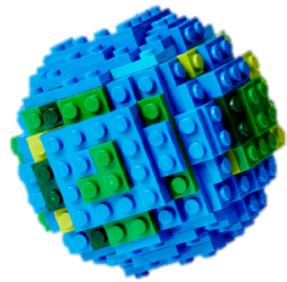
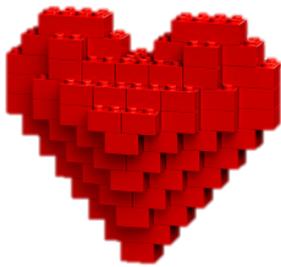


LEGO®

Strategy and Value Creation



The Lisbon EMBA 2019-2021

Group 6

Christian Luwisch
Isabel Viana
Madalena Reis
Nuno Sousa
Pedro Teixeira

Group 9

Ana Júlia Almeida
João Falcão
Luis Costa
Nádia Jamal
Tiago Fonseca



There are a lot of skills around resilience and problem solving and creativity that you learn through play.

Niels Christiansen, CEO of LEGO®

CONTENTS

1	Executive Summary	6
2	Company Overview	7
3	Environmental Analysis	10
3.1	Macro-environment.....	10
3.1.1	Sociocultural Environment	10
3.1.2	Economics	11
3.1.3	Technological Environment.....	11
3.1.4	Ecological.....	12
3.1.5	Political-Legal	12
3.2	Micro-environment	15
3.2.1	Customers.....	15
3.2.2	Competition.....	25
3.2.3	Suppliers	29
3.2.4	Industry	30
3.3	Key Success Factors.....	33
4	Organization Analysis.....	35
4.1	Resource and Capabilities.....	35
4.2	Core Competencies	39
4.3	Strategic Fit	44
4.3.1	By Demographic Segmentation.....	44
4.3.2	By Product Type Segmentation.....	47
4.4	SWOT Analysis.....	49
4.5	New SWOT Analysis	52
4.6	EGOS Map.....	56
4.6.1	Ole Kirk Christiansen	56
4.6.2	Niels Christiansen	56
4.6.3	LEGO Company	57
5	Business Model and Sustainability	59
5.1	Business Model.....	59
5.2	Sustainability.....	65

5.2.1	Economic sustainability	66
5.2.2	Environmental Sustainability.....	67
5.2.3	Social Sustainability	69
5.2.4	Governance Sustainability.....	70
6	Objectives and Strategy	73
6.1	Vision and Mission and Values	73
6.2	Objectives.....	76
6.3	Value Creation	79
6.3.1	Value Creation for Customers.....	79
6.3.2	Value Creation for Shareholders.....	85
6.3.3	Value creation for Employees	89
6.3.4	Value Creation for Community	90
7	Business Strategy: Products-markets	92
7.1	Products-Markets Matrix	93
7.2	Ansoff Matrix.....	96
7.2.1	Market penetration.....	97
7.2.2	Product development.....	98
7.2.3	Market Development.....	99
7.2.4	Range Diversification.....	100
7.3	Products-Markets Evolution	102
7.4	Generic Strategies	103
7.5	Innovation Strategy	104
8	Vertical Integration	108
8.1	Value Creation	110
8.2	Modes of Vertical Integration.....	111
8.3	Strategic Outsourcing	112
9	Internationalization	115
9.1	Foreign markets evaluation and country attractiveness.....	116
9.2	Competitive advantage of the nations – national diamond.....	118
9.3	Sector clusters	120
9.4	Internationalization modes	122
9.5	Country and firm advantage.....	122
9.6	Internationalization stages	123

9.7	International integration and responsiveness	126
10	Diversification.....	127
10.1	Diversification matrix.....	128
10.2	Business Portfolio Planning.....	130
10.2.1	GE/McKinsey matrix	131
10.2.2	BCG Matrix	132
11	Corporate Development	134
11.1	Value creation in corporate development	134
11.2	Corporate Development Alternatives.....	135
11.2.1	Internal development	136
11.2.2	External development.....	136
11.3	Evolution of corporate development	144
12	Planning	146
12.1	Organizational structure.....	146
12.2	Strategic and Operational planning	147
12.3	12.4 Planning under uncertainty	148
12.3.1	12.4.1 Planning with Scenarios.....	150
13	Implementation.....	155
13.1	Departmental Structure	155
13.2	Functional Management.....	157
13.2.1	Human Resources	158
13.2.2	Research and Development.....	158
13.2.3	Operations	158
13.2.4	Marketing & Sales	158
13.2.5	Finance	159
13.2.6	Information Systems	159
13.3	Process Management	160
13.4	Project Management.....	161
14	Control.....	163
14.1	Organizational Structure	163
14.1.1	Board of Directors and Executive Leadership Team	164
14.1.2	Board of Directors and Executive Leadership Team	166
14.2	Balanced Scorecard	166

14.3 Reward..... 169

15 Conclusions & Outlook..... 170

1 EXECUTIVE SUMMARY

Born in Denmark in 1932 as a small carpenter's workshop, LEGO® Group is currently a modern, global enterprise being the world's largest manufacturers of toys.

The Toy and Games industry is very competitive and reached 224.7 Billion USD in 2019 with a 36% growth YoY, split by Traditional Toys – 86.4 Billion and Video Games 138.3 billion.

In 2019, LEGO® net profit is robust with the company declaring profit of 1 111.79 million euros, and the company achieved revenue, consumer sales and profit growth with both revenue and operating profit steadily increasing during the last three years.

However, over 88 years of history, it has not always been like this. In 2003, LEGO® almost entered bankruptcy. One of the key strategic elements for the turnaround was to refocus on their core business (bricks), launched in 1958.

Today, LEGO® Group core business is still in the traditional toys segment. However, the increase importance of video games is driving Industry's growth in the last years and the trend towards digitalization are key markets drivers. Digital entertainment is shaping competitive dynamic and landscape, forcing traditional toy makers to adapt and reposition themselves within this shifting landscape as entertainment providers in multiple platforms. LEGO® was able to take digitalization as an opportunity, launching successful products such as Boost, Hidden Side, MINDSTORMS which combined electrical parts or digital activities with LEGO® bricks.

LEGO®'s success is also a result from key strategic partnerships allowing diversification with products such as movies and games but also theme parks.

LEGO® Group is present in more than 130 countries, owns more than 570 stores and 5 manufacturing plants.

Internationalization is a key priority for LEGO® in order to support company growth. China is a growth priority for LEGO® and in 2019 the company invested in expanding their brand presence and geographic reach in the country, ending the year with 140 stores in 35 cities and achieving strong double-digit growth in the country.

2 COMPANY OVERVIEW

LEGO® Group is a family business that started in 1932 with wooden toys in the city of Billund, Denmark [Figure 1 - Lego Evolution] and through almost a century, the LEGO® Group has grown from being a small local company into being one of the world's leading manufacturers of play materials. The name 'LEGO' is an abbreviation of the two Danish words "leg godt", meaning, "play well", and this is aligned with company mission "to inspire and develop the builders of tomorrow".¹ LEGO® brick the central of LEGO® myriad of products, was patented in 1958 with a new coupling principle, opening up to endless building possibilities bringing Imagination, creativity, fun, learning, caring and quality to children play experiences.

In 2004 The LEGO® Group faces a serious crisis and establishes a survival and turnaround plan. As part of this plan, Jørgen Vig Knudstorp succeeds Kjeld Kirk Kristiansen as President and CEO. He revitalizes the company by reintroducing a strong focus on the core business – the brick and the LEGO® System in Play.



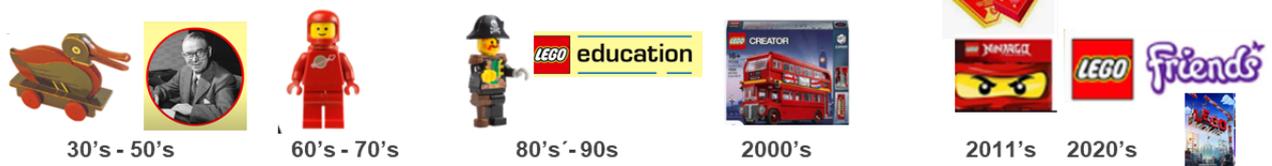
Figure 1 - Lego Evolution

LEGO® Group enjoys economic success having delivered top and bottom-line growth in 2019. The revenue increase for the full year of was 6% to DKK 38.5 billion compared with DKK 36.4 billion in 2018. LEGO® Group expects this upwards trend to continue with a single-digit growth in 2020, ahead of the global toy market. To support this growth, LEGO® will continue to focus on product innovation, to growth in established and strategic markets, such as China. A sustainability is at LEGO® Group top of mind, leading to continued investment in initiatives promoting sustainability and long-term sustainable growth.

¹ <https://www.lego.com/pt-pt/aboutus/lego-group/the-lego-group-history>

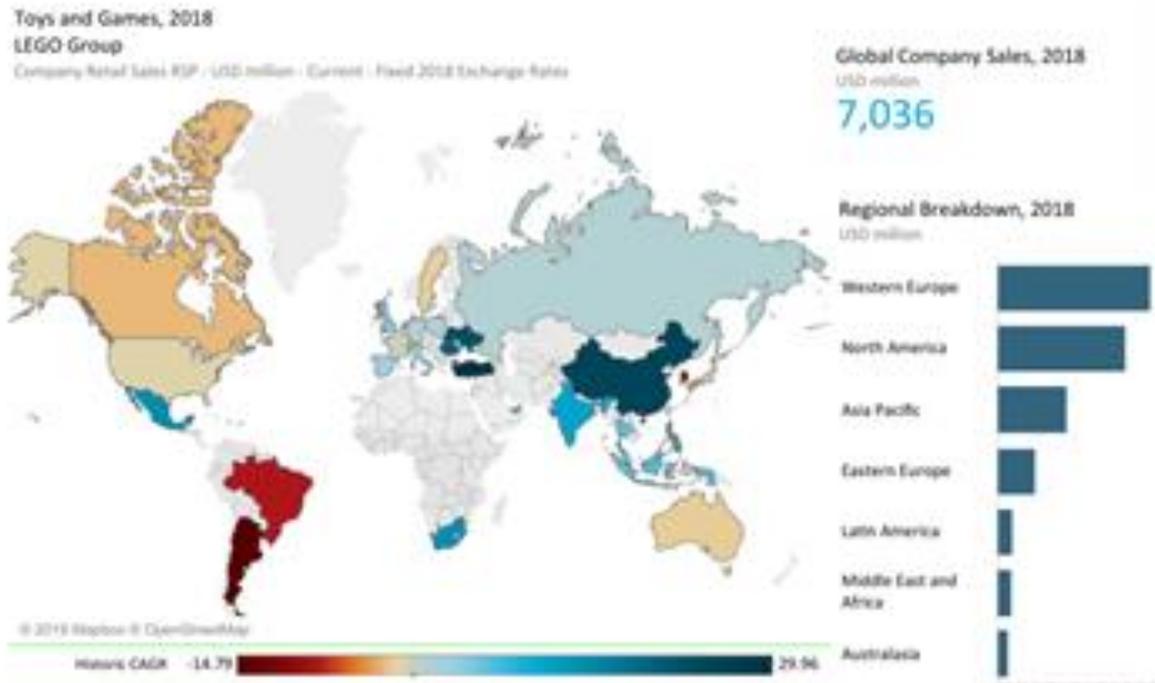
The aim of the company’s products is to “inspire and develop the builders of tomorrow”, and all products are based on the underlying philosophy of learning and development – through play. It is the LEGO philosophy that “good quality play” enriches a child’s life – and lays the foundations for later adult life.

Legos Company Calendar Looking back more than 60 years of Lego



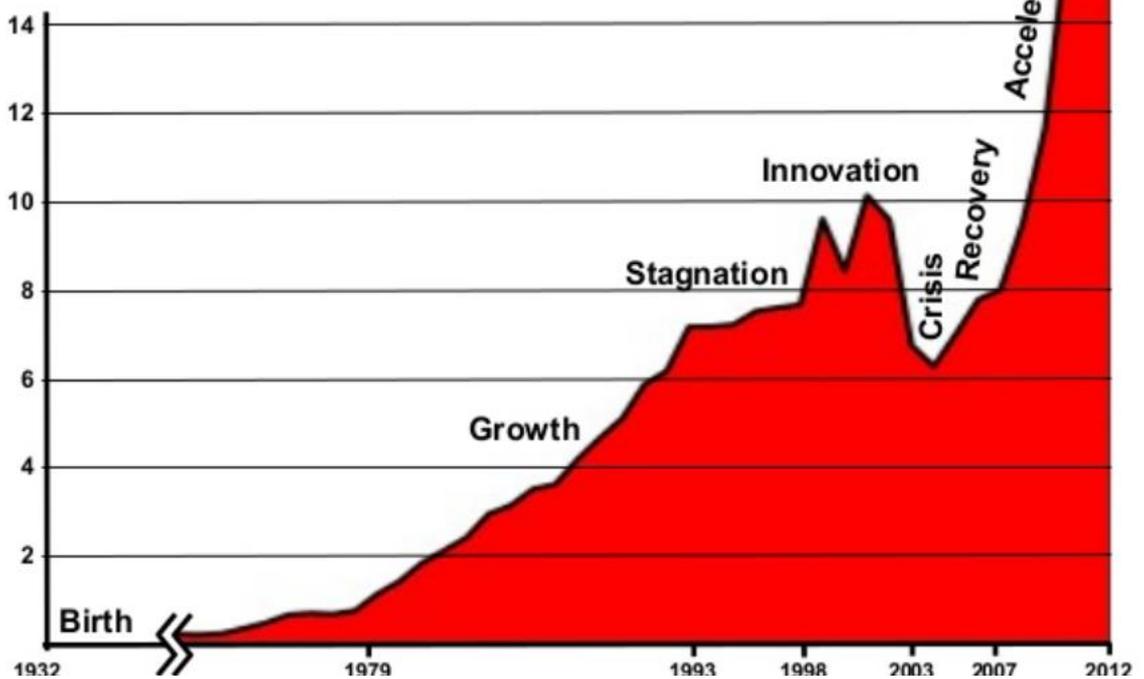
	30's - 50's	60's - 70's	80's - 90s	2000's	2011's	2020's
Stepstone	<ul style="list-style-type: none"> Master carpenter, Ole Kirk Kristiansen starts making wooden toys and name his company LEGO by combining 2 Danish words Lego Godt – Play Well 1953 Introduced Plastic LEGO bricks 1958 Lego is Patent 	<ul style="list-style-type: none"> Lego wheels is launched introducing movement to LEGO play Opens first Lego park in Billund Denmark 1978 LEGO miniature is introduced bringing role play 	<ul style="list-style-type: none"> Lego education is launched more than a toy strategy Partnership with MIT lab USA to aiming to add intelligence Lego pirate launched with multiple facial expressions 1996 www.lego.com goes live 1999 Elected toy of the century 	<ul style="list-style-type: none"> 2002 First Lego retail store opens in Germany , Cologne 2003 LEGO creator launched 2004 Lego enter a survival and turnaround mode 	<ul style="list-style-type: none"> 2011 Lego Ninjago is launched 2012 Lego friends launched 2014 Lego movies premiere in cinemas 2017 Lego Boost launched introducing programming and physical building 2017 Lego House in Denmark 2018 Lego brick celebrates 60's years 	
Countries	<ul style="list-style-type: none"> Denmark 1959 start selling Norway, Germany , Switzerland, UK 	<ul style="list-style-type: none"> Added USA and Canada partner with samsonite 1966 sold in 42 countries 	<ul style="list-style-type: none"> Continued Internationalization 	<ul style="list-style-type: none"> Continued Internationalization 	<ul style="list-style-type: none"> 130 Countries, including China 	
People and branded Stores	<ul style="list-style-type: none"> 1948: 50 1958 :140 	<ul style="list-style-type: none"> 1965: 600 1975 : 2,500 	<ul style="list-style-type: none"> 1985 : 5,000 1999 : 7,900 	<ul style="list-style-type: none"> 2010 : 8,365 	<ul style="list-style-type: none"> 2019: 18,800 570 branded stores 	
Production Sites	<ul style="list-style-type: none"> Denmark 	<ul style="list-style-type: none"> 2008 Factory in Hungary 4 Production Sites (Denmark, Hungary , China, Czech Republic, Mexico, Hungary 	<ul style="list-style-type: none"> 1996 Open South Korea production 4 Production Sites (Denmark, Hungary , China, Czech Republic, Mexico, Hungary 2004 Facility in Baar Switzerland closed South Korea site closed Facility in Brazil open 1986 and close 1998 	<ul style="list-style-type: none"> 2008 Factory in Hungary 4 Production Sites (Denmark, Hungary , China, Czech Republic, Mexico, Hungary 2004 Facility in Baar Switzerland closed South Korea site closed 	<ul style="list-style-type: none"> 2016 Factory in Jiaxing China opens 5 Production Sites (Denmark, Hungary , China, Czech Republic, Mexico, Hungary 	
Revenue	<ul style="list-style-type: none"> 1959 < \$50M 	<ul style="list-style-type: none"> 1979 \$240M 	<ul style="list-style-type: none"> 1999 \$1.5B 	<ul style="list-style-type: none"> 2010 \$2.5B 	<ul style="list-style-type: none"> 2019 \$6.0B 	

LEGO's global footprint



The LEGO Group's history in one slide

LEGO SALES (DKK Billions)



3 ENVIRONMENTAL ANALYSIS

Environmental forces can be thought of as the ecosystem in which a company develops its business in. We analyze the macroenvironment and microenvironment of LEGO® regarding the industry, customers, competition and suppliers, identifying the drivers of change of business and study the contextual environment that the company needs to consider, in order to develop an effective strategy.

3.1 MACRO-ENVIRONMENT

Global toy and games producers are facing a changing world - Digitalization and Environmental concerns pose interesting challenges to the future. The following tables depict the current trends and respective potential impacts for the toy making industry, on the Sociocultural, Technological, Economic, Ecological and Political-Legal (STEEP²) environmental variables.

3.1.1 Sociocultural Environment

Sociocultural Environment			
Trend		Impact on Demand	Impact on Supply
<ul style="list-style-type: none"> ▪ Strict Business Principles 	<ul style="list-style-type: none"> ▪ Increasing consumer and concerns with supply chain ensuring Business principles are respected and monitored 	<ul style="list-style-type: none"> + Consumers are more likely to increase consumption knowing products are developed through a healthy global supply chain 	<ul style="list-style-type: none"> - Demanding regulations might be hard to sustain - Hard to monitor supplier's practices globally
<ul style="list-style-type: none"> ▪ Environmental Awareness 	<ul style="list-style-type: none"> ▪ Global effort to curb plastic usage, packaging and use of alternative materials ▪ Current dependency on unsustainable raw materials ▪ Consumer activism regarding plastic-based manufacturing 	<ul style="list-style-type: none"> - Consumers search for eco-friendly alternatives 	<ul style="list-style-type: none"> - Volume drop - Increasing competition from eco-friendly toy makers - Increasing competition on alternative/ niche segments
<ul style="list-style-type: none"> ▪ Digitalization 	<ul style="list-style-type: none"> ▪ Pervasive Adoption of digital devices across society ▪ Traditional (physical) + Digital combination of playing 	<ul style="list-style-type: none"> - Change of traditional playing + Diversification through innovative, physical-digital integration into play 	<ul style="list-style-type: none"> - Volume Drop of conventional playing + Increase volume on digitally integrated products - Increased supply chain complexity + Increased volume of new kinds of toys

² Variation of PESTLE but essentially the same: Political-Legal together instead of isolated Political and Legal trends on the PESTLE approach.

▪ Customization	▪ Niche markets and strong adaptation to consumers' wants	- Complex product range and support might impact product marketing	+ Economy of scale
▪ Decreasing global fertility rate	▪ Population structure with lower number of children	- Constant drop in consumption on the long run	- Volume drop
▪ Pandemic Situation	▪ COVID-19 outbreak	▪ Equivalent demand on the short run - Negative impact on the medium/long run, on delayed movies and respective merchandising	- Disruption of the supply chain and Production delays

3.1.2 Economics

Economic Environment			
Trend		Impact on Demand	Impact on Supply
▪ BRIC and MINT development³	▪ Growth in emerging markets is faster than in established economies such as China	+ Increase in the consumption of toys (e.g. expansion to China)	+ Increase production volume on factory closer to locations + Increasing number of local/ regional suppliers - Increasingly Complex supply chain
▪ Partnerships & Licensing	▪ Diversification through other sources of revenue	+ Increase in demand from merchandising	+ Increase production volume on new lines of products
▪ Unemployment	▪ Pandemic effect	- Decrease in demand due to increasing economic problems	- Volume drop

3.1.3 Technological Environment

Technological Environment			
Trend		Impact on Demand	Impact on Supply
▪ Automation	▪ Decrease cost and vary production according to demand	+ Competitors face increased barrier of entry	+ Streamlined supply chain
▪ Additive Manufacturing / 3D Printing	▪ Not considered for production due to high precision and production speed requirements	- New way of creating own toys - Potential horizontal competition - Alternative + Potential for integrating with traditional playing - Highly complex Integration	- Volume decrease

³ BRIC - Brazil, Russia, India and China; MINT - Mexico, Indonesia, Nigeria, Turkey

<ul style="list-style-type: none"> ▪ Increased use of Online retail channel 	<ul style="list-style-type: none"> ▪ Sources of counterfeit products 	- Loss of revenue and marketing investment	- Volume drop
	<ul style="list-style-type: none"> ▪ Diversification of market channels and closer customer relation 	+ Increase consumption and follow-up purchases	+ Volume increase

3.1.4 Ecological

Ecological Environment			
Trend		Impact on Demand	Impact on Supply
<ul style="list-style-type: none"> ▪ Regulation 	<ul style="list-style-type: none"> ▪ Ensuring Business Principles are respected and monitored 	+ Consumers are more likely to increase consumption knowing products are developed through an healthy global supply chain	- Demanding regulation - + new suppliers of new materials might get involved
<ul style="list-style-type: none"> ▪ Development of sustainable New Materials 	<ul style="list-style-type: none"> ▪ Replace unsustainable plastics for products with sustainable alternatives (currently on development and research stage) 	- Consumers are more likely to increase consumption knowing products are sustainable	- Increase volume
<ul style="list-style-type: none"> ▪ Renewable energy sources 	<ul style="list-style-type: none"> ▪ Renewable energy is used wherever possible (Business Principles) 	+ Consumers are more likely to increase consumption knowing products have less impact on the environment	- harder for suppliers to commit - harder to guarantee suppliers comply - Worldwide different in suppliers' development and access to alternative energy sources + Volume increase

3.1.5 Political-Legal

Political-legal Environment			
Trend		Impact on Demand	Impact on Supply
<ul style="list-style-type: none"> ▪ Counterfeiting 	<ul style="list-style-type: none"> ▪ Global sources of counterfeiting 	- Sales drop; loss of reputation	- Volume drop
<ul style="list-style-type: none"> ▪ Protection of Intellectual Property, Patents, Trademarks, Copyright 	<ul style="list-style-type: none"> ▪ Global sources of infringement and high investment to sustain continuous global protection 	- Sales drop; loss of market position	- Volume drop
<ul style="list-style-type: none"> ▪ Political transparency and neutrality 	<ul style="list-style-type: none"> ▪ Consumer pressure on political topics 	- Loss of reputation and sales potential drop	- Volume drop

The Macro environment analysis reveals that Toys and Games makers' main challenges are related with **Ecology, Supply chain, Digitalization** and **Counterfeiting**. Moreover, the current pandemic situation leads to supply chain disruptions, unemployment and ultimately to decreasing demand.

Recycling, renewable energies and carbon-neutrality are becoming societal concerns with a great impact in established businesses. On one hand, companies face competition on trademarks, design and patents - on the other hand, the current trend of Environmental Awareness means that Toys and Games' producers needs to come up with alternatives to plastic as the main raw material for production.

Competitive advantage might come up from the use of innovative materials, for producers that are willing and are capable of financially invest on this strategy. Ultimately, customers might simply select environmentally safe product alternatives or divert attention to the video game substitute.

Global of toys and games producers rely on many suppliers for sourcing raw materials or outsource the transformation, production, assembly and distribution of their products. Global companies operating in this supply-chain environment need to monitor their suppliers regarding the adherence to established principles and values. Ultimately, consumers have the *power* to pressure organizations that violate their own principles and fail to *walk the talk*. Conscious buying and consumer activism is increasingly a vehicle to affect the way companies conduct their business, yet another reason for toy companies to monitor and enforce their principles and values.

“Like air and drinking water, being digital will be noticed only by its absence, not its presence.”⁴, this futuristic message from *distant* 1998 could not be truer today: Digitalization brought a different societal context also to play. Toys and Games producers long realized the importance of integrating this reality to their concepts and created sets with digitalization in mind. The ubiquity of being digital and online brings threats but of course, opportunities. Toy and Game makers and soon realized the need that innovating on the Digital arena meant creating learning packs integrating digital devices with traditional bricks and technical models, Mobile Games, Console Games and Computer-Generated Imagery (CGI) Movies.

Since some products are reproduceable, counterfeiting is a source of competition since counterfeiters do not need to adhere with regulation that companies operating globally need to

⁴ Nicholas Negroponte, chairman of MIT Media Lab, *WIRED* magazine, 1998

comply. Toy and games makers conduct their business internationally and need to invest on legal procedures to protect their Intellectual Property and Patents on a global scale.

3.2 MICRO-ENVIRONMENT

3.2.1 Customers

3.2.1.1 Microenvironment: Customers

Toys and Games industry is commonly associated with children and teenagers, but apart from the perceived importance these groups have on this market, the broad range of products available affects a wider spectrum of the population. It is important to mention that toys and games are not essential items, meaning its purchase is dependent on household income and any change in income trend directly affects the customers' ability to buy toys and games. In order to segment customers, different criteria can be chosen. In this report we will address a geographic segmentation, a product type segmentation and a demographic segmentation. The later, as it better reflects industry organization and allows deeper insights to this strategy report, was selected to be analyzed throughout the report

Segmentation by region

Toys and Games industry is growing and is expected to reach USD 353.5 billion in sales in 2024. Worldwide the growth paces are different. Asia Pacific and Eastern Europe outperforming total market trend with a CAGR (2017-2024) of 5.91% and 6.10% respectively, being Asia Pacific responsible for 30% of total sales (in value) in 2019.

	2 017	2 018	2 019	2 020	2 021	2 022	2 023	2 024	CAGR
North America	118 334	122 359	125 802	138 847	149 134	157 564	165 431	173 037	4,51%
Asia Pacific	74 507	78 044	81 745	84 806	90 677	96 480	101 608	107 004	5,91%
Western Europe	38 681	39 281	39 442	41 346	42 998	43 362	43 794	44 213	2,10%
Latin America	8 588	9 042	9 407	9 964	10 934	11 742	12 480	13 217	4,61%
Eastern Europe	6 160	6 673	7 142	7 805	8 373	8 911	9 447	9 988	6,10%
Australasia	3 566	3 651	3 731	4 072	3 922	3 970	4 004	4 031	2,14%
Middle East and Africa	1 546	1 577	1 632	1 722	1 798	1 863	1 920	1 974	3,48%
Total Market	251 382	260 627	268 901	288 561	307 837	323 892	338 683	353 464	4,57%



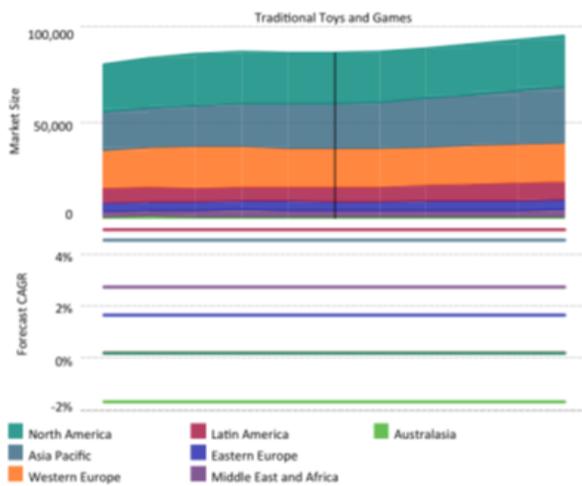
Forecast by product Type - Retail Value Sales 2017-2024, Constant USD million

2019 constant price, 2019 Fixed year Exchange Rate

When splitting the regional analysis in the two main segments within Toys and Games Industry: Traditional Toys and Video Games as presented in the graphs bellow. The dynamic each segment has is different, Asia Pacific contributes the most to video games growth, while for traditional toys North America is the biggest market.

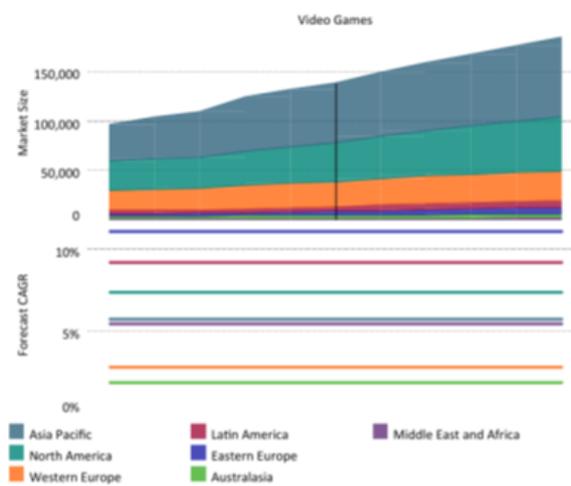
Toys and Games: Region Size and Growth by Category 2014-2024

Retail Value RSP USD million



Toys and Games: Region Size and Growth by Category 2014-2024

Retail Value RSP USD million



Passport, LEGO IN TOYS AND GAMES (WORLD), Euromonitor International, Sep 2019

Segmentation by product Type

This segmentation is based on what products do customers buy, and within Toys and Games Industry ten were selected:

Toys and Games Market	Video Games	Video Games Software
		Video Games Hardware
	Traditional Toys	Dolls
		Games and Puzzles
		Construction
		Action Figures and Accessories
		Outdoor and Sports
		Other Traditional Toys and Games
		Infant/pre-school toys
		Plush

The analysis of the ten segments of product type segmentation (next table) shows that in 2024 video games will account for more than 2/3 of Toys and Games Market (Video Games Software with 55, 3% and Video Games hardware with 12.4%). The increase importance of video games within industry will be mainly driven by video games software that have an increase of 7.2 percentual points from 2017 to 2024. Dolls segment will continue with a positive trend, achieving a CAGR (2017-2024) of 4.94%.

	2 017	2 018	2 019	2 020	2 021	2 022	2 023	2 024	CAGR
Video Games Software	120 939	131 390	139 558	153 366	164 740	175 468	185 476	195 544	6,83%
Video Games Hardware	29 274	28 598	28 907	33 723	37 983	40 247	42 091	43 813	4,92%
Construction	17 399	17 151	17 207	17 482	18 277	19 006	19 654	20 256	1,51%
Games and Puzzles	15 261	15 053	15 194	16 365	17 434	18 270	19 010	19 703	3,51%
Dolls	12 581	13 784	14 134	14 752	15 696	16 605	17 693	19 017	4,94%
Action Figures and Accessories	11 954	12 241	12 422	12 246	12 581	12 791	12 978	13 149	1,26%
Infant/pre-school toys	14 422	14 004	13 567	13 000	12 933	12 876	12 806	12 747	-1,33%
Outdoor and Sports	10 407	10 150	9 914	10 034	10 313	10 514	10 666	10 765	0,91%
Other Traditional Toys and Games	9 233	8 633	8 608	8 823	9 220	9 566	9 880	10 166	1,41%
Plush	9 913	9 623	9 391	8 769	8 659	8 551	8 429	8 304	-1,74%
TOTAL Market	251 382	260 627	268 901	288 561	307 837	323 892	338 683	353 464	4,57%



Forecast by product Type - Retail Value Sales 2017-2024, Constant USD million

2019 constant price, 2019 Fixed year Exchange Rate

Although future growth trend is an important factor to evaluate industry segments, it should not be the only one and computing an integrated analysis such as sustainable value of segments provides deeper understanding of comparative potential.

Specific information for each segment is difficult to find, a proxy was made with available information for companies operating within each segment, namely to compute net margins and sustainable index.

Segment sustainable value = $V \times (1+C)^t \times M/R \times S$

	Margin	2019 Value	CAGR	Risk	Sustainability Index	t (Years)	Sustainable Value
Video Games Software	21,6%	139 558	6,83%	0,38	0,74	5	81 524
Video Games Hardware	32,0%	28 907	4,92%	0,38	0,74	5	22 662
Dolls	14,3%	14 134	4,94%	0,38	0,84	5	5 645
Games and Puzzles	15,0%	15 194	3,51%	0,38	0,84	5	6 028
Construction	22,0%	17 207	1,51%	0,38	0,94	5	10 212
Action Figures and Accessories	19,0%	12 422	1,26%	0,37	0,83	5	5 588
Outdoor and Sports	13,0%	9 914	0,91%	0,37	0,88	5	3 179
Other Traditional Toys and Games	14,3%	8 608	1,41%	0,38	0,90	5	3 144
Infant/pre-school toys	22,0%	13 567	-1,33%	0,37	0,90	5	6 740
Plush	8,0%	9 391	-1,74%	0,37	0,90	5	1 675

Video Games Software and Hardware are the segments bringing more sustainable value to the companies, because adding to the positive growth trend, higher net margins are applied. This segment value is 8x and 2x higher than the third ranked segment, construction.

As previously described in the regional segmentation, a simplified approach to the product type segmentation is important in Toys and Games Industry: Traditional Toys and Video Games. This elementary approach allows a more in-depth analysis of the segments, mainly identifying the key success factors, as we will further detail.

Row Labels	2 017	2 018	2 019	2 020	2 021	2 022	2 023	2 024	CAGR	Sustainable Value
Traditional Toys and Games	101 170	100 640	100 437	101 471	105 114	108 178	111 116	114 107	1,52%	318 706
Video Games	150 213	159 987	168 465	187 089	202 723	215 715	227 567	239 358	6,00%	331 711

Segmentation by demographics

In the demographic approach, 4 segments were selected: Pre Schools, Pre-Teens, Teenagers and Adults.

3.2.1.2 Pre-Scholars – 0-5 years

Children between 0-5 years old who play with toys bought by adults, usually parents or family members in special dates such as Christmas or anniversary. This important segmented has been impacted by an unfavorable demographic trend and a shift towards digitalization of playtime. Traditionally strong in non-electronic, focused on toys which promote children development through stimulation. Online and specialized stores are the preferred places to buy toys and games for this segment.



3.2.1.3 Pre-Teens – 6-12 years

Preteenagers play with toys usually bought by adults. Special occasions are key moments in the purchase of toys within this segment. Specialized stores play a significant role in this segment, but an increasing importance of online store is been seen. Learning and educational experiences are key to drive purchase because parents look for products that provide educational benefits to their children. Pre-teens are increasingly interested in more interactive toys, and government agencies encourage more interactions with digital tools from an earlier age introducing, STEM to children through fun hands-on learning. These trends lead to more innovation in digital integrated toys for this segment. Pre-teens connection to blockbuster characters sustains the importance of licensing within the segment.



3.2.1.4 Teenagers – 13 to 18 years

Teenagers is a segment that besides receiving toys and games as a gift, starts buying themselves through their preferences. Special dates maintain their importance in the segment seasonality and online stores are the main form of buying, adding to some specialized stores. Video Games and digital entertainment dominate this segment are leaving traditional toys little space.



3.2.1.5 Adults – 18 years and older

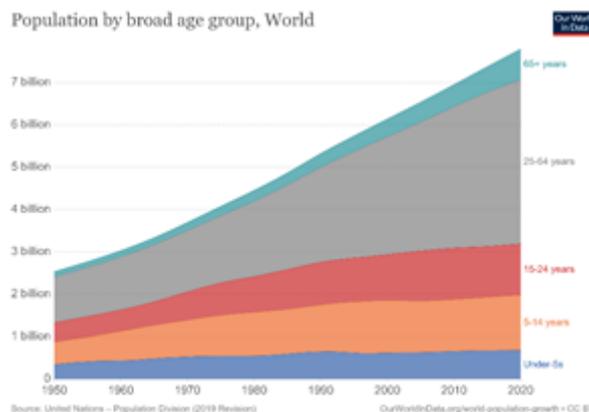
Adults segment encloses people with more than 18 years old, who buy toys for themselves, more than 50% of Adults buy online. The purchase pattern is more constant, driven by innovation. Nostalgic adults seek more traditional toys to feel younger and make connection to their kids, geek Millennials are willing to spend money for "childish desires" and account for 50% of the spend among grown-ups buying toys for themselves, while "Generation X-ers" (35-54 years old) account for around a third and "Boomers" (55 years+) account for 18%. Men are more likely than women to buy toys for themselves. More than half of the purchases by grown-ups are made online, with Amazon and Tesco the favorite destinations. Adults without children spend more money on toys for themselves than adults with kids. They are more likely to make impulse purchases of toys, for instance when shopping in the supermarket or browsing for other items online. The categories where the *kidult* trend is most prominent are games & puzzles (17% of sales), building sets (16%), action figures (16%) and vehicles (11%). Much of the growth in the older audience for toys can be attributed to the rise in collectible toys and popular characters⁵.

⁵<https://www.npdgroup.co.uk/wps/portal/npd/uk/news/press-releases/all-grown-up-from-games-puzzles-to-action-figures-and-building-sets-adults-are-spending-more-money-on-toys-for-themselves/>



	Preschool	Pre-Teens	Teenagers	Adults
Who	Parents, family	Parents, family	Parents, family, self	Self
What	Puzzles, Shape Sorters, Push-Pull Toys. Stuffed Animals and Dolls. Blocks and Building Systems.	Interactive STEM toys Building sets Licensing figures Video Games	Video Games Consoles Online Games Building Sets Action figures	Action Figures Collectibles Puzzles Building sets
For Whom	0-5	6-12	13-18	>18
	Entertainment/Educational/Development	Entertainment/Educational/Development	Entertainment/Educational	Entertainment
When	Special Dates	Special Dates	Special Dates	Anytime
Where	Specialized stores/Online	Specialized stores/Online	Specialized stores/Online	Specialized stores/Online

The presented graph illustrates the evolution of the different the world population by segment in the last 70 years.

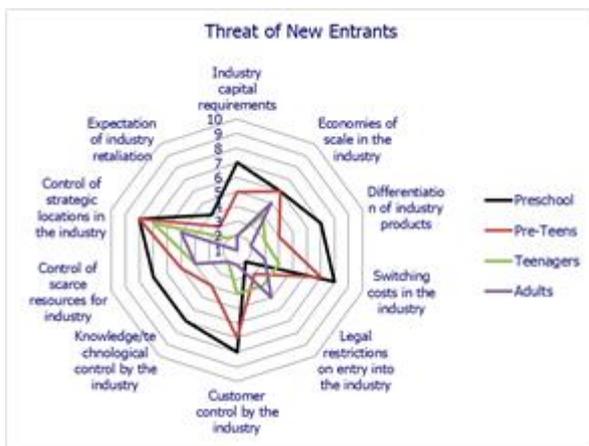


World’s population increased by three times, with the adult’s segment contributing the most for this growth. Once again, although children are commonly associated with toys and games, adults’ segment should be carefully considered by the companies in this industry, as it has been growing steadily.

This demographic approach will be followed throughout the report, because it brings additional value to the analyses in the report and better represents companies market approach. Important to stress that these segmentations can be related. The previously demonstrated importance of video games segment is linked with segments Teenagers and Adults of the demographic segmentation. Although video gaming trend is to gain customer at an increasing younger age, Teenagers and Adults are key when addressing video games.

Five Forces Model

Threat to new entrants



The toy industry does not present high barriers to entry and due to its positive historical performance is attractive to new competitors. Nevertheless, there is a growing interest to guarantee toys safety through the creation of safety legal frameworks mainly for Preschool segment but increasing legal requirements for video games will affect teenagers and adults'

segment. The higher the age segment the more differentiated the products available are and increase technological knowledge that companies need to have, being the Adults the segment where this differentiation this most perceived. Switching costs also follow this tendency, increasing with age segment. Additionally, there are high fixed costs associated with infrastructures or licensing which are toy industry capital requirements to cope with at market entrance. From the four segments preschool is the segment where threat to new entrants in higher and Adults.

	Preschool	Pre-Teens	Teenagers	Adults
TNE Avg.	6,3	5,2	3,8	3,2

Threat of Substitute Products



Preschool and pre-teens segments have higher number of substitute products, with lower differentiation between them and similar performance mainly in quality and safety leading to low substitution costs. However, starting in teens but with additional importance in Teenagers and Adults is the brand. This decrease the customers' propensity to buy substitutes in these segments this is also linked with who buy the products that is different from who uses the product. In Adults this propensity for

substitution is diminished and that is linked with nostalgia that drives purchase and the high relation this segment has with brand and specific technical features and blockbuster licensing. