist. The instructor should prompt the class to give examples from the case by giving some quotations. Ghalwash et al. (2017) list the following social entrepreneurial motives. Social entrepreneurs are compassionate risk-takers with entrepreneurial mindsets, who seek to address social issues in innovative ways. They also have the perseverance to face the inefficient institutional frameworks prevalent in developing economies. Social entrepreneurs are also motivated by social problems and challenges, inspiration, and previous personal experiences, as well as their social networks.

25 minutes: The instructor introduces the key issues and assumptions of Personal Initiative Theory developed by Frese, Kring, Soose, and Zempel (1996). S/he then connects the theory with the case by giving a few examples/applications and indicates how it is appropriate for explaining the emergence of social entrepreneurial behaviour in individuals. The students discuss the constructs of the theory like being self-starting, innovative and proactive, and how these relate to social entrepreneurial behaviour such as social venture start-up. The instructor may divide the class into groups asking them to apply Personal Initiative Theory to the case.

30 minutes: The instructor introduces the Social Business Model Canvas as a tool to understand the different components of a social entrepreneurial business model. The instructor asks the students to identify the different elements of a social business Model Canvas. S/he then tells the students to analyse T4T's business model using the Social Business Model Canvas, paying special attention to differentiate the commercial and impact aspects of a social enterprise. The students may be asked to submit their work as an in-class assignment for assessment. The session is closed

with a recap of social entrepreneurship, its characteristics and motives, and an overview of social business models.

Analysis of assignment questions:

Assignment Question 1

Is Musaazi a social entrepreneur? Outline and explain if and how the social entrepreneurial behaviours of Dees (2001) and the elements of Santos' (2012) theory of social entrepreneurship are applicable to the case study to motivate your answer. Using the same theoretical frameworks, also highlight what may differentiate Musaazi from commercial entrepreneurs.

Dees (2001, p.1) notes that social entrepreneurship is a combination of passion for a social mission with an image of business-like discipline, innovation and determination. Scholars have defined social entrepreneurship in different ways, but they have not yet come up with a unified definition. Many focus on social change and creativity or innovation in solving social problems rather than profit-seeking aspects (Doherty, Haugh, and Lyon, 2014). Social entrepreneurs aim at achieving social gains (Lumpkin, Moss, Gras, Kato, and Amezcua, 2013) and are motivated by altruism rather than profit. However, the businesses they create may still aim to make profits, besides creating social value. This implies that they blend business principles with social change (Krige and Silber, 2016). The businesses created may have a positive environmental impact and aim to achieve sustainability to create value for a long time (Quoquab and Mohammad, 2019).

The five identified characteristics according to Dees (2001) are the following:

1. Adopting a social mission to create and sustain social value (Mission Leader)
2. Recognizing and relentlessly pursuing new opportunities to serve the mission (Opportunity Seeker)

3. Engaging in a process of continuous innovation, adaptation, and learning (Innovator)
4. Acting boldly without being limited by resources currently in hand
5. Exhibiting heightened accountability to the constituencies served and for the outcomes created

These characteristics are all applicable to Musaazi, who adopted the social mission of solving the schoolgirl challenge but also getting little monetary reward for it; he was an opportunity seeker in starting T4T; he was also an innovator with *Maka Pads* and other social innovations; he relentlessly sought cheap, readily available—yet effective—raw materials (papyrus) to manufacture sanitary pads; and finally he displayed heightened accountability to *Maka Pads* beneficiaries/customers by not giving in until he got the product approved by the UNBS and by constantly striving to make the product competitive on the market.

The lecturer can ask the class whether they think Musaazi exhibits the elements of social entrepreneurship put forward by Santos (2012) in his theory:

1. **Value creation** (vs. value capture): Social entrepreneurship aims to create value for society, as opposed to capturing economic value.
2. **Neglected problems**: Social entrepreneurship addresses problem neglected by other actors, such as government and the market, which typically affect a powerless segment of the population.
3. With **positive externalities**: In the case of social entrepreneurship, such neglected problems—when addressed—would bring positive benefits to society, but they are not being addressed because the potential for value capture in them is lower than the potential for value creation.

4. Bringing about **sustainable solutions**: Social entrepreneurship is geared toward solving the neglected problem as effectively and as permanently as possible, bringing about long-lasting effects/consequences for beneficiaries and society (impact).
5. According to a **logic of empowerment**: Linked to the previous point, the solutions introduced by social entrepreneurs are not meant to make beneficiaries dependent on the product/service offered but, as far as possible, should empower people to become an integral part of the solution.

The instructor introduces these characteristics and asks the class to apply them to Musaaazi's case as a social entrepreneur. Santos' (2012) theoretical framework is useful to contrast the different logics of social and commercial entrepreneurs. For each element of the theory, students could be asked to not only explain how Musaaazi is a social entrepreneur but also to provide an example of the opposite logic. The instructor may organise the above as a class discussion or as group debates, and students may use quotes to give examples from the case to substantiate their claims.

Assignment Question 2

As a consultant who specialises in social enterprise creation, explain what motivates social entrepreneurs to create social value as identified by Ghalwash, Tolba and Ismail (2017) and argue whether Musaaazi exhibits these motives.

