

# RightPlace White Paper

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**Abstract.** The RightPlace project introduces a blockchain-based solution to address the rising concern of accessibility for over one billion individuals with disabilities globally. Grounded in Brazilian legal frameworks, particularly law nº 10.048, the initiative emphasizes the need for social acceptance and collaboration.

Utilizing blockchain for security and accountability, RightPlace offers a transparent assessment system, benefiting individuals with disabilities and promoting inclusivity. The platform's innovative features include gamification, annual rankings, and collaboration with local governments, creating a sustainable solution.

With a multidisciplinary team, the project incentivizes users through RightCoins, ensuring a robust and reliable database. The marketplace strategy involves tailored marketing efforts based on comprehensive research, aiming to raise awareness and encourage widespread adoption.

In essence, RightPlace is a holistic approach to fostering inclusivity, encouraging businesses to prioritize accessibility, and empowering individuals with disabilities to make informed decisions. The initiative aims to significantly contribute to creating a more inclusive and informed society, where accessibility is a shared commitment to social impact.

## 1. Introduction

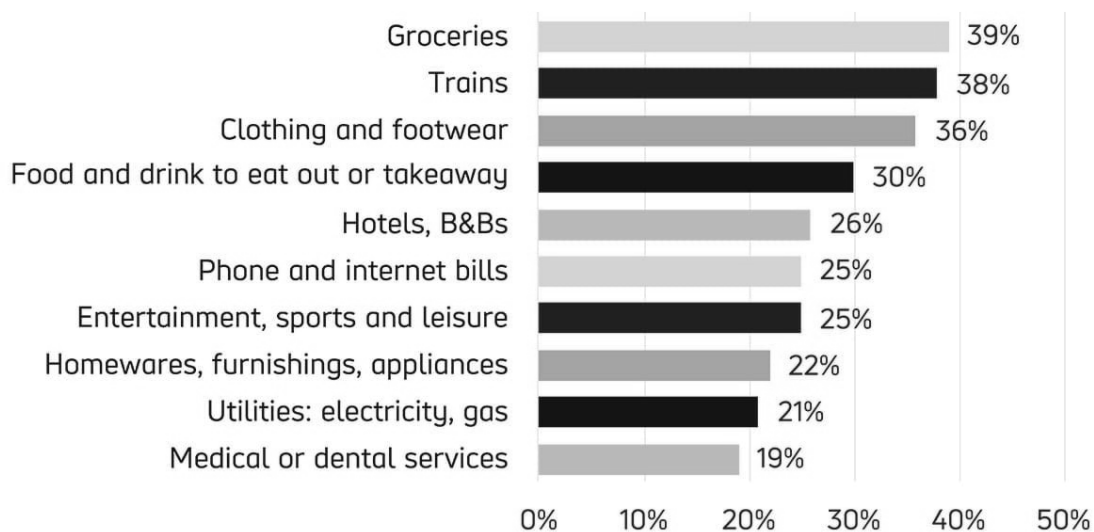
According to the World Health Organization's World Disability Report, over one billion people worldwide live with some form of disability, among whom approximately 200 million face significant functional challenges. In the coming years, disability will be an even greater concern as its prevalence has been on the rise. This is attributed to the aging of populations and the higher risk of disability in the older population, as well as the global increase in chronic diseases such as diabetes, cardiovascular diseases, cancer, and mental disorders.

People with disabilities have the right to designated reserved seats on public buses, metros, and trains, as well as easy access to bathrooms, identified accessible parking spots, a portion of vacancies in public tenders, tax benefits, and the use of service dogs, all granted by Brazilian law nº 10.048, enacted on November 8th, 2000. However, for the full realization of these rights, social acceptance and collaboration are essential components. Adhering to the law not only ensures legal compliance but also fosters a more inclusive and supportive society.

Culturally, businesses that are perceived as positive for prioritizing accessibility should, in fact, be the standard, given that legal obligations require such measures. Rather than being viewed as an added benefit, ensuring accessibility should be an inherent and expected practice, reflecting compliance with legal mandates. However, the sad reality is that many companies have not fully embraced inclusive practices.

## 10 most common poor digital experiences:

“In the past year, have you had a poor digital experience in any of these categories because your disability made it difficult to buy or use those things?”



<https://business.scope.org.uk/article/the-business-case-for-inclusive-design-big-hack-study-research-digital-accessibility>

## 2. Discussion

The solution we propose to provide accessibility, support, and respect to the 1 billion people with disabilities worldwide, along with other priority groups, is a foolproof and easily verifiable blockchain-based project.

Through an evaluation system, in which each user classifies the inclusion level of a given location, this project, called RightPlace, aims to improve the accessibility of companies, buildings and other public and private entities. By leveraging blockchain technology, our project establishes a secure and transparent basis for storing reviews. To ensure valuation integrity, smart contracts automatically validate specific criteria before recording valuations on the blockchain.



