

VOICES OF THE FUTURE

Summary of Learning Expedition to Kinshasa, DRC
by HEC's Impact Company Lab



IMPACT COMPANY LAB PRODUCTION

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INTRODUCTION TO THE VOICES OF THE FUTURE LEARNING EXPEDITION SERIES

The *Voices of the Future Learning Expeditions* is an immersive learning expedition series designed by the Impact Company Lab, co-founded by Schneider Electric and HEC Paris in September 2023, and aiming to bring the voices of the megacities of the Global South to the front and center stage of our sustainability-related thinking, planning and action. The underlying premise of this expedition series is that a *just transition* will not be possible unless we engage deeply with these voices, the voices of masses of people for whom there is the most at stake, yet all too often are not listened to or included.

The expeditions allow us to connect with the challenges, perceptions, mindsets, ideas, and actions of diverse stakeholders in the megacities of the world in a *physical way*: we build important bridges and social relationships that are embodied (Haidt, 2024). They promote a perspective that is *other-centered* (not self-centered) (Lamont, 2023), characterized by *humility, empathy, and shared ambition* (Valente and Oliver, 2018).

The insights and learnings generated by these expeditions bring a unique added value to both Schneider Electric's and HEC's strategic positioning. They contribute to HEC's strategic positioning:

- In terms of research excellence. These expeditions help identify cutting-edge, innovative research initiatives that take the realities (i.e., needs) of the Global South as a starting point.¹
- In terms of teaching excellence. These expeditions generate cases, practical examples, and dilemmas from the Global South that can be leveraged to raise student awareness about the opportunities in the megacities of the Global South and to develop the necessary skills to operate in these new, increasingly powerful economies. These case studies could be leveraged to give flagship programs a unique spin (notably, MBAs, specialized MSc programs such as the Master in Sustainability and Social Innovation, and Executive Educational Programs)
- In terms of outreach, impact and the common good. These expeditions put the school in pole position to develop and disseminate thought leadership as to how businesses can drive a sustainable and just future that considers the perspectives of the megacities of the world/future. They create a platform for ideas for social innovations,

¹ There is a gaping hole to fill: There is less than a handful of published works in the top 5 management journals (Strategic Management Journal, Academy of Management Journal, Organization Science, Management Science, and Administrative Science Quarterly) that is geographically focused on DRC (see annex for a summary overview)

social entrepreneurship, and inclusive growth, and spark the creation of ecosystems that put those ideas into practice.

They also contribute to Schneider Electric’s strategic positioning:

- In terms of community leadership. These expeditions help identify compelling TIMEs, specifically ecosystems that Schneider Electric can enable and ‘(em)power’. A TIME aspires to produce impact and affect inequality at an extraordinary scale by leveraging multiplier effects and connecting differentiated actions.
- In terms of bringing the company’s human impact vision alive (“no sustainability without humanity”). These expeditions take a bottom-up approach, they allow Schneider Electric to learn from the people they are looking to serve.
- In terms of thought leadership. These expeditions allow Schneider to put forward new concepts linked to the future of megacities that can inspire action inside and outside of the company.

Eight priority megacities were identified (based on several criteria including projected population and economic growth; climate change vulnerability; and access to the resources and opportunities required for a just transition). These are Mumbai, Dhaka, Kinshasa, Lagos, Cairo, Manila, São Paulo, and Shanghai.

The Impact Company Lab plans to learn from all these 8 megacities throughout 2024 and 2025 in order to identify both common and city-specific future impact dynamics and potential impact opportunities.

We chose Kinshasa, the capital of the Democratic Republic of Congo (DRC), as the destination of our first Voices of the Future Learning Expedition: Experts say that Kinshasa will be the biggest megacity in the world by 2075 (projected City Population 58 million). Already by 2050, it will be the second youngest country in the world (after Niger) with its youth population bulging, a vital resource that aging societies will have lost (New York Times, 2023). The DRC is the world’s fourth most vulnerable country to the impacts of climate change due to its low adaptation capacity, low investment in climate-resilient infrastructure and programs (Woodwell Climate Research Center, 2023). Business as usual is no longer an option (World Bank, 2021). Kinshasa today is bursting with energy.

In March 2024, Prof Marieke Huysentruyt (Academic Director of the Impact Company Lab) and Maureen Sigliano (Executive Director of the Impact Company Lab) spent a week in Kinshasa. During their stay, they met and interviewed a diverse range of stakeholders. This report builds on their valuable guidance and sets out to weave together their many thoughtful inputs.

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BACKGROUND ON THE DRC: FACTS AND FIGURES (INCLUDING SEVERAL PARADOXES)

