Tweel’s Wheels

2025 Pitch Deck

Mission

Tweel's Wheels is on a mission is to create **easy to find**, **beautifully designed**, and **affordable** play products that spark joy for and empower children with mobility challenges.

Problem

For children with physical disabilities, opportunities to experience play are limited.

- **Few options**
- **Hard to find**
- **Unappealing**
- **Expensive**

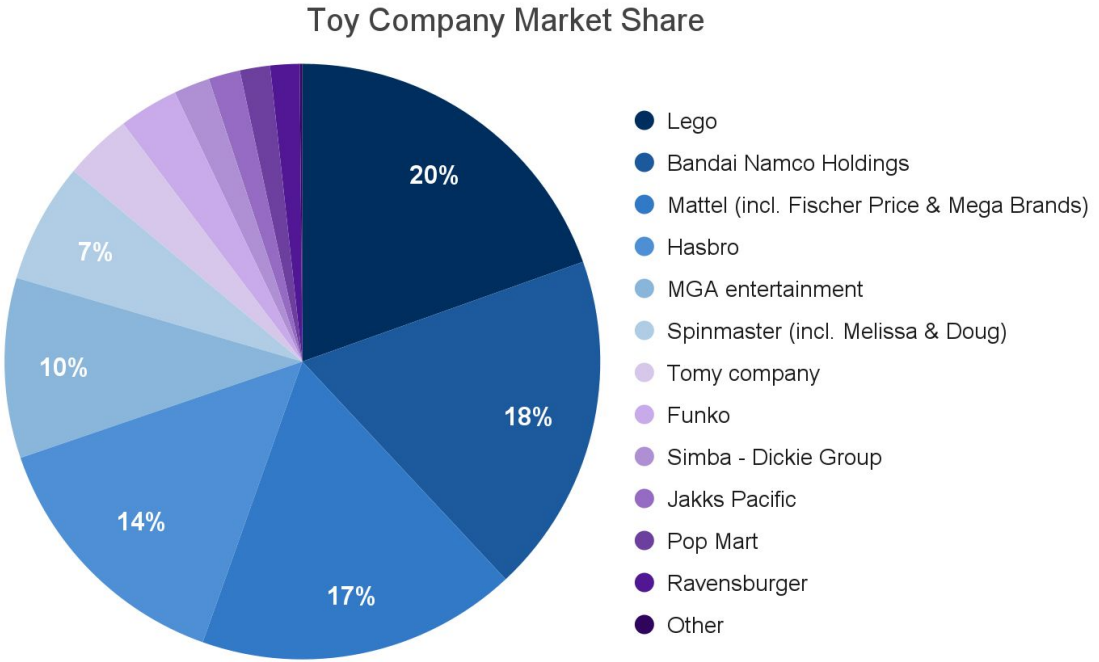
Industry

$40B

spent on US toys in 2023

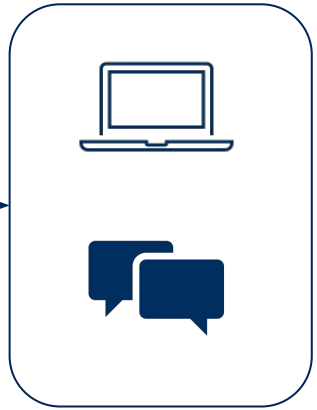
9%

of US children have some form of physical disability



Retailers:

User Journey



Adaptive Bikes

Adapted Solutions

Nonprofits

Specialized Resellers

Specialized Toys

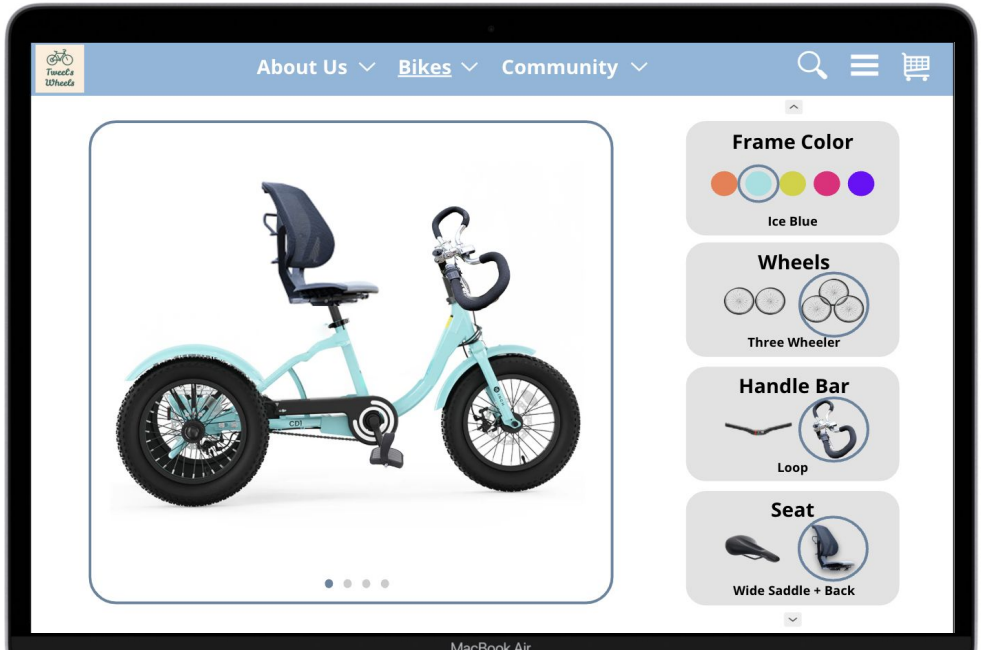
User Insights

“... as a kid I was **embarrassed** by it.”

“The donation **waitlist was over a year**, so we paid out of pocket and it was **$3,000**.”

Solution

Personalized, yet affordable adaptive bikes.



- User-centered design
- User-friendly website
- AI-powered customization
- Adjustable sizing
- Mass customization
- No exploitative pricing

Competition

Company	Tweel's Wheels	RAD Innovations	Van Raam	Rifton	Freedom Concepts
Design Forward	✓	✓	✗	✗	✗
Entry Price <$1,500	✓	✗	✗	✗	✗
Customizable	✓	✓	✓	✓	✗
User-Friendly Website	✓	✓	✓	✗	✗
Adjustable Sizing	✓	✓	✗	✗	✗

Business Model

Retail Price
$1,000*

Gross Margin
50%

Outsourced Manufacturing

☆ **Initial Focus** ☆

1	2	3
Direct to Consumer	**Business to Consumer**	**Business to Business**
Sell to customers directly from TW's website	Sell through big-box retailers (i.e. Amazon)	Sell to organizations (i.e. therapy & play centers)

+ +

*Price may vary depending on feature selection.

Go-To-Market Strategy - DTC

Target Segment: Cerebral Palsy Community

Leverage early adopters to influence others

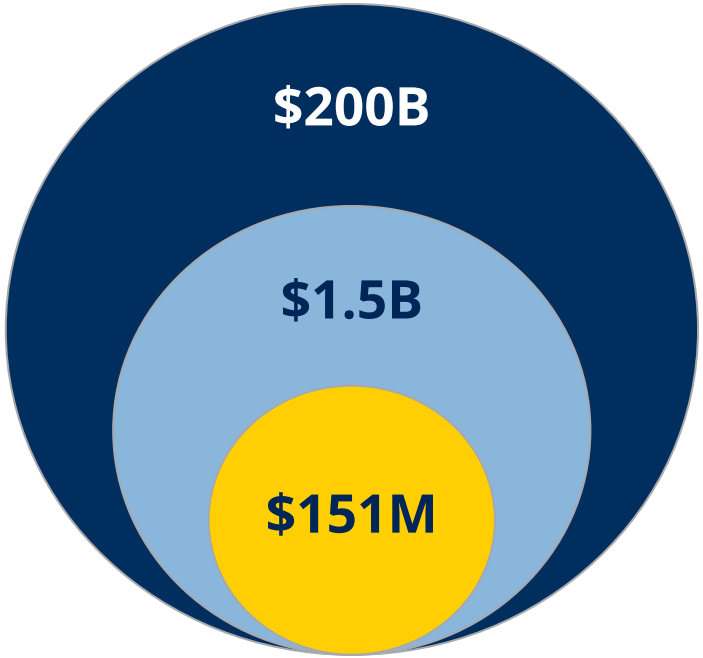
Advertise on social media, blogs, and community forums

