Diebold Nixdorf

## Sustainable Banking:

# A Guide to Taking Action

**Drive positive social and environmental impacts through financial inclusion and green operations.**

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**Abbreviation Key**

**PRB:** Principles for Responsible Banking

**SDG:** Sustainable Development Goals

**UNEP FI**: United Nations Environment Programme Finance Initiative

# The Evolution of Industry/FI evolution: Embracing Sustainability for a Better Future

As the effects of climate change are increasingly felt, environmental issues are now a major concern for everyone. Governments, companies, financial institutions, NGOs and citizens are mobilizing around an essential objective: to ensure a sustainable future for coming generations.

Financial institutions FIs are faced with major questions in responding to the challenges of sustainable development: How to integrate environmental, social and governance (ESG) criteria into strategic choices and decision-making? How to measure, evaluate and optimize their own environmental impact? How to encourage and support their clients in green projects? How to collaborate with the right partners to strengthen their positive impact on the environment and society?

Effectively navigating these challenges demands an ongoing commitment to creativity and innovation. Additionally, it necessitates forging new collaborations and demonstrating a genuine dedication to constructing systems that prioritize sustainability and equity for all stakeholders.

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"**Banks will increasingly need to integrate sustainability into their core business operations, both as a risk management strategy and as an opportunity to drive innovation and growth.** The banks that are able to do this successfully will be the ones that thrive in the new sustainable economy."

—**Achim Steiner**, Administrator of the United Nations Development Programme and former Executive Director of the United Nations Environment Programme Finance Initiative (UNEP FI)

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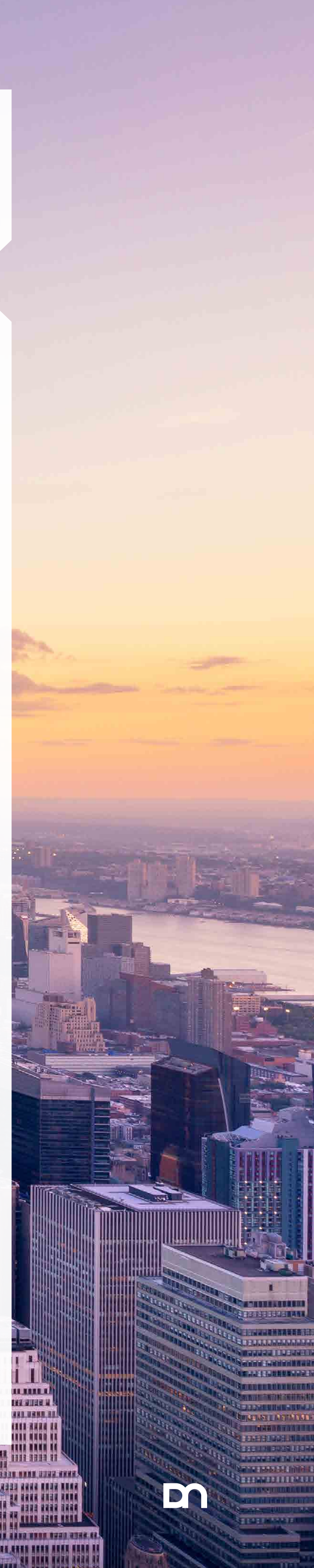
At Diebold Nixdorf, we are committed to elevating sustainability discussions to the forefront and methodically implementing sustainability initiatives, with the goal of having a positive impact on local communities. With this guide, Diebold Nixdorf provides insightful guidance on how to strategically promote sustainability for Financial Institutions. The focus is dual-fold, encompassing the facilitation of financial inclusion and the cultivation of environmentally responsible practices. By delving into nuanced approaches, institutions can contribute meaningfully towards a more sustainable and equitable future.



## The tidal shift of global perspective

Over the course of the past few decades, the discourse surrounding corporate social responsibility (CSR) and global sustainability has experienced fluctuations in attention and emphasis. Notably, the decade from 2010 to 2020 witnessed a pronounced upswing wherein prominent brands, recognizing their substantial influence, actively engaged in advocating for social and environmental causes. Issues spanning climate change, equality, ethical sourcing, and more were brought to the forefront of corporate consciousness.

Confronted with a dynamic and disrupted global landscape and having assimilated the lessons stemming from the COVID-19 pandemic, companies and governments find themselves confronted with enduring global challenges. The imperative at hand is to uplift millions out of poverty by leveraging the transformative potential inherent in new technologies and innovations. In the aftermath of the pandemic, there exists an unprecedented and heightened global awareness within both societal and economic spheres.

In the contemporary landscape, consumers exhibit a heightened level of interest, active engagement, and a receptiveness to novel modes of interaction. The transformative influence of automation and digital technologies is reshaping the paradigms of banking, shopping, and global business at large.

This evolution is not confined to consumer behavior alone; even investors are increasingly recognizing the potential of integrating environmental, social, and governance (ESG) principles into their decision-making processes as a means to catalyze positive change. In recent years, BlackRock CEO Larry Fink announced his organization's commitment to putting sustainability at the center of their future investment decisions.[1]

As the world's largest asset manager, the impact of that decision and commitment will be on a global scale. This signifies a broader acknowledgment within financial realms of the pivotal role ESG principles play in fostering sustainability, ethical practices, and long-term value creation.

## The role of financial organizations in charting a new course

The influence wielded by FIs in this realm is indeed profound and should not be underestimated. Functioning as custodians of the world's cash flows, collaborative partners with government entities, and essential lenders to businesses across diverse sectors, FIs—particularly retail banks—occupy a distinctive and pivotal position in the endeavor to promote sustainability. Recognizing the significance of this position, FIs can not only contribute to the evolution of sustainable practices within their own operations but can also catalyze broader societal and economic shifts towards a more sustainable future. This underscores the potential for financial institutions to serve as instrumental architects of positive change on both a local and global scale.

"This is not the time for short-term thinking or knee-jerk fiscal austerity that exacerbates inequality, increases suffering and could put the SDGs farther out of reach. These unprecedented times demand unprecedented action." [2]

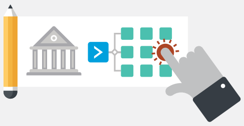
— **António Guterres**, UN Secretary General

**Read on to learn how your retail bank can support that mission —and why it's in your organization's best interest to do so.**

# Partnering with Diebold Nixdorf

## Strategic Green Transformation: Navigating Sustainable Change

Embarking on the journey towards environmental sustainability may seem like a daunting task. However, our expertise lies in guiding organizations through a step-by-step process that transforms the overwhelming prospect of "going green" into manageable and impactful initiatives. By partnering with us, your organization can navigate a strategic path towards meaningful and measurable environmental responsibility.

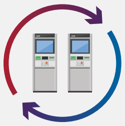


**Strategic Branch Transformation Consulting: Unlocking Immediate Opportunities**

Engage with our team of seasoned branch transformation advisors to identify and capitalize on immediate opportunities for your organization. Through comprehensive consulting, we can guide your team in implementing strategic changes that not only enhance operational efficiency but also contribute to long-term success. Let us help you unlock the full potential of your branch network.

**Rely on Extended Cash Capacities and Intelligent Cash Management Solutions for Significant Reduction in CIT Visits**

Experience a substantial decrease in Cash-in-Transit (CIT) visits by leveraging our solutions featuring larger cash capacities and cutting-edge intelligent cash management. Our advanced technology is designed to optimize cash handling, resulting in heightened operational efficiency and cost savings. Trust in a seamless cash management experience with increased capacity and intelligent solutions that redefine the way you handle currency logistics.



**Transition to Recycling-Enabled ATMs at Your Own Pace with DN Series**

Embark on a strategic shift to recycling-enabled ATMs with the flexibility and future readiness of DN Series technology. Tailor the rollout and implementation plan according to your network's readiness, allowing you to make informed decisions at your own pace. DN Series offers a forward-thinking approach to recycling technology, ensuring a seamless and adaptable transition for your organization.

**Unlocking the Potential of Predictive and Prescriptive IoT-Enabled ATMs for Enhanced Operational Efficiency**

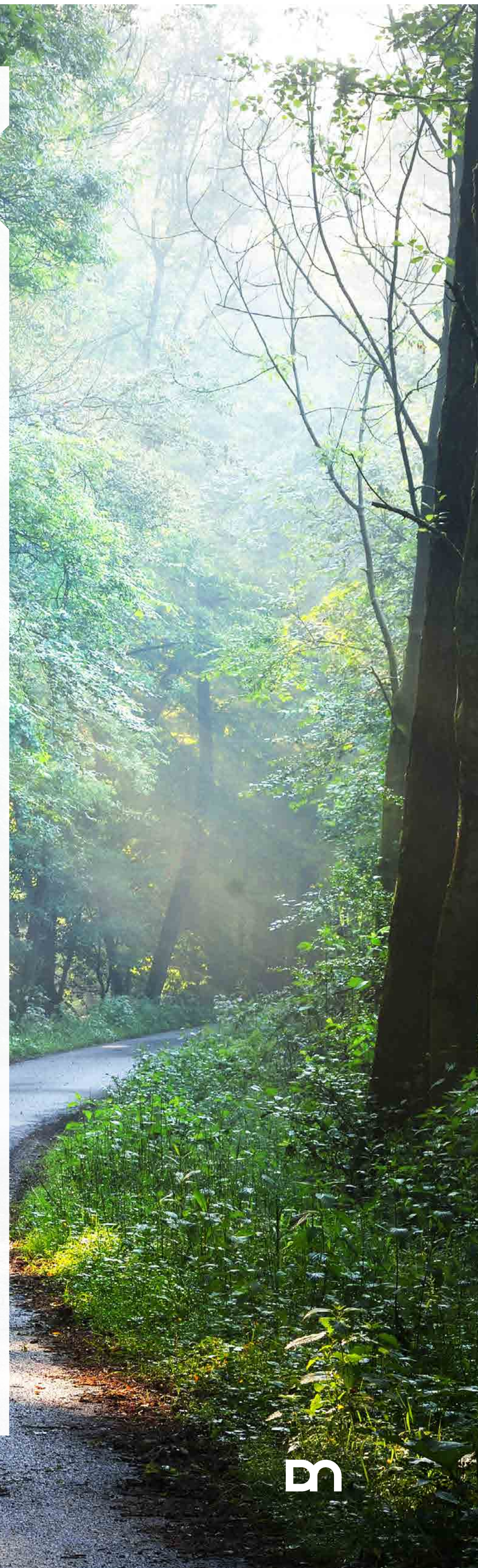
Explore the cutting-edge advancements in our IoT-enabled ATMs, where predictive and prescriptive capabilities converge to revolutionize operational efficiency. Learn how harnessing IoT technology enables us to proactively address service needs, reducing unnecessary and ineffective service calls. Stay ahead of challenges with a data-driven approach that optimizes ATM performance, ensuring a seamless and efficient operational landscape.

## Engage with Our Experts: Explore Transformative Solutions Through Experience Centers or Virtual Demos

Embark on a journey of innovation by connecting with our seasoned experts. Delve into the transformative realms of banking solutions through immersive visits to our global Experience Centers or seamlessly engage in virtual demo meetings. Our experts stand ready to collaborate with your teams, providing insights and solutions that align with your unique needs. Experience the future of banking through interactive sessions that blend expertise with cutting-edge technology.

## Chapter One

# The Importance of Sustainability in Banking



The urgency to address environmental challenges is supported by science-based evidence, revealing the profound impact of human activities on the planet and our well-being. Global initiatives like the United Nations Sustainable Development Goals (UN SDGs) serve as guiding lights, uniting nations and stakeholders in collective efforts towards sustainability. Meanwhile, industry-specific activities highlight the increasing relevance and necessity of tailored strategies to address nuanced challenges. This convergence of evidence, overarching frameworks like the UN SDGs, and sector-specific initiatives underscores a growing global commitment to effecting transformative change towards sustainability, providing a robust foundation for meaningful planetary progress.

In the financial sector, a notable emphasis on responsible banking has emerged, particularly evident in initiatives like the Principles for Responsible Banking (PRB) led by the United Nations Environment Programme Finance Initiative (UNEP FI). The PRB serves as a guiding framework for banking institutions, aligning their activities with societal and environmental goals beyond mere compliance, thus fostering proactive engagement with sustainability. Spearheaded by the UNEP FI, the PRB embodies a collective commitment among banks to mitigate risks and actively contribute to global sustainability objectives, marking a significant step towards a more sustainable financial industry.

FIs hold significant potential to drive global sustainability, with opportunities spanning environmental and social impacts, offering avenues for economic prosperity worldwide. FIs' diverse priorities, from evolving into sustainable banks to spearheading local initiatives, reflect the multifaceted nature of sustainability journeys, allowing tailored approaches based on strengths, market dynamics, and stakeholder expectations. Integrating sustainability into core operations is both an ethical imperative and a strategic necessity, influencing positive outcomes for the environment and society while fostering resilience in the global economy. Additionally, active engagement in local sustainability initiatives acknowledges community-specific challenges and opportunities, enabling FIs to enact meaningful change and contribute to a more inclusive and sustainable future. Recognizing sustainability as a continuous journey reinforces the idea that every step taken by FIs, whether in becoming more sustainable or driving local initiatives, contributes to a collective movement towards a prosperous global society.

# The Principles for Responsible Banking:

## A lighthouse project driving sustainability in the financial industry

In 2018, a consortium of 30 banks under the United Nations Environment Programme Finance Initiative (UNEP FI) launched the Principles for Responsible Banking framework in response to the imperatives of the Paris Climate Agreement and the United Nations' Sustainable Development Goals (SDGs).[3] This initiative aims to align banking strategies with global sustainability goals, addressing climate action and broader sustainable development objectives. The framework represents a collective effort to acknowledge the financial sector's pivotal role in global challenges, providing a guiding path towards responsible and ethical financial practices essential for shaping a sustainable and resilient future.


After an extensive six-month global public consultation, an additional 100 financial organizations joined forces, leading to the official signing and launch of the Principles for Responsible Banking (PRB) on September 22, 2019, coinciding with the UN General Assembly in New York. This milestone event marked a collective commitment by banks, financial institutions, and stakeholders worldwide to embrace the PRB's principles. The PRB invites global participation from both financial entities and stakeholders, encouraging signatories to undergo a structured three-step implementation process aimed at embedding responsible banking practices into their core operations. Facilitated by the United Nations Environment Programme Finance Initiative (UNEP FI), the commitment to biennial reporting ensures transparency, accountability, and shared learning among signatories, fostering a community dedicated to responsible banking principles and driving positive change in the global financial landscape.

> "The UN Principles for Responsible Banking are a guide for the global banking industry to respond to, drive and benefit from a sustainable-development economy. They create the accountability that can realize responsibility and the ambition that can drive action. They will enable banks to align their strategies with the sustainable development goals and the Paris Agreement on Climate Change. When a bank aligns its business with these goals and the goals of society, transformational change can take place."

—**António Guterres**, UN Secretary General[4]

## A timeline of the UN's role in driving global sustainability efforts

**2015**: The UN General Assembly sets the 17 global Sustainable Development Goals, with the goal of achieving them all by 2030.

**2016**: The Paris Agreement is adopted, one of the most high-profile results of the formation of the SDGs.

2017

2018

**2019**: Through a collaboration between the United Nations Environment Programme Finance Initiative and 30 founding banks, the Principles for Responsible Banking are launched, signed by 130 banks from 49 countries.

**2020**: The efforts of the financial industry and the group of signatories continue to increase. By December 2020, 330 banks in 58 countries had signed up to the PRB worldwide.

**2022**: Cop 27 - Provision of a fund of at least $4 to 6 billion/year involving governments, central banks, commercial banks, institutional investors and other financial players[5]

**2023**: UNEP FI – The first progress report on the Financial Health and Inclusion Commitment[6]

**Puleng Ndjwili-Potele**
United Nations Environment Programme Finance Initiative

> "While banks can't wait for enabling legislation that can take years to come to fruition, they can seek out partnerships that can help them accelerate their ability to respond to societal needs. And that is critical to success. For, as we saw with the pandemic, companies that were unable (or unprepared) to meet the needs of their customers and consumers were faced with unprecedented difficulties. This period has raised the level of debate about sustainability within every bank around the world. I'm encouraged by the solutions I've seen our member banks come up with thus far, and I hope we see more banks sign up to the Principles for Responsible Banking and contribute to building sustainable economies"[7]

## Six Guiding Principles Make Up the PRB

The Principles for Responsible Banking (PRB) are designed inclusively, inviting any bank committed to sustainability to become signatories, enabling them to align targets and ambitions with their unique contexts. By signing onto the PRBs, banks pledge to uphold the articulated aspirations, using the principles as a flexible framework to navigate their journey towards responsible banking practices. Each principle provides a roadmap for integrating sustainability into operations, emphasizing the dynamic and context-dependent nature of the commitment. This intentional flexibility, combined with the robust framework of the PRBs, highlights their scalability and adaptability across diverse banking institutions, serving as a unifying force in fostering a sustainable and ethical financial future. Through this commitment, the PRBs catalyze transformative change within the global banking industry, transcending mere endorsement to become a driving force for collective action towards responsible banking. (The following content is sourced directly from the PRB's "Guidance Document" that can be found **here**.[8])

PRINCIPLE 1:
**ALIGNMENT**

We align our business strategy with international frameworks like the SDGs and the Paris Climate Agreement, reflecting our commitment to corporate responsibility and sustainability. This approach ensures we contribute to global efforts to combat climate change and promote social and economic development in diverse communities.

PRINCIPLE 2:
**IMPACT & TARGET SETTING**

Our commitment is to enhance positive impacts while mitigating adverse effects on people and the environment, achieved through clear targets and continuous improvement, reflecting our proactive stance towards accountability, transparency, and responsible corporate stewardship.

PRINCIPLE 3:
**CLIENTS & CUSTOMERS**

Our steadfast commitment involves responsibly collaborating with clients and customers to promote sustainable practices, fostering mutual growth and prioritizing shared benefits for present and future generations through strategic partnerships and inclusive economic activities.

PRINCIPLE 4:
**STAKEHOLDERS**

Our commitment involves proactively consulting, engaging, and partnering with stakeholders to align seamlessly with societal aspirations, ensuring transparency, responsiveness, and collaboration as integral components of our approach towards achieving shared goals and fostering positive societal change.