- The DRC is the second largest country in Africa by land area, after Algeria, and it is the eleventh largest in the world. It spans a total area of 2,345,409 square kilometers
- It currently has a population of 115,403,027, (with 20+ million in Kinshasa alone). Population is growing exponentially. 50+% of the DRC's population is under 18 years of age (equating to more than the entire youth population across the European Union).
- Kinshasa is projected to be one of the world's largest and most populated megacities by 2075, with its population expected to reach approximately 58.4 million, making it one of the most populous cities globally by that time (Source: Ontario Tech University).
- Today the city of Kinshasa already spans over 35 km and has a total surface of approximately 10 km². Many areas are surprisingly not densely populated, very green, and almost rural in appearance.
- The DRC's Human Capital Index is 0.37: i.e., only 37% of DRC's children have the opportunity to reach their 'potential' (among lowest in the world and is especially concerning considering expected demographic growth) (Source: The World Bank).
- There are an estimated 6.1 million internally displaced people (refugees) due to ethnic tensions, genocide and tensions related to access to natural resources . Nearly 1 million newly displaced in DRC in the first half of 2023 alone due to recent surges in violence. An additional 1 million+ people have sought refuge in neighboring countries. (Source: IOM-UN Migration)
- Only 7% of DRC's population has access to electricity due to lack of infrastructure. These national rates of access to electricity are among the lowest in Africa. Energy availability, not its transportation or distribution, are the root cause of this and the tremendous gap between demand & supply is growing.
Today, 70% of its supply is used for the extractive industries and only 30% of its limited supply is for household consumption. 93% of the population therefore relies on wood for cooking and energy (creating risk of + 35% deforestation by 2050.) Despite the immense potential for hydropower and solar energy of the DRC, charcoal and fuelwood remain the main energy sources (96 percent of the energy mix) The use of liquefied petroleum gas

(LPG) for cooking is still very limited due to price, availability and a weak supply network. (Source: [Central African Forest Initiative](#))

There is therefore a major need for access to new/diversified sources of energy. Nonetheless, the DRC has the potential to become Africa's largest power exporter if it were able to harness its abundant hydroelectrical & solar sources of power. (Source: [The World Bank](#))

- The Congo River system, (also known as the Congo Basin which is the second 'green lung' of the planet), dominates the region; its river basin occupies nearly the entire equatorial country collecting water from an area of nearly 3,700,000 km² (1,400,000 sq mi), an area larger than the whole of India. The Congo has the second-largest flow and the second-largest watershed of any river in the world, second only to the Amazon in both respects. (Source: [Andritz](#))

The DRC ranks first in Africa in terms of its potential (100,000 MW), which accounts for 13% of global hydropower potential. Hydroelectric power (See Annex 1) is the Democratic Republic of Congo's main energy resource. These resources are a great asset for the supply of low-cost power, making the DRC a strategic player in the continent's electrical energy industry.

However the country clearly does not fully benefit from the possibilities of this resource (including its export possibilities and its potential ability to supply all of Africa with water). This stems from the government's inability to fully exploit the country's hydropower potential, which currently stands at 3%. Key obstacles to developing this potential include the poorly developed transmission and distribution system; the state of disrepair of infrastructure from lack of maintenance and their subsequent further deterioration from the civil war in the 1990's and the mismanagement of the electricity sub-sector as well as the legacy of financial woes of the National Electricity Corporation (SNEL). (Source: [African Development Bank Group](#))

- Although in theory, almost 100% of the DRC has 4G coverage, the overall population penetration rate for mobile internet is 29.6% and only 23% of the population is digitally literate. (Source: [ITC & Telecom](#))

Affordability is a major constraint with elevated prices (58th most expensive country out of 61 in Africa) and very low purchasing power. The DRC's underperformance in digital infrastructure is a binding constraint to the emergence of a digital economy.

Despite being one of the poorest populations in the world (close to 80% of the population are estimated to live under the poverty line of US\$ 1.90 a day), and facing several structural constraints to basic service delivery, the DRC has shown an undeniable enthusiasm in developing its digital economy, accompanied by a number of small-scale successes.

However, strong social and economic inequalities as well as poor institutional coordination have limited the operationalization of potentially transformational propositions included in the Plan National du Numérique (PNN) – Horizon 2025. (Source: [Democratic Republic of Congo – Digital Economy Assessment](#))

- The Democratic Republic of the Congo (DRC) is indeed rich in agricultural potential, yet faces significant challenges in food security and import dependence. Despite possessing one of the most favorable climates for agriculture and about 80 million hectares of arable land, only a small fraction is currently cultivated. The country currently exploits only 1% of this vast agricultural potential. This underutilization contributes to the fact that the DRC imports over 40% of its food, representing 25% of the DRC's total imports. This is further compounded by the lack of adequate refrigeration and electricity infrastructure. (Source: [World Food Programme](#)). The top three foods imported are fish, poultry and cereals. (Source: [African Union](#)). There are thus enormous opportunities for agriculture development, especially considering that the rest of the world is in an 'agricultural crisis'. (Source: [Food Business Africa](#))
- The DRC is estimated to have the biggest mineral reserves in the world and it is already one of Africa's richest mineral producers, with substantial reliance on its copper trade. (Source: [Business Insider](#))
The Democratic Republic of the Congo (DRC) is indeed one of the most significant players globally in the mineral industry, particularly for critical minerals essential for modern technologies. The DRC holds more than half of the world's cobalt reserves, estimated at 3.6 million tonnes, and accounts for about 70% of global cobalt production, which is a critical component in rechargeable batteries used in electric vehicles and other devices (Source: [NS Energy Business](#)). A recent report shows that the DRC's production of copper in 2023 surpassed that of Peru, which previously was the world's largest copper producer, second only to Chile.
- DRC's broad spectrum of infrastructure investment needs are among the biggest in Africa. Today Chinese private and semi-private companies are currently the biggest investors in the DRC's infrastructure. For example, China's CMOC Group plans to enhance its copper production at the Tenke Fungurume Mining (TFM) site and has initiated production at the Kisanfu mine, projecting significant increases in copper output in the coming years (MINING.COM). [Link between copper and China.](#) Chinese companies have recently announced up to \$7 Billion in investment in the DRC's infrastructure. This builds on a 2008 US\$6.2 billion minerals-for-infrastructure agreement that was not sufficiently benefiting the DRC. [HERE](#)