Attend trade shows, conferences, & networking events

Create brand ambassador program

Visit relevant schools, centers, & facilities

Market Sizing



SOM

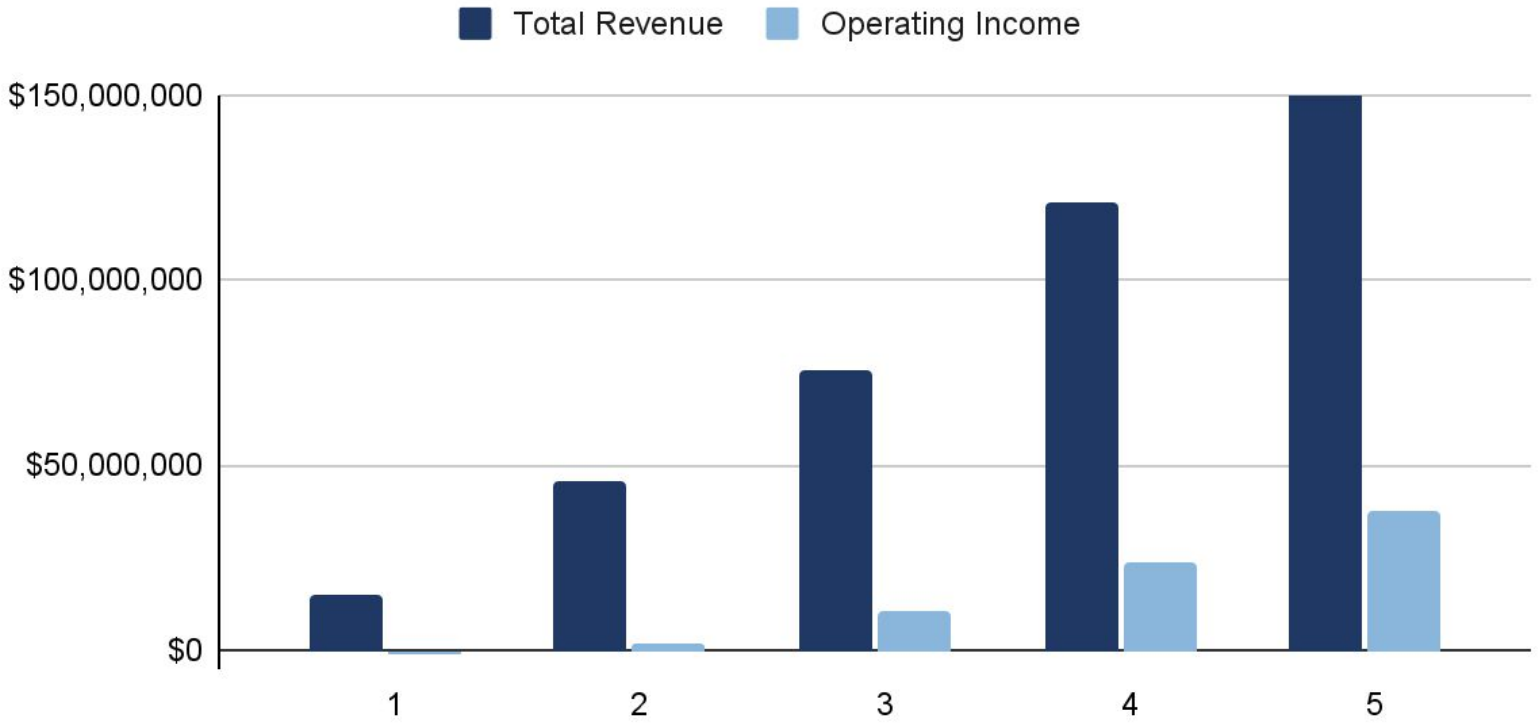
- Mobility challenges:
  - Cerebral palsy
  - Spina bifida
  - Limb reduction
  - Muscular dystrophy
  - Severe dyspraxia
- Age: 4-16 years old
- Region: U.S.
- 1% in Year 1 → 10% in Year 5

"This market is also growing .. as medicine advances, the lifespan of those born with disabilities increases."

- Dr. Mark Peterson, Associate Professor of Physical Medicine and Rehabilitation at Michigan Medicine

Financial Projections

$151M Revenue Projected in Year 5



Social Impact Metrics

Improve societal perception, inclusivity, and overall well-being of children with physical disabilities and their families.

Improve perception of the disabled community.

Include disabled children in group play.

Increase health and happiness.

Empower children through autonomy.

Eliminate exploitative pricing.

Reduce time and effort spent by parents.

Team

Management

Lauren Tweel
Founder & CEO

Advisory Board

Manufacturing

Donald Tweel

President & CEO of Laural Home

Medical

Dr. Joshua Hyman

Columbia University Pediatric Orthopedic Surgeon

Clinical Director of Weinberg Family Cerebral Palsy Center

Physician

University of Michigan Pediatric Physical Medicine & Rehabilitation Center

Exit Potential

Acquisition

$29M - $111M Valuation

Year 5

Market Comparables

Van Raam

- Adaptive bike company
- Acquirer: Armira
- Purchase price: $185M
- **Exit multiple: 11x**

Melissa & Doug

- Social impact driven toys
- Acquirer: Spin Master
- Purchase price: $950M
- **Exit multiple: 10.5x**

Thank you!