PRINCIPLE 5:
**GOVERNANCE & CULTURE**

Our dedication to the Principles for Responsible Banking is ingrained in our organizational ethos, reflected through robust governance mechanisms and a pervasive culture fostering accountability, transparency, and continuous improvement in our commitment to sustainable and ethical banking practices.

PRINCIPLE 6:
**TRANSPARENCY & ACCOUNTABILITY**

Our commitment to the Principles for Responsible Banking entails systematic and ongoing reviews to ensure transparency, foster accountability, and drive continuous improvement in alignment with societal goals, communicated openly to stakeholders to build trust and contribute to a culture of responsible and sustainable banking.

**324**
banks globally

**79**
countries across 6 continents

**US $89.4 tr**
in assets

~ 50% of global banking assets

# Why the banking sector?

**Banks play a key role in society.**

The pivotal role of the banking sector in shaping the trajectory of development is underscored by the fact that more than 90% of financing in developing countries and over two-thirds globally is provided by FIs.[9] This substantial financial influence places FIs in a unique position to mold the future of entire regions through the selection of projects they choose to fund.

An exemplary model of impactful financial solutions is demonstrated by initiatives like BNP Paribas' "sustainability-linked loan."[10] This innovative approach ties the interest rate to the degree of sustainability policies incorporated into a client's daily business operations. By aligning financial incentives with sustainable practices, FIs can effectively influence the behavior of their customers, fostering a culture of responsible business conduct. FIs transcend the perception of being mere faceless lenders of cash; they are dynamic entities, whether large or small, wielding a significant influence on society, individuals, and the planet by virtue of their operational footprint. The impact they exert extends beyond the financial transactions they facilitate; it encompasses the entirety of their operations, from physical storefronts and corporate buildings to ATM fleets and cash-cycle processes. As integral players in the economic landscape, banks possess the agency to shape their environmental impact, and whether this influence leans towards the negative or positive spectrum is contingent on the choices and strategies each organization adopts.

# Three compelling reasons to become a more sustainable FI

**The imperative to embrace sustainability within the financial industry has become increasingly apparent, driven by a confluence of factors that not only align with ethical considerations but also present unprecedented opportunities for growth. As the financial sector navigates this transformative landscape, three compelling reasons emerge, urging banks to elevate sustainability to a paramount position in their strategic priorities.**

1. **Alignment with Shifting Consumer Values:**
   The contemporary landscape of consumer behavior is undergoing a profound transformation, marked by a discernible shift towards values that prioritize sustainability, social responsibility, and ethical considerations. FIs find themselves at the nexus of this evolving paradigm, where consumers are increasingly scrutinizing the ethical dimensions of their financial engagements. This presents a compelling rationale for banks to align themselves with these shifting consumer values, recognizing the strategic imperative of meeting the expectations of an ever-conscious and socially aware clientele.

2. **Mitigating Risks and Enhancing Resilience:**
   The financial industry operates within a complex and dynamic global landscape, facing an array of (ESG) risks that have the potential to impact its stability and long-term viability. In recognizing the imperative to become more sustainable, (FIs) embark on a strategic journey that extends beyond ethical considerations to encompass risk mitigation and resilience-building measures.

3. **Unlocking New Avenues for Growth and Innovation:**
   Embracing sustainability in the financial sector not only upholds ethical standards but also fuels innovation and economic growth. By developing innovative financial products and services, banks cater to emerging markets and consumer needs, while actively contributing to the global transition to a low-carbon economy. Proactively engaging in sustainability positions financial institutions at the forefront of a transformative landscape, driving innovation and creating new business opportunities. A McKinsey study[11] shows that products with several types of ESG claims have grown approximately twice as fast as others. Companies do not need to choose between ESG and growth. They can achieve both simultaneously by employing a thoughtful, fact-based and consumer-focused ESG strategy. The overall result could be not only a healthier financial performance, but also a healthier planet. The UNEP FI estimates that working to solve the Sustainable Development Goals "could unlock USD $12 trillion in business savings and revenue annually and create 380 million more jobs by 2030." Consider the potential benefits within your organization.

In conclusion, prioritizing sustainability in the financial industry transcends compliance, becoming a strategic driver of growth, innovation, and resilience. By fostering an environment for innovative financial products, fostering collaborations, and aligning with government priorities, financial institutions position themselves as proactive participants in shaping a sustainable and prosperous future, meeting shifting consumer values and unlocking new avenues for success.

**Octavio Marquez**
President and CEO, Diebold Nixdorf

"Commitment to sustainable development is a crucial issue for the planet. Its integration into corporate strategy has never been as important as it is today, and the financial sector plays an essential role in this topic. As a responsible company, the shift we have embarked upon requires strong, visible, and committed action over the long term. These range from social responsibility and inclusion to the ecological mindset behind our solutions and much more. All the innovations we are implementing today would not be possible without considering our role in the preservation of our planet. Through our united efforts in positively impacting the well-being of society, we possess the power to shape a future where the banking sector becomes a force for creating a better world, empowering individuals worldwide to realize their aspirations."

Crafting a bespoke sustainability plan for your organization is a strategic imperative, acknowledging the distinctive nature of your institution amidst the broader financial landscape.

While the global financial industry shares common challenges, the spectrum of priorities within each organization is inherently diverse. Recognizing this diversity is paramount to developing a sustainability framework that aligns seamlessly with your institution's unique values, operational dynamics, and strategic objectives.

### Africa

In Africa, strategic initiatives are underway to leverage and expand the utilization of the mobile channel, enhance financial literacy, and foster the growth of microbusiness enterprises. The multifaceted approach encompasses:

- Capitalizing on the Mobile Channel: Emphasizing the strategic significance of the mobile channel, initiatives are directed towards optimizing its use as a pivotal tool for financial inclusion. The goal is to harness the ubiquity of mobile technology to broaden access to financial services, allowing for greater inclusivity and participation in the formal financial system.
- Driving Financial Literacy: Recognizing the pivotal role of financial literacy in fostering economic empowerment, initiatives are underway to drive comprehensive financial education. The aim is to equip individuals with the knowledge and skills necessary to make informed financial decisions, manage resources effectively, and navigate the complexities of the financial landscape.
- Promoting Microbusiness: Acknowledging the critical role of microbusinesses in the economic fabric of the region, efforts are focused on promoting and supporting the growth of these enterprises. This involves targeted initiatives that provide access to finance, mentorship, and capacity-building programs for microbusiness owners.

## Asia

In Asia, a strategic focus encompasses driving awareness of the imperative for sustainable business practices, advancing financial literacy, and promoting the financial inclusion of unbanked populations in both urban and rural areas. The multifaceted approach includes:

- Driving Awareness of Sustainable Business: A concerted effort is underway to raise awareness regarding the necessity for sustainable business practices across diverse sectors. This involves advocating for environmentally and socially responsible approaches to business operations, encouraging organizations to adopt sustainable models, and fostering a heightened consciousness of the long-term impact of business activities.
- Advancing Financial Literacy: Recognizing the pivotal role of financial literacy in individual empowerment and economic development, initiatives are focused on advancing financial education across diverse demographics. The goal is to equip individuals with the knowledge and skills required to make informed financial decisions, manage resources effectively, and navigate the complexities of the financial landscape.
- Promoting Financial Inclusion of the Unbanked: Addressing the dual challenges of urban and rural financial inclusion, concerted efforts are directed towards bringing the unbanked population into the formal financial fold. Initiatives target both urban and rural areas, leveraging innovative solutions to overcome barriers to access.

## Europe

In Europe, strategic initiatives are being implemented to actively support the transition to a low-carbon economy. Concurrently, efforts are underway to establish an optimal mix of channels that cater to a diverse range of consumers, ensuring inclusivity and accessibility. These initiatives, driven by a commitment to sustainability and adaptability, encapsulate a multifaceted approach:

- Supporting the Transition to a Low-Carbon Economy: Acknowledging the critical importance of environmental sustainability, a robust framework is being developed to support and facilitate the transition to a low-carbon economy. This involves strategic investments, policy advocacy, and collaborative efforts to align financial practices with environmentally responsible principles.
- Enabling an Inclusive Mix of Channels: Recognizing the diverse needs and preferences of consumers, there is a concerted effort to establish the right mix of channels that ensures widespread accessibility to financial services. This encompasses digital platforms, traditional branches, and innovative solutions that cater to a broad spectrum of consumers.
- Addressing the Evolving Branch Landscape: In response to the changing dynamics of consumer behavior, there is a proactive stance towards addressing the shifting branch landscape. This involves strategic considerations such as optimizing branch networks, reimagining physical spaces to enhance customer experiences, and embracing technology to augment the capabilities of traditional branches.

## Latin America

In Latin America, strategic initiatives are underway to carefully balance economic development with conservation efforts, promote the financial inclusion of unbanked populations in both urban and rural areas, and strategically capitalize on the expansion of mobile channels. The comprehensive strategy includes:

- Balancing Economic Development with Conservation Efforts: Acknowledging the delicate equilibrium between economic growth and environmental preservation, there is a concerted effort to navigate a path that harmonizes economic development with conservation initiatives. This involves implementing policies and practices that foster sustainable economic growth while actively addressing environmental concerns.
- Promoting Financial Inclusion of the Unbanked: Addressing the dual challenges of financial exclusion in urban and rural areas, initiatives are focused on promoting the financial inclusion of unbanked populations. Tailored strategies are implemented to extend financial services to those traditionally excluded, with a focus on reducing inequalities and fostering economic participation.
- Capitalizing on and Expanding Use of the Mobile Channel: In recognition of the transformative potential of mobile technology, there is a strategic emphasis on capitalizing on and expanding the use of mobile channels in the financial sector. This involves leveraging mobile platforms to broaden access to financial services, enhance convenience, and promote financial literacy.

## North America

In North America, strategic imperatives are being pursued to address the dynamic changes in the branch landscape, actively support the transition to a low-carbon economy and promote the growth of small and medium businesses (SMBs). The multifaceted approach includes:

- Addressing the Shifting Branch Landscape: In response to evolving consumer behaviors and technological advancements, there is a strategic focus on addressing the shifting branch landscape. This involves reevaluating the role of physical branches, optimizing their distribution, and incorporating innovative technologies to enhance customer experiences.
- Supporting the Transition to a Low-Carbon Economy: Recognizing the imperative for environmental sustainability, a proactive strategy is in place to support the transition to a low-carbon economy. This encompasses investments in sustainable practices, the promotion of green financing, and advocacy for environmentally responsible business operations.
- Promoting Small and Medium Businesses (SMBs): Acknowledging the pivotal role of small and medium businesses (SMBs) in the economic fabric, there is a concerted effort to actively promote their growth. Initiatives include tailored financial solutions, access to capital, and strategic support to foster the development and resilience of SMBs.

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Within the backdrop of regional variations and a strategic financing focus on promoting a "green economy" over a " coal economy," there exist two universally significant areas primed for enhancement. In this guide, our attention will be directed towards these two key action areas for improvement: Financial Inclusion and Advancing Environmental Sustainability. These pivotal domains not only transcend regional disparities but also represent critical avenues where concerted efforts can yield widespread positive impacts.

## Action Area No. 1: Financial Inclusion

## Action Area No. 2: Advancing Environmental Sustainability

**Furthermore, we will discuss innovative ideas and practical tools designed to assist you in translating these opportunities into tangible initiatives within your organization.**

## Partnering with Diebold Nixdorf

**Diebold Nixdorf is a comprehensive long-term partner to FIs of all sizes around the globe.** Drawing upon our expertise, we specialize in guiding FIs through the development of comprehensive roadmaps and the implementation of consumer-centric solutions. In response to the evolving landscape where FIs are committed to delivering equitable access to financial products and services in a responsible and sustainable manner, our consultancy extends beyond the immediate horizon.

We excel in assisting FIs to identify immediate opportunities that align with their goals, all while fostering a strategic roadmap for sustainability initiatives. This includes a focus on promoting financial inclusion, not only in the short term but also with a forward-looking perspective that spans the medium and long term.

Our approach is rooted in a commitment to aiding FIs in navigating the complexities of the financial landscape, ensuring that their initiatives are not only responsive to current demands but also positioned to meet the evolving needs of consumers and businesses. By engaging with us, FIs gain a partner dedicated to supporting their journey toward responsible and sustainable practices, driving positive impacts in both the immediate and future trajectories of their operations.

**Our solutions are built to connect and built for more. We support financial inclusion efforts in several key areas:**

### Driving Financial Access: Virtual Branches Redefine Rural Banking

Instituting resilient self-service solutions that function as virtual branches becomes imperative, particularly in rural areas where physical branches have undergone closure or were never established initially. This strategic approach involves the deployment of technologically advanced self-service solutions that not only compensate for the absence of traditional branches but also enhance accessibility and convenience for individuals in remote regions.

By leveraging these robust self-service solutions, financial institutions can bridge the gap in financial access and offer a comprehensive suite of banking services to populations in rural areas. These solutions serve as virtual extensions of traditional branches, providing a range of functionalities from basic transactions to more sophisticated financial services.

The implementation of such self-service solutions requires a meticulous strategy that considers the unique needs and challenges of rural communities. This entails deploying user-friendly interfaces, ensuring robust connectivity, and incorporating features that cater to the specific financial requirements of individuals residing in these areas.

Moreover, the deployment of these solutions contributes not only to the financial inclusion of rural populations but also aligns with broader initiatives aimed at fostering digital transformation in the banking sector. This strategic move not only addresses the closure of physical branches but positions financial institutions as innovators in meeting the diverse needs of communities, irrespective of their geographical location.

In essence, the implementation of these robust self-service solutions represents a proactive step by financial institutions to adapt to changing banking landscapes, ensuring that essential services are extended to rural areas in a manner that is efficient, technologically advanced, and aligns with the evolving expectations of consumers in today's digital age.

### Innovative Banking Experiences: Embracing Assisted Self-Service and Video Solutions

Strategically enhancing banking services involves the integration of extended functionalities and cutting-edge video solutions, including video teller functionality, assisted self-service, and round-the-clock live support. This comprehensive approach not only amplifies the scope of services offered by financial institutions but also embraces technological innovations to cater to the diverse needs of modern consumers.

The incorporation of video teller functionality allows for a more personalized and interactive banking experience. Clients can engage with live tellers remotely, facilitating real-time assistance for transactions, queries, and personalized financial guidance. This not only mirrors the in-branch experience but also provides the convenience of accessing these services from the comfort of one's location.

Assisted self-service represents another dimension of this integrated approach, empowering customers to conduct transactions independently while having the option to seek assistance when needed. This hybrid model ensures a seamless and user-friendly interface, combining the efficiency of self-service with the added support of live assistance.

Furthermore, the provision of 24/7 live support is instrumental in ensuring continuous and responsive assistance for customers at any time. This commitment to round-the-clock availability not only caters to diverse time zones but also aligns with the expectations of today's interconnected and dynamic banking landscape.

In essence, the integration of extended services and video solutions signifies a forward-thinking approach by financial institutions, embracing technology to elevate customer experiences. This multifaceted strategy not only reflects a commitment to customer-centricity but also positions these institutions at the forefront of innovation, meeting the evolving demands of the digital era while ensuring accessibility, convenience, and personalized support for their clientele.

### Beyond Traditional Banking: Enlocking Convenience and Inclusivity with Innovative and Secure Solutions

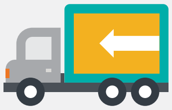
Incorporating cutting-edge digital kiosks and advanced ATMs represents a pivotal step in seamlessly bridging the digital and physical realms of banking. These innovative solutions are characterized by multi-factor identification methods, eliminating the necessity for a traditional bank card or established account. This transformative approach not only enhances the accessibility of financial services but also exemplifies a commitment to technological evolution within the banking sector.

Digital kiosks, equipped with state-of-the-art features, serve as interactive hubs that facilitate a range of financial transactions. By leveraging sophisticated multi-factor identification methods, these kiosks ensure secure and convenient access for users without the dependency on traditional banking credentials. This approach aligns with the evolving preferences of consumers who seek streamlined yet secure interactions in the digital landscape.

Simultaneously, the deployment of innovative ATMs extends beyond conventional cash withdrawal and deposit functions. These ATMs incorporate multi-factor identification techniques, thereby eliminating the need for a physical bank card or pre-existing account. This not only streamlines the transaction process but also caters to a broader demographic, fostering financial inclusion by removing barriers traditionally associated with access to banking services.

The integration of such digital kiosks and advanced ATMs underscores a forward-thinking strategy, positioning financial institutions as pioneers in adapting to the changing dynamics of consumer behavior and technological advancements. This transformative approach not only amplifies the reach of banking services but also enhances the overall customer experience, reflecting a commitment to innovation, security, and inclusivity in the evolving landscape of modern banking.

### Bringing Financial Services to Remote Communities with Mobile Banking



Implementing mobile self-service solutions introduces a dynamic and versatile dimension to banking services, enabling their transportation from one remote location to another through innovative means such as trucks or boats. This strategic approach not only extends the reach of financial services but also adapts to the unique challenges presented by diverse and geographically dispersed populations.

The concept of traveling self-service solutions involves the deployment of mobile units equipped with comprehensive banking functionalities. These units can be transported to remote and underserved areas, addressing the financial needs of communities that may lack access to traditional brick-and-mortar branches.

The mobility aspect, facilitated by trucks or boats, allows financial institutions to navigate challenging terrains and reach locations where the establishment of permanent branches might be impractical. This agile and adaptable approach ensures that banking services are brought directly to the doorstep of communities, fostering financial inclusion in areas that may otherwise be overlooked.

Furthermore, these mobile self-service solutions are designed to offer a spectrum of banking transactions, including deposits, withdrawals, and basic account management. The incorporation of advanced security measures ensures the integrity of financial transactions, providing users with a secure and reliable banking experience.

In essence, the implementation of traveling self-service solutions represents a strategic response to the evolving demands of modern banking. This approach not only reflects a commitment to accessibility but also positions financial institutions as catalysts for positive change in addressing the financial needs of diverse and remote populations, reinforcing the principles of financial inclusion and adaptability in the contemporary banking landscape.

### Comprehensive Advisory for Branch Modernization and Digitization

Engaging in advisory support for your branch modernization endeavors, encompassing comprehensive digitization initiatives, is a strategic imperative to navigate the evolving landscape of financial services. This tailored approach involves expert guidance and support throughout the entire process of modernizing your branch infrastructure, ensuring a seamless integration of digital advancements to enhance operational efficiency and customer experiences.

