



GUIDEBOOK FOR ENTREPRENEURS: HOW TO BUILD ACCESSIBLE AND INCLUSIVE BUSINESSES



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01

ABOUT OUR GUIDEBOOK

PURPOSE OF OUR GUIDEBOOK

Established in 2021, Vidi Labs is an accessibility technology company dedicated to fostering an inclusive environment for VIPs. Led by CEO Turzo Bose, COO Lamia Rahman, and Machine Learning Engineer Reshika P V, they developed the Seekr device, a wearable assistive technology designed to help VIPs navigate the world independently.

Vidi Labs Limited has crafted this comprehensive guidebook to assist emerging tech startups to empower VIPs with their products. This guidebook includes strategies and insights on bringing ideas to life, business planning, user-centricity and current user landscape.



Turzo Bose



Lamia Sreya
Rahman

INTRODUCTION

02

“Who is our target audience?”



VISUALLY IMPAIRED PERSONS

Visual impairment is a reduction in vision that may or may not be irreversible. Around 1 in 5 people over 85 years have irreversible vision loss.



1.1 B

people were estimated to have some sort of vision impairment in 2020

1.8 B

people were predicted to suffer from visual impairment by 2050

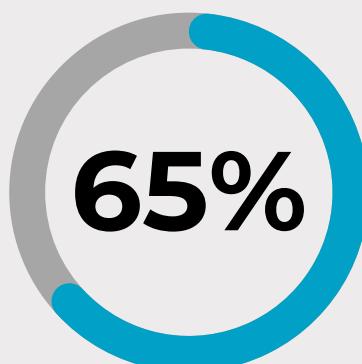


ENTREPRENEURS

An entrepreneur is an individual who identifies and seizes opportunities, takes risks, and organizes resources to start and manage a business venture. Entrepreneurs are typically driven by innovation, creativity, and a desire for autonomy.

< 5 years

average survival time of startups



of owners cited financial issues like cash flow visibility or access to capital as a reason for failure

Why choose a tech start-up for VIPs?

The simple answer is because technology is becoming more integrated into our lives. Enabling technology companies, those that seek to make the world more accessible for the visually-impaired, have been emerging. Some examples of more well-known tech businesses are Google and Apple. They are embodiments of how impactful technology and accessibility features could be with intricate planning and product development.

Manuel Pereira of the French Valentin Hauy Association (Bonnard, Boyle, Chapman, 2023), which campaigns for greater accessibility, reckons AI has the potential to give blind and visually impaired people more autonomy. "If we fall into an economic model that emphasizes profitability, the door can close as quickly as it opened," he said.

VISUALLY IMPAIRED PERSONS

Definition and types of visual impairment

- Visual impairment is defined as the limitation of actions and functions of the visual system.

Types of visual impairments

- Blindness: Blindness is a severe visual impairment where a person has a visual acuity lower than 20/400 with the best possible correction, or a visual field of 10 degrees or less.
- Moderate Visual Impairment or Low Vision: This refers to a visual acuity of 20/70 to 20/400 (inclusive) with the best possible correction.

Causes of visual impairment

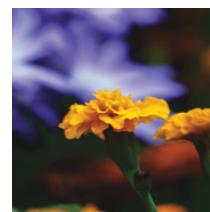


Age-related Macular Degeneration (AMD)

- Blurred or distorted central vision
- Difficulty reading or recognizing faces
- Dark or empty areas in the center of vision

Cataract

- Cloudy or blurry vision
- Sensitivity to glare
- Frequent changes in eyeglass prescription
- Faded or dull colors



(Normal) (Cataract)



(Normal) (Glaucoma)

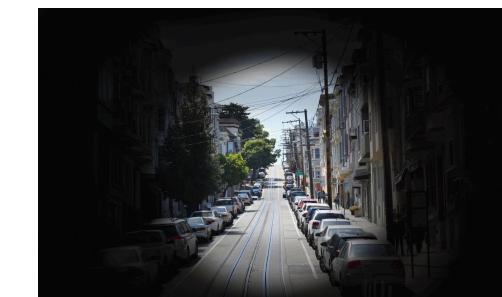
Glucoma

- Gradual loss of peripheral (side) vision
- Tunnel vision in advanced stages
- Eye pain or redness
- Halos around lights



(Normal)

(Diabetic
retinopathy)



Retina pigmentosa

- Difficulty seeing at night (night blindness)
- Loss of peripheral (side) vision
- Tunnel vision in advanced stages
- Difficulty with color perception

Common Challenges faced by VIPs

1 Mobility and Navigation

VIPs may encounter obstacles, uneven surfaces, and inaccessible signage, which can make it difficult to move around independently. Lack of tactile cues and auditory information can further hinder their ability to navigate safely.

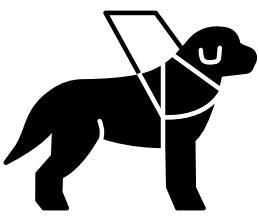
2 Limited access to information

Due to the visual nature of information, it is difficult for the visually impaired to gain access to information such as signs, timetable, printed materials, and many more.

3 Employment Opportunities

Limited accessibility in workplaces, lack of accommodations, and unconscious bias from employers can hinder their chances of maximizing financial potential. This can also impact their overall well-being.