- The DRC's GDP of US\$64.72 billion (Source: [The World Bank](#)) is primarily fueled by mining activities. Real GDP is projected to grow 7.2% in 2024, driven by the extractive sector, which is expected to grow at least 12% between 2023 and 2024. (Source: [African Development Bank Group](#))
- 2023 remittances reached US\$1.7 billion in 2023. The Congolese diaspora – through remittances – constitutes an essential economic lifeline for many households and communities in the DRC. While each individual transfer of remittances may be small, the combined streams of remittances and diaspora investments significantly exceed the sum of all aid and development investments combined. (Source: [Ouragan](#))
The Congolese diaspora therefore represents significant source of income and soft power.
- The DRC's first peaceful political power transition occurred in December 2019 with the election of President Felix Tshisekedi. Despite a two-year delay due to former President Joseph Kabila's reluctance to leave office, Mr. Tshisekedi's election marked the first peaceful transfer of power since the country's independence from Belgium over 60 years ago. President Tshisekedi was re-elected for a second term in late 2023 and has pledged to form a new, more efficient government and to focus on a forward-looking strategy. He was recently in Paris for an official visit with President Macron and both agreed to a much closer collaboration between the two countries. (Source: [United Nations News](#))



VOICES OF KINSHASA: OBSERVATIONS AND PERSPECTIVES

Why are you traveling to Kinshasa, what does it have to do with business? Are you going on a humanitarian mission?

This is symbolic of the current 'one story' narrative, and it is potentially a reason for the lack of much-needed **business investments and infrastructure**.

Yes, there is genocide and corruption here. But this country is enormous, and the genocide does not impede the possibility of development in Kinshasa and other cities. Please do not go back and add to the current top-down, colonial based story. Please also highlight the opportunities that you will see.

The narrative on the DRC outside of the country is **one-dimensional**. It is focused on one story that is thwarting investors from seeing and addressing opportunities.

The DRC has lost 30 years or more. Kinshasa is significantly behind cities like Abidjan, Dakar, Casablanca, and Lagos...Let alone São Paulo or Shanghai...The war, the political unrest. A lot of corruption stories at all levels were cited, but also the need to look forward to move ahead was stressed over and over... 'Quand on veut progresser il faut laisser des choses derrière, c'est parti du voyage'

Ici, même un trou devient un fond de commerce.

Kinshasa has little infrastructure and its urban dynamics are especially chaotic, in particular the traffic that is slowed down by the numerous potholes throughout the city. But then there is so much innovation, so much hustle. So much energy. The locals are called upon to be **extremely innovative** in order to create limited revenue, generating opportunities by leveraging the day-to-day realities.

YANGQI is very efficient. Don't worry it is safe and quite reliable.

Astonishingly **certain things really work** (Kinshasa equivalent of Uber).

Est-ce normal que les députés gagnent £31K par mois alors que nous gagnons \$15 par jour ? Est-ce normal de payer les factures d'électricité malgré les coupures ? Est-ce normal que la formation coûte si cher ? Est-ce normal que les élites embauchent surtout les leurs ?

Many questions from every day people on what could be. Awareness and **eloquence with regard to challenges and needs**, but a general feeling that things will not change, that no one within or outside of the DRC is listening, and even that no one cares.

There is so much trash everywhere, especially plastic bottles. In addition, waste management overall is a serious issue. It is impacting our quality of life and our health.

There is very little information and education on the importance of clean waste management & of recycling. The concern seems focused on the need for cleanliness and aesthetics, not on the longer-term **ecological damage** that is being created within the DRC and in the planets' oceans.

*Public hospitals seem to have gone downhill. At the hospital where I gave birth 10 years ago, you now have to wait 11 hours just for a routine check-up. We need investments especially on the pre-emptive side. Our population is growing and that doesn't just mean the youth, people are also living to an older age. **Nothing is in place within our health system.***

*Business investments are limited. Companies like Decathlon, KinMarket, Toyota, WU and many others are nonetheless forging ahead. Navigating, creating jobs, meeting needs, growing rapidly and generating revenues, while also **building opportunities, know-how and legitimacy.***

The only place where people of different backgrounds really interact may be churches.

Social rupture is omnipresent everywhere. There was a clear need and spontaneous **requests for solutions to build social bridges.**

*There is real leadership here making a real difference, but we are not connected, and no one is equipped to deal with all the challenges that we are facing. No one is capable of actually addressing the types of complex and multi-dimensional business problems that we face. Not the best CEOs in the world, nor the best university professors, or the best innovators. We are dealing with **new realities, the realities of the future, and we are expected to tackle them alone.***

Leadership training, exposure and networking across industries, socioeconomic classes and ethnicities is a need that was raised repeatedly despite the fact that there are numerous leadership organizations working in parallel: Young Presidents Organization, Femmes d'Exception, REFL Friends of the French Embassy, etc.

Je veux protéger ma femme des violences, des patrons qui lui demanderont des choses humiliantes. Donc, je préfère qu'elle reste à la maison, et je vais me battre pour nous.

The situation for women in society is complicated: a **male-dominated** culture including in the workplace, **violence against women** including rapes are prevalent and normalized (in the eastern DRC but also across the whole country). As a result, even the women whose husbands are truly supportive of gender equality don't want their wives to work.

Nonetheless, the President of the DRC has recently nominated a female Prime Minister, Judith Tuluca, to lead the government in his second term which began in late 2023.