Appendix

Market Sizing

Market Sizing

	US	Global
Total Available Market (TAM)		
Total Population	331,900,000	8,045,311,447
% of Population under 18	22.18%	29.80%
# Births per Year	3,659,289	140,000,000
# Years (Age Representation)	18	18
U18 Population	73,602,753	2,397,435,502
Total U18 Pop. with physical disabilities	6,514,386	200,071,051
Total U18 Pop. with severe physical disabilities	2,098,221	56,224,921
Dyspraxia	4,416,165	143,846,130
Severe dyspraxia	1,472,055	47,948,710
Cerebral palsy	500,000	5,065,858
Spina bifida	26,347	1,008,000
Limb reduction	81,000	1,482,353
Muscular dystrophy	18,819	720,000
Serviceable Addressable Market (SAM)		
# Years (Age Representation)	13	13
Total 4-16yr. Pop. with severe physical disabilities	1,515,382	40,606,887
Dyspraxia	3,189,453	103,888,872
Severe dyspraxia	1,063,151	34,629,624
Cerebral palsy	361,111	3,658,675
Spina bifida	19,028	728,000
Limb reduction	58,500	1,070,588
Muscular dystrophy	13,592	520,000
Serviceable Obtainable Market (SOM)		
Year 1 Market Capture	1%	
Year 5 Market Capture	10%	
SAM Year 1	15,154	
SAM Year 5	151538	

TAM: 200M children

- Global
- Under 18
- Any physical disability

SAM: 1.5M children

- US
- 4-16 years old
- More severe physical disabilities

SOM: 15-151k children

- 1% of SAM in year 1
- 10% of SAM in year 5

Financials

Costing

Color Code	
Inputs	Black Text
Calculations	Blue Text
Assumptions (w/ sources)	Green Text

Costing Inputs	
Freight	20%
Duty	11.3%
China Duty	10%
Allowance	5%
Storage	10%
Markup	50%
TW Retail Price	$1,000.00
3rd Party Sugg. Retail Price	$1,000.00

Retail price: **$1,000**

Markup: **50%**

COGS: **$500**

First Cost: **$290**

Method	First Cost	Freight	Duty	Landed Cost	Allowance	Storage	COGS	TW Retail Price	TW MU	3rd Party Retail Price	3rd Party MU (shared)
Bike 1 - Entry Level											
Backward	$289.52	$57.90	$61.67	$409.09	$50.00	$40.91	$500.00	$1,000.00	50%	$1,000.00	50%

Pricing Strategy

Adaptive			
Company Name	**Min Price**	**Max Price**	**% Change**
Rifton	$2,260	$5,920	162%
AmTryke	$1,500		-
Triaid	$1,500	$2,300	53%
Freedom Concepts	$3,400	$6,700	97%
Vanraam	$1,520	$2,670	76%
Worksman Cycles	$519	$2,600	401%
RAD Innovations	$5,280	$11,280	114%
Average	**$2,283**	**$5,245**	**150%**

Traditional			
Company Name	**Min Price**	**Max Price**	**% Change**
Trek	$280	$700	150%
Specialized	$150	$3,800	2433%
Retrospec	$99	$220	122%
Cannondale	$150	$1,650	1000%
Scott	$160	$2,000	1150%
Cleary Bikes	$260	$1,000	285%
Average	**$183**	**$1,562**	**857%**

$2,283 vs. $183: **12x** more expensive
$1,000 vs. $2,283: **56%** less

Revenue Forecasting - Inputs & Assumptions

Startup Costs (fixed)	
Category	**Amount**
Total	**$131,462**
SG&A	$14,112
Business Setup Costs (incl. insurance &	$1,875
Patent Fees	$1,200
eCommerce Website Design	$9,650
Domain name	$106
Marketing	$1,281

Startup Costs (fixed)	
Category	**Amount**
Research & Development	$117,350
Product Design (by engineering contractor)	$40,000
Prototyping	$15,300
Tooling Costs	$55,000
Upfront Cost of Inventory & Storage	$5,150
Package Design	$1,525
Distribution costs	$375

Startup costs: **$131k**
Market pen.: **1→10%**
SG&A: **20%**
R&D: **35→5%**
Employees: **1→4**
Avg. Salary: **$100k**

YoY Assumptions						
Category	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Market Share (Serviceable Obtainable Market)	0%	1%	3%	5%	8%	10%
Revenue per Product	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
COGS per Product	$500	$500	$500	$500	$500	$500
Sales, General, & Administrative (% of Revenue)	0%	20%	20%	20%	20%	20%
Research & Development (% of Revenue)	0%	35%	25%	15%	10%	5%
Number of Employees	1	2	3	4	4	4
Average Salary	$0	$100,000	$100,000	$100,000	$100,000	$100,000
Financing Raised	$150,000	$1,000,000		$4,000,000		
Investment Round	Friends & Family	Seed		Series A		

Revenue Forecasting

Revenue Year 5: **$151M** Operating Income Year 5: **$37M** Breakeven: **Year 2**