The advisory support begins with a meticulous assessment of your current branch ecosystem, identifying areas for improvement, and formulating a customized roadmap for modernization. This strategic planning phase encompasses a thorough understanding of your institution's unique objectives, challenges, and customer expectations, laying the foundation for a targeted and effective modernization strategy.

Throughout the digitization process, our advisory support extends to the selection and implementation of cutting-edge technologies that align with your institution's goals. This includes but is not limited to digital banking platforms, customer relationship management (CRM) systems, and advanced analytics tools. The aim is to optimize your branch's digital capabilities, empowering it to offer a diverse range of services in a user-friendly and technologically advanced manner.

Moreover, our advisory services provide ongoing support and guidance to ensure the seamless integration of digital solutions into your branch operations. This involves training your staff on the latest technologies, monitoring the performance of implemented systems, and continuously adapting strategies to align with emerging trends and industry best practices.

By leveraging our advisory support for branch modernization and digitization, your financial institution can not only stay ahead of the technological curve but also cultivate an environment that fosters innovation, efficiency, and a superior customer experience. This strategic partnership aims to position your institution at the forefront of the digital banking revolution, ensuring sustained growth and relevance in the ever-evolving financial landscape.

Chapter Two

# Financial Inclusion: Pairing the Digital and Physical to Make a Difference and Drive Growth

Financial inclusion is a pervasive theme cutting across nearly every region, yet the underlying issues exhibit considerable diversity. While "unbanked households" might be the immediate association, authentic financial inclusion extends beyond this, encompassing various segments of the population. This includes individuals with disabilities, those possessing limited knowledge or access to digital financial services, residents in rural areas where traditional branches have never existed, micro-SMBs, and women- and minority-owned SMBs. In this chapter, we will adopt a holistic perspective to comprehensively explore this multifaceted topic.

## The picture looks very different from region to region

As an illustrative example, within developed countries across Europe and North America, the presence of local banks has historically been a beneficial constant, extending even to rural communities. However, a notable shift has transpired over the past decade, marked by the closure of these local branches, a phenomenon primarily attributed to considerations of economic viability. Furthermore, this trend is anticipated to persist, raising concerns about the enduring impact on communities.

The closure of these local branches, once integral to community life, generates a significant disruption. The repercussions are profound, as the sudden absence of these financial institutions renders many communities underbanked or, in some instances, completely unbanked. This transformation not only alters the financial landscape but also engenders broader socio-economic consequences, affecting residents' access to essential banking services, financial education, and community development initiatives.

In the subsequent sections, we will explore potential strategies and considerations to navigate these challenges effectively, with a view toward fostering sustainable financial ecosystems in the face of evolving economic dynamics.

In contrast, underserved communities in developing countries, exemplified by nations like India, face a distinct challenge as they never had the privilege of a local bank branch from the outset. Compounded by a deficiency in infrastructure, these communities grapple with the absence of accessible banking services. While government initiatives have made strides in augmenting the number of accounts nationwide, a disconcerting reality persists: the prevalence of low transactional activity within these accounts.

The absence of a local banking infrastructure in these developing regions underscores a significant impediment to financial inclusion. The dearth of accessible banking services hinders residents from participating fully in formal financial systems, limiting their ability to engage in essential transactions, savings, and investments.

In the subsequent sections, we will delve into the nuanced aspects of this issue, examining potential strategies, innovative solutions, and collaborative efforts that can bridge the gap between account ownership and active financial participation in underserved communities. By doing so, we aim to contribute to a more inclusive and dynamic financial landscape that empowers individuals in developing countries to fully leverage the benefits of formal banking services.

Certain nations, including Zimbabwe and Colombia, are experiencing notable success by adopting a strategy of leapfrogging traditional financial channels. In these contexts, the transition involves bypassing cash-based economies entirely, embracing mobile technology as the primary means to access financial services. Consequently, the imperative to enable omnichannel consumer journeys becomes indispensable, recognizing the diversified channels through which consumers interact with financial services.

Conversely, developed countries, exemplified by the United Kingdom, are witnessing an emerging focus on addressing the challenges associated with digital transformation. A key aspect of this focus involves ensuring that vulnerable groups, such as the elderly and disabled individuals, are not left behind in the rapid shift toward digital technology.

In the subsequent sections, we will delve deeper into the contrasting dynamics of digital financial adoption in different global contexts. By exploring the success stories of leapfrogging in certain nations and the challenges faced by vulnerable groups in developed countries, we aim to provide insights that contribute to the development of inclusive and globally responsive financial ecosystems.

Within the realm of the small-business community, a resonating challenge, particularly voiced in regions such as Africa and Latin America, revolves around the imperative to secure funding for micro-businesses. The significance of funding micro-businesses lies in their potential to catalyze transformative change across rural communities. It is noteworthy that the challenges associated with financing small businesses are not exclusive to developing nations; a parallel narrative unfolds in Europe, where smaller enterprises confront hurdles when attempting to secure financial support. This issue is compounded by a prevailing sentiment among smaller enterprises that larger companies receive preferential treatment, further exacerbating the challenges faced by the small-business sector.

In regions like Africa and Latin America, micro-businesses emerge as pivotal drivers of positive change within their rural landscapes. The funding needs of these enterprises, while crucial, often encounter obstacles that hinder their ability to access necessary financial resources. Overcoming these challenges is essential for fostering economic development, creating employment opportunities, and enhancing overall community well-being.

In the subsequent sections, we will delve into the nuanced dynamics of funding challenges encountered by micro-businesses in Africa and Latin America, juxtaposed with the analogous struggles faced by smaller enterprises in Europe. By examining these distinct yet interconnected narratives, we aim to contribute to a comprehensive understanding of the global landscape for small-business financing, identifying potential solutions and strategies to promote equitable access to financial resources across diverse economic contexts.

## A rising tide lifts all boats

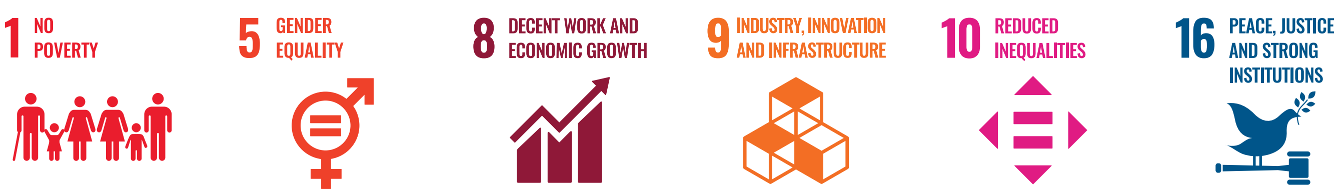
Globally, an estimated 1.4 billion individuals fall into the category of the "unbanked," signifying a lack of any affiliation with a financial institution.[12] Expanding the purview to encompass under-banked individuals, characterized by limited interactions with banking services, amplifies the magnitude of this demographic segment. The combined prevalence of unbanked and under-banked populations underscores the considerable scale of individuals who face challenges in accessing or fully engaging with formal financial systems. This substantial segment highlights the critical importance of initiatives and strategies aimed at enhancing financial inclusion on a global scale.

As individuals transition into the "banked" category, a cascade of positive changes unfolds, leaving a profound impact not only on the individual and their immediate family but resonating across villages, communities, and society as a whole. The acquisition of enhanced financial literacy becomes a pivotal driver, empowering individuals to discover avenues for savings, fostering active participation in societal affairs, and generating opportunities for personal advancement.

The consequential effects of this progression extend beyond the realm of personal finance, radiating into broader social dynamics. As financial literacy increases, individuals become adept at navigating economic landscapes, making informed financial decisions, and contributing to the overall economic vibrancy of their communities. This newfound financial acumen lays the foundation for more robust financial planning, risk management, and strategic investment, thereby fueling economic growth at both the micro and macro levels.

In exploring the multifaceted impacts of transitioning to the "banked" status, it becomes evident that the journey towards financial inclusion is not only a personal achievement but a catalyst for broader societal development. The interplay of financial literacy, economic empowerment, and social engagement paints a comprehensive picture of the transformative power embedded in the trajectory from unbanked to banked individuals.

## Choosing to take steps to advance financial inclusion helps your organization support several Sustainable Development Goals:



# How To Make Financial Inclusion One of Your Sustainability Targets: Five Action Plans

**Action Plan #1:**

Address access and inclusion for differently-abled populations.

**Action Plan #2:**

Strengthen your mix of physical and digital channels.

**Action Plan #3:**

Educate consumers through outreach and access.

**Action Plan #4:**

Ensure financial access in underbanked areas.

**Action Plan #5:**

Think differently about SMBs, micro-SMBs, women- and minority-owned SMBs.

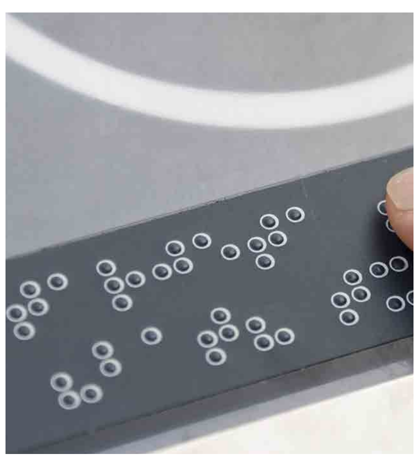
## **Action Plan #1:**
## Address access and inclusion for differently-abled populations

According to the World Health Organization (WHO), it is estimated that approximately 16% of the global population experiences some form of disability.[13] In recognizing the diversity and prevalence of disabilities, the imperative to enhance accessibility becomes paramount across various channels, ranging from mobile applications to ATM networks. Beyond merely meeting regional compliance requirements, optimizing these channels presents distinctive opportunities to elevate access and availability for individuals with disabilities. A commitment to inclusivity not only aligns with global accessibility standards but also underscores a broader dedication to creating environments that cater to the diverse needs of users, fostering a more inclusive and equitable experience across the entirety of your network.

Is your digital team actively attending to nuanced design elements, such as font size and color contrasts, during the development of new content? Acknowledging and incorporating these subtleties into the design process not only adheres to principles of accessibility but also ensures that the visual presentation meets the highest standards of usability. Proactively addressing design nuances contributes to a more inclusive user experience, accommodating a diverse audience and enhancing overall satisfaction with your digital offerings. By prioritizing these details, your digital team demonstrates a commitment to accessibility and user-centric design principles, fostering a positive and accessible environment for all users. "Accessibility should be a key consideration in the early stages rather than a late-stage add-on. But no matter where you start, evaluate elements like font choice, color selection, content presentation, and visual hierarchy to promote inclusivity." says Ibrahim Alcali in DevPro Journal.[14]

Embarking on a spectrum of solutions, ranging from nuanced adjustments to comprehensive enhancements, offers a myriad of opportunities to make your offerings more inclusive across diverse segments of the population. Progressing from minor interventions to more extensive measures, there exists a continuum of strategies to broaden the accessibility of your services.

Particularly within the self-service channel, a noteworthy consideration is the implementation of BYOD (bring your own device) capabilities. Enabling such functionality not only aligns with contemporary trends but also serves as a crucial step toward ensuring that individuals who are blind or visually impaired can navigate and engage with your services seamlessly and intuitively. This proactive approach underscores a commitment to fostering an inclusive digital environment, where users of varied abilities can partake in self-service interactions with ease and efficiency. As a result, these thoughtful initiatives contribute to an overarching strategy aimed at enhancing accessibility and creating a positive user experience for a wider audience.



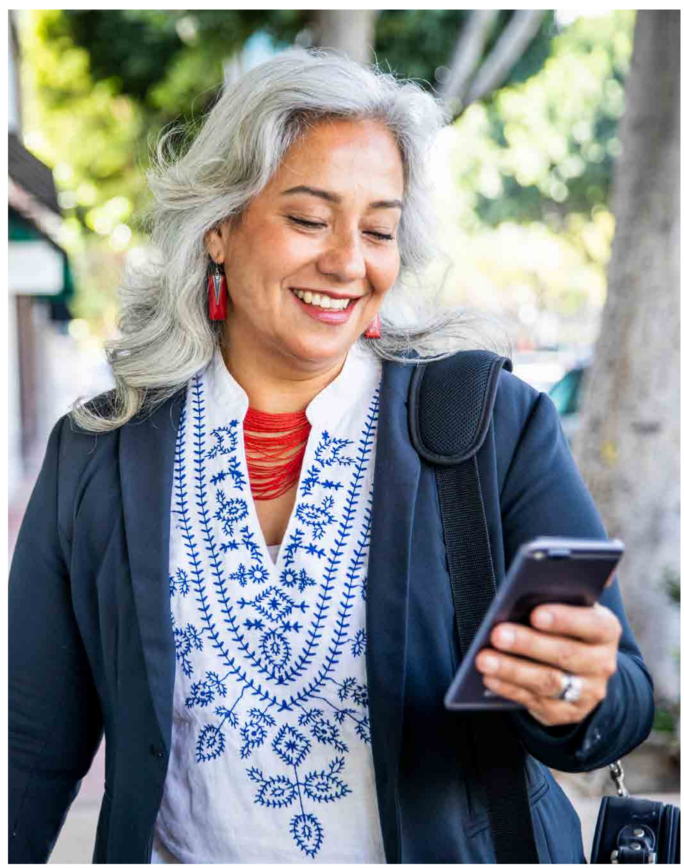
## **Action Plan #2:**
## Strengthen your mix of physical and digital channels

According to the World Health Organization (WHO), a notable demographic shift is anticipated, with projections indicating that by 2030, 1 in 6 individuals globally will be aged 60 years or over. This demographic transformation underscores a substantial increase from 1 billion in 2020 to an estimated 1.4 billion individuals in the 60 and over age group.[15] Looking further ahead, the world's population of individuals aged 60 years and older is anticipated to double by 2050, reaching a staggering 2.1 billion. Furthermore, within this demographic, the number of persons aged 80 years or older is expected to triple between 2020 and 2050, reaching an estimated 426 million.

This demographic evolution presents a unique set of challenges, particularly concerning the digital landscape. Many individuals within this aging demographic, not considered "digital natives," may not feel entirely comfortable exclusively utilizing digital channels for their everyday banking needs. Simultaneously, banks are compelled to develop innovative services to meet the evolving expectations of the younger generation.

In navigating this dynamic landscape, self-service and mobility emerge as pivotal elements to cater to the diverse needs of different age groups. The younger generation often demands seamless and mobile-centric banking experiences, while the older demographic seeks more traditional and advisory-focused services. Striking a balance between these contrasting needs becomes imperative for banks seeking to differentiate themselves in an increasingly competitive landscape.

**Explore innovative approaches to seamlessly intertwine your physical and digital channels, fostering an environment that is not only technologically advanced but also comfortably accommodates consumers of all age groups.** By forging strategic connections between these channels, you can cultivate a holistic and inclusive space that caters to the diverse preferences and technological comfort levels of consumers, irrespective of their age. This proactive integration not only enhances the overall customer experience but also positions your organization as forward-thinking and adaptable in meeting the evolving expectations of a diverse clientele. As you embark on this endeavor, consider leveraging technological advancements and user-centric design principles to ensure a harmonious convergence of physical and digital touchpoints, creating a unified and user-friendly environment that resonates with consumers across generations.



Sustainability in Action

# Connecting Digital and Physical Services at Capitec

Capitec's overarching mission is grounded in the commitment to simplify, bring transparency, and foster inclusivity in banking for all. As the largest digital bank in South Africa, Capitec strategically extends access to its banking services through multiple channels, offering a comprehensive and inclusive approach. While the bank provides online banking services accessible via web browsers and a dedicated smartphone app, it does not limit its offerings exclusively to digital platforms. Notably, Capitec recognizes the continued significance of its omnichannel strategy, acknowledging that a substantial portion of its customer base actively engages with its physical branches.[16]

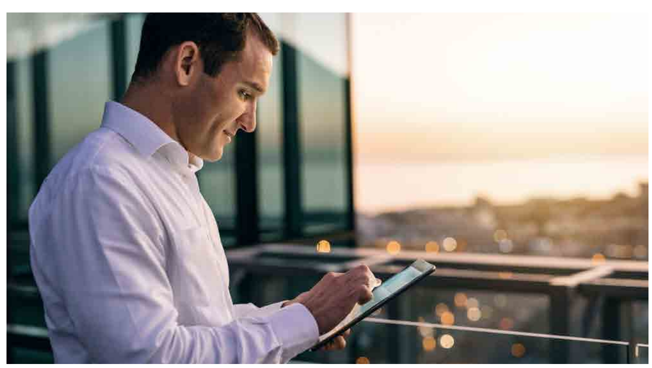
This deliberate omnichannel approach is a testament to Capitec's dedication to meeting customers where they are, understanding that preferences for banking interactions vary among its diverse clientele. While embracing digital advancements, Capitec places importance on retaining a physical presence to cater to the needs of customers who still prefer or rely on in-person interactions at branches.

By maintaining a balance between digital innovation and physical accessibility, Capitec positions itself as a bank that not only embraces cutting-edge technology but also values the importance of personalized, face-to-face interactions. This strategic alignment with diverse customer preferences reflects Capitec's commitment to providing a banking experience that is not only technologically advanced but also considerate of the varied needs and comfort levels of its customer base.

Charl Nel, Head of Communications at Capitec, articulates the strategic evolution of Capitec's branches, emphasizing a deliberate shift in format to feature an increased number of workstations and self-service terminals, moving away from traditional cash counters. This transformation positions branches as dynamic spaces transitioning from mere transaction points to comprehensive sales and service centers. A noteworthy aspect of this evolution is the heightened presence of consultants within branches, strategically positioned to assist consumers with specific and individualized banking needs.

As part of Capitec's inclusive strategy, the ATM channel emerges as a crucial pillar, providing widespread access to cash and various financial services through a network of 2,863 ATMs spread across the country. This extensive reach aims to enhance clients' financial well-being and contribute to a redefined banking experience that is not confined to specific locations or timeframes.

The intentional restructuring of branches and the emphasis on the ATM channel align with Capitec's overarching goal of improving clients' financial lives. By fostering a transformed banking experience, Capitec seeks to transcend conventional banking paradigms, offering flexibility and accessibility to clients regardless of their location or the time of engagement. This strategic approach underscores Capitec's commitment to innovation, customer-centricity, and the continuous enhancement of the overall banking experience for every individual within its diverse clientele.