Ghalwash et al. (2017) identify four factors that motivate social entrepreneurs

1. Current social problems and challenges: They have a desire to solve unmet social needs and to change society, leading them to identify opportunities and find innovative solutions.

2. Inspiration: Exposure to different situations and experiences that inspire new ideas and vision (e.g., a trip abroad or inherited religious beliefs can be a source of inspiration).
3. Previous personal experience: Personal experiences can drive people to start social projects; different experiences incite entrepreneurs' ambitions to seek welfare and happiness for others.
4. Social networks: Social networks provide reinforcement in guiding human behaviour; social entrepreneurs receive encouragement, support and drive; social networks provide emotional, rational and physical support to social entrepreneurs; social networks help entrepreneurs to get access to finance; Social networks give access to different skills.

The lecturer can ask the class whether they think that these factors can explain what motivated Musaazi to be a social entrepreneur. The class will break into groups to answer the assignment question. The lecturer gives the class a chance to mention what motivates Musaazi and other social entrepreneurs to solve societal challenges. The lecturer then summarises the session citing examples and giving factors that motivate social entrepreneurs to do what they do. This will help students to identify and apply factors that motivate social entrepreneurs in the case.

Assignment Question 3

Apply your knowledge of Personal Initiative Theory to the case and discuss the factors that explain the emergence of social entrepreneurial behaviour in Musaazi, in line with Frese, Kring, Soose, and Zempel (1996).

Personal Initiative Theory assumes that human beings with certain personal traits are influenced by their environment and their own characteristics. Creating social ventures calls for personal

initiative (Frese and Fay, 2001), which is based on the fundamental idea that human beings are not only influenced by their environment but also exert their personal influence on it (Frese, Rousseau, and Wiklund, 2014; Tornau and Frese, 2013). The theory notes that individuals taking personal initiative exhibit an active and self-starting approach to achieve certain goals/tasks. These individuals are persistent in overcoming barriers/setbacks in the process of starting social entrepreneurial ventures and need to adjust to any social and environmental changes that may occur (Frese and Fay, 2001; Glaub, Frese, Fischer, and Hoppe, 2014). Showing initiative involves acting openly on ideas that come up and have been neglected by others within the community. People who take initiative are *self-starters*, *proactive*, *innovative*, *persistent* and *resilient* in overcoming difficulties/barriers that arise in pursuit of a goal. These characteristics help them to start and maintain their projects. Taking personal initiative in social enterprises exemplifies Personal Initiative Theory, whereby individuals in a complex environment innovate, persist to overcome any risks and are the first to start enterprises before others do (Nsereko, Balunywa, Munene, Orobia, and Muhammed, 2018).

The instructor can ask students to give examples of people they feel took personal initiative within their communities. Typical answers from students could be international and local examples of social entrepreneurs. After that, the instructor focuses on the case and asks students to apply Personal Initiative Theory by pointing out specific characteristics and dimensions of the theory as applicable to Musaaazi. Some examples of these dimensions are (in sum):

1. **Self-starter:** This explains how Musaaazi began his project of making *Maka Pads* by taking his own initiative, without needing to be told or encouraged to do so. He really wanted to

solve the problem of school dropouts and refugee unemployment through the provision of affordable sanitary towels.

2. **Proactive:** Musaazi created change and acted in anticipation of future problems and needs of the girls and women to have a low-cost sanitary towel.
3. **Innovative:** Musaazi was an individual who practically implemented his idea of creating sanitary towels, which later resulted in the introduction of a new product (*Maka Pads*).
4. **Persistent:** Musaazi had to experiment using a variety of raw materials to make the product before identifying the right one. He had to overcome some initial failed attempts until he was able to produce *Maka Pads* using economical raw materials and processes.
5. **Resilient:** Musaazi had the ability to withstand adversities and bounce back from difficult events in his quest to supply more and more people with *Maka Pads*.

Assignment Question 4

Analyse T4T's business model using the Business Model Canvas. Discuss whether T4T's business model has a good balance between the commercial and social aspects.

A Social Business Model Canvas is a tool that helps to plan, communicate and refine a social business model in a simple, visual way. The instructor will briefly explain the elements of the Social Business Model Canvas following Sparviero (2019). Students will be given the below social business model canvas (Sparviero, 2019) to fill in the building blocks of a social-enterprise business model. For the template to be filled as well as an example, instructor is advised to refer to the paper. Also, it would be beneficial for the students to check the

<https://www.strategyzer.com/> for the original business model first introduced by Osterwalder (2004) and then refined and improved by Osterwalder and Pigneur (2010).

Key learnings

The case is built around the social entrepreneur Dr Moses Musaaazi, the former Managing Director of Technology for Tomorrow (T4T), an innovative company that manufactures affordable sanitary towels to help teenage girls lead healthier lifestyles and overcome the stigma associated with the menstruation period. Musaaazi also invented incinerators, interlocking bricks, and Maka Stoves, all of which were intended to solve social problems by providing low-cost products that created positive social impact. The case presents the concept of social entrepreneurship especially looking at social entrepreneurial behaviours and social entrepreneurial motives. It introduces Personal Initiative Theory and the Social Business Model Canvas for social enterprises for students to apply in their learning process.

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