Tweel's Wheels 5 Year Pro Forma						
	Year 0	**Year 1 (est.)**	**Year 2 (est.)**	**Year 3 (est.)**	**Year 4 (est.)**	**Year 5 (est.)**
Customers	0	15,154	45,461	75,769	121,231	151,538
Price (per product)	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
COGS (per product)	$500	$500	$500	$500	$500	$500
Revenue	$0	$15,153,820	$45,461,460	$75,769,100	$121,230,560	$151,538,200
COGS	$0	$7,576,910	$22,730,730	$37,884,550	$60,615,280	$75,769,100
Gross Profit	$0	$7,576,910	$22,730,730	$37,884,550	$60,615,280	$75,769,100
Gross Margin (%)		50%	50%	50%	50%	50%
Operating Expenses	$131,462	$8,534,601	$20,757,657	$26,919,185	$36,769,168	$38,284,550
Sales, General, & Administrative	$14,112	$3,030,764	$9,092,292	$15,153,820	$24,246,112	$30,307,640
Research & Development	$117,350	$5,303,837	$11,365,365	$11,365,365	$12,123,056	$7,576,910
Personnel Expenses	$0	$200,000	$300,000	$400,000	$400,000	$400,000
Operating Income	-$131,462	-$957,691	$1,973,073	$10,965,365	$23,846,112	$37,484,550
Operating Margin (%)		-6%	4%	14%	20%	25%
Cash Balance without Investment	-$131,462	-$1,089,153	$883,921	$11,849,286	$35,695,398	$73,179,948
Investment	$150,000	$1,000,000		$4,000,000		
Cash Balance with Investment	$18,539	$60,848	$2,033,921	$16,999,286	$40,845,398	$78,329,948

Income Statement

Tweel's Wheels Income Statement						
	Year 0	Year 1 (est.)	Year 2 (est.)	Year 3 (est.)	Year 4 (est.)	Year 5 (est.)
Total Revenue	$0	$15,153,820	$45,461,460	$75,769,100	$121,230,560	$151,538,200
Cost of Goods Sold (COGS)	$0	$7,576,910	$22,730,730	$37,884,550	$60,615,280	$75,769,100
Gross Profit	$0	$7,576,910	$22,730,730	$37,884,550	$60,615,280	$75,769,100
Sales, General, & Administrative (SG&A)	$14,112	$3,030,764	$9,092,292	$15,153,820	$24,246,112	$30,307,640
Research & Development (R&D)	$117,350	$5,303,837	$11,365,365	$11,365,365	$12,123,056	$7,576,910
Personnel	$0	$200,000	$300,000	$400,000	$400,000	$400,000
Operating Income	-$131,462	-$957,691	$1,973,073	$10,965,365	$23,846,112	$37,484,550
Interest Expense	TBD	TBD	TBD	TBD	TBD	TBD
Pretax Income	-$131,462	-$957,691	$1,973,073	$10,965,365	$23,846,112	$37,484,550
Taxes	-	-	$414,345	$2,302,727	$5,007,684	$7,871,756
Net Income			$1,558,728	$8,662,638	$18,838,428	$29,612,795

Exit

Valuation

Valuation Method	DCF
Exit Timing (year)	5
Sales at Exit	$151,538,200
Earnings at Exit	$37,484,550
Multiple at Exit	11
Discount Rate (min)	70%
Valuation (min)	$29,040,252
Discount Rate (max)	30%
Valuation (max)	$111,052,471

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Assumptions (w/ sources)	Green Text

Exit Timing: **Year 5**

Multiple at Exit: **11x**

Discount Rate (min): **30%**

Discount Rate (max): **70%**

Ideal Acquirer:

- **Established toy company**
- **Adaptive bike company**
- **Traditional bike company**