*Many of the issues we face are rooted in our colonial past. Layers of different colonial approaches and realities have destroyed our culture and our ability to take pride in ourselves. Enough imposing. Enough extraction...**The DRC needs to be co-constructed. There needs to be value for the people of Congo.***

The colonial past and resentment are very present. Future initiatives and interventions will need to take this into account. A lot of anger and frustration about the past, but also a desire to change.

Les projets doivent être portés par les jeunes.

The power of the **exponentially growing youth population must be harnessed**. This is both an enormous challenge and an asset.

How do we package and market all that we are good at in order to change the narrative with regard to the DRC? Is there a role for our music which is globally famous, for our dance, for our frugality and for our unique 'sapologie' in all its forms?

The population is eager to change the DRC's reputation since they understand that the current narrative has a direct impact on the opportunities they can access. They hope that the country's **cultural opinion leaders** can help drive mindset changes.

Many within our diaspora are educated, powerful and in a position to help us drive the much-needed changes far beyond their remittances that are already transformational.

Numerous questions on how to **harness the energy and dreams of the DRC diaspora**, on how to engage it to more strategically in order to participate in the building of DRC's future.

Stop saying that there is no money in the DRC, and that it is among the poorest countries in the world.

DRC has enormous amounts of natural resources, **wealth and potential for generating wealth**. The thing is that it is 'badly distributed'. We have an urgent need for financial re-engineering and for real win-win investments.

*The Aid & Development investments coming from outside DRC have **too many strings attached**. And it is too often badly managed without serious local governance. For example, there have been significant investments in ghost schools, schools that never existed. The Chinese & Australian investments have too many strings attached too. The amounts sound so large but there is so little value directed toward the people of the DRC. Investments are siloed, dispersed and too often "self-interested". No one is looking out for us.*

OPPORTUNITY FOR MULTIPLIER IMPACT: FIVE CONNECTIVITY AREAS

There is enormous business potential in Kinshasa. However, there is also skepticism and a need to create reasons to believe, to demonstrate concretely and empirically that Kinshasa CAN accelerate into the future in just and sustainable ways.

This will require an acceleration of much needed CONNECTIVITY in different areas:

1. Job connectivity
2. Energy connectivity
3. Financial connectivity
4. Digital connectivity
5. Social connectivity

The beauty of these five connectivity areas is that they are strongly **interlinked**: positive change in one area is likely to spark positive change in other areas as well. Furthermore, positive change in any one of the connectivity areas is likely to be **non-linear**: positive change in one area is likely to spread and expand rapidly because of the social network dynamics at play. Any concrete action at the intersection of two or more of the above connectivity areas thus has the potential to produce huge **multiplier effects**, and consequently spark true systemic change at a scale that is at par with the observed needs.

RECOMMENDATIONS FOR ACTION: TWO T.I.M.E.s

We see a huge potential (opportunities) for the development of **T.I².M².E(s)** in Kinshasa – **T.I².M².E(s)** refers to a type of concerted action (or intervention) that brings alive 5 core concepts:

- **T** for Territorial: in the sense of being grounded in and engaged with the complex societal challenges of specific (bounded) geographic areas in a megacity, respectful of humanity and nature
- **I** for Impact and Inequality: in the sense of being relentlessly focused on realizing, growing, demonstrating sustainable impact: economic, environmental, and social impact; and being especially focused on tackling the problem of growing inequalities.
- **M** for Multiplier and Megacity: in the sense of being designed to produce multiplier effects, to impact rapidly and vastly in scalable, replicable ways, taking a megacity as entry point
- **E** for Ecosystem: in the sense of being designed to connect the dots, the differentiated (often dispersed) actions already undertaken by diverse actors in a way that promotes healthy, regenerative ecosystems

The power of a **T.I.²M²E (henceforth, TIME)** was detected and explored in co-creation with the stakeholders we met in Kinshasa. The concept sets the stage for a new narrative: how to imagine actions that speak to the extensive needs, mounting tensions, and enormous opportunities we observed in Kinshasa. We have already started to imagine three distinct, but complementary TIMEs. These three TIMEs were presented for the first time at the 'Meeting of Minds ' dinner in Kinshasa, and subsequently enriched and are still being further developed.

The two recommended TIMEs are:

- TIME # 1: Megacity Access to Energy Prototype - Connectivity⁵**
- TIME # 2: Megacity Frontier Leadership Academy**



Note that the **TIMEs we recommend in this report**, are directional, requiring further input and discussions. They were nonetheless designed to fulfill five strategic goals:

1. To allow Schneider Electric to demonstrate and renew its impact leadership, to forge new game-changing impact dynamics that deliver on much needed 'just transition'
2. To address Kinshasa's multiple and future-critical 'connectivity needs' in systemic and replicable ways
3. To fully leverage existing but siloed and scattered impact investments and initiatives in convergent, complementary, and radiating ways.
4. To accelerate deep behavioral change by leveraging the latest insights in the behavioral and management sciences
5. To generate robust and reliable, scientifically validated results and deliver 'reasons to believe' to global stakeholders (in the near, medium, and long term)

TIME #1: Megacity Access to Energy Prototype - Connectivity⁵

Problem: The connectivity and infrastructure needs of Kinshasa are enormous. The megacity has one of the lowest rates of electrification in the world. This is a problem that must be addressed to enable much needed inclusive economic opportunities. Private and public organizations understand this and are investing to drive change. Innovative impact initiatives are being spearheaded. But the current efforts appear to be siloed, scattered, and not anchored in a common vision. Therefore, progress is limited, and frustration is growing alongside the risks.