Tools for VIPs That Are Not Technology-Related

Tools	Benefits	Limitations
	<ul style="list-style-type: none"> Enhanced mobility and independence Safety and confidence Social interaction and emotional support 	<ul style="list-style-type: none"> High cost of maintenance Long training required Limited accessibility (e.g. non-pet-friendly spaces) Limited to VIPs with certain level of physical capabilities
	<ul style="list-style-type: none"> Cost-effective Immediate availability upon purchase Obstacle detection via cane tip feedback 	<ul style="list-style-type: none"> Limited mobility assistance Learning curve Social stigma High orientation required

IDEATION & RESEARCH

04

Market Research



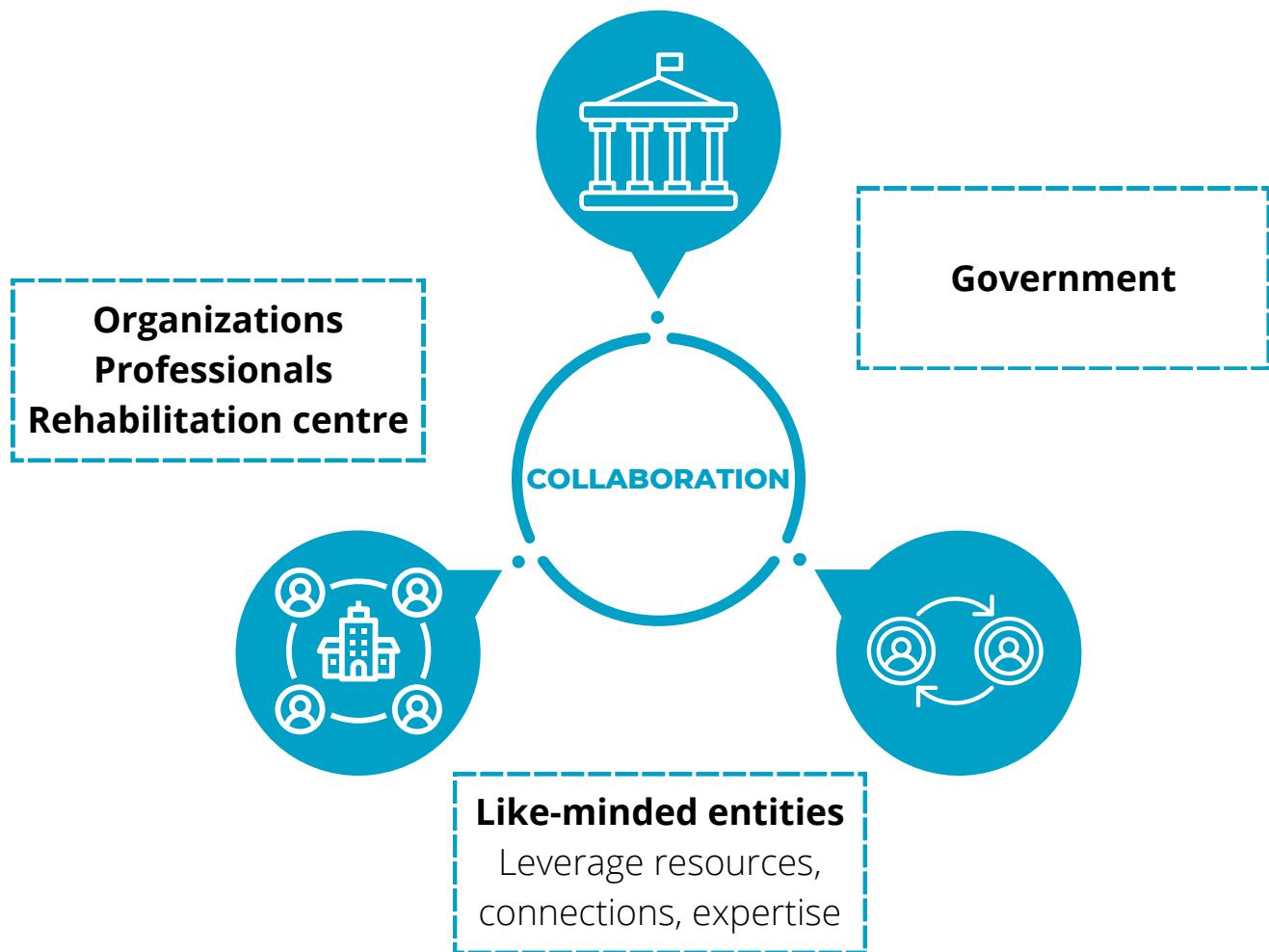
Staying updated on trends and developments within the VIP market

1. Emerging technologies, products, and services
 - a. AI, machine learning, assistive technology, wearables, haptics, computer vision
2. New studies on statistics, findings, reports, publications, etc.
 - a. May opt for innovating solutions to existing problems/inconveniences they face
3. Conferences or events
 - a. Understand the current landscape of VIPs and the blind.
 - b. Get informed with emerging trends and topics related to accessibility, technology, and discoveries.



Engaging with VIPs

1. Stepping into their everyday experiences
 - a. Self-perception towards disability and functional limitations
 - b. Daily routines, experiences, pain points, needs
 - c. Motivation towards leading an independent life
2. Engaging in formal communities such as organizations, hospitals, schools as well as informal communities like reading groups
 - a. Conduct interviews, surveys, focus groups, etc.
3. Gathering experiences and insights to help develop ideas and arrive at solutions.



Research on existing solution

- Analyzing strengths and limitations of existing innovations, products, and services
 - Identifying gaps where current solutions are not adequately addressed; not as suited to the needs of VIPs
- Enhancing existing solutions or developing new ones



User needs and pain points

User needs are specific requirements or features that users expect from a product or service to enhance its value and create a better user experience. Meeting these needs fosters brand loyalty. Businesses must identify and address user needs to develop relevant solutions. User needs guide research and development, influencing product integrity and design decisions. They also help designers allocate time and resources effectively by prioritizing favored designs.

Ways to Identify User Needs

A. Primary Research



User Interview



Focus Group
Discussions

- Conduct (1-on-1) interviews (structured and semi-structured) with users to collect data, understand their perspectives, and realize their needs.
- Interviewers ask questions and participants share their thoughts, expectations, and experiences.
- Works best for present data or information; Not applicable when remembering past use or speculating a future use of a system

Tips

1. Keep your questions simple, straightforward, and open-ended.
2. Avoid compound questions.
3. Help users break down how they perform a task with prompts
4. Use tactile tools when necessary.
5. Ask about when a system or feature worked really well or when they faced a difficult task.
6. Connect with VIPs through conversations to tap into their emotions, thoughts, and to build rapport.
7. Ask neutral questions to not interfere with the data.