Manufacturing

Manufacturing Facilities

BATTLE

IDEAL
IDEAL BIKE CORPORATION

Tianjin Fuji-ta Group

Synergies

- Kids' bikes
- Spare bike parts
- Outdoor toys
- Largest bike manufacturer

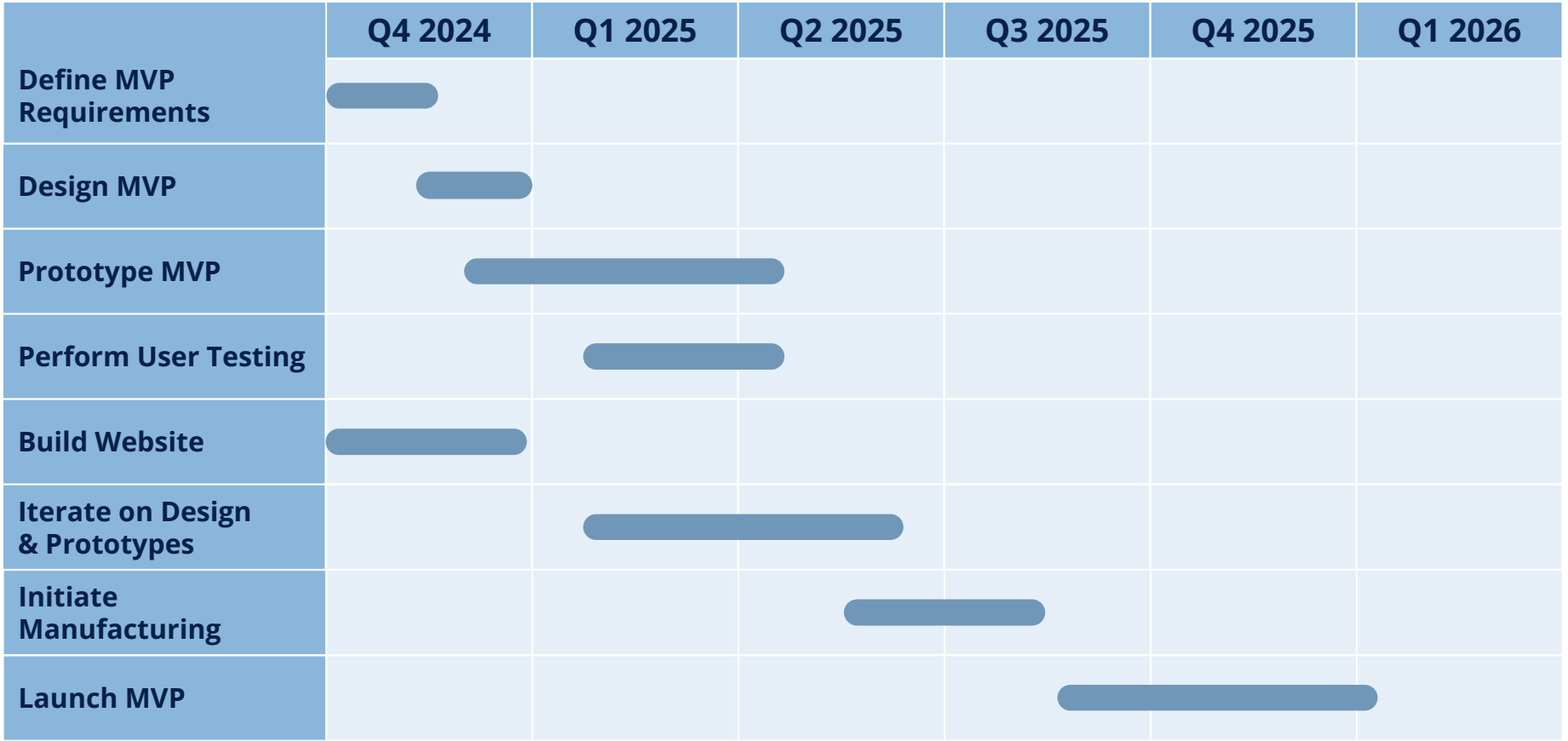
Ideal Bike Company

Synergies

- Innovative processes
- Custom designs
- Prototyping capabilities
- 40+ years experience

Product Development

Product Development Roadmap



Risks

Risks

- Gaining early product adoption
- Designing ineffective or problematic product
- Higher than expected or sustainable startup and manufacturing costs
- Securing necessary funding

Risk Mitigation

- Performing thorough user testing and iterating on feedback
- Conducting detailed cost analyses with input from various expert stakeholders
- Developing financial plans that consider diverse sourcing of funding
- Embracing lean startup principles and agile management

User Research

User Insights - Children (users)

"... as a kid I was embarrassed by it."

“My bike was too big and bulky so maneuverability was an issue... I couldn’t even ride off the sidewalk.”

“I didn’t have gears so I couldn’t keep up with my friends.”

“I have a distinct memory of watching my siblings go off bike riding without me... that was really hard.”

User Insights - Parents (customers)

“Hard to find exactly what you need and nothing is customizable.”

“Slap an adaptive label on it and the price goes up five fold.”

“The donation waitlist was over a year... we paid out of pocket and it was at least $3,000.”

"There is a difference between being capable of doing something and being great at it."

User Insights - Physicians (influencers)

“I think you're onto something very interesting.”

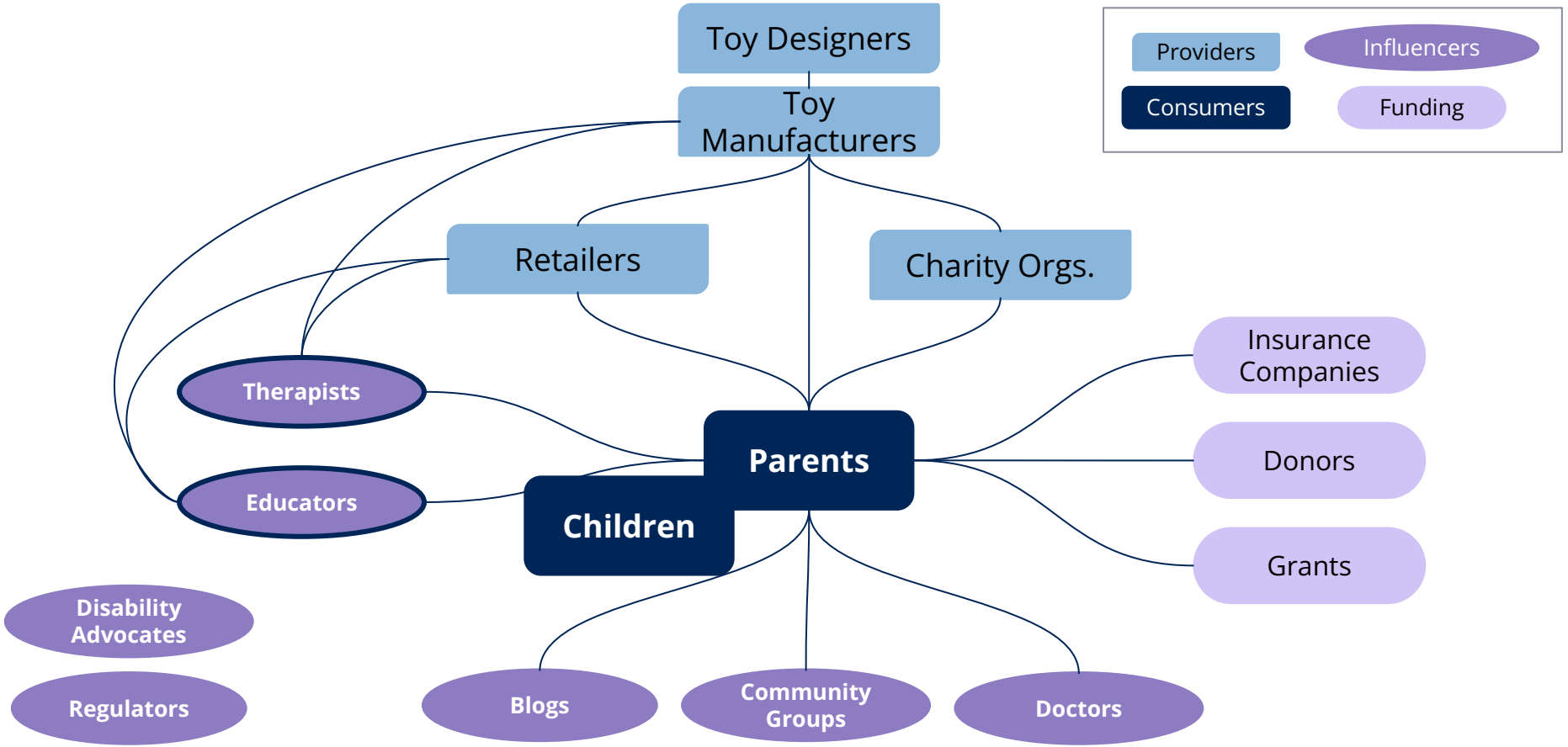
“Youre talking about something that is very timely.”

“Throughout my entire career and time as a dad to a son with CP, I have not seen a single toy designed for kids with mobility challenges.”

“There are significant opportunities for improvement in motor impairment cases, as these individuals can cognitively understand and engage in more activities.”

Impact

Ecosystem


Toy Designers
Toy Manufacturers
Retailers
Charity Orgs.
Therapists
Educators
Parents
Children
Insurance Companies
Donors
Grants
Disability Advocates
Regulators
Blogs
Community Groups
Doctors
Providers
Influencers
Consumers
Funding

Theory of Change

Problem: Few options of physical toys suitable for children with physical disabilities exist and those that do are hard to find, unappealing, and expensive.

Intervention: Tweel's Wheels' mission is to create easy to find, beautifully designed, and affordable play products that spark joy for children with mobility challenges.

Inputs	Activities	Outputs	Impact
• User research prioritized • Passion for inclusivity, especially in mobility for children • Leadership experience spans engineering, product, entrepreneurship, eCommerce, sales and manufacturing	• Adaptive bikes • Product customization • Expert recommendations and guidance • Making inaccessible activities and experiences accessible • Community building	• # users served • Product usage and longevity • # of repeat customers • # of retail partners • # of recommendations posted and accuracy • Changes in self-reported health, happiness, and feelings of empowerment	• Improved perception of the capabilities of the disabled • Increase in readily available resources • Increase in inclusivity of disabled children in group play • Better quality of life, including increased health and happiness for users and customers, and increased feeling of empowerment for users • Time, effort, and money saved for parents and caregivers

Goal: Improved societal perception, inclusivity, and overall well-being of children with physical disabilities and their families.

Social Impact Calculator

Social Impact Calculator	
Category	**Parameter**
Scale of Problem & Importance of Change	Well-defined
	Size
	Severity
	Urgency
Intervention Rationale & Company Capacity	Potential effectiveness of inputs
	Additive to existing efforts
	Systematic vs. Incremental Change
Impact Measurability & Potential	Clear, logical, and measurable outputs
	Impact tracking commitment
	Impact scale compared to comps.
	Cost effectiveness compared to comps.
	Timeline compared to comps.
Mitigated Risks & Externalities	Execution risks
	Negative externalities
	Disparate impact on subgroups

Sources

Sources

1. https://www.nidirect.gov.uk/articles/how-play-helps-childrens-development#:~:text=Playing%20can%20help%20children%20develop,develop%20self%2Ddiscipline
2. https://www.gse.harvard.edu/ideas/usable-knowledge/18/06/summertime-playtime
3. https://www.seattletimes.com/opinion/imagination-has-no-limits-design-toys-for-children-of-all-abilities/
4. https://www.forbes.com/sites/gusalexiou/2020/12/15/accessible-and-representative-toys-key-for-development-of-kids-with-disabilities/?sh=302a82df6b81
5. https://kidscreen.com/2019/05/31/how-can-toycos-deal-with-the-disability-dilemma/
6. https://finance.yahoo.com/news/20-biggest-toy-companies-world-153507474.html
7. https://www.insidermonkey.com/blog/5-biggest-toy-companies-in-the-world-1147291/5/
8. https://sites.udel.edu/gobabygo
9. https://www.stanfordchildrens.org/en/topic/default?id=buying-a-bike-for-your-child-1-2954#:~:text=Between%20ages%204%20and%208,until%20age%2010%20or%20older
10. https://kidshealth.org/en/parents/growth-13-to-18.html#:~:text=Most%20girls%20start%20their%20sexual,until%20they're%20around%2016
11. https://blog.hubspot.com/marketing/tam-sam-som
12. https://www.statsforstartups.com/kpis/market-penetration-rate/
13. https://toys.business/toy-distributors/f/a-guide-to-retail-and-wholesale-pricing-strategies
14. https://www.starterstory.com/ideas/bicycle-manufacturer/startup-costs#equipment-supply-expenses
15. https://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule#Patent%20Fees
16. https://www.shopify.com/blog/ecommerce-website-cost#:~:text=The%20cost%20of%20an%20ecommerce,%2C%20custom%20features%2C%20and%20more
17. https://ventrify.ca/news/costs-of-new-product-development/
18. https://www.prnewswire.com/news-releases/spin-master-completes-acquisition-of-melissa--doug-a-trusted-brand-in-early-childhood-play-302024756.html#:~:text=In%2DLanguage%20News-,Spin%20Master%20Completes%20Acquisition%20of%20Melissa%20%26%20Doug%2C%20A%20Trusted,Brand%20in%20Early%20Childhood%20Play&text=Spin%20Master%20Corp.
19. https://www.macrotrends.net/countries/WLD/world/population#:~:text=United%20Nations%20projections%20are%20also,a%200.83%25%20increase%20from%202021.
20. https://www.cdc.gov/nchs/data/vsrr/vsrr020.pdf
21. https://ourworldindata.org/births-and-deaths#:~:text=Population%20projections%20show%20that%20the,second%20half%20of%20the%20century.
22. https://data.unicef.org/how-many/how-many-children-under-18-are-there-in-the-us/
23. https://my.clevelandclinic.org/health/diseases/23963-dyspraxia-developmental-coordination-disorder-dcd
24. https://dyspraxiafoundation.org.uk/what_is_dyspraxia/dyspraxia-at-a-glance/
25. https://www.cerebralpalsy.org/about-cerebral-palsy/prevalence-and-incidence#:~:text=About%20500%2C000%20children%20under%20age,year%20will%20develop%20Cerebral%20Palsy
26. https://www.cdc.gov/ncbddd/cp/features/cerebral-palsy-11-things.html#:~:text=About%201%20in%20345%20children,with%20CP%20have%20spastic%20CP.
27. https://www.cdc.gov/ncbddd/spinabifida/documents/spina-bifida-fact-sheet1209.pdf
28. https://medlineplus.gov/genetics/condition/spina-bifida/#:~:text=Spina%20bifida%20is%20one%20of,1%20in%202%2C500%20newborns%20worldwide.
29. https://www.nationwidechildrens.org/family-resources-education/700childrens/2018/04/limb-loss-adapting-to-the-challenges-and-hitting-milestones
30. https://www.sciencedirect.com/topics/pharmacology-toxicology-and-pharmaceutical-science/limb-reduction-defect#:~:text=Limb%20reduction%20defects%20(LRD)%20occur,defect%20of%20the%20upper%20limb.
31. https://rarediseases.org/rare-diseases/duchenne-muscular-dystrophy/
32. https://www.reorg.com/olb-sole-lender-to-support-armira-acquisition-of-van-raam/