Opportunity: There is an opportunity to co-construct a vision, and to converge existing initiatives and investments to enable it. To learn together. To course-correct as necessary. To scale and replicate in order to accelerate systemic change. Schneider Electric is uniquely well positioned to '(em)power a TIME that accelerates access to energy in Kinshasa and in doing so leverages change in the five connectivity areas.

Vision: Imagine if we could create a prototype in a designated area of Kinshasa (selected based on specific criteria) Where the local community was engaged and excited about a common systemic vision. Where training for the jobs of the future was made available across schools and universities in that area by the entities doing so already elsewhere (electricians, junior engineers, coders, etc.). Where the DRC diaspora which is sending remittances to that community was encouraged to fund the purchase of solar panels. Where the community was empowered with electricity (and all that it can enable). Where innovation was ignited and incubated by the subject matter experts already doing so elsewhere (e.g., SILIKIN, Bangalore Congolese diaspora, HEC's I&E etc.). Where women were encouraged to participate and given the required peace of mind. Where plastic, fuels and metals were cleaned up and recycling was harnessed to build pride and potentially to create new funding sources. Where impact leaders collaborated with each other and with local communities to build a just and sustainable future. And much more.

TIME Overview: We recommend the creation of a TIME, with a shared vision to enable Job connectivity, then Financial Connectivity, then Energy Connectivity, then Digital connectivity, and in doing so promote Social connectivity. The recommendation is to build this TIME in phases, beginning with the convergence of initiatives linked to access to electricity, since this is at the heart of Schneider Electric's business and know-how. Again, what is distinct is that the TIME will take a geographic focus in a designated area of Kinshasa, and in doing so, create a test area, and a use case that can be scaled up and transposed to other megacities, if proven successful.



1. Job connectivity

There is an urgent need for vocational training opportunities to prepare youth to become part of the access to energy solution (just transition): installing solar-powered energy solutions in a first instance (and electricity lines in a second instance).

We recommend that Schneider Electric strive to strategically connect the know-how and capabilities of its One Million by 2025 program with the local training partners of Access to Energy (like Don Bosco) and that they localize these initiatives in the designated area of Kinshasa. The idea would be to kick-off the TIME with an ambitious training initiative for electricians and junior electrical engineers. It is important to note that the DRC's new Minister of Education has put special focus on STEM education in the past and that efforts like this will therefore likely find particular support moving forward.

Where the **Impact Company Lab** can deliver value:

- 1.1 Helping the TIME think up new ways of how to motivate (draw in) youth to sign up for and complete the training. We recommend placing a particular focus on attracting female participants. We could help ensure that in the design of an information campaign, the TIME leverages the latest scientific insights from the behavioral sciences. We recommend that the TIME test different communication frames and evaluates their relative effectiveness in drawing in different types of audiences.
- 1.2 Helping the TIME make the most of the training itself by introducing and testing minor differences in the actual training offering (curriculum). We recommend adding a module focused on a subset of soft skills (skills that foster trust) to the standard training and subsequently evaluating the importance of this (well-being, ability to secure and retain a job)

- 1.3 Helping the TIME experiment with the way participants sign up for the training e.g., signing up for the training alone versus signing up for the training in pairs. Past research has found that when participants commit to completing a training and pursuing a new job opportunity alongside a peer, then they are more likely to succeed.
- 1.4 Helping the TIME experiment with the bundle: We recommend potentially testing different bundles of support: training alone, versus training and mentorship, versus training and help with job placement, versus training and privileged access to banking services.

Each of the four possible action-research avenues above would also strengthen social connectivity (5) – they would be designed in a way to foster connections between different groups of people – men and women, old and young, people from different disciplinary backgrounds, etc. These experimentation sites would allow the TIME to generate the necessary know-how that would allow its partners (including of course Schneider Electric) to scale their impact faster and more effectively.

2. Financial connectivity

The DRC's population is currently among the poorest in the world. Therefore, unless efforts are focused on drastically reducing the financial barriers to accessing solar solutions, the related inclusive, social and economic opportunities will not be created.

We recommend that Schneider Electric continue to strengthen its partnership with local banks (such as Raw Bank and Equity Bank), that may be willing to provide low interest rate loans to access energy solutions in return for expanding their customer base, for example, but also that it connects strategically with new powerful sources of capital – in particular, the Congolese diaspora. To this effect, we recommend that the TIME collaborate with Western Union, a company with extraordinary reach/capillarity, and with a large and influential sending community.

Where the **Impact Company Lab** can deliver value:

- 2.1 Partnering with Western Union to design new ways of how to motivate the Western Union sending community to earmark their remittances for 'access to energy' solutions. We could help design an information campaign. We could help ensure that in the design of an information campaign, the TIME leverages the latest scientific insights from the behavioral sciences. We recommend that the TIME test different communication frames and evaluate their relative effectiveness in concretely engaging different types of audiences.
- 2.2 Help the TIME (local banks) design more effective campaigns to encourage existing clients to invest in new energy solutions.



These two action-research options would also promote social connectivity: (5) They represent a channel for the diaspora to provide energy solutions to their commune of origin. These experimentation sites would allow the TIME to generate the necessary know-how that would allow its partners (including of course Schneider Electric) to ensure that the sustainable solutions are also socially just, as well as accessible to a much larger community than is the case today.

3. Energy connectivity

Energy empowers people, and powers life. To ensure that the energy that will be generated and made accessible to as many people as possible in the selected territory in Kinshasa is reliable, affordable and used efficiently, we will need to secure households' access to and payment of energy (electricity) over time.

We recommend that Schneider Electric strengthen its partnership with the SNEL, the DRC's national electricity company to expand the ways in which regular payment for quality service can be achieved. The SNEL has already started a pilot using pre-payment schemes – promoting the logic of 'pre-pay for what you actually get', as monthly fixed pay schemes do not work well because of the recurrent power cuts (insufficient and unreliable electricity supply). We also recommend that Schneider Electric draw on its ongoing support of the Creative Destruction Lab, calls on the CDL to help identify technological solutions that allow for a better alignment between Kinshasa's energy needs and supply.

Areas where the **Impact Company Lab** can deliver value:

3.1 Helping the TIME embrace new digital technologies that bring electricity within reach of all, including the potential opportunity to connect surplus power generated by household solar panels to the SNEL grid (exploratory – with the inputs from the Creative Destruction Lab)

3.2 Helping the TIME pilot 'mySNEL' at scale and creating reliable, scientific evidence of its effectiveness. We could advise on how the mySNEL application could be rolled out in a systematic manner. We could help ensure that in the design of the mySNEL marketing campaign, the TIME leverages the latest scientific insights from the behavioral sciences. We recommend that the TIME test different communication frames and evaluate their relative effectiveness in drawing in different types of audiences.

3.3 Help the TIME improve the design of the client-user interface, leveraging the latest insights from the behavioral sciences. There is an extensive body of literature on decision-making under stress, high uncertainty and complexity. We recommend taking stock of this literature (literature review) and identify a series of actionable changes to the user interface of MySNEL to ensure greater engagement with the tool over time.

These three avenues for action-research would take into special consideration the social differences amongst the existing and future clients of MySNEL and leverage these differences to promote a more connected society, and so promote the transversal connectivity area of social connectivity. (5) Again, these experimentation sites would allow TIME to generate the necessary know-how that would allow its partners (including Schneider Electric) to ensure that the sustainable solutions are also socially just, as well as accessible to a much larger community than is the case today.

4. Digital connectivity

There is an urgent need to empower youth, to help youth access labor market opportunities or to help them create their own opportunities through entrepreneurship. Such efforts must be particularly sensitive to the special needs of women, who today all too often are employed in the informal labor market and earning low wages.

We recommend that Schneider Electric strengthen its partnership with the entrepreneurial ecosystem in Kinshasa, including the universities and incubators such as SILIKIN. We also recommend that the TIME seek to empower women via entrepreneurship and financial autonomy. For this, we recommend that Schneider Electric draw on the expertise of the Innovation and Entrepreneurship Institute and Hi! Paris at HEC Paris. In particular, there is the successful Stand Up program focused on reaching vulnerable populations (pioneered in 2012 by HEC Paris) and that is now being scaled up thanks to the support of a major family foundation. We recommend that the TIME consider partnering with initiatives like the Stand Up program in order to fully leverage the increased access to energy in the interest of powering a vibrant entrepreneurship community.

Areas where the **Impact Company Lab** can deliver value:

4.1 Helping the TIME to design successful ecosystems for female entrepreneurship, entrepreneurship in the area of access to energy, climate change, etc. The idea here is to leverage in particular the experiences of Station F, and a variety of initiatives led by the Innovation and Entrepreneurship Institute and Hi! Paris at HEC Paris, to distill best practices, and bring together partners to learn from each other.

4.2 Helping the TIME to test innovative ways, how to draw in women into the existing (or expanding) entrepreneurial landscape, based on the latest scientific insights, and to measure the effectiveness of these approaches in terms of entrepreneurial success as well as well-being (such as mental well-being, dignity, self-esteem, self-confidence etc.).

4.3 Helping the TIME to develop new financing tools, drawing on green investment instruments, and evaluate their efficacy. Here, we would incorporate the expertise of professors from our Finance Department.

These three avenues for action-research would identify and connect different groups – female entrepreneurs, youth entrepreneurs, youth and jobs, and a diverse investment community and in doing so also promote the transversal connectivity aspect of social connectivity. (5) Again, these experimentations would allow the TIME to generate the necessary know-how that would allow its partners (including Schneider Electric) to ensure that the proposed sustainable solutions are also socially just, as well as accessible to a much larger community than is the case today.

We propose to gradually expand and invest resources in each of the five connectivity areas, and thus realize the potential of significant multiplier effects. We also see huge potential in translating some of the TIME practices to other megacities, notably São Paulo (where Schneider is now investing dedicated resources to expand its One Million by 2025 training program). We are about to hire a new Brazilian post-doc from Brazil at the S&O Institute– he will formally start working with the Impact Company Lab from September 1, 2024, but we would like him to already begin exploring the feasibility and suitability of the actions proposed in the context of São Paulo.

