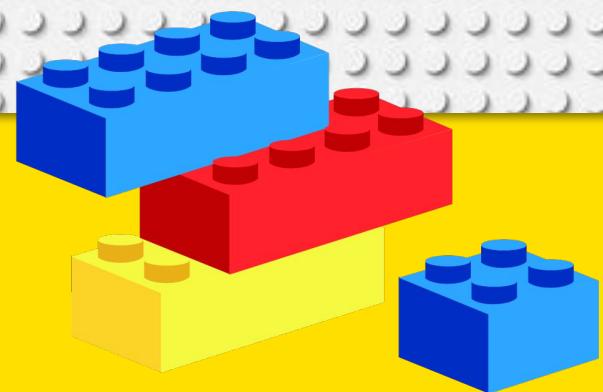




# BRICK BY BRICK: BUILDING LEGO'S AI FUTURE

LEGO & *BrickGPT*





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Finance Director  
Finance '27

**OUR TEAM**

# AGENDA

-  **1 INTRODUCTION**
-  **2 RECOMMENDATION**
-  **3 IMPLEMENTATION**
-  **4 FINANCIALS**





# FROM CRISIS TO CREATIVITY

FRAMEWORK  
FOR THE FUTURE

REBUILDING  
TRUST  
LEARNING FROM COLLAPSE





# RECOMMENDATION

Develop **LEGO AI Studio**, a proprietary AI experience that will seamlessly integrate into LEGO's ecosystem, with optional premium features.



# DECISION MATRIX



	Brand Alignment	IP and Safety	Speed to Market	ROI	Engagement
Partner w/ BrickGPT	Yellow	Red	Green	Green	Yellow
Reject AI	Green	Green	Green	Red	Red
Build in-house AI	Green	Green	Yellow	Green	Green
	INTRODUCTION	RECOMMENDATION	IMPLEMENTATION	FINANCIALS	Q&A



# DECISION MATRIX



**Partner w/  
BrickGPT**

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**Reject AI**

<b>Brand Alignment</b>	<b>IP and Safety</b>	<b>Speed to Market</b>	<b>ROI</b>	<b>Community Engagement</b>
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**Build  
in-house AI**

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# BRICKGPT

VS

# BUILD IN-HOUSE



- Open-source
- Limited models
- Unintuitive interface
- External creative outlet

- Full creative and brand control
- Seamless integration
- Custom-trained on LEGO library and user-generated builds
- Designed for play aligned with LEGO's brand





## BrickGPT Demo

This is the official demo for [BrickGPT](#), the first approach for generating physically stable toy brick structures from text prompts.

BrickGPT is restricted to creating structures made of 1-unit-tall cuboid bricks on a 20x20x20 grid. It was trained on a dataset of 21 object categories: *basket, bed, bench, birdhouse, bookshelf, bottle, bowl, bus, camera, car, chair, guitar, jar, mug, piano, pot, sofa, table, tower, train, vessel*. Performance on prompts from outside these categories may be limited. This demo does not include texturing or coloring.

**Input prompt**  
Text prompt for which to generate a brick structure.

table

**Do not save my data**  
We may collect inputs and outputs to help us improve the model. Your data will never be shared or used for any other purpose. If you wish to opt out of data collection, check this box.

**Advanced options**

**Generate!**

**Rendered brick structure**



**Output bricks**  
The brick structure in text format. Each line of the form "hxw (x,y,z)" represents a 1-unit-tall rectangular brick with dimensions hxw placed at coordinates (x,y,z).

```
zxz (14,18,6)
6x2 (8,18,6)
6x2 (2,18,6)
2x1 (0,19,6)
2x4 (0,15,6)
```



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Brick Buddy

Online



Hello! I am your Brick Buddy, let's build together!  
What would you like to create today?

Build a rainbow with clouds



Great idea! Here's what your rainbow can look like.  
What else can you add to make it more realistic?

Describe the structure you want to build...

Rainbow

Generated from: "Build a rainbow with clouds"

Export

3D Model   Parts List   Instructions



Rotate

Zoom

Reset View



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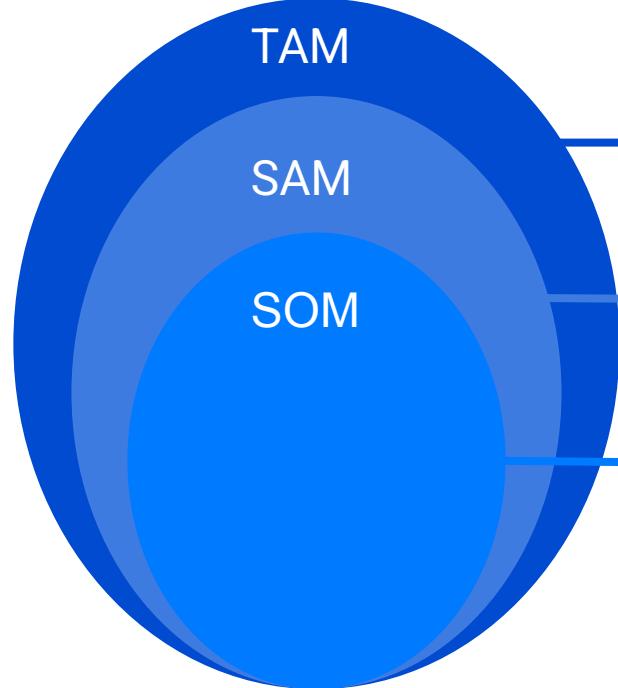
## BUILD IN-HOUSE

- Full creative and brand control
- Seamless integration
- Custom-trained on LEGO library and user-generated builds
- Designed for play aligned with LEGO's brand





# TARGET MARKET



**750 MILLION  
LEGO CONSUMERS**

**225 MILLION  
DIGITAL USERS**

**22 MILLION  
PREMIUM USERS**





# SITUATIONAL ANALYSIS

## STRENGTHS

- Trust
- Global Community

## WEAKNESSES

- Slower Digital Pivot
- High Dev Costs (Econ)

## OPPORTUNITIES

- Hybrid / Sustainable (Environ.)
- Personalized
- Digital Entertainment
- Education (Social)

## THREATS

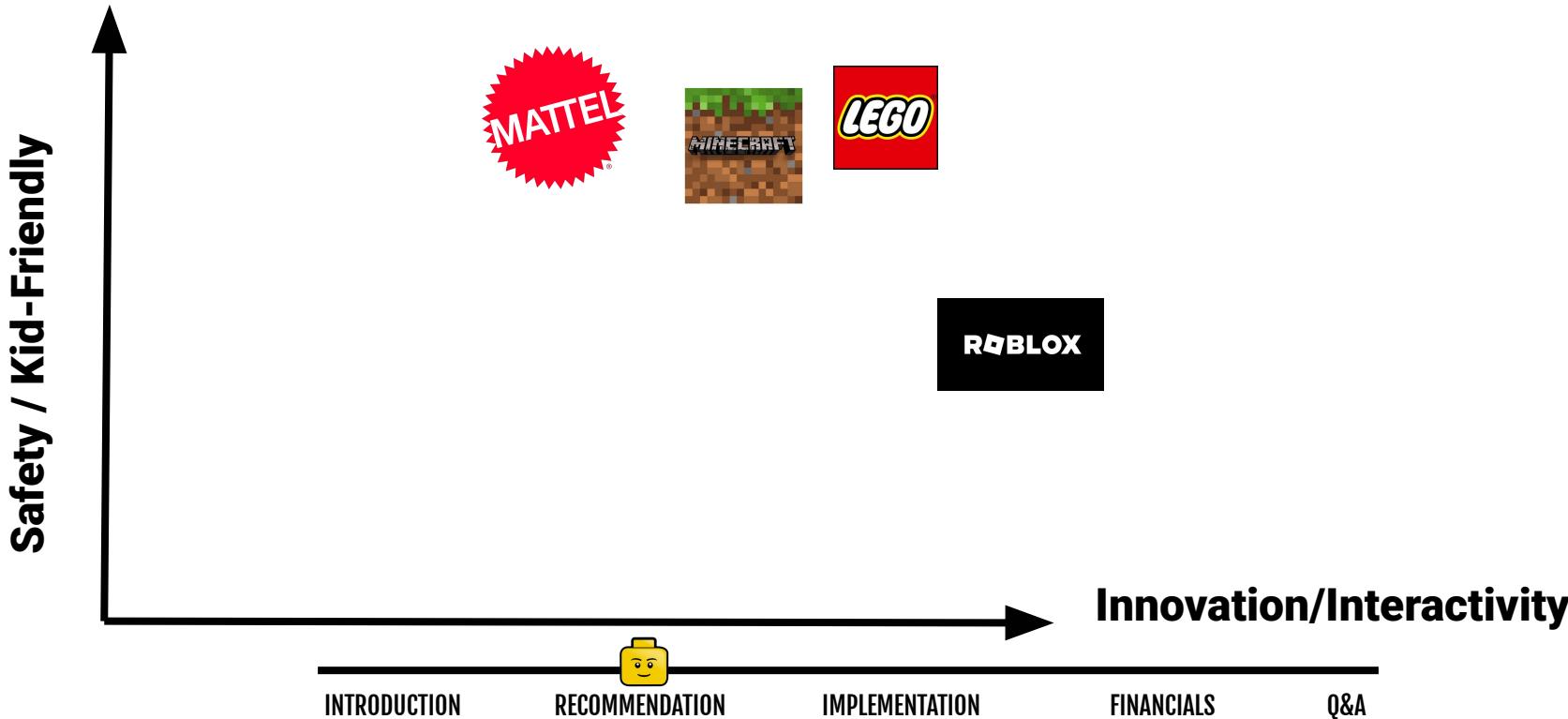
- Data + Content Safety (Political + Legal)
- Brand Dilution





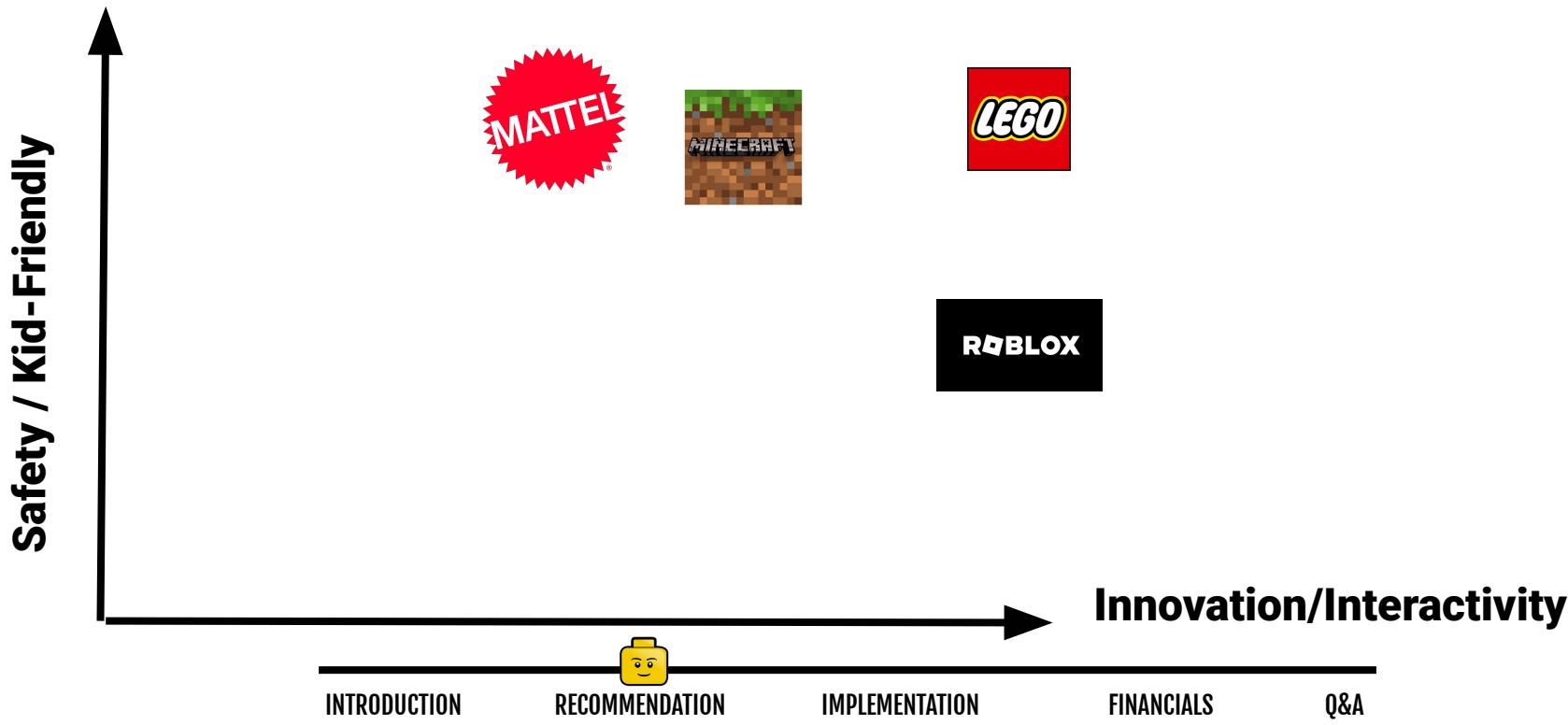
# MARKET POSITION

Where does LEGO stand relative to our competitors?





# MARKET POSITION WITH AI STUDIO





# STRATEGY ANALYSIS

## BENEFITS

- **Core Competency: Co-Designer**
- Personalized Creativity
- **Job Opportunities**
- Community Growth
- New Revenue Streams
- **Product Insight**

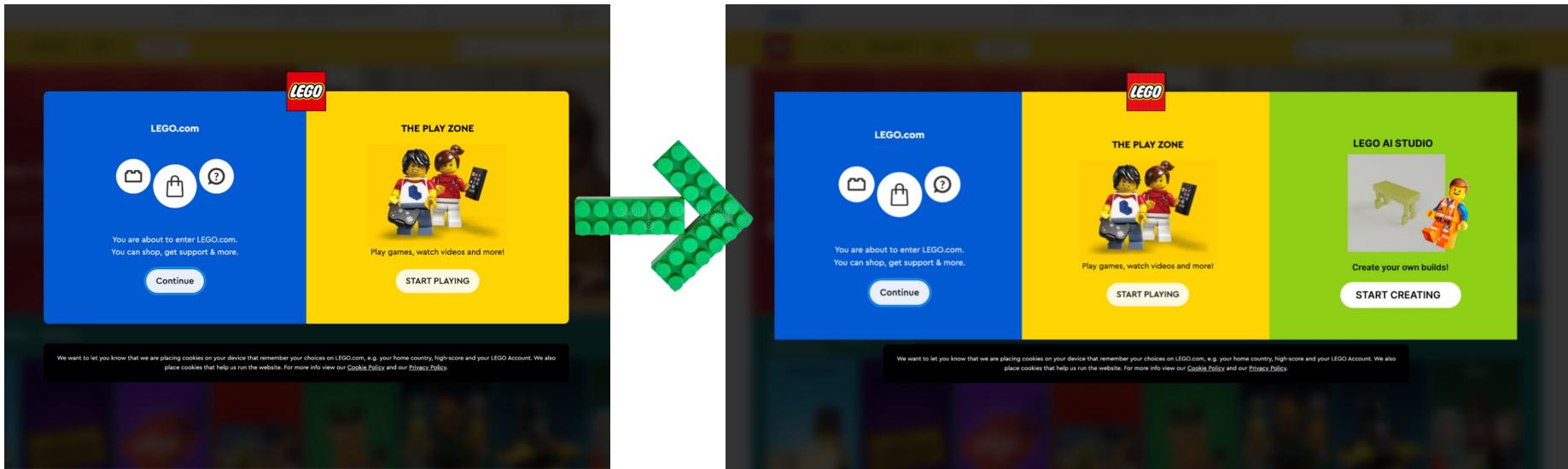
## RISKS

- Content Safety
- Over Reliance on AI
- Data Privacy
- Brand Dilution





# IMPLEMENTATION



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# LEGO AI Studio Timeline

3-Year Implementation Plan

2026 - 2029



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Brick Buddy  
Online



Hello! I'm your Brick Buddy, let's build together!  
What would you like to create today?



### No Model Generated Yet

Describe a structure in the chat to see the 3D model, parts list, and instructions here

Try these examples:

Build a small house with a red roof

Create a castle tower with blue and gray blocks

Design a simple car with wheels

Describe the structure you want to build...





Brick Buddy  
Online



Hello! I am your Brick Buddy, let's build together!  
What would you like to create today?

Build a rainbow with clouds



Great idea! Here's what your rainbow can look like.  
What else can you add to make it more realistic?

Describe the structure you want to build...



## Rainbow

Generated from: "Build a rainbow with clouds"

Export

3D Model Parts List Instructions



Rotate

Zoom

Reset View





+ New Project

## RECENT PROJECTS

 House Collection  
Nov 7, 2025

## FAVORITES

 Medieval Castle  
Nov 5, 2024Master Brick Builder  
GPT-4 Enhanced • Real-time Analysis

Welcome to LEGO AI Studio Pro! I'm your advanced AI assistant with enhanced capabilities. I can generate complex structures with detailed specifications and more bricks.

10:56 AM



Build a modern house made of brown and grey bricks with a family of minifigs

10:56 AM

✓ Generation complete! I've created a professional-grade model with:

- X unique parts (XX total pieces)
- Difficulty: X
- Time: XX hrs

Check the output panel for detailed specifications and step-by-step instructions.

10:56 AM

Generate Variations

Describe your structure with advanced requirements

Storage Used

3.5 GB / 10 GB

## Modern Two-Story House

Generated from: "Build a modern house made of brown and grey bricks with a family of minifigs"

Export All

\$ Total Cost  
\$29.87Build Time  
60mWeight  
891gDifficulty  
Intermediate

3D Model

Parts (101)

Instructions



Rotate

Zoom

X-Ray

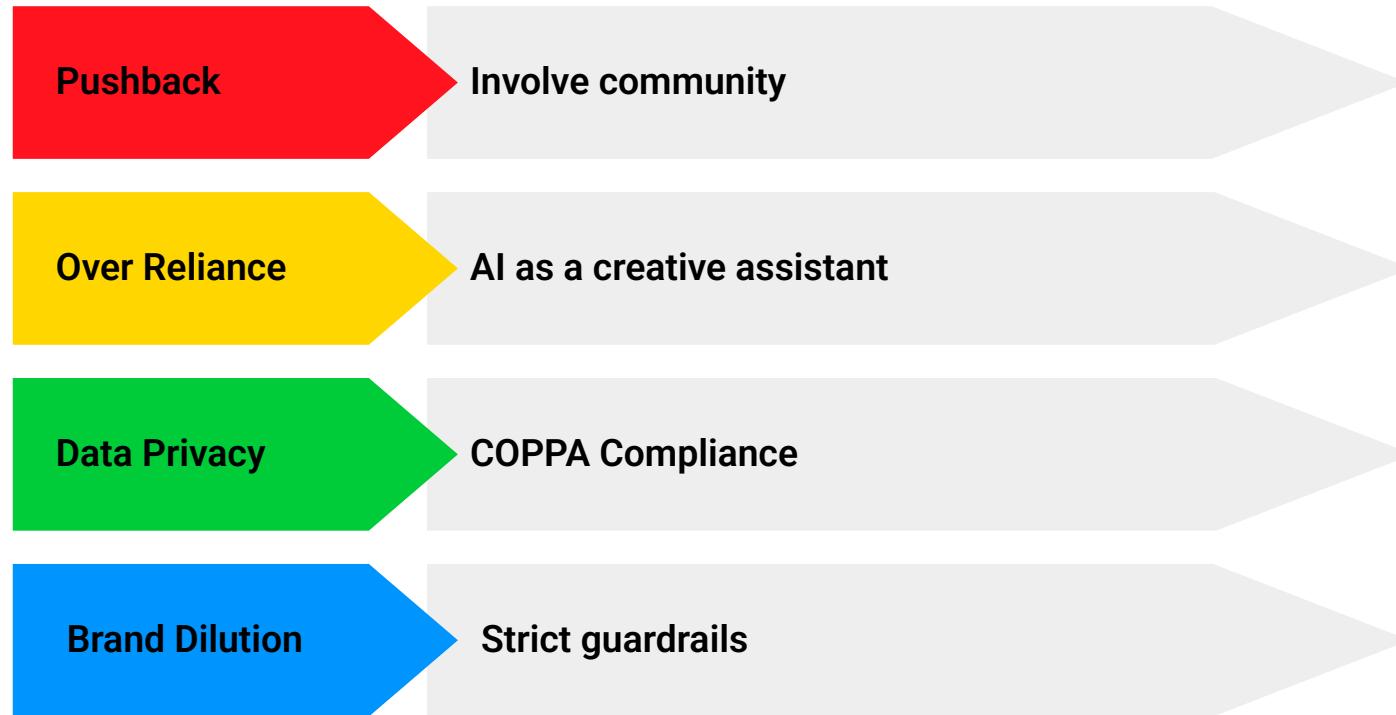
Explode

Tags



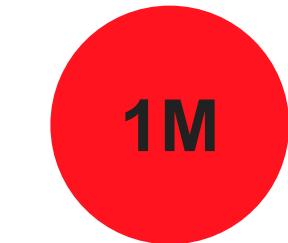


# RISK MITIGATION

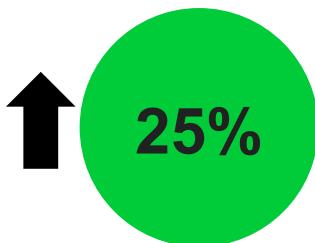




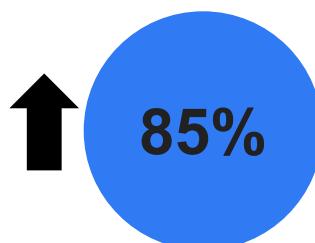
# KPI HIGHLIGHTS



Monthly Active Users



Pick-A-Brick/BrickLink



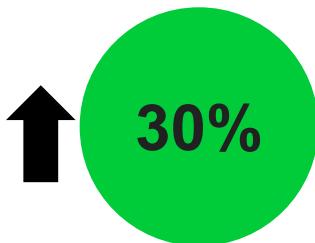
Valid Builds



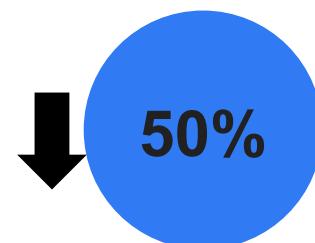
AFOL



Avg. Session Length



AI Studio Pro



Safety Triggers



Satisfaction

**Engagement**

**Conversion**

**Quality**

**Community**



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# MARKETING STRATEGIES

## Education

- First LEGO League
- LEGO Education

## "#DesignedByMe"

- User Stories
- Reels + TikTok

## LEGO AI Challenges

- Kid-Friendly Creator Partnerships

Product-Driven → Experience-Driven

Ecosystem Expansion: Traffic → LEGO Ideas + Stores



# FINANCIAL FINDINGS



**3 Year Cumulative Profit**

**724M**

With our projected adoption rate to be 4.45% (33M Subscribers by Y3)

**Profit Driven by Physical Sales**

**33.4%**

Assumption of 10% of all Pro subscribers will purchase a least 1 set (~\$75)

**Digital Operating Margin**

**95.4%**

With our Pro subscription price of \$14.99 and 8,342,561, the projected number of Pro subscribers





# PROFIT + LOSS FORECAST

	Year 1	Year 2	Year 3
Digital Revenue (Pro Subscribers)	\$125,055,000	\$250,110,000	\$333,480,000
Physical Revenue (Incremental Sales)	\$62,569,200	\$125,138,400	\$166,851,200
Total Incremental Revenue	\$187,624,200	\$375,248,400	\$500,331,200
Total Annual Costs	(\$15,250,000)	(\$15,250,000)	(\$15,250,000)
COGS from Physical Orders	(\$19,836,000)	(\$39,672,000)	(\$52,875,108)
Net Profit	\$152,538,200	\$320,326,400	\$430,206,092
Cumulative Profit	\$152,538,200	\$472,864,600	\$724,864,600





## COST

VS

## BENEFIT

Y1 Annual Costs:

**\$35,086,000**

Y2 Annual Costs:

**\$54,922,000**

Y3 Annual Costs:

**\$68,125,108**

Y1 Net Profit:

**\$152,538,200**

Y2 Net Profit:

**\$320,326,400**

Y3 Net Profit:

**\$430,206,092**





**"INSPIRE AND DEVELOP THE LEADERS FOR  
TOMORROW"**



THANK  
YOU!

The word "THANK" is written in large, colorful letters made from various LEGO bricks, primarily in shades of red, blue, yellow, and white. The letter "A" features a central circular gear. Below it, the word "YOU!" is also constructed from LEGO bricks in a similar color scheme, with the "O" being a larger, hollowed-out square. A small circular LEGO piece with a smiling face is positioned to the right of the exclamation mark.



# APPENDIX

## SLIDE DECK

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4. [Why Not Partner w/ BrickGPT](#)
5. [Target Market](#)
6. [Situational Analysis](#)
7. [Competitor Positioning](#)
8. [Strategy Analysis](#)
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15. [KPI Highlights](#)

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17. [Profit & Loss](#)
18. [Cost vs Benefits](#)

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20. [LEGO Engagement Metrics](#)

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22. [Year 1 Calculations](#)
23. [Key Findings Calculation](#)
24. [LEGO P&L and Gross Margin](#)
25. [Breakeven Calculations](#)
26. [Adoption Rate](#)
27. [Cost Breakdown for CapEx & OpEx](#)

<b>Total Addressable Users (LEGO Apps)</b>	<b>750 Million</b>	<b>Total Addressable Market</b>
<b>Target Pro Conversion Rate (Cumulative Y3)</b>	<b>4.45%</b>	Long-term target of 4.45% of the 750M base is 33 M subscribers
<b>PRO Subscription Price</b>	<b>\$14.99/Year</b>	Proposed annual price of PRO subscription
<b>Incremental Physical Order Value</b>	<b>\$75</b>	Estimated average value of one set purchased by PRO user
<b>Incremental Physical Conversion Rate</b>	<b>10%</b>	Percentage of PRO subscribers ordering one \$75 set
<b>Initial Investment (CapEx)</b>	<b>\$3.75 Million</b>	Annual Cost for Development
<b>Annual Operating Costs (OpEx)</b>	<b>\$1.5 Million</b>	Maintenance, compute, moderation costs
<b>LEGO Physical Gross Margin</b>	<b>68.3%</b>	From corporate filings
<b>Cost of Goods Sold (COGS) Rate</b>	<b>31.7%</b>	$1 - 68.3\% = 31.7\%$
<b>Year 1 Adoption Rate Assumption</b>	<b>1.11%</b>	$1.11\% \text{ adopt LEGO Studio}$



# Financial Calculations (YEAR 1)

1. Projected Pro Subscribers: TAM x Y1 Adoption Rate

$750M \times 0.111 = \underline{8,342,561 \text{ Subscribers}}$

2. Digital Revenue: Pro Subscribers x Annual Price

$8,342,561 \times \$14.99 = \underline{\$125,055,000}$

3. Physical Revenue: Physical Conversion Assumption (10%) x Pro Subscribers

$8,342,561 \times 0.10 = 834,256$ , (Average Order Value = \$75),  $834,256 \times \$75 = \underline{\$62,569,200}$

4. Total Revenue = Digital Revenue + Physical Revenue

$\$125,055,000 + \$62,569,200 = \underline{\$187,624,200}$

5. Total Annual Costs: CapEx + OpEx + Marketing Costs

$\$3.75 \text{ M} + \$1.5 \text{ M} + \$10 \text{ M} = \underline{(\$15,250,000)}$

6. COGS = Physical Revenue x COGS Rate (31.7%)

$\$62,569,200 \times 0.317 = \underline{(\$19,836,000)}$



# Key Findings Calculations

1. Operating Margin (Digital): The profitability and efficiency of the LEGO subscriptions service.

Operating Margin = Digital Revenue (Y3) - Total Annual Costs (Y3) / Digital Revenue (Y3)

Digital Revenue (Y3): \$333,480,000

Total Annual Costs (Y3): (\$15,250,000)

Operating Margin:  $\$333,480,000 - \$15,250,000 / \$333,480,000 = \underline{0.9542} = 95.4\%$

2. Profit Driven by Physical Sales

Physical Profit Percent = Cumulative Profit from Physical Sales / Total 3 Yr Net Profit

Physical Profit = \$354,558,800 (Total Rev.) - \$112,359,558 (Total COGS)= \$242,199,242

Percentage =  $\$242,199,242 / \$724,864,552 = \underline{0.334 \text{ or } 33.4\%}$

# LEGO P&L & Gross Margin



(mDKK)	2024	2023	2022	2021	2020
<b>Statement of Profit or Loss</b>					
Revenue	74,325	65,914	64,647	55,294	43,656
Expenses	(55,584)	(48,806)	(46,726)	(38,250)	(30,744)
Operating profit	18,741	17,108	17,921	17,044	12,912
Financial items	(695)	(49)	(245)	(39)	(412)
Profit before tax	18,046	17,059	17,676	17,005	12,500
Net profit	13,792	13,109	13,782	13,285	9,916
<b>Statement of Financial Position</b>					
Total assets	68,691	58,856	55,192	47,991	37,202
Total equity	41,771	37,662	33,539	29,138	23,547
Total liabilities	26,920	21,194	21,653	18,853	13,655
<b>Statement of Cash Flow</b>					
Cash flow from operating activities	19,150	15,397	15,304	16,048	13,382
Purchase of property, plant, equipment and intangible assets	(8,960)	(8,466)	(5,976)	(3,159)	(1,891)
Free cash flow	10,193	6,934	9,332	12,892	11,498
Free cash flow, adjusted	9,135	5,578	8,464	12,195	10,892
<b>Employees</b>					
Average number (full-time)	26,765	25,136	23,775	20,198	17,431
Headcount end of year	31,282	28,528	27,338	24,484	20,468
<b>Other financials (%)</b>					
Revenue growth as reported	13	2	17	27	13
Revenue growth in constant currency	14	3	11	28	16
<b>Financial ratios (%)</b>					
Gross margin	68.3	68.1	68.8	69.6	69.7
Operating margin	25.2	26.0	27.7	30.8	29.6
Net profit margin	18.6	19.9	21.3	24.0	22.7
Return on equity (ROE)	34.7	36.8	44.0	50.4	43.4
Return on invested capital (ROIC)	52.0	57.1	77.8	94.0	74.1
Equity ratio	60.8	64.0	60.8	60.7	63.3

Definitions of Financial ratios are disclosed in note 1.1. Parentheses denote negative figures.

## Statement of Profit or Loss

1 January – 31 December

(mDKK)	Note	2024	2023
Revenue	2.1	74,325	65,914
Production costs	2.2	(23,570)	(21,056)
<b>Gross profit</b>		<b>50,755</b>	<b>44,858</b>
Sales and distribution expenses	2.2	(23,438)	(20,618)
Administrative and IT expenses	2.2	(6,100)	(5,185)
Other operating expenses	2.2	(2,476)	(1,947)
<b>Operating profit</b>		<b>18,741</b>	<b>17,108</b>
Financial income	4.1	281	217
Financial expenses	4.1	(976)	(266)
<b>Profit before tax</b>		<b>18,046</b>	<b>17,059</b>
Income tax expenses	2.4	(4,254)	(3,950)
<b>Net profit</b>		<b>13,792</b>	<b>13,109</b>

# BREAK EVEN CALCULATIONS

1. Total Cost = CapEx + Annual OpEx + Annual Marketing Cost

Total Cost = \$3.75 M + \$1.5 M + \$10 M = \$15.25 M

Annual Subscription Price = \$14.99

Breakeven Subscribers = Total Cost / Annual Subscription Price = 1,107,345  
Subscribers

- Even with high annual costs of \$15.25 M, the project's breakeven point is only 1,017,345, which shows financial risk is minimal.

# ADOPTION RATE

**Assumed Adoption Rate: 4.45% over 3 years**

- **Large Base Effect: 4.45% of LEGO's TAM**
- **Even with a conservative adoption rate, LEGO is still making 430 Million dollars in net profit, which shows if we scale up, LEGO in the future can generate more revenue. (Strong ROI)**
- **Shows financial risk is minimal (Break Even point = 1,107,345 compared to our projected Pro subscribers of 8,342,561)**

# COST BREAKDOWN OF CAPEX AND OPEX

## Capital Expenditure: 3.75M

1. **External Contract Labor** - \$2,500,000 (66.7%): High-rate, specialized talent
2. **Project Contingency** - \$500,000 (13%): Budget for unexpected infrastructure needs, extension of key contracts to ensure project completion
3. **Onboarding and Training** - \$750,000(20%): Cost of specialized licenses, environment setup, structured knowledge transfer to internal team

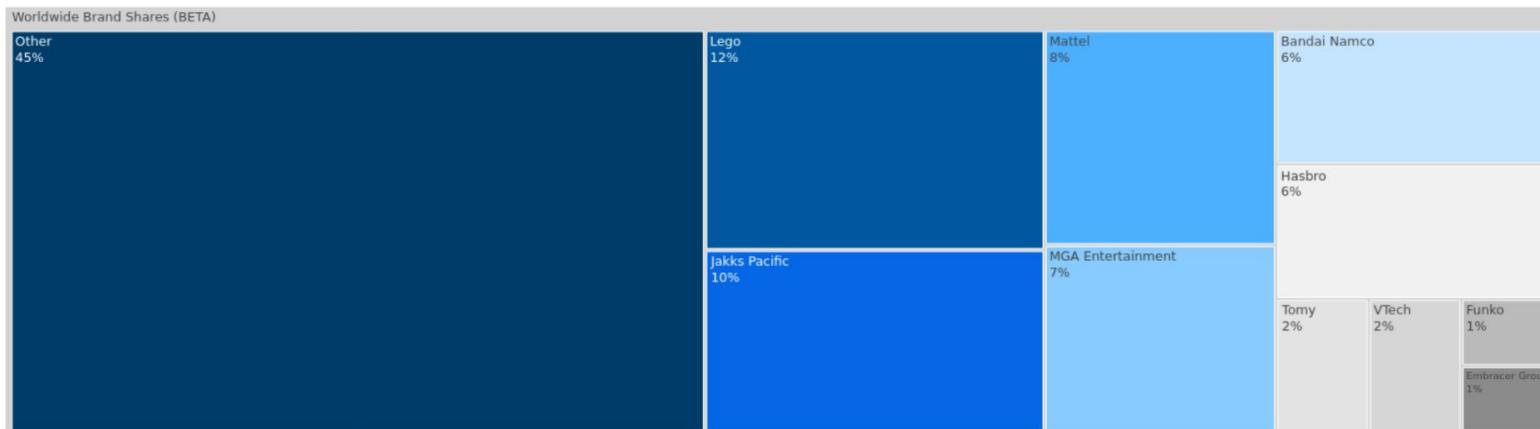
## Operating Expenditure: 1.5M

1. **Cloud & Infrastructure** - \$150,000
2. **Internal Team** - \$900,000
3. **Sales/Marketing** - \$50,000
4. **General Administrative** - \$400,000



# Digital Trends Appendix

- Smart / AI Toy Market : \$2.6B (2025) → \$9.7B (2035), CAGR of 14.2%
- AI toys, [can] stimulate children's higher mental functions, promote creative, emotional and collaborative inquiries, and related literacy skills. (J. Su, 2022) (University of Hong Kong)





# LEGO Engagement Metrics Appendix

- **Market share** grew significantly with the LEGO Group consistently outpacing a slightly declining toy market (LEGO)