# Action Plan #3:
## Educate consumers through outreach and access.

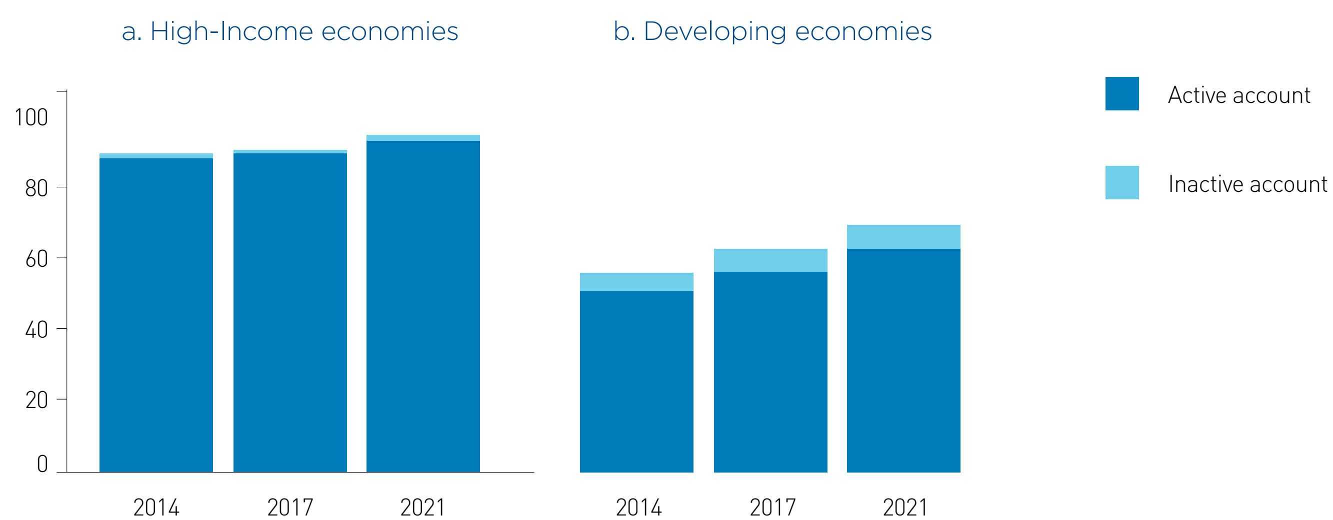
Undoubtedly, education stands as a foundational pillar of financial inclusion; however, the stark reality persists that millions of individuals worldwide grapple with financial illiteracy. The mere act of reaching out to these individuals does not inherently resolve the issue. According to findings from the World Bank, a staggering one in five account owners globally possesses an unused account, with the majority of this disparity concentrated in developing countries.

This disconcerting revelation highlights the intricate challenges associated with financial inclusion efforts. While expanding access to financial services is a crucial step, it does not automatically translate into improved financial literacy and active engagement. The prevalence of unused accounts underscores the nuanced nature of the problem, where factors beyond mere accessibility play pivotal roles in fostering genuine financial inclusion.

By intertwining accessibility and education, the financial inclusion paradigm can evolve beyond mere account ownership statistics. This comprehensive strategy aims to equip individuals with the knowledge and skills necessary to navigate financial landscapes, make informed decisions, and actively participate in the broader economic ecosystem. In doing so, it endeavors to bridge the gap between accessibility and effective utilization, fostering a more inclusive and empowered global financial community.

Globally, one in five account owners has an account that has been inactive[12]

**Adults with an account (%), 2014-2021**




Source: Global Findex Database 2021.

The importance of **financial education** in **shaping the future of generations** to come.

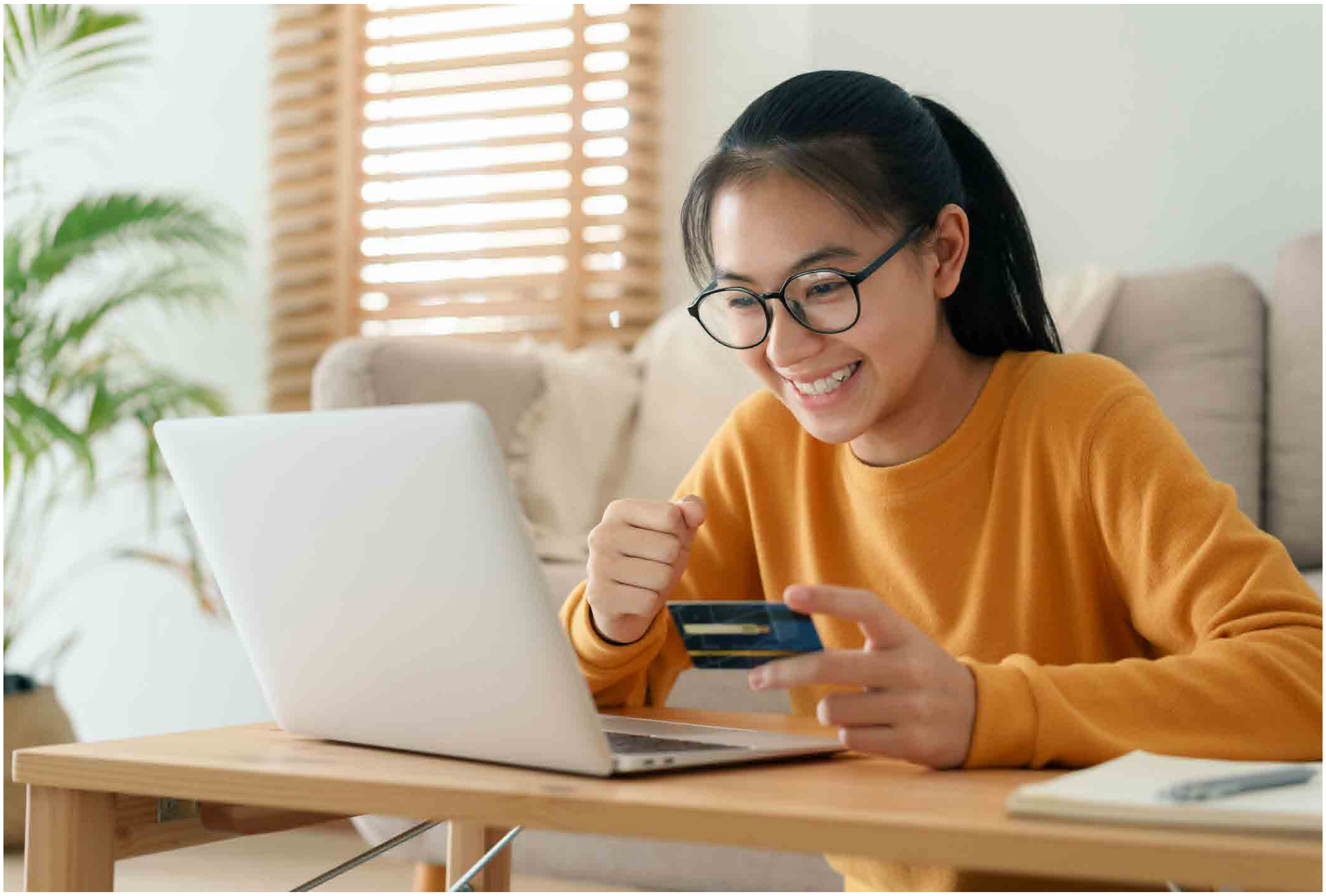
## Sustainability in Action

# Empowering the younger generation to manage money intelligently is vital

With the development of social networks, the younger generation is faced with the challenge of managing money that is sometimes earned quickly and the ever-present temptation to spend their earnings without thinking. "It's not easy to adopt good financial habits and, in the digital age, the younger generation can quickly find themselves in situations that can have a very damaging impact on their future plans," says Richard Watkins, a chartered financial planner at Continuum[17].

JMG and Oxford Federal Credit Union are setting an example and helping young people to do just that.

"Giving the next generation financial literacy is not just a responsibility, but a commitment to their future success. That's why we're committed to equipping students with the tools and knowledge they need to navigate the complexities of financial literacy. Not only are we training them to become better financial decision-makers, we are also cultivating a stronger, more resilient community," said Craig Larrabee, President and CEO of JMG.[18]



Sustainability in Action

# Crédit Agricole Promotes Social Inclusion through Financial Inclusion

Crédit Agricole is actively committed to addressing the financial inclusion needs of groups facing significant challenges, recognizing its pivotal role in promoting overall social inclusion. One such group that stands out in this context is refugees. In collaboration with the United Nations High Commissioner for Refugees (UNHCR) and the Swedish International Development Cooperation Agency (Sida), the Grameen Crédit Agricole Foundation has spearheaded a program specifically designed to enhance the financial inclusion of refugees.

In the year 2022, this collaborative initiative manifested through three microfinance institutions, which allocated €2.5 million in subsidies for technical assistance. The primary objective was to benefit 100,000 refugees and host communities by providing them with essential financial services.[19] These services encompassed not only access to credit and savings but also extended to non-financial opportunities, including crucial aspects such as financial education and business management trainings.

Through such collaborative endeavors, Crédit Agricole, in tandem with key partners, contributes to the broader goal of fostering social and economic inclusion. By tailoring initiatives to the specific needs of vulnerable populations like refugees, the financial institution actively participates in creating pathways for individuals to rebuild their lives, establish financial independence, and integrate more effectively into their host communities. This concerted effort exemplifies a commitment to leveraging financial services as a catalyst for positive social impact and transformation.

## Action Plan #4:
Ensure financial access in underbanked areas.

A global trend of innovative partnerships is emerging, driven by the common goal of extending financial services to underserved rural areas and communities affected by the closure of traditional bank branches. These collaborations represent a strategic approach to addressing the evolving landscape of financial accessibility, particularly in remote regions where challenges persist.

These alliances aim to fill the gaps in financial services, especially in remote or rural areas where access may be limited due to branch closures. The disruptions caused by these closures highlight the need for adaptive and cooperative solutions to maintain financial inclusion for diverse populations. These partnerships reshape the financial services landscape, promoting resilience and adaptability to meet evolving consumer needs through the combined efforts of stakeholders across sectors. They are proactive endeavors that capitalize on collective strengths to reimagine the delivery of financial services, ensuring they reach even the most marginalized communities amidst changing technological and consumer landscapes.

**United Kingdom:** : In the United Kingdom, the departure of the last local banks from communities poses a challenge to financial access. However, two prominent organizations have stepped forward to mitigate the impact and ensure continued financial services for these localities.

The Post Office network in the UK emerges as a pivotal player, effectively serving as a proxy bank by providing individuals with the ability to make cash withdrawals at its counters. This strategic utilization of the extensive Post Office network plays a crucial role in maintaining access to essential financial services for residents in areas affected by the closure of local banks.

Furthermore, LINK, the largest ATM network in the UK, is actively contributing to the preservation of financial access in regions where the disappearance of this service would otherwise be imminent. LINK's commitment to providing free equipment in these areas underscores a proactive approach to sustain the availability of ATMs, ensuring that residents can continue to access cash conveniently.[20]

The collaborative efforts of these two organizations exemplify a responsive and adaptive approach to the evolving financial landscape in local communities. By leveraging existing infrastructure and networks, the Post Office and LINK are instrumental in filling the void left by departing banks, safeguarding financial access for residents and businesses alike.

In the face of changing dynamics in the banking sector, the UK's commitment to innovative solutions and collaborative initiatives demonstrates a dedication to preserving financial inclusivity and accessibility at the community level. These strategic interventions not only address immediate challenges but also contribute to the resilience and adaptability of the financial ecosystem in the evolving landscape of local banking services.

**Germany:** In Germany, confronted with a decline in branch traffic, a strategic response has been employed by Frankfurter Volksbank and Taunus Sparkasse.[21] Rather than opting for the complete removal of branches, these financial institutions have adopted a cooperative model. This innovative approach involves the sharing of operational hours at local branches, effectively optimizing resources and maintaining a physical presence in the community for both brands.

Under this collaborative arrangement, consumers are informed of the operational schedule through clear signage outside the branches, indicating which bank is open on a given day. This transparent communication ensures that customers are well-informed and can access financial services seamlessly, while also minimizing the impact of declining branch traffic on the overall accessibility of banking services.

The cooperative model adopted by Frankfurter Volksbank and Taunus Sparkasse reflects a forward-thinking strategy to adapt to changing consumer behaviors and preferences. By sharing resources and operational hours, both financial institutions can continue to provide essential services to the local community, demonstrating a commitment to sustained accessibility and customer-centric solutions.

This cooperative approach not only addresses the challenges posed by declining branch traffic but also sets an example for collaborative innovation within the banking sector. As the financial landscape undergoes transformations, initiatives like these showcase a proactive response that balances operational efficiency with a commitment to community service, ultimately contributing to the resilience and adaptability of banking services in the region.

**Africa:** In Africa, the introduction of M-Pesa in Kenya in 2007 marked a transformative milestone in the realm of peer-to-peer (P2P) remittance and bill-pay services. The rapid proliferation of M-Pesa underscored its widespread adoption, with a significant impact evidenced by the presence of 29.1 million M-Pesa customers in Kenya as of September 2021, constituting a substantial 63% of the population.[22]

A key factor contributing to the early success of M-Pesa was Safaricom's strategic decision to facilitate P2P payments through a hybrid approach. This approach seamlessly integrated digital channels, leveraging consumers' mobile phones for transactions, with a physical component involving M-Pesa agents stationed across the region. These agents played a vital role in disbursing cash or accepting deposits, ensuring accessibility and usability across diverse demographics.

In a continued effort to enhance the service, the M-Pesa ATM withdrawal feature has been introduced, targeting a substantial user base of over 8.5 million Safaricom M-PESA customers. This innovative service enables users to leverage their mobile phones to access funds from Equity Bank's extensive network of over 550 ATMs—the largest such network in the region. This strategic collaboration between M-Pesa and Equity Bank not only expands the accessibility of financial services but also aligns with the evolving preferences of users who seek seamless and convenient ways to manage their finances.

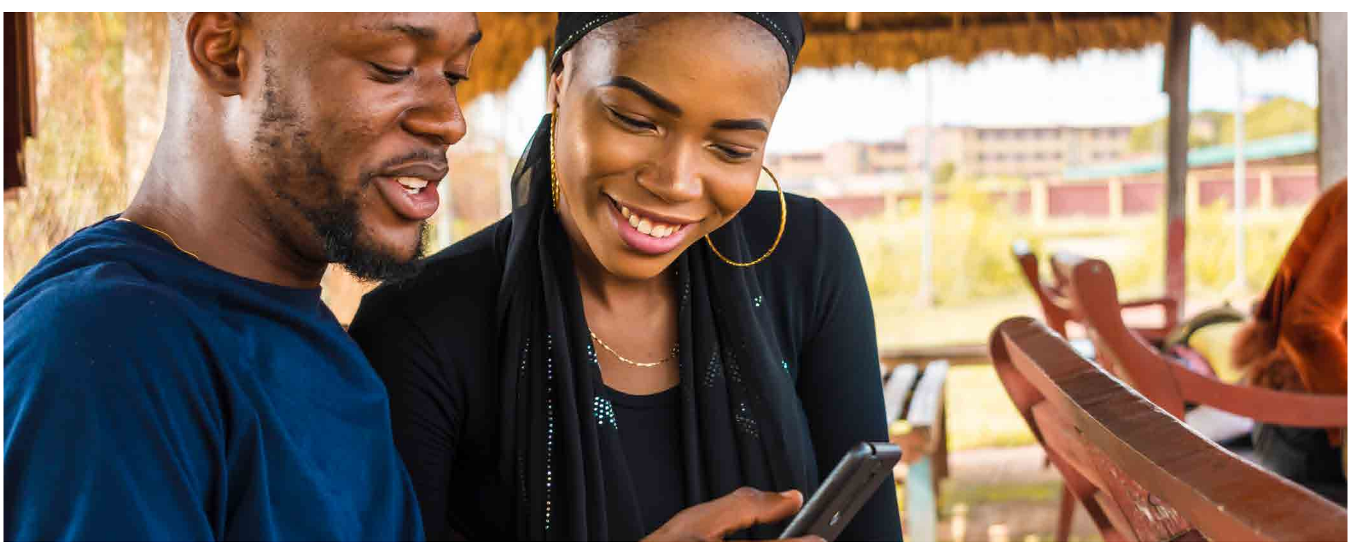
The integration of digital channels with physical touchpoints and the expansion into ATM withdrawals exemplify M-Pesa's commitment to providing versatile and inclusive financial solutions. This approach not only caters to the diverse needs of the user base but also reflects a forward-thinking strategy to leverage both digital and physical infrastructure for the benefit of customers. As M-Pesa continues to evolve, it stands as a testament to the transformative power of innovative financial services in driving financial inclusion across the African landscape.

**South America:** In South America, an analogous initiative in Colombia called Agromovil is strategically directed towards agricultural workers and the rural populations within the region. Much like the M-Pesa model, this program is spearheaded by a mobile-phone company—in this instance, Movistar—working collaboratively with the rural bank Banco Agrario.[23] The synergy of digital innovation and physical infrastructure is harnessed to cater to the financial needs of rural communities.

Agromovil, resembling the successful M-Pesa paradigm, has leveraged the pervasive use of mobile phones to empower agricultural workers and rural residents. This initiative not only provides a digital platform for financial transactions but also integrates a physical network of agents strategically positioned to facilitate cash-in and cash-out transactions. The combination of digital accessibility and localized physical support ensures that the program is inclusive and user-friendly, addressing the unique challenges faced by rural populations.

The collaboration between Movistar and Banco Agrario exemplifies the synergy between telecommunications and banking to create impactful financial solutions for underserved communities. By incorporating both digital and physical components, Agromovil seeks to bridge the gap in financial access for those residing in rural areas, fostering economic empowerment and financial inclusion.

The Agromovil initiative stands as a testament to the adaptability and scalability of innovative financial solutions, particularly in regions with distinct demographic and geographical characteristics. As South America continues to embrace digital transformations in the financial landscape, initiatives like Agromovil set the stage for inclusive and sustainable financial ecosystems that cater to the diverse needs of agricultural communities and rural populations.



## **Action Plan #5:**
## Think differently about SMBs, micro-SMBs, women- and minority-owned SMBs

The realm of small and medium businesses (SMBs) emerges as a substantial growth opportunity for retail banks and credit unions, given their significant footprint in the global business landscape. SMBs, constituting about 90% of businesses globally, play a pivotal role in fostering economic activity and employment, contributing to over half of all jobs worldwide.[24]

The economic significance of SMBs is further underscored by estimations from McKinsey, indicating that these businesses contribute substantially to the banking sector. According to McKinsey's assessment, SMBs represent a considerable share, accounting for one-fifth of all global banking revenue.[25] This insight highlights the financial importance of cultivating relationships with SMBs, as they emerge as key contributors to the revenue streams of financial institutions on a global scale.

In essence, understanding and capitalizing on the growth potential presented by SMBs is a strategic imperative for retail banks and credit unions. By aligning services with the unique needs of SMBs, financial institutions position themselves as valuable partners in the success and prosperity of these businesses, fostering a symbiotic relationship that extends beyond mere transactions to contribute meaningfully to economic development on a global scale.

**And they are banks' power-users.** Small and medium businesses (SMBs) stand out as power-users of banking services, establishing a robust and frequent engagement with financial institutions. Distinguished by their reliance on physical storefronts and substantial cash transactions, SMBs exhibit a distinctive pattern of financial interactions, often necessitating a more intensive utilization of financial services compared to the average consumer.

The operational dynamics of SMBs involve a multitude of financial transactions that underscore their role as pivotal clients for financial institutions. These businesses regularly engage in cash-related activities, such as withdrawing cash for daily operations, depositing cash at the end of each business day, cashing checks, and managing payroll requirements. This high frequency of financial transactions signifies the integral role that financial institutions play in supporting the day-to-day operations and financial management of SMBs.

SMBs emerge as a vital demographic for financial institutions, with their distinctive patterns of engagement presenting an opportunity for banks to establish enduring partnerships. The ability to cater to the multifaceted financial demands of SMBs positions financial institutions as instrumental allies, fostering a symbiotic relationship that goes beyond routine transactions to actively contribute to the growth and prosperity of SMBs.

Thriving and profitable Small and Medium Businesses (SMBs) wield a transformative influence on the localities they operate within. A study conducted by the International Monetary Fund (IMF) emphasizes the far-reaching impact that enhanced financial inclusion for SMBs in the Middle East and Central Asia could have on economic growth. The findings suggest that an improvement in financial inclusion for these businesses has the potential to contribute significantly, with estimates indicating a potential boost of up to 1% in economic growth.[26]

Furthermore, the IMF study projects that this positive economic impact could translate into the creation of approximately 16 million new jobs by the year 2025. This forecast underscores the critical role that SMBs play not only as economic entities but also as significant contributors to employment opportunities within their respective regions.

These findings reinforce the notion that supporting and empowering SMBs through enhanced financial inclusion is a strategic imperative for sustained economic advancement. Financial institutions, in collaboration with policymakers, are well-positioned to play a pivotal role in unlocking the full potential of SMBs, thereby contributing to the overall economic resilience and progress of the Middle East and Central Asia. This underscores the interconnectedness of financial inclusion, economic growth, and job creation, highlighting the profound implications of empowering SMBs within these regions.

In various regions across the globe, Small and Medium Businesses (SMBs), particularly those categorized as micro-SMBs and those owned by women or minorities, encounter formidable challenges in accessing loans essential for elevating them from poverty or facilitating expansion. This predicament stands as the second most frequently cited obstacle faced by SMBs, as revealed in a survey conducted by the World Bank.

The struggle for access to loans is underscored by the fact that, according to the survey, 65 million businesses, constituting nearly 40% of micro-SMBs in developing countries, find themselves unable to secure the necessary funds each year.[27] This poignant statistic emphasizes the pervasive nature of financial barriers that hinder the growth and prosperity of businesses in underserved communities.

Addressing this gap in financial services for SMBs requires a multifaceted approach. Financial institutions need to not only enhance accessibility to loans but also strategically design tools and solutions that resonate with the diverse requirements of micro-SMBs, as well as businesses owned by women and minorities. By doing so, financial institutions can play a pivotal role in empowering these businesses to overcome financial barriers and embark on trajectories of sustainable growth.

The recognition of these challenges underscores the importance of a concerted effort by financial institutions, regulatory bodies, and international organizations to bridge the existing gaps in financial access for SMBs. Through collaborative initiatives, the aim is to create an inclusive financial ecosystem that empowers all SMBs, irrespective of size or ownership, fostering economic resilience and prosperity in diverse communities worldwide.

How can your retail bank shift its perspective on loans and lending? Are there local, non-profit or government entities with whom you could partner to create programs that reach new business customers?

In reimagining the approach to loans and lending, your retail bank has the opportunity to undergo a transformative shift in perspective. A strategic avenue to explore involves the identification and collaboration with local non-profit or government entities. By forming partnerships, your bank can spearhead the creation of targeted programs designed to effectively reach and serve new business customers.

The potential impact of these collaborations is twofold – your bank can facilitate the growth of new businesses while simultaneously contributing to positive social outcomes. This shift in perspective aligns with the evolving landscape of responsible banking, positioning your retail bank as a proactive agent of community empowerment.

## Small and Medium-sized Businesses (SMBs) serve as the backbone of modern economies, and their collaboration with banks stands as a pivotal partnership crucial to their success.

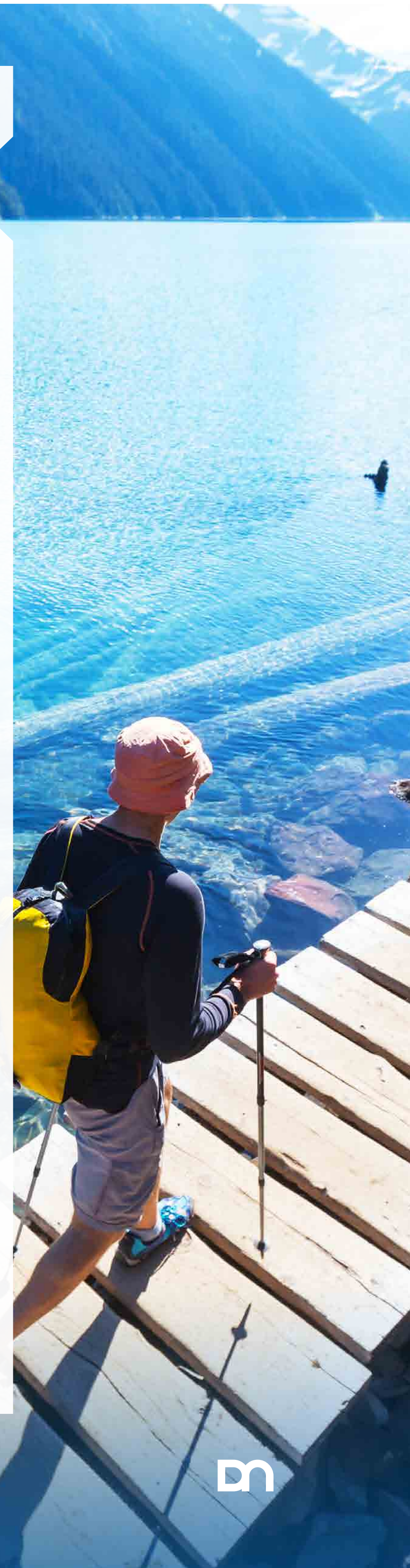
SMEs account for over 99% of firms in OECD economies, over 60% of business sector employment and the majority of value added and new job creation in our economies.[28]

Policies have a critical role to play to support the twin transition of SMEs and entrepreneurs to finance greening and digital technology adoption.

The latest recommendations from world economic organizations highlight the need to strengthen SME access to bank financing. The aim is also to encourage dialogue, exchange of experience and coordination between SME financing stakeholders: political decision-makers, financial institutions, research institutes and SME managers.

**Chapter Three**

# Environmental Awareness: Leading the Sustainable-Banking Charge



In the contemporary global landscape, environmental issues ranging from climate change to waste management have permeated world news, underscoring the urgent need for collective action. Retail banks, as integral components of society, are poised to play a pivotal role in mitigating their impact on the environment. Beyond minimizing their own carbon footprint, retail banks possess the capacity to actively contribute to the collective effort by providing financial support to green initiatives. This chapter delves into a comprehensive exploration of strategic options that not only aim to reduce the environmental impact of retail banks but also foster a commitment to sustainability across the entire omnichannel network.

The imperative for environmental responsibility has become more pronounced than ever, and retail banks are well-positioned to align their operations with sustainable practices. Initiatives to reduce carbon footprints encompass a multifaceted approach, including energy-efficient practices, waste reduction strategies, and the incorporation of eco-friendly technologies. Through a meticulous examination of each facet, retail banks can establish a roadmap for minimizing their environmental footprint, demonstrating a dedication to environmental stewardship.

Moreover, the focus extends to "greening" physical channels, acknowledging that the physical infrastructure of retail banks plays a crucial role in their overall environmental impact. This involves implementing sustainable practices in branch design, optimizing energy consumption, and adopting eco-friendly materials. By embracing green initiatives within physical channels, retail banks can set a precedent for environmentally conscious practices, influencing both staff and customers.

The omnichannel network, encompassing digital platforms, ATMs, and other customer touchpoints, presents a vast landscape for promoting sustainability. Strategies include incentivizing eco-friendly behaviors among customers, implementing paperless initiatives, and integrating sustainable features into digital banking platforms. By infusing sustainability into the omnichannel experience, retail banks can effectively communicate their commitment to environmental responsibility to a broader audience.

In essence, this chapter serves as a comprehensive guide, offering insights and strategies for retail banks to navigate the path towards environmental sustainability. By proactively embracing green initiatives, retail banks not only contribute to the global environmental agenda but also position themselves as leaders in fostering a sustainable and responsible future for the banking industry.

## The concealed costs of emissions may be impeding your endeavors to embrace environmentally sustainable practices.

The retail banking sector's substantial carbon footprint is largely attributed to its IT and data center operations. Factors such as energy consumption, the energy mix, and cooling methods contribute to the strain on infrastructure, presenting an opportunity for mitigation through alternative methods. Recognizing this environmental impact, numerous FIs are strategically adopting innovative approaches, including leveraging external clouds operated by organizations committed to carbon-neutral operations.

A prime example of this trend is observed in the collaboration between financial institutions and cloud service providers like Google Cloud.[29] Google Cloud, as part of its sustainability commitment, not only focuses on minimizing its own environmental impact but extends this commitment to offsetting the digital footprints of its customers. Through the implementation of clean energy practices and carbon offset initiatives, Google Cloud provides a viable solution for FIs seeking to reduce their carbon footprint associated with IT and data center operations.

This strategic shift towards external clouds not only addresses the environmental impact of internal operations but also aligns with the broader industry trend toward sustainability. By partnering with cloud service providers committed to carbon-neutral operations, FIs can proactively contribute to reducing the overall carbon footprint of the retail banking sector. This approach signifies a significant step towards achieving sustainability goals while optimizing the efficiency and resilience of IT infrastructure.

In essence, the adoption of external clouds with a focus on carbon-neutral operations represents a strategic move by retail banks to navigate the evolving landscape of environmental responsibility. By aligning with organizations that share their commitment to sustainability, FIs can not only enhance their operational efficiency but also contribute to the global efforts to mitigate the environmental impact of IT and data center operations in the financial sector.

The cloud has transcended its status as an emerging trend and has evolved into an indispensable tool for ensuring the competitiveness of financial institutions. The degree of digitalization achieved by banks and their success in fostering innovation are increasingly contingent upon the integration of cloud computing into their operational frameworks. Beyond the evident operational advantages, the ecological benefits inherent in the shared cloud infrastructure present a compelling rationale for financial institutions to earnestly consider and adopt cloud computing solutions.

In the current landscape, where technological advancements drive the trajectory of the financial industry, the strategic incorporation of cloud computing has become paramount. Financial institutions that successfully navigate the digitalization journey and carve a path for innovation are those that leverage the capabilities afforded by cloud infrastructure. The cloud serves as a catalyst for agility, scalability, and enhanced operational efficiency, allowing banks to stay at the forefront of technological evolution.

Amid the imperative for sustainability, the ecological advantages offered by the shared cloud infrastructure emerge as an additional and compelling incentive for financial institutions to embrace cloud computing. The consolidation of computing resources in a shared environment promotes optimal utilization, reducing overall energy consumption and environmental impact. This not only aligns with global initiatives for sustainability but also positions financial institutions as responsible stewards of resources in the digital era.

The symbiotic relationship between financial institutions and cloud computing underscores a strategic alignment that extends beyond mere operational efficiency. It embodies a paradigm shift wherein the success of banks in the digital age is intricately linked to their adept utilization of cloud resources. Simultaneously, the ecological dividends of embracing shared cloud infrastructure contribute to a broader commitment to environmental responsibility within the financial sector.

In essence, the cloud is not merely a technological tool but a cornerstone of competitiveness and sustainability for financial institutions. As banks continue to chart their course in an era defined by digital prowess, the adoption of cloud computing stands as a testament to their commitment to innovation, operational excellence, and environmental stewardship.

## Emissions matter—and they occur throughout the IT lifecycle

Operational activities play a pivotal role in accounting for a substantial portion of emissions throughout the lifecycle of IT equipment. Specifically, the operations associated with traditional Automated Teller Machines (ATMs) are a noteworthy contributor, constituting approximately 80% of all emissions over the complete lifespan of an ATM.[30] This lifecycle encompasses various stages, ranging from the production and transportation of supply parts to the eventual disposal and recycling at the end of the machine's operational life.

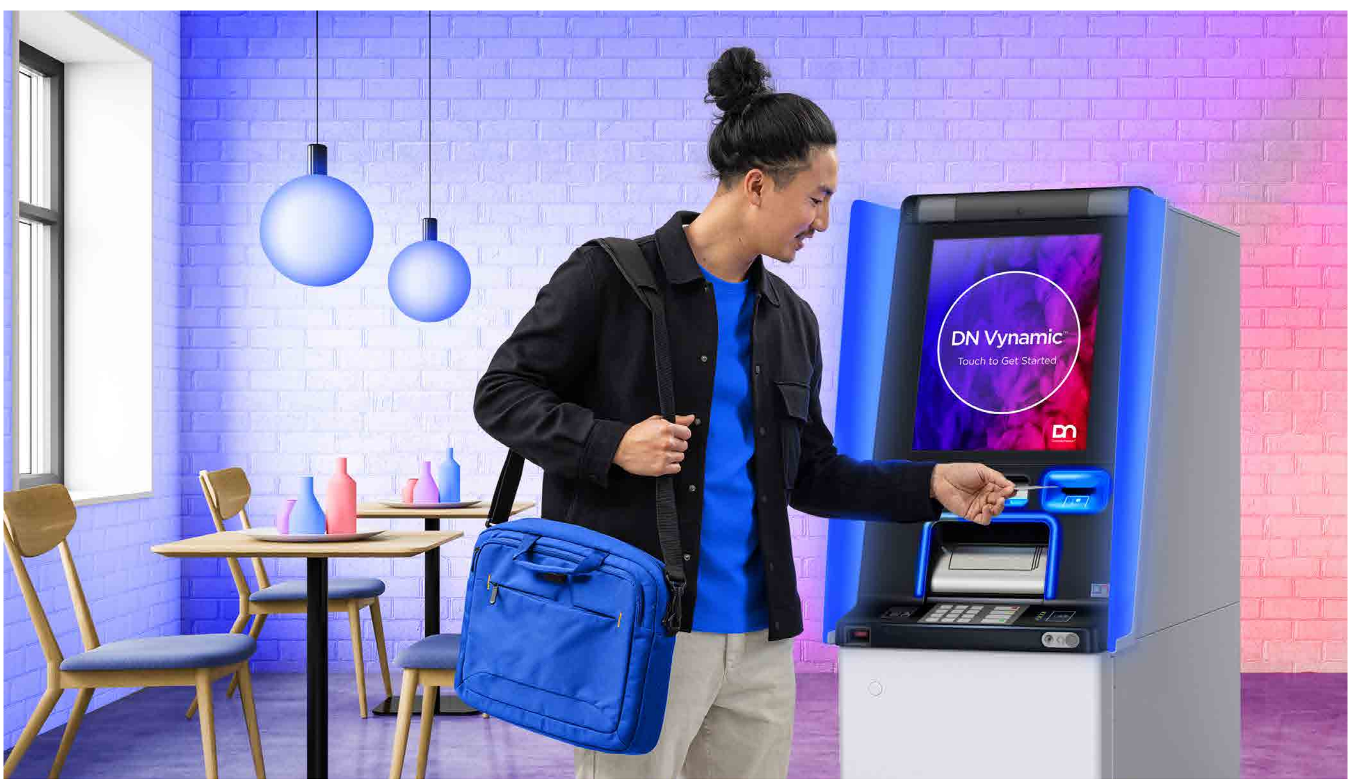
The ecological footprint associated with traditional ATM operations underscores the importance of scrutinizing each phase of the ATM's lifecycle. From the initial manufacturing processes to the ongoing operational functions, and finally, the sustainable disposal and recycling practices, each stage presents an opportunity for financial institutions to make environmentally conscious decisions.

By acknowledging the prominence of operational emissions in the overall environmental impact of IT equipment, financial institutions can strategically target areas for improvement. This holistic approach involves optimizing the efficiency of production processes, enhancing supply chain sustainability, and implementing eco-friendly disposal and recycling practices.

Moreover, financial institutions are increasingly recognizing the imperative to transition toward more sustainable and environmentally responsible alternatives in their technological infrastructure. Embracing innovations that reduce the emissions associated with operational activities becomes integral to a broader commitment to environmental stewardship within the financial sector.

In summary, the acknowledgment of the significant role played by operations in the emissions profile of IT equipment, particularly traditional ATMs, underscores the need for a comprehensive and sustainable approach. By scrutinizing each phase of the equipment lifecycle and implementing eco-friendly practices, financial institutions can align their operations with global sustainability goals and contribute to a more environmentally conscious and responsible future.

To what extent has your organization conducted a thorough examination of the values and processes embraced by each vendor and partner in its network? It's crucial to recognize that your carbon footprint extends beyond everyday usage; it's intricately tied to the entire lifecycle of the building, from construction to demolition. This comprehensive perspective applies not only to the physical structure but also to the lifecycle of the equipment housed within. Understanding and assessing the environmental impact of each stage in this lifecycle is imperative for organizations committed to mitigating their overall carbon footprint and fostering sustainable practices.



Diebold Nixdorf has implemented robust rules and structures to intricately weave the principle of closed product cycles into its operational framework. Our commitment extends across the entire lifecycle of our products, encompassing various critical phases.

The journey begins with meticulous attention to design and development, ensuring that our products are conceived and constructed with sustainability at the forefront. The manufacturing process is executed with a keen focus on minimizing environmental impact and adhering to stringent eco-friendly standards. As our products embark on their operational life, we are dedicated to providing ongoing product support that goes beyond mere functionality. This includes initiatives to reduce service calls, minimize cash in transit calls, and optimize parts replacement, contributing to the longevity and efficiency of our solutions.

Moreover, our commitment extends to the responsible management of products at the end of their lifecycle. Through conscientious product recycling and reuse strategies, we actively work to prevent equipment and hard drives from entering landfills globally. This holistic approach spans the entire spectrum of materials, products, and services involved in our procurement process, ensuring that sustainability is ingrained in every facet of our operations.

Diebold Nixdorf's commitment to closed product cycles reflects our dedication to environmental stewardship and responsible corporate citizenship. By embracing a comprehensive view of the product lifecycle, we contribute to the global effort to minimize waste, promote recycling, and create a more sustainable future for generations to come.

Our commitment to environmental sustainability is underscored by the certification of our production sites and data centers according to the ISO 14001 environmental management system. This certification serves as a testament to our dedication to systematically identifying and addressing the environmental aspects at both the company and product levels. Through this structured approach, we ensure that potential areas for improvement and associated risks are duly recognized, leading to the derivation of effective measures and the design of processes that prioritize safety and environmental friendliness.

In our pursuit of sustainability, every contractual agreement with our suppliers carries a mandate to embrace environmentally friendly and resource-saving work methods. This proactive approach extends our commitment beyond our immediate operations, fostering a collective effort to promote sustainability across our entire supply chain.

Within our organization, concerted efforts have yielded tangible results in terms of CO2 reductions. This success has been facilitated by optimized product design, emphasizing efficiency and eco-conscious materials. Additionally, our commitment to increased plastics recycling and waste minimization has played a pivotal role in achieving these positive environmental outcomes.


## Physical presence: a challenge and an opportunity

Navigating a sophisticated landscape that encompasses branches, self-service networks, and intricate cash management logistics, retail banks wield a complex web of physical channels. Undoubtedly, the physical presence of traditional FIs stands as a paramount strength, as elucidated in the preceding chapter. However, this commanding presence is not without its intricacies and concomitant operating and lifecycle costs.

The multifaceted nature of retail banking involves a strategic orchestration of various physical touchpoints, each playing a crucial role in delivering financial services to diverse customer segments. Branches, serving as tangible hubs of interaction, and self-service networks, designed for customer convenience, collectively contribute to the comprehensive framework of a retail bank's physical channels.

While this expansive physical network empowers FIs to connect with customers on a personal level, it concurrently introduces a spectrum of operational challenges. The management of physical locations, routine maintenance, technological upgrades, and the continuous optimization of cash handling procedures necessitate a meticulous approach. These aspects, integral to the seamless functioning of physical channels, also incur associated costs that impact the overall operational efficiency and financial performance of retail banks.

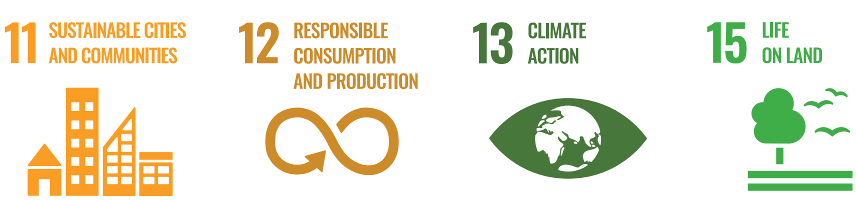
In the subsequent chapters, we delve deeper into the strategies and innovations that can be leveraged to optimize these physical channels, striking a balance between the inherent strengths they offer and the imperative to manage costs effectively. The evolution of retail banking in the face of technological advancements and shifting consumer behaviors will be explored, shedding light on how FIs can position themselves for sustained success in an ever-changing landscape.

The advent of new technological innovations is catalyzing a paradigm shift in the approach of retail bankers, prompting a reevaluation of their business models and the very essence of providing "branch" services. In contemporary scenarios, the traditional paradigm of large and oversized branches is no longer universally applicable, necessitating a departure from conventional structures. However, this shift should not be construed as an endorsement of abandoning physical channels altogether. On the contrary, with a well-defined action plan, organizations can strategically reimagine their physical channels to cultivate an efficient and optimized ecosystem that undergoes a radical transformation, challenging the traditional "look and feel" associated with banking.

This reimagining process involves leveraging technology and innovative solutions to tailor physical channels according to the evolving needs and preferences of customers. The goal is to align these channels with the dynamic landscape of modern banking, ensuring they remain relevant, customer-centric, and cost-effective. The traditional notion of a brick-and-mortar branch is evolving into a more nuanced and adaptive concept—one that integrates seamlessly with digital advancements while preserving the essential elements of personalized service and accessibility.

In the upcoming chapters, we will explore in-depth strategies and best practices for this transformative journey, examining how retail banks can harness technology to optimize physical channels, foster operational efficiency, and create an engaging and contemporary banking experience. The intersection of technology and physical presence in the banking sector represents a pivotal arena for innovation and adaptation, and understanding how to navigate this convergence is paramount for success in the evolving landscape of retail banking.

## Increasing your environmentally-friendly activities meets these SDGs:



Sustainability in Action

# Santander Group sets ambition to be net zero by 2050

To support the goals of the Paris Agreement on climate change, Banco Santander announced its ambition to achieve net zero carbon emissions across the group by 2050. The ambition applies to the group's own operations, which are carbon neutral since 2020, and all client emissions that result from any lending, advisory or investment services provided by Santander.[31]

To achieve this and facilitate the transition to a low-carbon economy, the bank will align its power generation portfolio with the Paris Agreement by 2030, and has also published its first decarbonization targets: by 2030, Santander will have stopped providing financial services to power generation clients with more than 10% of revenues dependent on thermal coal. The bank will also eliminate all exposure to thermal coal mining worldwide.

# How To Make "Going Green" One of Your Sustainability Targets: Five Action Plans

**Action Plan #1:**

Optimize your branches' physical footprint.

**Action Plan #2:**

Reduce power consumption.

**Action Plan #3:**

Reduce CIT visits through automation and cash recycling.

**Action Plan #4:**

Increase remote and automated capabilities.

**Action Plan #5:**

Implement new technology that enables long-term sustainability.

## **Action Plan #1:**
## Optimize your branches' physical footprint.

Traditional banking branches, characterized by their expansive and open spatial layouts, have historically been emblematic of the banking landscape. However, the prevalence of such branches, often exceeding practical requirements, has contributed to a significant environmental footprint. These edifices, comprising buildings, storefronts, office spaces, and branch lobbies, are identified as carbon-emission offenders. According to data from the EIA 2018 Consumer Buildings Energy Consumption Survey, small and midsize office buildings (those under 100,000 square feet) register an average electricity consumption of 15 kilowatt-hours (kWh) and 38 cubic feet of natural gas per square foot annually.[32] In comparison, large office buildings (those exceeding 100,000 square feet) record an average electricity consumption of 20 kilowatt-hours (kWh) per square foot and 24 cubic feet of natural gas per square foot annually.

The environmental impact of these traditional branches extends beyond energy consumption to carbon emissions. By strategically optimizing the spatial footprint of a branch—reducing it from, for instance, 4,000 $ft^2$ to 3,000 $ft^2$—banks can realize substantial reductions in electricity consumption. Such a reduction could lead to an annual decrease of 15,000 kWh, signaling a tangible step toward greater sustainability. As the banking industry undergoes a transformation to align with environmental consciousness and operational efficiency, reevaluating the spatial dimensions of traditional branches emerges as a key strategy to curtail environmental impact and enhance resource utilization.

The endeavor to reduce the footprint of your entire branch network carries the potential for substantial and measurable savings across various resources. These savings extend beyond the obvious benefits of reducing space requirements to encompass resource-efficient practices in heating, cooling, lighting, ventilation, and electronic systems. Embracing smaller branch formats, shared branches, self-service-only branches, and integrating video-teller capabilities are innovative approaches that empower retail bankers to reimagine their branch models.

In this strategic shift toward more compact and technologically advanced branches, retail banks can achieve operational efficiencies, enhance customer experiences, and contribute significantly to environmental sustainability. The multifaceted advantages of such initiatives position them as integral components of a forward-thinking approach to banking that not only adapts to evolving consumer preferences but also aligns with broader corporate sustainability goals. The synthesis of reduced physical footprint, energy-efficient practices, and advanced technology applications represents a holistic strategy for reshaping the future of retail banking branches.

The adoption of a hub-and-spoke approach within the branch network has become a prominent strategy for many FIs. This model involves establishing smaller, task-specific branches dispersed across a region, complemented by a central and larger branch strategically located in a key area. An intriguing consideration for optimizing branch functionality is the potential to reallocate specific services, such as consulting and cash services, to specialized mini-branches rather than providing comprehensive services at every branch within the network.

By strategically deploying mini-branches with focused functions, FIs can enhance operational efficiency, tailor services to meet specific community needs, and create a more targeted and responsive customer experience. This approach aligns with the evolving dynamics of consumer behavior and preferences, providing a flexible and adaptive framework for branch operations. The integration of mini-branches into the broader branch network underscores a commitment to innovation and resource optimization, contributing to a more sustainable and customer-centric banking ecosystem.

The transition to cashless or tellerless branches represents a significant evolution in branch design and operations. In these branches, tellers no longer handle cash transactions directly, leading to a substantial reduction in the required work area. The implementation of self-service solutions takes center stage in managing cash transactions within the branch, enabling tellers to be reallocated to value-added functions and eliminating the need for counters, associated furniture, and equipment that were traditionally dedicated to cash handling.

The strategic shift towards cashless branches not only optimizes physical space but also enhances operational efficiency. It enables financial institutions to streamline workflows, minimize the physical footprint of branches, and reposition staff to focus on more personalized and value-driven interactions with customers. By embracing technology-driven solutions for cash transactions, such branches align with the changing landscape of banking preferences and contribute to a more contemporary and efficient banking environment.

**ATMs "as" the branch:** ATMs "as" the branch: In locations where establishing a full-fledged branch might not be feasible or practical, leveraging modern self-service terminals with advanced functionalities can serve as a viable alternative to traditional tellers. These sophisticated ATMs are designed to offer a comprehensive range of services, encompassing cash deposits and withdrawals, bill payments, money transfers, and even handling more intricate transactions that were traditionally associated with in-person teller interactions.

By positioning ATMs as an extension of the branch, financial institutions can provide customers with convenient access to a diverse array of banking services, effectively bridging the gap between physical and digital channels. The enhanced capabilities of these ATMs not only cater to routine transactions but also address more complex financial needs, offering a versatile and self-sufficient banking experience for customers. This strategic integration aligns with the evolving preferences of consumers and contributes to creating a modern and accessible banking infrastructure.

**Shared branches:** Earlier we highlighted the collaboration between German banks Frankfurter Volksbank and Taunus Sparkasse, which have pooled their branches and operate on separate days, providing services to local consumers for two brands out of a single shared space. The concept of shared branches exemplifies a collaborative approach within the banking industry, as demonstrated by German institutions like Frankfurter Volksbank and Taunus Sparkasse. In this innovative model, these banks have strategically combined their branch networks, optimizing resources and operations by sharing physical spaces on designated days. This cooperative arrangement allows both institutions to provide services to their respective customer bases efficiently, streamlining costs and improving overall accessibility.

Shared branches represent a forward-thinking strategy, fostering synergy between financial institutions to enhance customer service and maintain a physical presence in communities. By leveraging shared spaces, banks can maximize the utilization of resources, ensuring a more sustainable and cost-effective approach to branch operations. This collaborative model not only benefits the participating banks but also contributes to the continued availability of banking services within local communities, aligning with evolving industry dynamics and customer expectations.

The advent of modern ATMs and kiosks has ushered in a new era of customer assistance through integrated remote or virtual support. These advanced self-service terminals are equipped with full-service video capabilities, allowing consumers to seamlessly connect with banking experts irrespective of time or location. Whether these experts operate from a physical branch, a centralized call center, or even remotely from their homes, the integration of virtual assistance provides customers with a heightened level of service accessibility.

By embracing this innovative approach, banks can enhance customer interactions, offering personalized support and expert guidance through virtual channels. The integration of remote assistance not only expands the reach of banking services but also aligns with the evolving preferences of today's tech-savvy consumers. This forward-looking strategy ensures that customers can receive timely and expert assistance, contributing to an elevated and digitally enabled banking experience.

**Juergen Kisters** | VP Banking Marketing, Diebold Nixdorf

"The combination of digital and physical solutions for modern branches opens up new and comprehensive services in branches, with a lower footprint. At the intersection of physical and digital services, self-service plays an important role for FI's customers as a key enabler for banking services in the branch—or even operating as the branch. On one hand, it offers consumers who want a more personal touch an easy and accepted entry point into digital services; on the other hand, it can be the primary financial touchpoint for mobile-first consumers."

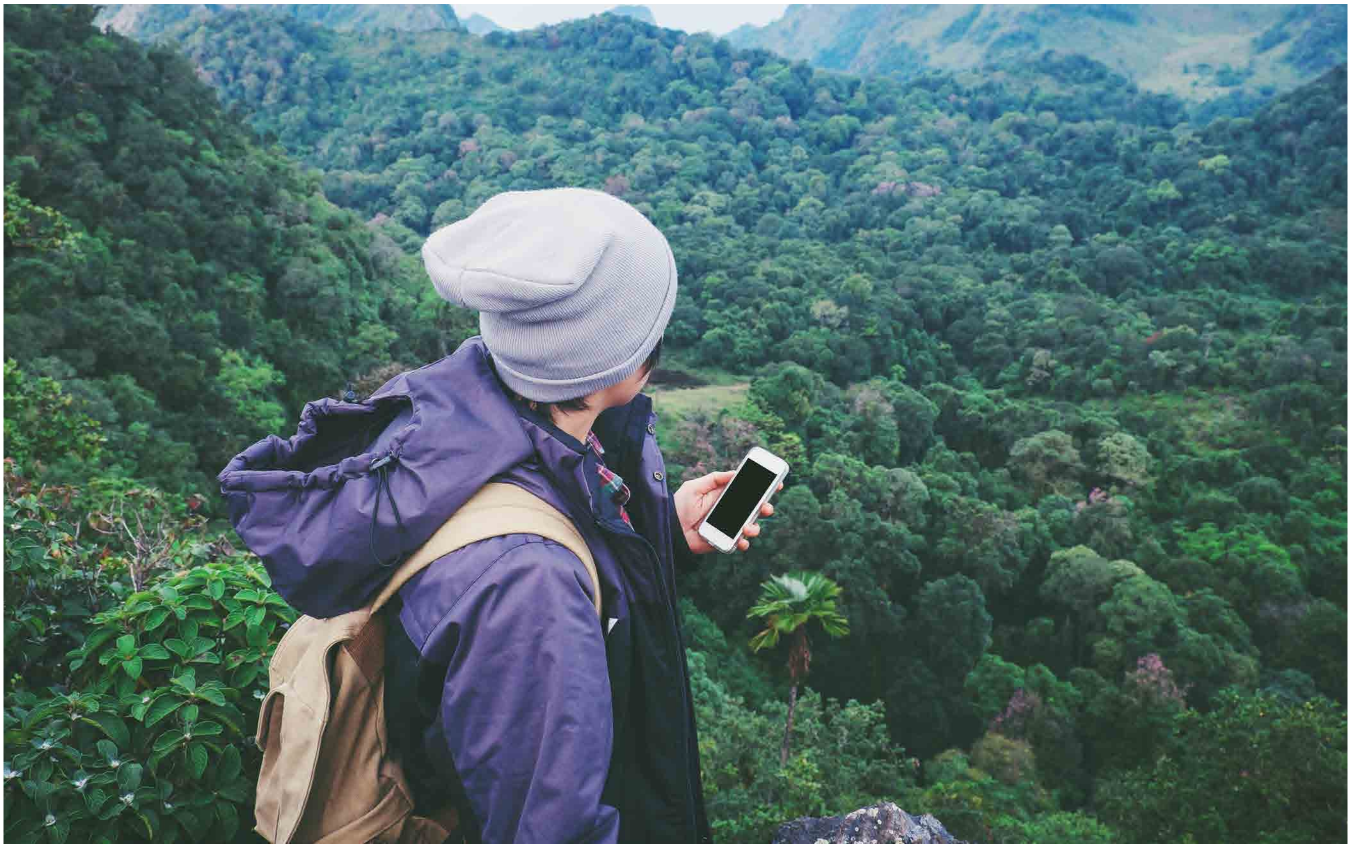
## Sustainability in Action

# Société Générale Cuts its Greenhouse Gas Emissions

In its commitment to align business operations with the objectives of the Paris Climate Agreement, Société Générale has undertaken a multifaceted approach that extends beyond investments in sustainable companies and industries. Emphasizing a comprehensive carbon reduction program, the institution has intensified its efforts in 2021, setting a formidable target of achieving a 50% reduction in the Group's carbon emissions from 2019 levels by 2030.[33]

To realize this ambitious goal, Société Générale has implemented a series of strategic initiatives. The introduction of an internal carbon tax exemplifies the institution's commitment to internalizing environmental considerations into its decision-making processes. Moreover, a holistic environmental strategy has been devised for real estate operations, accompanied by concerted efforts to curtail water, paper, and energy consumption.

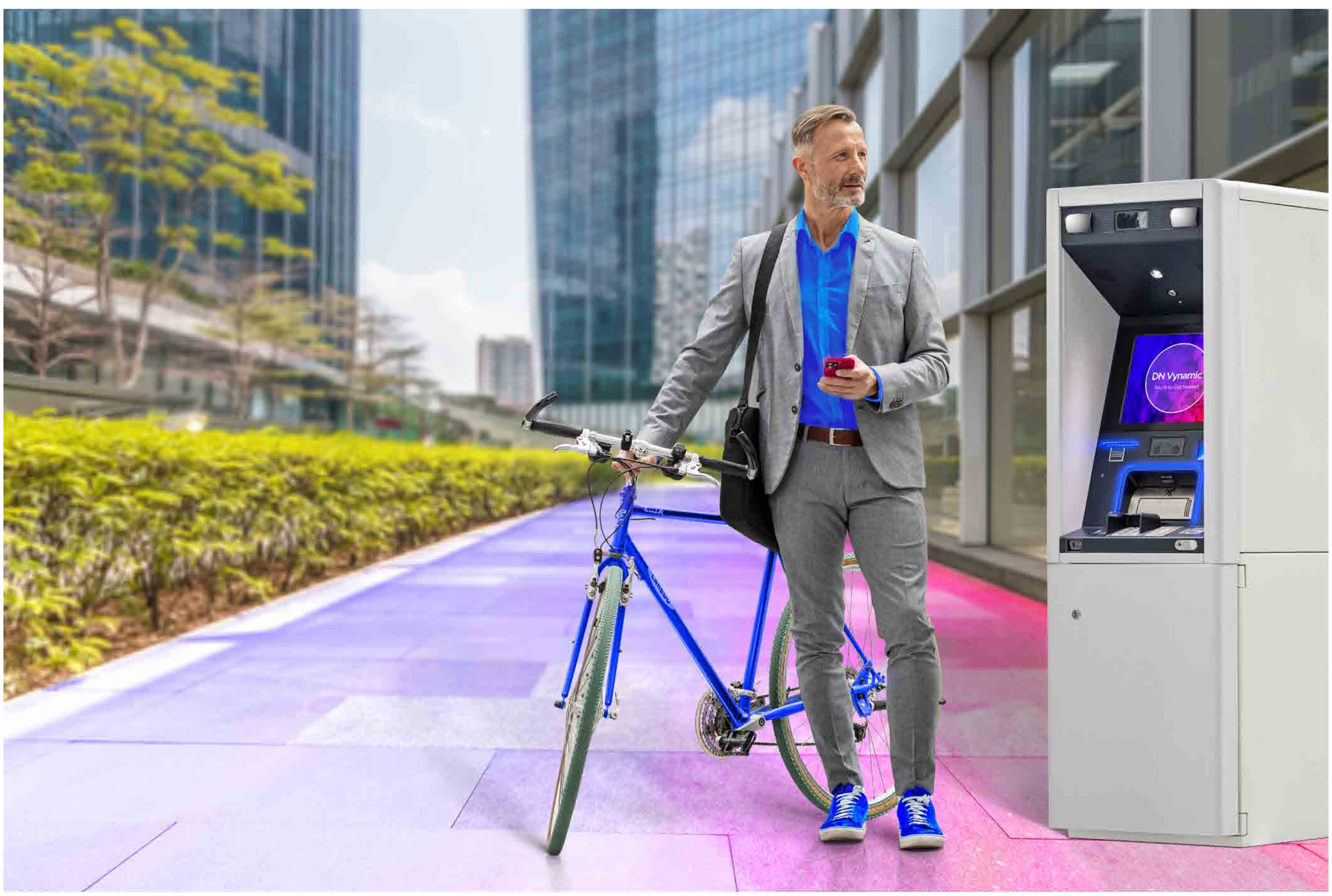
In addition to these measures, Société Générale has embraced sustainability through initiatives such as a recycling scheme and proactive endeavors to minimize food waste. The reduction of business trips further underscores the institution's dedication to sustainable practices. Collectively, these initiatives reflect Société Générale's proactive stance in addressing environmental challenges and fostering a corporate culture aligned with climate-conscious objectives.



## **Action Plan #2:**
## Reduce power consumption.

Constant availability characterizes self-service systems, operating round the clock, and this perpetual functionality is accompanied by uninterrupted power consumption. It is imperative for financial institutions to conduct periodic and thorough assessments of their self-service network's energy consumption levels. The efficiency of older terminals and the potential impact of underutilized ATMs should be scrutinized to ascertain their influence on the overall energy consumption of the network.

Ensuring that self-service systems are not only operationally effective but also energy-efficient is crucial for minimizing environmental impact and optimizing resource usage. Evaluating and modernizing the technology within the self-service infrastructure can contribute significantly to aligning the network with sustainability goals while maintaining the convenience and accessibility that customers expect from these services. As part of a broader commitment to responsible banking practices, financial institutions must prioritize the ongoing evaluation and enhancement of their self-service networks to achieve a balance between operational efficacy and environmental responsibility.



**Jerome Amara** | Vice President, Banking Product Management & SME

" DN Series is a benchmark in sustainability. The optimized product design reflects a strong emphasis on reducing the environmental impact of our solutions. State-of-the-art intelligent power management combined with LED technology throughout the suite of terminals enables savings between 30% and 60% in electricity consumption compared to traditional ATMs[34]—with incremental saving opportunity by activating an energy-saving mode. These environmental benefits are valued by our customers. Frontrunners around the world, as well as banks among the founding PRB signatories, are confirming that DN Series enables them to manage their fleet in the most sustainable way."

## Centralized intelligent power management

The energy consumption of an Automated Teller Machine (ATM) is contingent upon various factors, including the electronic components employed and the terminal's capacity to conserve energy during idle periods. Our DN Series(R)TM solutions are engineered with energy-efficient features such as low-power displays and LED panels. Additionally, these ATMs can integrate an intelligent power-saving mode. The cutting-edge technology embedded in DN Series™ results in a noteworthy power-saving rate, delivering at least a 30% to up to 60% reduction when compared to traditional ATMs (refer to page 43).

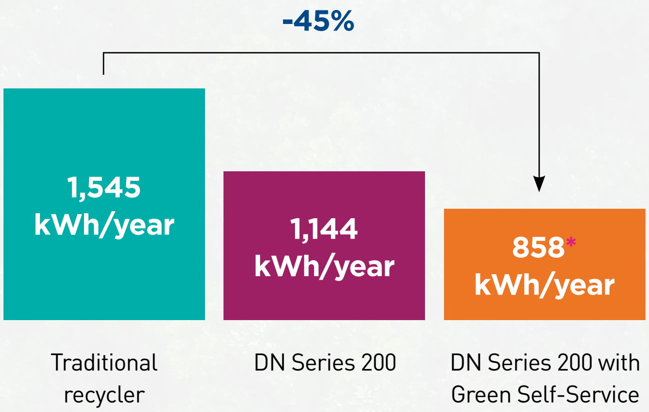
In practical terms, for a sample ATM network comprising 300 systems, achieving a 45% power saving equates to over 1.6 billion kWh saved over the fleet's lifetime. This exemplifies how advancements in ATM technology not only enhance operational efficiency but also contribute significantly to sustainable practices by significantly reducing energy consumption, aligning with environmental goals and promoting responsible banking.

Certainly, the quantification of carbon emissions attributable to energy consumption is subject to variations influenced by factors such as the specific types of energy used, overall energy production, and the energy mix of each country. In this context, the calculations provided are grounded in the concrete energy mix of a European country, ensuring a nuanced understanding of the environmental impact.[35]

It's noteworthy to draw parallels by comparing the saved CO2 emissions with the amount of emissions that can be absorbed by one hardwood tree per year.[36] This ecological perspective serves as a tangible metric, emphasizing the positive environmental outcomes resulting from energy-saving initiatives. By contextualizing the impact in terms of trees, a universally recognized symbol of sustainability, the significance of energy conservation efforts is effectively communicated, fostering a deeper understanding of the broader ecological implications and reinforcing the commitment to responsible and environmentally conscious practices.

# Intelligent Power Management

## Power reduction




Average power savings per year:

**687**

**kWh/year**
per system

In total for an ATM network with 300 systems:

**> 1.6 million**

**kWh/lifetime**
(8 years)

**For a network of 300 ATMs, this results in a carbon footprint savings of...**

**146 metric tons CO2e** per year

**1,168 metric tons CO2e** over the lifetime of the ATMs

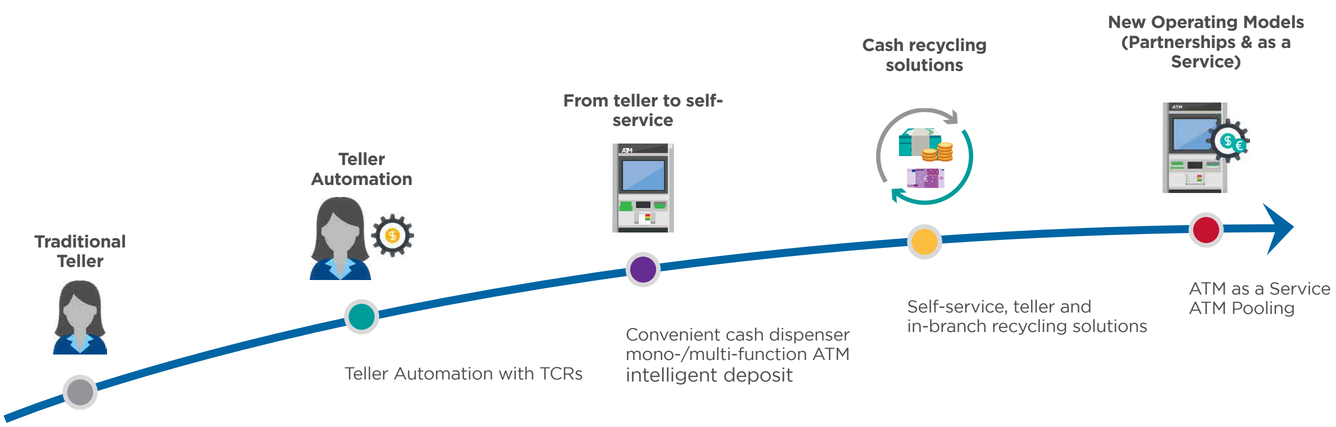
Enhanced Environmental Considerations for Self-Service: In alignment with sustainability goals, our ATMs are equipped with advanced features that facilitate a more eco-friendly operation. Specifically, depending on the installation site, the ATMs are programmed to undergo automatic shutdown during the closing hours of the building, such as in branch lobbies or malls. This strategic approach not only contributes to a reduction in energy consumption but also aligns with responsible energy management practices. By incorporating intelligent automation in the self-service system, we aim to optimize energy efficiency, emphasizing our commitment to environmental stewardship and eco-conscious operational standards.

## Action Plan #3:
## Reduce CIT visits through automation and cash recycling.

Optimizing Global Access to Cash: Recognizing the fundamental importance of providing customers with seamless access to cash services on a global scale, banks face the inherent challenges associated with the intricate logistics and environmental impacts of cash handling. Transporting and managing cash involve concealed efforts and expenses, urging the financial industry to prioritize cash automation as an imperative strategy in its commitment to environmental conservation. By embracing automated solutions, banks not only enhance operational efficiency but also significantly contribute to minimizing the ecological footprint associated with cash-related processes. This strategic shift aligns with the industry's responsibility to foster sustainability and underscores the pivotal role of technological innovation in addressing environmental considerations.

Strategic End-to-End Optimization for Environmental and Operational Impact: Implementing a comprehensive optimization framework for cash processes is a pivotal strategy for banks seeking to not only reduce their environmental footprint but also enhance operational efficiency. The holistic approach to cash management entails a substantial decrease in the physical handling of cash, leading to a notable reduction in the need for managing cash in brick-and-mortar locations. This not only aligns with sustainability goals but also translates into tangible benefits, such as a 75% reduction in cash replenishment efforts. The direct correlation between optimized cash processes and lower carbon emissions, achieved through fewer cash-in-transit (CIT) visits, underscores the dual impact of this strategic initiative—environmental conservation and operational cost savings. In adopting such measures, financial institutions demonstrate a commitment to responsible and sustainable practices, embracing efficiency gains while contributing to global environmental goals.

### A Journey Towards Cash Automation



Revolutionizing Cash Processes Through Recycling Technology: Transitioning customers to cash recycling ATMs marks a pivotal shift toward a sustainable and economically efficient cash management model. This strategic move creates a closed-loop cycle wherein small and medium-sized business (SMB) customers actively replenish ATMs, forming a symbiotic relationship. The implementation of intelligent cash deposit solutions, such as a cash recycler equipped with dedicated cassettes for deposits, significantly reduces the frequency of replenishments. Leveraging concrete cash flow data from a U.S.-based retail bank network, a staggering 75% reduction in cash replenishments is achievable with this innovative technology. In this scenario, transitioning from traditional ATMs to cash recyclers decreases the replenishment frequency from 16 to 4 times per month, yielding a substantial carbon footprint reduction of 75%—equivalent to approximately 1,700 kg per year per ATM [1.7 metric tons CO2].[37] By embracing cash recycling, financial institutions not only contribute to environmental conservation but also realize operational efficiencies, marking a paradigm shift in sustainable cash processes.

**Unlocking Efficiency Through Cash Recycling: Remarkably, the advantages of cash recycling extend beyond scenarios with a balanced cash flow. Our comprehensive research reveals that FIs can harness the benefits of recycling in diverse environments, where the cash-in/cash-out ratio ranges from 70:30 to 30:70. The implementation of recycling technology consistently delivers a noteworthy 20%-50% reduction in Cash-in-Transit (CIT) visits across the entirety of FIs' fleets, showcasing its effectiveness in optimizing operational efficiency. This versatile solution not only streamlines cash management processes but also aligns with FIs' sustainability goals, offering a compelling case for the widespread adoption of cash recycling technologies in the financial landscape.**

# Migration from Intelligent Deposit to Recycling

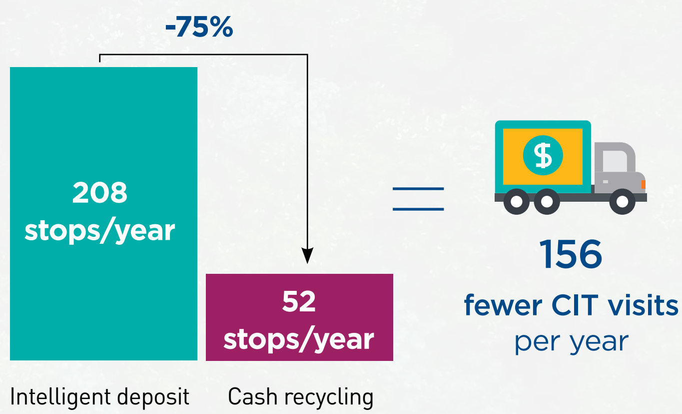
The merits of recycling are grounded in empirical cash flow data obtained from an operational intelligent deposit installation. This meticulous analysis provides a tangible foundation for understanding the tangible advantages associated with implementing recycling technology. By drawing insights from real-world scenarios, financial institutions can confidently explore the transformative potential of recycling solutions, informed by actual cash flow dynamics and outcomes from existing intelligent deposit installations. This data-driven approach enhances the reliability and applicability of the identified benefits, fostering a strategic and evidence-based perspective on the advantages of recycling within the financial landscape.

With an average round trip spanning 30 kilometers (18.6 miles), the adoption of recycling technology translates to an impressive annual reduction of 4,680 kilometers (2,908 miles) in travel distances. This substantial decrease in transportation requirements not only signifies operational efficiency but also underscores the positive environmental impact achieved by minimizing the carbon footprint associated with cash replenishment endeavors. The calculated savings in travel distances reflect a strategic commitment to sustainability, showcasing how embracing recycling solutions can yield tangible benefits in terms of reduced logistical efforts and enhanced environmental stewardship.

Taking into account a fuel consumption rate of 9 liters of petrol per 100 kilometers (equivalent to 26.1 miles per gallon), the transition to recycling technology emerges as an impactful strategy, resulting in a noteworthy reduction of carbon emissions by 1,700 kilograms per year, per system. This calculation underscores the environmental benefits of embracing recycling initiatives within the financial industry, illustrating how such advancements not only enhance operational efficiency but also contribute significantly to the broader objective of minimizing ecological impact. This reduction in carbon emissions stands as a testament to the positive outcomes achievable through sustainable practices and forward-thinking solutions in the banking sector.

**That's 4 million kg less carbon emissions over the lifetime of the network (8 years). This translates to a substantial reduction of 4 million kilograms in carbon emissions over the entire lifespan of the network, spanning a period of 8 years. This impressive figure underscores the enduring environmental impact derived from the implementation of recycling technology within the financial infrastructure. By adopting sustainable practices and prioritizing eco-friendly solutions, financial institutions not only enhance operational efficiency but also make a substantial and lasting contribution to mitigating their carbon footprint. This long-term reduction in emissions exemplifies the positive outcomes that can be achieved through a commitment to environmentally conscious initiatives within the banking sector.**

Cash Replenishment Visits
(based on given cash flow)




**For a network of 300 ATMs, this results in a carbon footprint savings of...**

**510 metric tons CO2e emissions** per year

**4,080 metric tons CO2e emissions** over the lifetime of the ATMs

Sustainability in Action

# Garanti BBVA Decreases Reliance on CIT Visits

Garanti BBVA, as a pioneering force in Turkey's financial landscape, strategically implemented recycling-enabled systems across its entire ATM fleet. This forward-looking initiative resulted in a notable reduction in costs and environmental impact, showcasing the institution's commitment to innovation and sustainability. By embracing recycling technology, Garanti BBVA achieved a significant milestone, halving CIT visits required for cash replenishment. Bora Uluduz, the Director, emphasized the transformative impact of recycling ATMs on cost reduction, enhanced customer experience, and increased availability.[38] This strategic shift aligns with Garanti BBVA's dedication to driving positive change and aligning its operations with environmentally responsible practices.

## **Action Plan #4:**
## Increase remote and automated capabilities.

What happens when an ATM goes down in your network? All too frequently, the path to uptime can be unnecessarily long and winding. Many times, a service technician will be dispatched, only to discover they don't have the right part to complete the fix. Or what if they complete a fix based on a wrong diagnosis and the device is down again the next day, requiring another on-site visit?

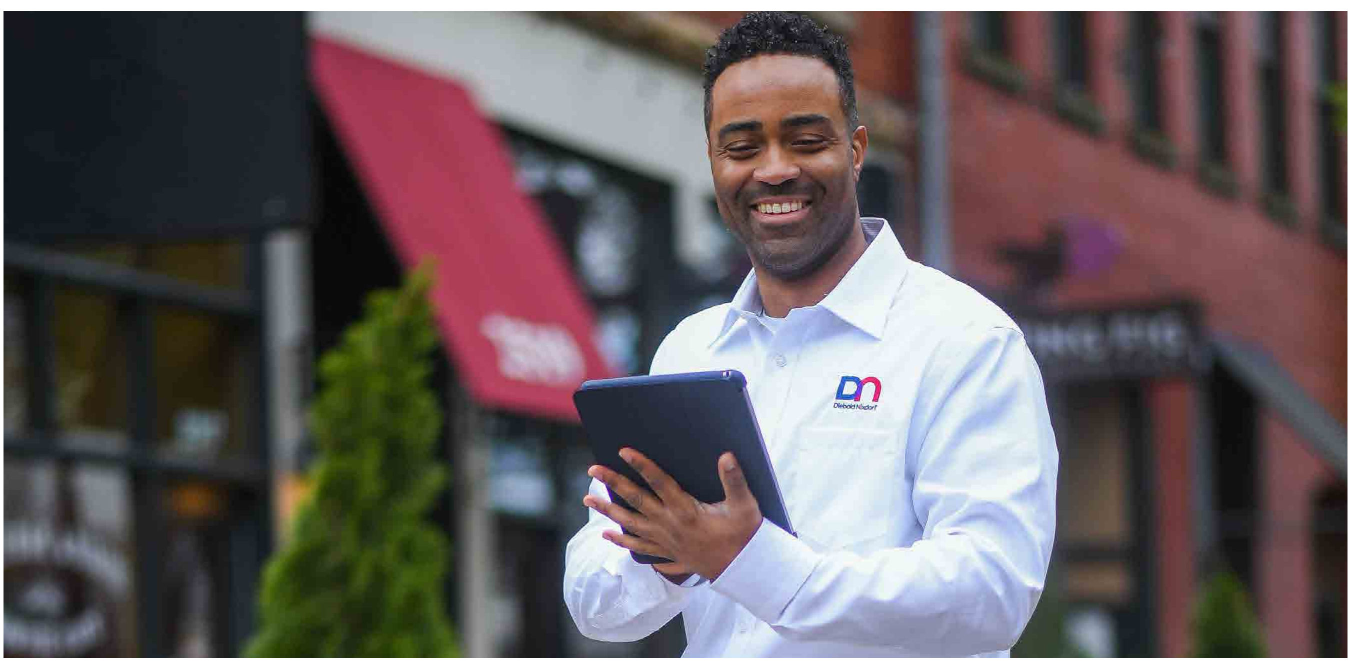
Shortening and straightening the path to uptime through fewer unnecessary service technician visits, higher first-time-fix rates and higher call avoidance will not only drive more availability but also reduce energy consumption.

Diebold Nixdorf's award-winning service model relies on a global framework and best-in-class practices, which are augmented by a first-to-industry data intelligence platform (DN AllConnect SM Data Engine) to which more than 230,000 self-service devices are connected worldwide*. DN AllConnect Data Engine builds on a unique combination of decades of unmatched engineering experience and a continuously augmented global technical knowledge base, as well as the application of the latest developments in IoT, cloud computing and storage, machine-learning technologies, and AI.

Whenever a service request is live in our systems, diagnosis and identification of the most likely root cause(s) are completed automatically within seconds, with no need to send a technician to inspect a device. A recommendation is then provided about the precise fix and spare parts needed, the required level of the technician, and the time the repair should take. It is what we call the right tech – right part – right time – right fix approach. In addition to prescribing how to resolve an outstanding failure, the platform can also provide insights into other areas of the device that may require attention and therefore be actioned by the technician while they are on-site to pre-empt a possible future outage and to maximize uptime.

Through our increased use of data intelligence, we conducted 120,000 fewer on-site ATM visits in 2023 in EMEA alone. Calculating each service visit with an average drive of 25 miles (40 km), that equates to carbon footprint savings of more than 1,892 metric tons CO2e for the same year. And we are not stopping here. We are continuously enhancing our infrastructures, refining our processes and upskilling our service teams, so we deliver an increasingly higher-performing service model, which benefits our customers while caring for the environment.

**January 2024*



## Action Plan #5:
Implement new technology that enables long-term sustainability.

Cash-recycling technology, a longstanding presence in the financial industry, has entered a new era with the integration of cutting-edge self-service terminal design. This synergy allows FIs to unlock additional savings, whether they are prepared to adopt the technology immediately or in the future. Every DN Series terminal incorporates recycling technology, providing FIs with a dynamic solution that can be activated or deactivated through a straightforward software update. This flexibility empowers FIs to manage their fleets with agility and seamlessness, adapting to evolving operational needs.

### Larger Cash Capacity for Enhanced Operational Efficiency:

In high-traffic areas, the demand for cash at ATMs can be unpredictable, leading to frequent cash-outs or rapid accumulation of cash and check deposits, e specially during peak periods like Friday paydays or bank holidays. The DN Series addresses this challenge by incorporating a spacious all-in box designed to accommodate rejects, unfit, and non-recycled notes. This larger capacity not only extends replenishment cycles but also contributes to a notable reduction in CIT visits. On average, DN Series terminals require 30-50% fewer CIT visits compared to traditional recyclers and offerings from other manufacturers, enhancing operational efficiency.

### Enhanced Operational Efficiency through Optimized Note Path:

The advanced technology integrated into the "head" of DN Series recycling modules significantly reduces the occurrence of jams, resulting in fewer interventions required. The optimized note path contributes to a remarkable 40% reduction in the average number of yearly interventions per system when compared to traditional recyclers. This improvement not only streamlines operational processes but also enhances the overall reliability and performance of the system, ensuring a smoother and more efficient banking experience for both customers and operators.

### Enhanced Retract Capabilities for Improved Operational Efficiency:

DN Series technology introduces innovative retract capabilities that redefine how unwithdrawn cash is managed. Traditionally, unclaimed cash is stored in the retract compartment, requiring manual removal and system downtime. With DN Series, retract recycling allows automatic return of unwithdrawn cash to the all-in box, along with detailed notes back-posting in the journal. Additionally, enabling "Retract on escrow" reduces CIT stops handled under the "4-eyes" principle, streamlining operations and meeting enhanced security requirements for unclaimed customer cash. This feature not only minimizes manual interventions but also optimizes the overall cash-handling process, contributing to a more secure, efficient, and customer-friendly banking experience.

### Strategic Cash Management Solutions for Operational Excellence:

DN's comprehensive suite of cash management solutions and services is designed to elevate efficiency and reduce costs associated with cash handling across both branch and self-service networks of financial institutions. Our tailored approach considers key factors such as CIT costs, interest rates, and cash flows, optimizing operations based on the unique circumstances of each institution and the prevailing market conditions. Leveraging statistical data and peak-time documentation, our forecasting models empower FIs to make informed decisions for superior cash-flow management. In environments with interest rates below 3%, our cost-optimization services typically result in a substantial 10-25% reduction in CIT stops, exemplifying our commitment to delivering operational excellence and financial savings.[39]

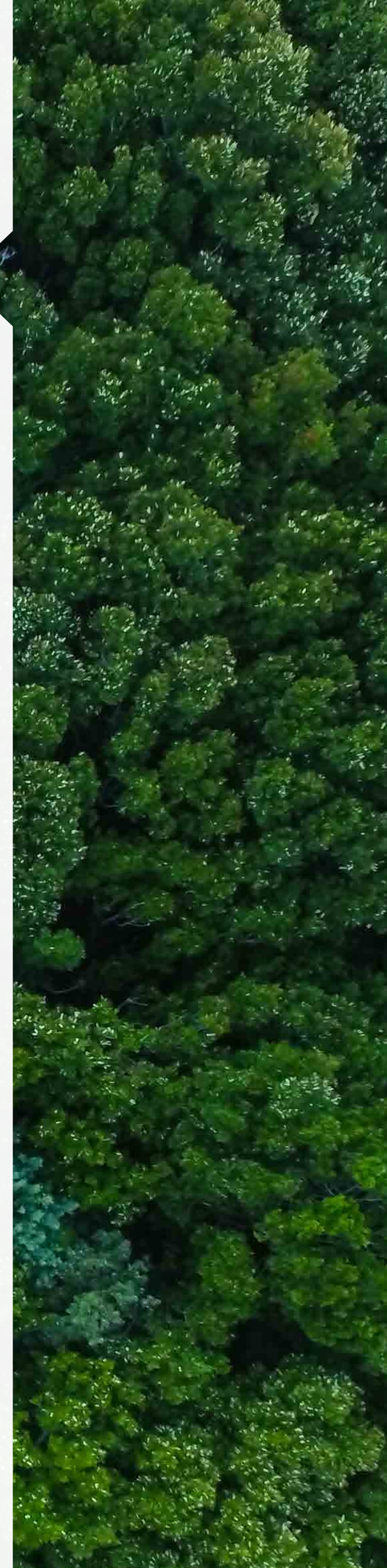
### Future-Ready Flexibility and Sustainable Innovation:

Beyond its immediate sustainable advantages, the DN Series presents a strategic investment that delivers significant long-term returns. Engineered with scalability and modularity at its core, DN Series seamlessly accommodates the integration of new components and features, ensuring adaptability to evolving technological landscapes. The platform's unique design allows for straightforward upgrades, transforming a standard cash dispenser into an advanced recycler without compromising the compact footprint. This capability not only extends the ATM's lifecycle, minimizing waste and disposal, but also enhances operational efficiency and elevates the overall consumer experience, making it a judicious choice for forward-thinking financial institutions.

# Optimizing Your Self-Service Network to Reduce Your Carbon Footprint

**Switch to the latest recycling and cash-management technology to reduce costs and drive efficiencies for your entire organization.**

| Carbon-footprint reduction initiative | For a network of 300 ATMs, this results in a **carbon footprint savings of...** |
| --- | --- |
| **Larger cash capacity** (larger all-in box) | **66.9 metric tons CO2e** per year<br>**535 metric tons** over the ATMs' lifetime |
| **Optimized note path** | **37 metric tons CO2e** per year<br>**297 metric tons** over the ATMs' lifetime |
| **Retract capabilities** (retract recycling) | **57 metric tons CO2e** per year<br>**456 metric tons** over the ATMs' lifetime |
| **In-branch recycling** | **48 metric tons CO2e** per year<br>**384 metric tons** over the ATMs' lifetime |
| **Cash management enhancements** | **66 metric tons CO2e** per year<br>**528 metric tons** over the ATMs' lifetime |



Unlocking Efficiency with DN Series Indoor Recycling ATMs:
Introducing the DN Series indoor recycling ATM offers a tailored suite of functionalities, strategically aligning with your unique environment, cash flows, and cash management requirements. The individual optimization methods encompass various benefits, each meticulously calculated to address specific aspects of your operational landscape. It's crucial to note that these savings are not merely a summation of individual parts but represent a comprehensive improvement over the initial scenario.

The data analysis is derived from potential annual savings realized across a network of 300 ATMs, with each ATM having a lifecycle of eight years. In comparison to traditional ATMs and recyclers in operation, the introduction of DN Series indoor recycling ATMs results in a reduction of CIT visits and onsite-maintenance stops. The calculations assume that each CIT stop entails an average drive of 30 km [18.6 miles] and a service stop of 50 km [31 miles], utilizing a transporter/van with a fuel consumption rate of 9 liters per 100 km [26.1 mpg].

# True Future-Readiness Requires Vision and Leadership

The rapidly evolving landscape of recent global events serves as a poignant reminder that the world can undergo transformative shifts in the blink of an eye. In this dynamic environment, businesses find themselves at a crossroads—those that have meticulously prepared for unexpected changes and those that deferred significant initiatives in the hope of circumventing the complexities associated with future readiness.

Now more than ever, the importance of strategic preparedness cannot be overstated. Businesses that proactively embrace change, fortify their resilience, and remain agile are better positioned to navigate the challenges and seize opportunities that arise. The paradigm shift triggered by global events underscores the necessity for foresight, adaptability, and a forward-looking approach to ensure sustained success in an ever-evolving world.

In the face of every challenge, whether characterized by its magnitude, pace, or complexity, lies a reservoir of opportunities waiting to be explored. The recent disruptions that have permeated our daily lives have not only underscored the paramount significance of the digital realm but have also emphasized the critical importance of maintaining the accessibility of physical sites. It has become evident that ensuring an uninterrupted supply chain, both on a global and regional scale, is pivotal—especially in the context of the cash cycle.

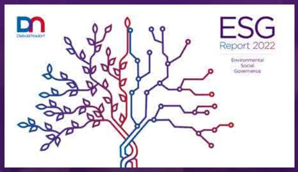
Amidst these transformative events, businesses have discovered novel ways to engage with individuals, establishing connections that are not only more human but also more empathetic. This period of upheaval has served as a catalyst for innovation, prompting organizations to reevaluate their strategies, embrace digital transformation, and foster resilience. In essence, these challenges have unfurled a tapestry of opportunities for those willing to adapt, navigate uncertainties, and forge new paths toward success.

**Embracing Responsible Banking Principles for a Sustainable Future**

The Principles for Responsible Banking serve as a definitive guide for FIs worldwide, offering a tangible blueprint for instigating positive change. In this realm, Diebold Nixdorf stands as a steadfast partner for FIs across the globe, providing invaluable support in the exploration and implementation of intelligent solutions aimed at fostering financial inclusion and cultivating environmentally responsible operations.

Whether your organization has already embarked on the journey to lay the groundwork for an adaptable and resilient future, or if these plans are slated for the near future, the current context and recent experiences underscore the paramount importance of consumer adaptability and the imperative for businesses to be agile, versatile, optimized, and efficient. The ability to confront an uncertain future head-on is a hallmark of successful enterprises.

**The question remains: Is your organization ready to embrace the principles of responsible banking, positioning itself as a beacon of sustainability and resilience in an ever-evolving landscape?**




View our 2022 Environmental, Social & Governance Report

# Appendix


[1] https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter?cid=ppc:CEOLetter:PMS:US:NA&gclid=EAIaIQobChMIktrLx5eL5wIVip6zCh1nBwe0EAAYASAAEgJPFvD_BwE&gclsrc=aw.ds

[2] https://www.un.org/sustainabledevelopment/goal-of-the-month/

[3] https://sdgs.un.org/goals

[4] https://youtu.be/pdTTDbarasI?si=-zcakIlTXnD8cv9z

[5] https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on-new-loss-and-damage-fund-for-vulnerable-countries

[6] https://www.unepfi.org/industries/banking/commitment-to-financial-health-and-inclusion-summary-report/

[7.] https://www.dieboldnixdorf.com/en-us/banking/insights/blog/how-an-unexpected-accelerator-is-driving-real-world-change-in-the-banking-industry/

[8.] https://www.unepfi.org/wordpress/wp-content/uploads/2019/07/Key-Steps-to-be-Implemented-by-Signatories.pdf

[9.] https://www.un.org/sg/en/content/sg/statement/2019-09-22/secretary-generals-remarks-launch-of-un-principles-for-responsible-banking-delivered

[10.] https://cib.bnpparibas/sustainable-finance-the-rise-and-rise-of-sustainability-linked-loans/

[11.] https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets

[12.] https://www.worldbank.org/en/publication/globalfindex

[13.] https://www.who.int/news-room/fact-sheets/detail/disability-and-health#:~:text=Key%20facts,1%20in%206%20of%20us

[14.] https://www.devprojournal.com/software-development-trends/digital-accessibility-getting-started-with-the-pour-principles/

[15.] https://www.who.int/news-room/fact-sheets/detail/ageing-and-health

[16.] https://www.capitecbank.co.za/globalassets/pages/investor-relations/financial-results/2023/annual-report/integrated_annual_report_2023.pdf

[17.] https://www.ftadviser.com/your-industry/2023/08/18/younger-generation-must-be-taught-how-to-manage-money/

[18.] https://www.sunjournal.com/2023/09/04/jmg-gets-financial-education-partner-with-oxford-federal-credit-union/

[19.] https://www.gca-foundation.org/assistance-technique/inclusion-financiere-des-refugies/

[20.] https://www.link.co.uk/about/news/news-archive/link-access-to-cash-commitment/

[21]. https://crm-tech.world/en/weekly-news-en/volksbank-and-sparkasse-cooperate-a-role-model-for-trade-and-pos-respectively/

[22.] https://techpoint.africa/2023/03/12/how-m-pesa-is-revolutionizing-financial-inclusion-in-kenya-and-beyond/

[23.] https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/blog/reinventing-rural-financial-inclusion-in-latin-america-highlights-from-foromic/

[24.] https://www.gpfi.org/publications/g20-action-plan-sme-financing-implementation-framework

[25.] https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/five-ways-for-banks-to-better-serve-small-business-clients

[26] https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2019/02/11/Financial-Inclusion-of-Small-and-Medium-Sized-Enterprises-in-the-Middle-East-and-Central-Asia-46335

[27] https://www.worldbank.org/en/topic/smefinance

[28] https://www.oecd.org/cfe/smes/key-issues-paper-oecd-sme-and-entrepreneurship-ministerial-meeting-2023.pdf

[29] https://cloud.google.com/sustainability?hl=en

[30] Diebold Nixdorf Carbon Footprint Analysis

[31] https://www.santander.com/en/stories/santander-is-now-fully-carbon-neutral-what-does-that-mean

[32] https://www.eia.gov/consumption/commercial/

[33] https://www.societegenerale.com/en/news/press-release/reduction-own-carbon-footprint

[34] Comparing DN Series 200 H with a traditional lobby recycler

[35] https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2019-04-10_cc_10-2019_strommix_2019.pdf

[36] https://www.co2meter.com/en-fr/blogs/news/could-global-co2-levels-be-reduced-by-planting-trees

[37] Calculation assumptions: 15 km [9.3 miles] travel distance (one way) per CIT stop; A transporter consumes on average 9 l petrol / 100 km distance travelled [26.1 mpg]; CO2 emissions calculated based on "myclimate" https://co2.myclimate.org/en/car_calculators/new

[38] https://www.dieboldnixdorf.com/en-us/banking/insights/whitepaper/self-service-reloaded/

[39] Typically, in countries of interest rates up to 3%

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