Key next steps for TIME #1 in 2024:

1. Validate and enrich the overall Time #1 concept with Schneider Electric internally and the stakeholders that we met locally in Kinshasa.
2. Agree to Schneider Electric's role within TIME #1 (sponsor, contributor, enabler)
3. Organize a working session with select subject matter experts at HEC Paris & its partner schools who might be interested in contributing to the realization of TIME #1:
 - a. Yann Algan (Professor in Economics and Expert on Trust and Social Capital at HEC Paris)
 - b. Craig Anderson (Professor of Marketing specialized in Consumer Behavior and Awe at HEC Paris)
 - c. Magali Delmas (Professor in Sustainability at UCLA)
 - d. Raphaelle Gauthier (Executive Director of Hi! Paris)
 - e. Francois Gemenne (Professor and Expert on Climate & Migration at HEC Paris)
 - f. Brian Hill (Professor in Economics and Expert on Behavioral Sciences at HEC Paris)



- g. Marieke Huysentruyt and Maureen Sigliano (Academic Director & Executive Director of the Impact Company Lab)
 - h. Stefano Lovo (Professor in Finance and Expert on Green Finance and Behavioral Science at HEC Paris)
 - i. Aymeric Penven (Executive Director of the Deep Tech Center at the Innovation and Entrepreneurship Institute) and Nathalie Riond (Director of Stand Up)
4. Prioritize the experimentation-site criteria & identify designated area in Kinshasa
 5. Align on roles and responsibilities and overall engagement model
 - a. Schneider Electric
 - b. HEC Paris
 - c. Kinshasa-based stakeholders & partners
 - d. DRC/Kinshasa government
 6. Contribute to scope, roadmap & measurement plan
 7. Assess relevance and potential to extend to other megacities -São Paulo (priority)

TIME # 2: Megacity Frontier Leadership Academy

Problem: No one is equipped to address the new world challenges being faced in Kinshasa (and other megacities). Neither the best CEOs in the world, nor the world's best universities (including HEC), or the best scientists.

Opportunity: As has been reported to us by several stakeholders we met in the DRC, there is a need for learning programs, that concretely address the emerging and urgent challenges of tomorrow. Such programs need to be anchored in real challenges and real dynamics. They need to be co-constructed, tested, measured and nourished by actions.

Vision: Imagine if we could bring together the collective intelligence of diverse stakeholders and subject matter experts plus measurement techniques. To co-construct the learning programs that are so critical to ensuring a just transition in the megacities of the world. There is an opportunity to co-construct new training with the leaders of Kinshasa and beyond. To apply know-how to the emerging realities. To dare to enter the future together.



TIME overview: We recommend the creation of a TIME, with a shared vision to reimagine the training of future leaders, prepared to drive positive change in the world's biggest megacities. Again, we propose to pilot this training in Kinshasa first. This TIME would need to be led by the HEC Paris Executive Education team which possesses globally renowned expertise and experience. Nonetheless we see a unique opportunity in a TIME that connects existing resources, the dynamics and experiments of TIME #1 and the experiences of local leaders. This would result in a unique tailor-made executive training that is anchored in the specific challenges the world's megacities.

We would recommend proceeding in a step-by-step manner (develop, test and fine-tune in multiple iterations)

- (i) **Design 1.0 of the training**: We propose to tap into the African representation of leaders of the Young Presidents Organization. This is a large global network of leaders (including in Africa). We propose to lead conversations in order to understand their perceived needs and to ask these leaders what they would imagine such a training to look like. We would also like to survey participants of the Lead campus training program organized by HEC Paris and call for their inputs as to what kinds of pedagogy and tools would be on their wish-list based on the challenges they feel least prepared for. We also propose to interview Schneider Electric staff working in Africa to solicit their contributions and all the stakeholders that have contributed to this report. With their inputs, we should be ready to define a first vision for the training: objectives, format, and a skeleton of what a first pilot-version could look like.
- (ii) **Review of design 1.0 by representatives at the United Nations** (such as African Risk Capacity), **OECD, DRC Ministry of Education and African Development Bank**: We propose to request additional inputs from multilateral actors operating in Africa. These actors may also be willing to finance the further development and piloting of the training
- (iii) **Development of the training with partners**: We imagine that much of the training will be online. There will be a need to develop online tools, videos, etc. We imagine that we will co-create this context with African leaders, HEC professors, and other relevant partners leveraging experiments and learnings within TIME #.
- (iv) **Pilot Training 1.0**: We recommend testing and launching different modules with a series of privileged, select participants, including potentially talented staff of the SNEL, participants identified via YPO, Lead Campus, Schneider Electric HR, etc. We would integrate scientific measurement into the pilot phase of the training i.e., introduce the training in a way that we can test and evaluate its near term & longitudinal efficacy.

- (v) **Refine, repeat and scale:** After this, we propose to repeat steps (i) through (iii) to improve the training based on our learnings, repeat and then roll out to more geographies

Key Next Steps for TIME #2 in 2024:

1. Validate and rationalize the overall concept of TIME #2 with the Executive Education Team and HEC Subject Matter Experts (Lead Campus, Finance & Strategy professors).
2. Socialize and secure support from local Kinshasa-based stakeholders and potential partners for TIME #2. Include the DRC/Kinshasa government & SNEL.
3. Align on roles and responsibilities and overall engagement model:
 - a. Schneider Electric
 - b. HEC Paris
 - c. Kinshasa-based stakeholders & partners
 - d. DRC/Kinshasa government
 - e. YPO
 - f. Multilateral agencies
4. Contribute to scope, roadmap & measurement plan
5. Assess relevance and potential to extend to other megacities -São Paulo (priority)

CONCLUSION: ADDITIONAL BENEFITS OF TIMES

Today in Europe (and beyond), the DRC and Kinshasa are defined by a single, one-sided story that emphasizes poverty, conflict, and corruption. Although it is a reality that the local challenges are unique and significant, there are also enormous human, environmental and economic opportunities. Therefore, it is critical that the narrative on the DRC and Kinshasa evolve to be more multi-dimensional, forward looking and focused on the possibilities that should and could exist.

We believe that collaborating with local stakeholders on TIME #1 and TIME #2 will enable us to shed light on these opportunities across the broader HEC-Schneider Electric ecosystem.

We would therefore aim to build bridges, enable exposure, and open the mindsets of professors, students, business partners etc. The new narratives and perspectives that would emerge would be both an enabler to and a result of the recommended TIMEs. The paradigm shifts should also set out to create new public conversations and ignite new perspectives on the importance of finding solutions to social and environmental challenges in the places where humans have most at stake. Finally, we would aim to position HEC Paris as a school, and Schneider Electric as a business, as entities that understand the world and seek to better prepare its students and employees respectively to be the leaders that the world of 2050 is waiting for.

This report, and the recommendations it includes, will be shared, and discussed with stakeholders starting in June 2024. They will also be central to a podcast episode scheduled for September 2024 and the subsequent discussions that it will ignite.

Updates on agreements and progress will follow.

Thank you.

APPENDIX

BACKGROUND ON THE IMPACT COMPANY LAB

Co-founded by HEC Paris and Schneider Electric in early 2023, the [Impact Company Lab](#) is a leading experimentation platform focused on concretely growing companies' ability to drive a *just transition* in a rapidly changing world.

The Impact Company lab uses an integrated and future focused action-research approach to the multi-dimensional topics that companies are tackling as they strive to lead a just transition

The Impact Company Lab delivers value on 3 levels:

1. Convening a new generation of forward-looking Impact Leadership: building a global community of global *Frontier Impact Companies & Frontier Leaders*, harnessing their collective experience & transformation power to narrow gaps between impact intentions and results (where it matters most)
2. Applying future-focused & bold thinking to universal business impact related challenges: identifying new perspectives and drives scaleable paradigm shifts
3. Designing, experimenting with and scientifically assessing impact initiatives with the potential to drive systemic progress: creating a body of compelling evidence for the leaders of today and of tomorrow.

THE SUSTAINABILITY & ORGANIZATIONS INSTITUTE

Established in 2009 as a pioneering entity within HEC Paris, S&O is an interdisciplinary institute, fostering a community of researchers, business leaders, organizations and individuals deeply committed to serving a sustainable and just transition. As we believe that economic actors are powerhouses to achieve this goal, we advocate for a responsible creation, a sharing of economic value, and a decarbonized economy that serves both human and planetary well-being. Our purpose is to reinvent business through promoting sustainability and unleashing human potential.

Critical thinking, cutting-edge research, ground-breaking experimentation, multi-stakeholder dialogue, and transformative pedagogy are at the core of our holistic approach to drive change. Through our activities of research and teaching, our interconnected centers (Purpose, Inclusive Economy, Climate & Earth) and articulated with the Impact Company Lab, our mission is to empower current leaders and the new generation to navigate systemic challenges with science-based knowledge, courage and conviction.



SCHOLAR ARTICLES RELATED TO DRC AND KINSHASA

According to the IPCC's sixth assessment report on the impacts of climate change, the southern DRC will be one of the places in Africa worst-impacted by increasing malaria by 2030. The DRC has the world's biggest cobalt reserves, which are critical for the energy transition, and is among the top 8 countries with the largest known copper reserves (REF). There exist huge connectivity needs (and potential): Today, only 7% of its population has access to electricity (REF). There is a pressing need for us to engage and take this reality more seriously.

There is also tremendous opportunity to connect business school scholars with the DRC. There is less than a handful of published works in the 5 top management journals (*Strategic Management Journal*, *Academy of Management Journal*, *Organization Science*, *Management Science*, and *Administrative Science Quarterly*) that are geographically focused on the DRC:

- In a study of sustainability practices in conflict minerals, Kim and Davis (AMJ, 2016) explore the challenge of supply chain accountability in an era of globally distributed production and diverse labor and environmental practices. They find that a mere 1% of companies could certify their products as conflict-mineral free. Based on cross-sectional analysis, they conclude that nearly out eight out of ten companies are unable to determine the provenance of the minerals in their products.
- Stevens and Newenham-Kahindi (SMJ, 2019) explore how MNEs manage corruption in six SSA countries, including DRC.
- Fangwa et al. (*Management Science*, 2023) evaluate the impacts of a governance bundle, including performance-based incentives and auditing and feedback, on the operational efficiency and quality of healthcare in DRC. [HEC!!]

In neighboring fields, there are several leading scholars doing work in the DRC:

- Raoul Sanchez de la Sierra at Harris School of Public Policy: focusing on how society is organized when the state is weak or predatory and what type of state can be built in that context. <https://harris.uchicago.edu/directory/raul-sanchez-de-la-sierra>
- Lowes et al. (AER P&P 2015) use a participant population from Kananga, a city located in central DRC, to measure participants' attitudes towards four ethnic groups using a variant of the implicit association task. They show evidence of an implicit bias in favor of one's own ethnicity.
- Armand, Atwell, and Gomes (AER 2020) examine the role of FM radio in mitigating conflict. Their empirical setting is the LRA conflict started in Uganda, but that has expanded into DRC.

- Falisse, Huysentruyt, and Olafsgard (forthcoming in the *Economic Journal*, 2024) study the effectiveness of a 'textbook for homework' incentive scheme introduced in primary schools in the DRC.



Leading with Purpose for an Inclusive and Sustainable World

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