



# GAIA

## TAP ON!

**Semi Finalist in Masschallenge StartUp Accelerator**

Enhancing Customer Experience and Promoting Environmental Sustainability with an NFC Digital Receipt System

### **Background**

In the evolving landscape of retail, the integration of technology to enhance customer experience while promoting environmental sustainability has become increasingly important. The use of NFC (Near Field Communication) technology offers a unique opportunity to address these objectives. Recent trends indicate a growing consumer preference for digital solutions that are not only convenient but also environmentally conscious. This shift is driven by an increasing awareness of ecological issues and a desire for more efficient, technology-driven shopping experiences. Recognizing this trend, our startup has developed an all-in-one NFC digital receipt system, aimed at transforming the traditional transaction process into an eco-friendly, customer-centric model. This system not only addresses the environmental impact of paper waste but also caters to the modern consumer's need for convenience and digital accessibility.

### **Customer Study Methodology :**

To effectively tailor our NFC digital receipt system, a comprehensive customer study was conducted. This study aimed to understand the preferences, behaviors, and attitudes of retail shoppers towards digital receipts and eco-friendly practices. The demographic for this study broadly encompassed tech-savvy individuals aged 18-50, who frequently engage in retail shopping and show a propensity towards environment sustainability. The study utilized a mix of quantitative and qualitative research methods, including surveys, and one-on-one interviews. The survey, conducted with over 500 participants, gauged the general sentiment

towards digital receipts, while interviews provided deeper insights into user expectations, concerns, and desired features.

### Customer Profile:

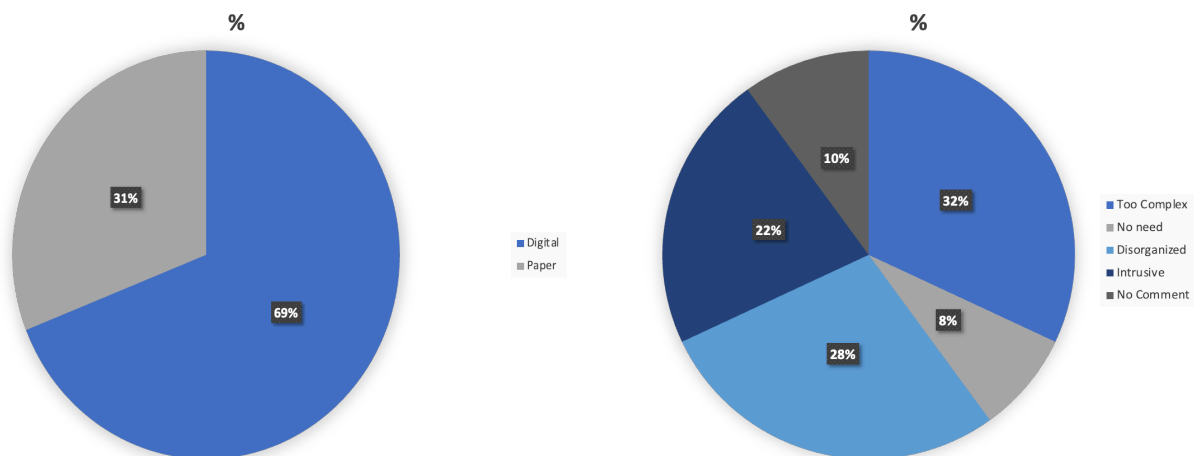
The typical customer profile emerging from our study is a tech-aware individual, aged between 21-40, who is environmentally conscious and values convenience and efficiency in their shopping experience. These customers are often smartphone users, comfortable with NFC technology, and prefer digital over paper-based solutions due to environmental concerns and personal organizational preferences. They are also active on social media and keen on brands that align with their values of sustainability and technological innovation. It was found that below the age of 21, users were not financially conscious, and after age 40 difficulties with technologies can be seen.

### Customer Insights

#### *Issues with Paper Receipts*

In the past, customers often found themselves juggling paper receipts, worrying about losing or misplacing them. According to a 2019 survey by Green America, 69% of people favored digital receipts for their organization, yet 60% said they opt out of any receipt.

As part of our research we interviewed 500 potential customers about their concerns with the current digital receipt solution. **32%** of respondents mentioned holding paper receipts or using a current method of digital receipts was too complex. Our second biggest group, **32%**, mentioned that current solutions are too intrusive for them, showing a hesitancy to share their personal data with merchants. **28%** mentioned they feel the current solutions are not organized for optimal UX.



## **Environmental Sustainability**

### *Reducing Paper Waste*

One of the key environmental benefits of our system is its ability to significantly reduce paper waste. By promoting the use of digital receipts, we contribute to a substantial reduction in the consumption of paper and ink, alleviating the environmental burden caused by discarded paper receipts. In our study we found that **42% of respondents had a desire for reducing their carbon footprint.**

## **Business Advantages**

### *Streamlined Operations*

While our primary focus is on customers and the environment, businesses gain substantial benefits as well. Our all-in-one NFC register system simplifies operations by integrating payment processing, receipt generation, and data capture into a single, streamlined device. This results in reduced hardware clutter and a more efficient workflow for businesses.

### *Cost Savings*

Businesses stand to save significantly by eliminating the need for separate hardware components, costly third-party services, receipt paper and upkeep of this hardware. This financial relief allows them to allocate resources to more critical areas of their operations, ultimately benefiting their bottom line.

## **Technicality**

This startup is at the forefront of revolutionizing retail transaction technology with the development of an advanced NFC (Near Field Communication) digital receipt system. This technology harnesses the power of NFC, a form of contactless communication between devices like smartphones and payment terminals. The core of our system is a sophisticated NFC module integrated into point-of-sale (POS) terminals. When a transaction is made, the system encodes and securely transmits digital receipt data to the customer's NFC-enabled device with just a tap. This process involves complex data encryption and transmission protocols to ensure security and privacy. The system is designed to be universally compatible with a wide range of

NFC-enabled smartphones and devices, ensuring a broad customer reach. Additionally, the back-end of the system is supported by a robust cloud-based infrastructure, which not only stores transaction data securely but also allows for seamless retrieval and management of digital receipts. The user interface on the customer side is intuitive, facilitating easy access and organization of their receipts. Our technology is not just a leap towards digital convenience; it's a stride towards environmentally sustainable practices in retail by significantly reducing paper waste.