B. Secondary Research

- Reviewing and analysing existing research studies, reports, publications, databases, and other sources of information that are available to the public

Step 1: Defining the purpose

- a. Ask your team: *what is the purpose of this product or service?*
- b. *What problem are you trying to solve?*
- c. *Set a goal.*

Step 2: Choosing your target user

- a. *Research on the user segments within the VIP community, since visual impairment is a spectrum,*
- b. *Understand their demographics, specific needs, preferences, and challenges.*

Step 3: Brainstorming

- a. *Brainstorm and cluster ideas with your team.*
- b. *Conduct baseline research, such as user interviews, to verify your ideas and assumptions.*

FOUNDATION FOR STARTING A COMPANY

05

1. Defining Vision, Mission, and Goal



- Determine the purpose and vision of your startup for serving the VIP community.
- Create a mission statement that clearly defines the problem you want to solve and the impact you aim to have.
- Establish measurable goals that align with your vision and mission, such as reaching a specific number of visually impaired individuals or improving accessibility.

2. Unique Selling Proposition (USP)

- Study existing companies serving the VIP community.
- Look at their products, branding, values, and marketing.
- Find gaps or opportunities where you can provide something unique and valuable to the visually impaired community.
- Define your USP by highlighting a distinctive product feature, a fresh problem-solving approach, a compelling brand story, or an innovative marketing strategy.



3. Building the Team



- Determine the skills needed to execute your startup's vision.
- Seek individuals who are passionate about the cause, possess experience or knowledge related to visual impairment, assistive technologies, or accessibility.
- Use networking events, online platforms, and industry communities to find potential team members.
- Conduct thorough interviews and assessments to ensure team members share your vision, have complementary skills, and are dedicated to the project.

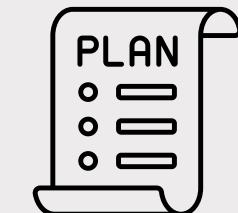


4. Funding and Grants

- Research funding opportunities and grants for startups focused on the visually impaired or disability initiatives.
- Look for opportunities offered by organizations, foundations, or government programs that support social impact startups or assistive technology ventures.
- Build a compelling pitch deck and business plan to attract potential sponsors, investors, or grant providers.
- Utilize networking events, pitch competitions, and online platforms to connect with potential funders and sponsors.

5. Business Plan

- Create a focused business plan that includes market analysis, product/service, marketing, operations, and finances.
- Research the needs and preferences of the visually impaired community.
- Define your value proposition, target market, competition, and marketing strategies.
- Develop a detailed operational plan.
- Create a financial forecast with projected revenue and expenses.



DESIGNING ACCESSIBLE & INCLUSIVE PRODUCTS

06

Universal design and accessibility principles



Universal Design: “The design and composition of an environment so that it can be accessed, understood, and used to the greatest extent possible by all people regardless of their age, size, ability, or disability” (Centre for Excellence in Universal Design, n.d.).

- Ensures that the true user experience envisioned by businesses is encapsulated properly at the implementation process.
- Designs with all types of users in mind
- Example: using Color Universal Design (CUD) to help users edit images and ensure graphical information is conveyed accurately, specifically for VIPs with color blindness

UNIVERSAL DESIGN



Tolerance for Error

Perceptible Information

Low Physical Strength

Equitable Use

Simple & Intuitive

Size & Space

Flexibility in Use

It is not a must, it is a should. In some cases, it is a legal requirement to meet accessibility standards. In others, it is just something smart to do.

This quote sums up our campaign goal, which is to educate designers on universal and accessible design and its importance. To do this, we've created a series of posters outlining each of the seven principles of universal design, and an accompanying website that further explains the principles and their relevance to both society and specific design practices.

Each poster focuses on a specific principle with relatable daily life examples that disregard that principle. Each poster is visually oriented to attract attention, and is consistent with its visual identity and style. Posters actively involve viewers by asking questions that are relatable.

7 Principles (Centre for Excellence in User Design)

1. Equitable Use: useful for people with diverse abilities
2. Flexibility in Use: accommodates a wide range of preferences and abilities
3. Simple and Intuitive: Use: easy to understand, regardless of the user's knowledge or experiences
4. Perceptible Information: communicates necessary information effectively to all types of users
5. Tolerance for Error: minimizes hazards and consequences of accidental or unintended actions
6. Low Physical Effort: used efficiently and comfortably, with minimum fatigue
7. Size and Space for Approach and Use: appropriate size and space are provided, regardless of user's size or mobility

User-centric Interfaces and Experiences (UI & UX)

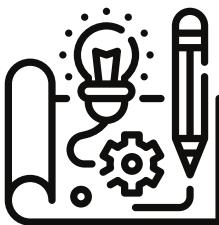
- Understand User Needs: This serves as a direction when designing systems and experiences for your specific target audience.
- Prioritize Accessibility:
 - Remember your target audience, VIPs, and create experiences FOR them.
 - Understand the guidelines, standards, and best practices when designing products or experiences for visually impaired people (ex. Web Content Accessibility Guidelines or WCAG).
 - Ex. color contrast, text readability, alt text, and compatibility with assistive technologies, sound feedback, voice prompts, assistive touch
- Clear and Consistent Design: stay true to your brand's identity
 - Use clear and legible typography, appropriate font sizes, and ensure color contrast.
- User Control Ability: Customizable settings
 - Font size, voice speed, multiple languages, color themes, playback speed
- Test and Iterate: Continual process of fine tuning and making amendments to address usability and are tailored for the target market
- Collect User Feedback:
 - Hold user interviews and focus group discussions.
 - Use the collected feedback to alter the direction of your design process to better suit the needs of your users.

Assistive technologies and accessibility features



Assistive technologies

- Assistive technologies: tools or technologies that help people with disabilities interact with technology
- Implement these features to supplement your product or device.



Developing prototypes

- Low-fidelity sketches or interactive prototypes like Figma wireframes
- Seeing, interacting with, or feeling prototypes could extract more accurate and genuine feedback that can be used to enhance the product's features.
- Used as prompts during user interviews, deployments, testing (ex. A/B testing), etc.



Compatibility and Integration

- Ensure that your device or interfaces are compatible with assistive technologies.
- Follow accessibility standards.

Examples



Screen reader optimization
Keyboard Accessibility
Alternative Text and Captions

User testing and iterative design process

Usability Testing

It allows the company to observe how the user interacts with the device. They collect feedback based on usability, accessibility, and user experience to refine and calibrate the design and integrity of the product.

- Address data issues received from data collected
- Identify improvement areas.
- Set a matrix to prioritize which type of feedback to work on for the next iteration.
- Make adjustments for better user experiences and meeting objectives of the product and needs of VIPs.

Iterate



Regularly evaluates the compliance of your system with the existing accessibility standards.



Involve VIPs in the design and testing process.



- Technology and user needs change and evolve, and to stay competitive, your product shall adopt respective changes if needed.
- Regularly iterate and enhance the features of your device to stay up-to-date with accessibility guidelines, as well as to improve the overall user experience.

Business ideas in practice: How Seekr does it

Company Vision

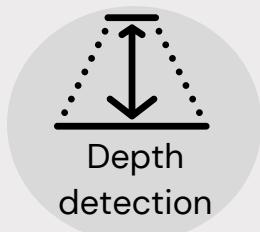
Seekr revolutionizes everyday human interactions through AI and intuitive designs

Company Mission

Enhancing the daily lives of visually impaired with our convenient assistive solution

Seekr Device

The Seekr device was created to empower VIPs as they access different spaces, opening up their world to more information. With its features, VIPs can navigate and understand their surroundings, bridging the accessibility inequality gap.



LOGISTICS & OPERATION

Go-to-Market Strategy

- Definition: a plan used by businesses to launch a new product or service to the market
- Components: target market profiles, marketing plan, sales strategy, distribution strategy
- Benefits: increased revenue, improved brand recognition, good customer relationships, competitive edge

Step 1: Target Market

- You must define your target market for tailored marketing strategies. You can research the competitive landscape in the accessibility space to identify competitors, analyze their offerings, strengths, and weaknesses to improve your solution.

Step 2: Marketing Plan

- After understanding your target market, your competitors, and the current trends, you could identify the most effective means of reaching your audience. Make sure to emphasize the value your technology brings to your target market. Below are some examples of marketing strategies:
 - Online platforms (social media, website)
 - Industry events and conferences
 - Partnerships
 - Billboards and posters

Step 3: Sales and Distribution Strategies

- You must define your sales and distribution channels. You should choose between direct sales or partnerships, prioritize efficiency and cost-effectiveness, and ensure technology accessibility for the target market.

Determine your company's preferred distribution channel

a. Distribution channel: the means used to get your product to the consumers

b. Types of Distributions:

i. Direct Distribution Channel

1. The business sells directly to the consumer

ii. Distributor or Resellers

1. Another entity sells the product or service to the final consumers

2. Ex. Department stores

iii. E-Commerce: selling the product or service online

Revenue Generation and Revenue Model Strategies



Subscription or Licensing Models:

- Ensure recurring revenue
- Ideal for tech firms for continuous updates
- Cater to diverse customer needs



Freemium Model

Basic version is accessible to all, premium features come with a price. Users can test it out before committing to the premium version



Perpetual Licensing:

- One-time purchase with lifetime access
- Attracts customers who prefer a one-time payment over recurring fees



Sponsorships and Grants:

Provides funding for the research and development of your company's assistive technology

Monitoring and Measuring Performance

- Key Performance Indicators (KPI):
 - Definition: key targets that should be tracked to make the most impact on your strategic business outcomes
 - Measures the performance and success of your product or service.
 - Example:
 - User adoption
 - Customer satisfaction (surveys, interviews, ratings)
 - Revenue growth
 - Product usage analytics (session duration, feature usage)
- Utilize user analytics and feedback to enhance your product roadmap and prioritize improvements based on user needs.

CHALLENGES & TIPS

08

Funding and Financial Pressure

- Challenge: Securing adequate funding, especially for startups targeting a niche market like the visually impaired community.
- Example: Limited access to traditional funding sources, such as venture capital firms, due to a lack of understanding or perceived market size



Tips

- Explore diverse funding options: Research grants, government funding, or nonprofit organizations dedicated to helping the visually impaired community.
- Strategic partnerships: Team up with organizations, foundations, or corporations interested in accessibility or social impact to access funding and resources.
- Crowdfunding: Use crowdfunding platforms to gather financial support from individuals passionate about the cause.

Failure to Adapt to Technological Advancements and Industry Trends

- Challenge: Falling behind in assistive technology and accessibility solutions can hinder competitiveness and relevance.
- Example: Creating a product that becomes quickly outdated due to emerging technologies



Tips

- Stay current with continuous learning and research: Keep abreast of the latest technological developments and industry trends by actively researching, attending conferences, and networking with industry experts.
- Cultivate innovation and experimentation: Foster an innovative culture within the startup that promotes experimentation and the exploration of new technologies and concepts.
- Engage with technology partners: Collaborate with technology firms or experts to benefit from their knowledge and remain at the forefront of technological progress.

Ensuring long-term impact and social responsibility

- Challenge: Maintaining long-term success to ensure a sustainable and responsible approach in serving the visually impaired community.
- Example: Neglecting the varied needs and preferences of the visually impaired community or overlooking social and ethical issues related to accessibility.



Tips

- Prioritize a user-centric approach: Engage consistently with the visually impaired community to comprehend their needs, preferences, and obstacles. Develop solutions that effectively cater to their requirements.
- Promote diversity and inclusion: Foster a variety of viewpoints within the startup team to enhance understanding of the community being supported.
- Support social impact efforts: Engage proactively in projects that advocate for accessibility, inclusivity, and social responsibility. Show a sincere dedication to creating long-lasting positive change.



All data has been gathered by Vidi Labs Limited in 2023. Our sincere wish is to witness more user-centric designs and assistive technologies to empower visually impaired people worldwide..

Interested to learn more about where to start or collaborate with us? Contact us through the information below!



[@seekr.hk](https://www.instagram.com/seekr.hk)



info@vidilabs.com.hk



<https://seekr.hk/>

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創業者指南： 如何建立無障礙及 共融的企業



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01

關於本指南

本指南的目的

成立於2021年的Vidi Labs是一家致力於為VIP創造共融環境的無障礙技術公司。由CEO Turzo Bose、COO Lamia Rahman和機器學習工程師Reshika P V領導，他們開發Seekr設備，一種可穿戴的輔助工具，旨在幫助VIP獨立地探索世界。

Vidi Labs Limited 精心製作了這本全面的指南，希望協助初創和科技企業，為視障人士(VIP) 探索產品開發。本指南內容包括有關實踐想法、計劃、用家為本精神以及現時用家所面臨的情況等資訊。



Turzo Bose



Lamia Sreya
Rahman

“誰是我們的目標受眾？”



視障人士 (VIP)

視力障礙指的是視力減退，可能是可逆的，也可能是不可逆的。超過85歲的人中約有5分之1具有不可逆的視力損失。



11 億人

在2020年患有某種視力障礙



創業者

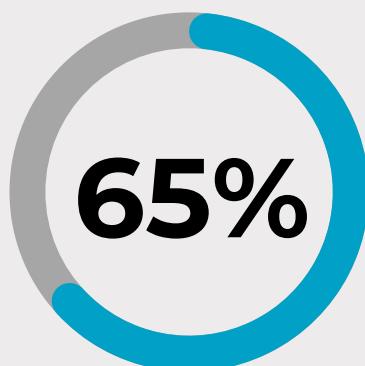
創業者是指發掘和抓住機遇、冒風險、組織資源來開展和管理業務的個人。他們通常受創新、創造力和渴望自主的驅使，而開始創業之路。

< 5 年

平均企業存活時間

↗ 18 億人

預估2050年視障人士的數量



的企業主將財務問題，如現金流可見度或資本進入，列為失敗的原因

為什麼要為視障人士開展科技業務？

技術越來越深入地融入了我們的日常生活，能夠使視障人士的世界更具易達性的科技公司正在慢慢出現。其他科技企業如Google和Apple一類的知名企業，展示了技術和可及性功能，並通過精心規劃和產品產生的巨大影響。

法國瓦朗丁·豪伊協會的曼努埃爾·佩雷拉（Bonnard、Boyle、Chapman, 2023）是倡導更大可訪問性的組織，他認為人工智能有潛力讓盲人和視覺障礙者更加自主。他說道，「如果我們陷入強調盈利的經濟模式，門也可能會像它打開一樣迅速關閉。」

視障人士

視障定義和類型

視障被定義為視覺系統的行動和功能受限。

常見視障的類型

- 失明：失明是一種嚴重的視障，指的是人的視力在最佳矯正情況下低於20/400，或視野範圍在10度以下
- 中度視力障礙或低視力：這指的是在最佳矯正下視力在20/70至20/400之間（包括）

導致視障的常見原因



年齡相關性黃斑變性 (AMD)

- 中央視覺模糊或扭曲
- 閱讀困難或無法識別面孔
- 視覺中心有黑暗或空白區域

白內障

- 視力模糊或朦朧
- 對強光敏感
- 眼鏡處方經常變動
- 顏色褪色或暗淡



(正常視力)



(白內障患者)



(Normal)



(Glaucoma)

青光眼

- 逐漸失去周邊視覺
- 進展到狹窄視野
- 眼痛或紅腫
- 光環出現在光源周圍

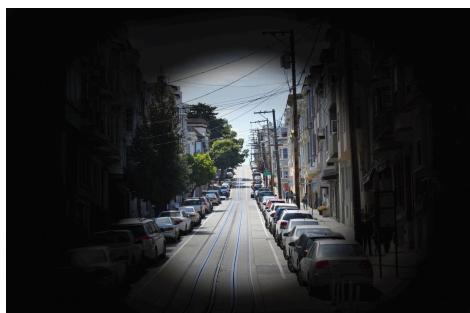


(正常視力)

(糖尿病性
視網膜病變)

糖尿病性視網膜病變

- 視力模糊或波動
- 視覺中出現黑暗或空白區域
- 斑點或飄浮物
- 難以看到顏色



視網膜色素變性

- 夜間視力困難（夜盲症）
- 周邊視野收窄進展到狹窄視野
- 顏色感知困難

視障人士面臨的常見挑戰

1 行動與導航

視障人士可能遇到障礙物、不平坦的地面向和不易辨識的標誌，這可能使他們難以獨立行動。缺乏觸覺提示和聽覺信息進一步妨礙他們安全定向的能力。

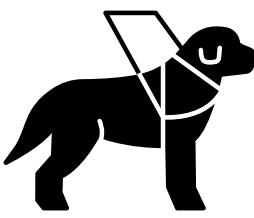
2 信息受限

由於信息大多數屬視覺性質，視障人士很難接收如標誌、時間表、印刷材料等信息。

3 就業機會

工作場所的易達性有限，缺乏適當的配套設施，以及雇主的認知和配合，可能阻礙他們最大限度地發揮經濟潛力。這也可能影響他們的整體身心靈健康。

現有輔助工具

工具	優點	限制
	<ul style="list-style-type: none"> • 增強自主以及獨立外出能力 • 安全和信心 • 社交互動和情感支持 	<ul style="list-style-type: none"> • 高昂的護理成本 • 需要長時間的培訓 • 在某些情況下易達性有限，如不允許攜帶寵物的場所 • 只適用於具有一定身體素質的視障人士
	<ul style="list-style-type: none"> • 具有成本效益 • 小巧便攜，易於攜帶 • 購買後立即可用 • 通過手杖尖端檢測障礙物 	<ul style="list-style-type: none"> • 提供有限的定向幫助 • 需要學習適應 • 社會污名化

構想和研究

04

市場研究



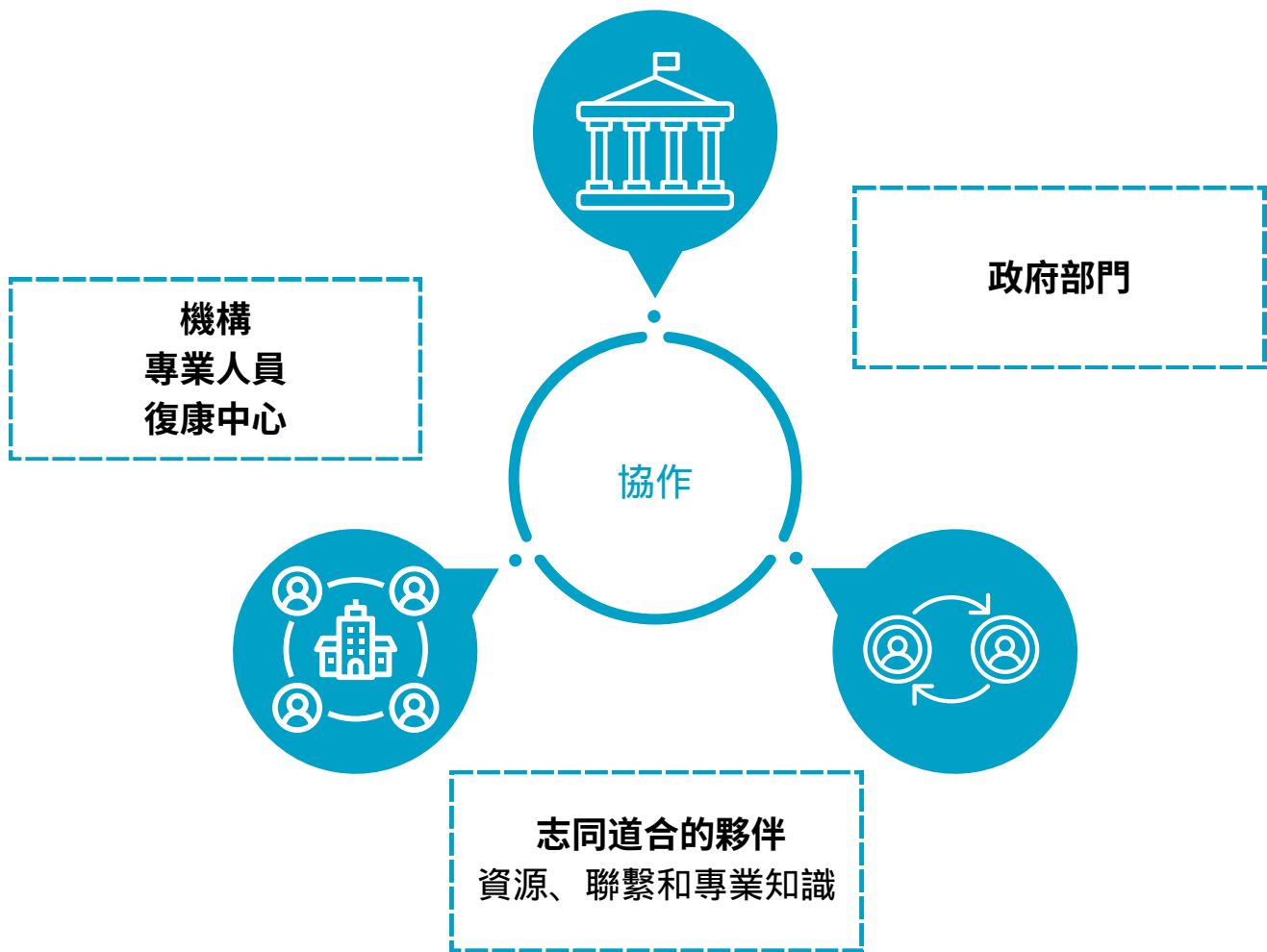
保持對視障人士市場的了解

- 保持對視障人士市場趨勢和發展的最新了解：
 - 研究新興技術、產品和服務領域，如人工智能、機器學習、輔助技術、可穿戴設備、觸覺技術和電腦視覺
- 關注最新的統計數據、調查結果、報告和出版物，以獲取相關研究成果
- 創新解決方案：
 - 可以考慮開發創新的解決方案，以解決視障人士面臨的問題和不便



參與視障人士互動

- 深入了解視障人士的日常生活、經驗、困難和需求
- 瞭解他們對獨立生活的渴望和動力
- 參與正式社群組織如醫院、學校等，以及非正式社群，如閱讀小組等
- 進行訪談、調查和焦點小組等形式的互動，收集經驗和見解，幫助開發新想法和找到解決方案



檢視現有解決方案

- 分析現有創新、產品和服務的優點和局限性
- 確定現有解決方案無法滿足的需求，或不符合視障人士的需求的方案
- 改進現有或開發新的解決方案，以填補現存需求差距

用家需求和痛點

用家需求是指用家對產品或服務的特定要求或功能，以滿足他們的期望、提升價值並創造更好的用家體驗。提供良好的用家體驗將帶來很高的品牌忠誠度。企業必須確定並滿足這些需求，為他們的市場制定相關和更好的解決方案。需求在研究和開發過程中提供方向，影響產品的完整性（例如功能、特性、交互設計等）。此外，它們還幫助設計師合理分配時間和資源，以優先更受歡迎的設計。

識別用家需求的方法

A. 初級研究



用家訪談



小組討論

- 進行一對一訪談，與用家收集數據，瞭解他們的觀點和需求
- 訪談中參與者分享他們的想法、期望和經驗
- 適用於收集現有數據或信息；無法準確收集過去的使用情況或推測對系統的未來使用

建議

1. 多運用簡單、直接且開放式
2. 避免使用複合問題
3. 問題
4. 透過提示幫助使用者分解執行任務的步驟
5. 必要時使用觸感工具
6. 了解系統或功能表現良好的情況，或是他們遇到困難的任務
7. 透過對話與重要人物建立情感和思維上的聯繫，建立關係
8. 提出中立問題，避免引導性問題干擾數據

B. 次要研究

回顧和分析現有的研究、報告、出版物、數據庫和其他公開可用的信息來源

步驟一：確立目的

- 產品或服務的目的是什麼？
- 您試圖解決什麼問題？

步驟二：設定目標

- 選擇目標用家。
- 研究視障人士中不同用家分層，因為視力受損程度有所不同
- 了解他們的人口、特定需求、偏好和鄭面對的挑戰

步驟三：集思廣益

- 與團隊一起集思廣益、整理想法
- 進行基線研究，例如用家訪談，以驗證想法和假設

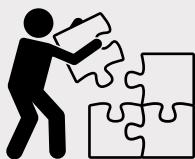
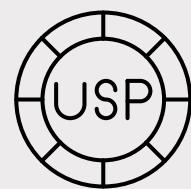


1. 定義願景、使命和目標

- 確定與服務視障人士社群相關的初創企業的目的和長期願景
- 制定清晰的使命，概述您希望解決的具體問題和希望產生的影響
- 設定與願景和使命一致的可衡量目標，例如受惠的視障人士人數或您希望實現的可及性水平

2. 獨特銷售主張 (USP)

- 研究現有針對視障人士的公司，分析它們的產品、品牌、核心價值觀和營銷策略
- 確定您可以向視障人士社群提供獨特和有價值的方面或領域
- 確定您的USP，這可能是一個獨特的產品特點、解決問題的不同方法、一個引人入勝的品牌故事或一種創新的營銷策略



3. 建立團隊

- 明確定義執行初創企業願景所需的技能和專業知識
- 尋找有志投入此事業、具有與視障、輔助技術或可及性相關的經驗或知識的人士
- 利用公開活動、在線平台和行業特定社群尋找潛在的團隊成員
- 進行全面的面試和評估，以確保團隊成員分享您的願景，具備互補的技能並持續投入項目

4. 資金和資助



- 研究針對初創企業專注於視障人士或以殘障為重點的倡議的資金和資助機會
- 尋找由組織、基金會或政府計劃提供的支持社會影響初創企業或輔助技術項目的機會
- 建立一份引人入勝的文稿和商業計劃，以吸引潛在贊助商、投資者或補助金提供者
- 利用公開活動、比賽和在線平台與潛在的資助者和贊助商建立聯繫

5. 商業計劃

- 定義您的商業計劃的整體結構和內容，包括執行摘要、公司描述、市場分析、產品或服務提供、營銷和銷售策略、運營計劃和財務預測
- 進行市場研究，了解視障人士社群的規模、需求和偏好
- 清楚地陳述您的價值主張、目標市場、競爭分析和營銷策略
- 制定詳細的運營計劃，包括生產、分銷、客戶支持和合作夥伴關係
- 創建一個包括預測收入、支出和資金需求的財務預算



設計無障礙和 共融產品

06

通用設計和無障礙原則



通用設計：「通用設計是指對環境進行設計和構建，以使所有人，無論年齡、體型、能力或殘疾程度如何，都能夠盡可能地獲得、理解和使用」（通用設計卓越中心）。

- 確保企業所設想的真正使用者體驗在實施過程中得到適當的呈現
- 以所有類型的使用者為設計對象
- 例如：使用色彩通用設計 (Color Universal Design, CUD) 來幫助使用者編輯圖像，確保圖形信息能夠準確傳達，尤其是針對患有色盲的視覺障礙者。

UNIVERSAL DESIGN



Tolerance for Error

Perceptible Information

Low Physical Strength

Equitable Use

Simple & Intuitive

Size & Space

Flexibility in Use

It is not a must, it is a should. In some cases, it is a legal requirement to meet accessibility standards. In others, it is just something smart to do.

This quote sums up our campaign goal, which is to educate designers on universal and accessible design and its importance. To do this, we've created a series of posters outlining each of the seven principles of universal design, and an accompanying website that further explains the principles and their relevance to both society and specific design practices.

Each poster focuses on a specific principle with relatable daily life examples that disregard that principle. Each poster is visually oriented to attract attention, and is consistent with its visual identity and style. Posters actively involve viewers by asking questions that are relatable.

七個卓越用家設計中心的原則

1. 公正使用：有助於擁有不同能力的人
2. 使用靈活性：適應各種偏好和能力
3. 簡單直觀的使用：易於理解，無論使用者的知識或經驗如何
4. 可察覺的信息：能夠有效地向所有類型的使用者傳達必要信息
5. 容錯率：減低意外或非預期中的fen和後果
6. 低體力負擔：使用起來高效且舒適，最小化疲勞感
7. 適當大小和空間以進行接近和使用：提供適當的大小和空間，無論使用者的體型或行動能力如何。

以用家為中心的界面和體驗（UI和UX）

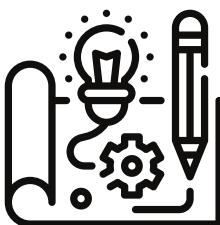
- 了解使用者需求：在為特定目標受眾設計系統和體驗時，作為指引的方向
- 重視可及性：記住目標受眾，也就是視力障礙者，並為他們創造體驗
 - 了解設計產品或體驗時的指南、標準和最佳實踐，例如網頁內容可及性指南（Web Content Accessibility Guidelines, WCAG）
 - 例如：色彩對比度、文字易讀性、替代文字以及與輔助技術的兼容性、聲音反饋、語音提示、輔助觸控
- 清晰而一致的設計：忠實於品牌的identity
 - 使用清晰易讀的字體、適當的字體大小，並確保色彩對比度
- 使用者控制能力：可自定義的設置
 - 字體大小、語音速度、多種語言、色彩主題、播放速度
- 測試和迭代：持續微調和修改的過程，以解決可用性問題，並針對目標市場進行定制
- 收集使用者反饋：進行使用者訪談和焦點小組討論
 - 利用收集到的反饋來調整設計過程的方向，以更好地滿足使用者的需求

輔助技術和可及性功能（視障群體）



輔助科技

- 輔助科技：幫助殘疾人與技術互動的工具或技術
- 實施這些功能以補充您的產品或設備



開發原型

- 草圖或交互式雛型，如Figma工具
- 觀察互動或感受雛型能有效提取更準確和真實的反饋，用於增強產品的功能
- 在用家訪談、部署、測試（例如A/B測試）等過程中用作討論工具

- 確保設備或界面與輔助功能相容
- 遵循可及性標準



兼容性和整合性

例子

屏幕閱讀器改良
鍵盤可用性
圖像描述和字幕

用家測試和改良設計過程



可用性測試

測試和用家會面使公司能夠觀察用家如何與設備互動。他們根據可用性、可及性和用家體驗收集反饋，以改進產品的設計和完整性。

- 解決從收集的數據中獲得的問題
- 確定改進範圍
- 設定矩陣，優先處理能包含在下一階段改良的反饋
- 進行調整以提供更好的用家體驗，滿足產品目標和VIP需求

迭代



定期評估系統是否符合現有的可及性

邀請視障人士參與設計和測試過程



- 技術和用家需求不斷變化和發展，為了保持競爭力，如果需要，您的產品應包容相應的變化
- 定期改良和增強設備功能，以與可及性指南保持最新，同時改善整體用家體驗

實踐想法和理念：Seekr的經驗

願景

Seekr通過人工智能
和直觀設計改變日常
人際互動

使命

通過我們方便的輔助解決方案
提升視障群體的日常生活質素
和多元性

Seekr設備

Seekr設備旨在為視障人士建
立一個無障礙信息的世界，
使他們能夠自主探索不同空
間。憑藉所提供的功能，視障
群體可以定向和理解周圍環
境方面，拉近可及性不平等
的差距。



文字識別



深度偵測



物體識別



巴士偵測

物流和運營

市場推廣策略

- 定義：企業用於將新產品或服務推向市場的計劃
- 組成部分：目標市場概況、市場營銷計劃、銷售策略、分銷策略
- 好處：增加收入、提高品牌知名度、良好的客戶關係、競爭優勢

步驟1：目標市場

- 為定制的營銷策略確定目標市場。研究可及性領域的競爭環境，以確定競爭對手，分析他們的產品、優勢和弱點，以改進您的解決方案。

步驟2：營銷計劃

- 在了解目標市場、競爭對手和當前趨勢之後，您可以確定最有效的目標受眾達到方式。請確保以及反覆展現您的技術能為目標市場帶來的價值。以下是一些營銷策略的例子：

- 在線平台（社交媒體、網站）
- 行業活動和會議
- 合作夥伴關係
- 廣告牌和海報

步驟3：銷售和分銷策略

- 確定銷售和分銷渠道，選擇直接銷售或合作夥伴關係，優先考慮效率和成本效益，並確保技術對目標市場具有可及性

確定公司首選的分銷渠道

- 分銷渠道：將產品提供給消費者的策略
- 分銷類型：
 - 直接分銷渠道
 - 企業直接向消費者銷售產品
- 經銷商或轉售商
 - 另一個實體向最終消費者銷售產品或服務
 - 例如：百貨公司
- 電子商務：在線銷售產品或服務

收入生成和收入模型策略



訂閱或授權 模型：

- 確保循環收入
- 適用於技術公司進行持續更新
- 滿足不同客戶需求



免費和付費混 合模型：

- 基本版本對所有人開放，高級功能需要付費
- 用家可以在承諾購買高級版本之前進行測試



永久授權：

- 一次性購買，終身使用權
- 吸引喜歡一次性付款而不是循環付費的客戶



贊助和資助：

- 為公司輔助技術的研發提供資金

監控和衡量績效

- **關鍵績效指標 (KPI) :**
 - 定義：應跟蹤的關鍵目標，對您的策略業務成果產生最大影響
 - 衡量產品或服務的表現和成功
 - 例如：
 - 用家採用情況
 - 客戶滿意度（調查、訪談、評級）
 - 收入增長
 - 產品使用分析（持續時間、功能使用情況）
- 利用用家分析和反饋來改進產品路線圖，根據用家需求優先進行改進

挑戰與建議

08

資金和財務壓力

- 挑戰：為針對視障社群等非主流市場的初創企業尋找穩定資金來源
- 例子：由於對市場規模的認知不足或感知，傳統的風險投資公司等傳統資金來源的使用受限



建議

- 探索多樣化的資金選項：研究資助、政府資助或致力於幫助視覺受障社區的非營利組織所提供的資源
- 策略合作夥伴關係：與對可及性或社會影響感興趣的組織、基金會或企業合作，以獲取資金和資源
- 精籌：利用眾籌平台從對該事業熱情的個人獲得財務支持

無法適應技術進步與行業趨勢：

- 挑戰：輔助技術和可及性解決方案是快速發展的領域。無法跟上技術進步和行業趨勢可能會減低競爭力和相關性
- 例子：開發的產品由於新興技術的出現而迅速過時



建議

- 持續學習與研究：通過積極研究、參加會議和與業內專家建立聯繫，及時了解最新的技術發展和行業趨勢
- 培養創新和實驗精神：在初創企業中培養一種促進實驗和探索新技術和概念的創新文化
- 與技術合作夥伴合作：與技術公司或專家合作，從他們的知識中受益，保持在技術進步的前沿

確保長期影響和社會責任

- 挑戰：確保對視覺受障社群提供可持續和負責任的服務方式
- 例子：忽視視覺受障社群的多樣需求和偏好，或未能解決與可及性相關的社會和倫理問題



建議

- 用家為本：與視覺受障社群保持持續互動，了解他們的需求、偏好和障礙，開發能有效滿足他們需求的解決方案
- 促進多元和共融：在初創團隊中培養多種觀點，以增進對所支持社群的理解
- 支持不同社會影響力：積極參與倡議可及性、共融和社會責任的項目，展示真誠致力於創造持久正面改變的決心



所有數據均由Vidi Labs Limited於2023年收集。我們誠心希望能見證更多以用家為本的設計和輔助技術，為視障社群探索更多可能性。

有興趣了解更多或不知道如何入手？歡迎透過以下方式聯絡我們的團隊！



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