**RightPlace logo**

To attract users, the system is gamified by assigning achievements and ratings to users. For each review performed, the user earns a RightCoin, which can be used in negotiations with partner markets and, to ensure accurate and robust feedback, there will be a daily limit of three reviews per user.

For the success of the project, it is essential to offer significant incentives to places, such as preference in recommendation in research, according to positive recognition from the community. Furthermore, there is the chance of collaborations with local governments to provide additional incentives, such as tax discounts or access to subsidy programs for accessibility improvements, public recognition, and special certifications.

Additionally, the platform would incorporate an annual ranking system that recognizes the best-rated places in various accessibility categories. Businesses and environments that achieved exemplary standards would receive certificates of excellence, demonstrating their achievements in improving accessibility. These annual certificates would serve as an additional incentive for venues, publicly highlighting their dedication and efforts towards inclusion.

Overall, the RightPlace project presents an innovative approach to promoting the inclusion of people with disabilities in environments. Pseudo-random numerical rating data or pseudonymous comment data can be freely accessed by people with disabilities, who can use this data to make informed decisions about where to go and what services to consume, based on accessibility ratings provided by other users. This proposal empowers people with disabilities to actively choose places and services based on verified accessibility information, promoting a more inclusive and informed decision-making process. Thus, the evaluation mechanism generates a competitive dynamic favorable to inclusion.

### **3. Blockchain**

In recent years, blockchain technology has emerged as a pivotal tool in securing sensitive data across various industries. This paper contends that the inherent security protocols of blockchain make it an ideal candidate for safeguarding client information. Furthermore, the utilization of users' data as a strategic resource holds immense potential for informing businesses about inclusion challenges and, subsequently, enhancing profitability.

Blockchain technology is renowned for its ability to create immutable and transparent records. Using robust consensus algorithms such as Proof of Work (PoW) or Proof of Stake (PoS), the blockchain ensures that stored data is resistant to malicious alterations. This feature is particularly relevant when dealing with sensitive information provided by the users of the application and the transactions that will occur within our company and our clients.

Beyond its security attributes, blockchain serves as a transformative tool for businesses aiming to address societal challenges. Focusing on issues of inclusion, companies can use our users' data to gain valuable insights into the hurdles faced by various demographics. This informed perspective facilitates the development of targeted strategies to overcome inclusion challenges.

Understanding and resolving inclusion challenges not only align with ethical business practices but also prove instrumental in enhancing profitability. By tailoring products, services, and corporate strategies to be more inclusive, companies can tap into previously underserved markets. This strategic alignment with diverse consumer needs has the potential to unlock new revenue streams, thereby contributing to sustained business growth.

The incorporation of blockchain technology is imperative for the successful realization of the Self-Sovereign Identity (SSI) framework. SSI, grounded in the principles of blockchain, offers a robust solution for safeguarding individual user data. The proposed implementation of SSI assures users of heightened security measures, reinforcing the protection of their personal information.

In this endeavor, a strategic choice is made to employ the Hyperledger architecture, known for its efficacy in creating secure and decentralized ecosystems. The application of Hyperledger ensures the establishment of a reliable infrastructure, fostering the integration of SSI within an ecosystem designed to facilitate the transparent and immutable recording of user reviews pertaining to various locations or applications.

This innovative framework positions itself as a reservoir of valuable user-generated insights, stored securely on the blockchain. Furthermore, these aggregated reviews hold potential commercial value and can be selectively disseminated to interested entities. Companies keen on optimizing accessibility and augmenting profitability may acquire these anonymized, yet insightful, user reviews. This symbiotic exchange not only empowers users by granting them control over their data but also facilitates a mutually beneficial dynamic between users and interested enterprises within the proposed blockchain-based ecosystem.

### **4. Marketplace**

The profits of RightPlace are diversified, reflecting an innovative approach in the context of a marketplace. This platform, dedicated to promoting accessibility and inclusion, implements various strategies to drive its financial success.

A significant source of revenue comes from donations, originating from both public and private organizations. These donations are expressions of recognition for RightPlace's contribution to the promotion and encouragement of inclusive policies.

The Paid Accessibility Certification Program represents another avenue of revenue generation. After an evaluation by experts, locations deemed inclusive receive a special recognition emblem for a limited time. This certification not only validates RightPlace's mission but also contributes to the creation of an inclusive environment.

Strategic partnerships with companies interested in promoting accessibility and inclusion not only diversify revenue sources but also strengthen RightPlace's mission. This collaboration extends to the empowerment of people and the improvement of the physical environment, promoting a more inclusive ecosystem.

Advertising on the platform, through partner company ads, is another revenue stream. This strategy not only boosts RightPlace's visibility but also reinforces collaboration with entities committed to accessibility.

Furthermore, RightPlace aggregates and anonymizes statistical data on accessibility collected by the platform, offering this information to interested organizations. This data sale provides valuable insights into the needs of people with disabilities, solidifying RightPlace's position as a catalyst for change and innovation in the field of inclusion.

Collectively, these revenue strategies contribute to the financial sustainability of RightPlace, while the platform continues to play a vital role in promoting accessibility and inclusion.

## **5. Marketing Strategy**

Thorough research on disabilities and individuals with disabilities will be conducted to better understand and effectively approach this target audience in our marketing efforts. Valuable insights into their specific needs, preferences, and consumption patterns will be gained, enabling tailoring of messaging and outreach strategies to resonate more effectively with the disability community. The goal is to ensure that marketing efforts are not only impactful but also inclusive and considerate of the unique experiences of individuals with disabilities.

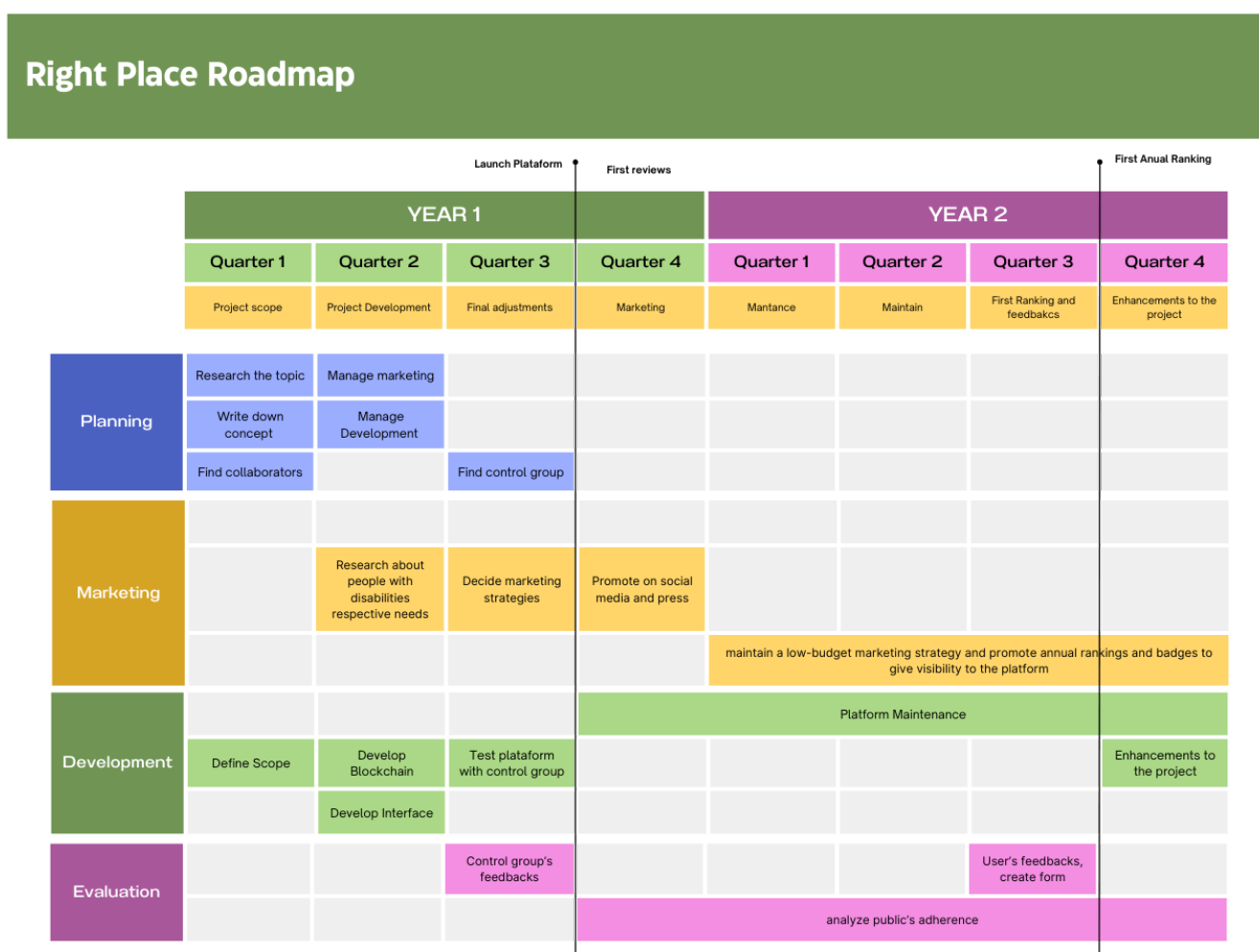
Upon the completion of our platform, we will launch a strategic campaign across social media channels and engage with the press to maximize visibility. Our goal is to connect with our audience by highlighting how our blockchain solution can significantly improve the lives of those with disabilities. Through a thoughtful and data-driven approach, we aim to create awareness and encourage widespread adoption of our innovative initiative.

In a concerted effort to amplify the impact of the RightPlace initiative, we recognize the paramount importance of forging strategic partnerships. By aligning with disability advocacy groups, NGOs, and businesses dedicated to inclusivity, our project aims to broaden its reach and enhance credibility. Collaborating with these organizations enables us to tap into established networks, ensuring that the RightPlace platform reaches and resonates with the diverse communities it aims to serve. Through these partnerships, we not only leverage shared expertise but also foster a collaborative ecosystem committed to driving positive change.

Beyond the planned marketing efforts, user satisfaction not only fuels organic marketing on our platform but also plays a crucial role in driving user advocacy. When users believe in the importance of the project and find it genuinely useful, their natural inclination is to encourage others to join. Satisfied users become enthusiastic ambassadors, actively sharing their positive experiences and endorsing the platform within their social circles. This organic word-of-mouth promotion

becomes a powerful catalyst for attracting as many individuals as possible to join our cause. We recognize that user advocacy is a vital component of our growth strategy, and we count on our satisfied users to champion the platform's mission and extend its reach within the community.

## 6. Project Roadmap



## 7. Conclusion

In conclusion, our proposed blockchain-based platform emerges as a transformative solution to address the growing concern of accessibility for individuals with disabilities around the world. The World Health Organization's alarming statistics underscore the urgency of our initiative, especially given the rising prevalence of disabilities due to aging populations and the increasing incidence of chronic diseases.

The legal framework in Brazil, as outlined in law n° 10.048, establishes the rights of individuals with disabilities, emphasizing the need for social acceptance and collaboration for the full

realization of these rights. We assert that businesses should not merely comply with legal obligations but should prioritize accessibility as a fundamental and expected practice, contributing to a more inclusive and supportive society.

The core of our solution lies in the application of blockchain technology, strategically chosen for its security attributes and transformative potential. By creating a transparent and accountable assessment system, we aim to not only benefit individuals with disabilities but also foster inclusivity for all. The use of Self-Sovereign Identity (SSI) and the Hyperledger architecture ensures heightened security and decentralized ecosystems, laying the foundation for a reliable infrastructure.

Through a strategic marketing approach, we plan to connect with our target audience and raise awareness about the potential of our innovative initiative. User satisfaction is paramount, not only driving organic growth but also serving as a catalyst for user advocacy. Satisfied users become ambassadors, actively promoting our platform and extending its reach within the community.

In essence, our blockchain-based platform is not just a technological solution; it is a holistic approach to fostering inclusivity, encouraging businesses to prioritize accessibility, and empowering individuals with disabilities to make informed decisions about the spaces and services they engage with. As we move forward, we believe that our initiative can contribute significantly to creating a more inclusive and informed society, where accessibility is not just a legal requirement but a shared commitment to social impact.

## **8. Team Overview**

Our multidisciplinary team of four computer science students is dedicated to revolutionizing accessibility evaluation through the implementation of a blockchain-based platform. With a shared passion for leveraging technology to enhance the lives of individuals with disabilities, we bring a diverse set of skills to the table.

### **Team Members:**

#### **Augusto Schweitzer**

Background: Concluded high-school integrated with the course of telecommunications .

Contribution: Idealized the central idea of the project.

#### **Gustavo Nunes Viana**

Background: Computer Science undergraduate at Federal University of Santa Catarina.

Contribution: The development of viable means of profit, incentives for relationships between parties, and innovative features.

#### **Rafael dos Santos Oliveira**

Background: Concluded high-school integrated with the course analysis and development of computer systems.

Contribution: Developed the idealization of the technical part of the project.

#### **Laura Maciel Queiroz**

**Background:** With a background that includes three years of study in Electrical Engineering before transitioning to Computer Science, the team member is presently formally enrolled in Graphic Design studies as well.

**Contribution:** Key insights on marketing and branding, as well as user's accessibility and satisfaction, knowledge on blockchain and similar technologies.

Our collaborative strengths lie in our shared commitment to social impact, proficiency in blockchain technology, and the unique skills contributed by each team member. A keen understanding of the challenges faced by individuals with disabilities, enables us to create a well-rounded and innovative solution.

All team members are currently pursuing degrees in Computer Science at Universidade Federal de Santa Catarina (UFSC). We have collectively focused our studies on blockchain technology, and our coursework has equipped us with the theoretical and practical knowledge necessary for the successful implementation of this project.

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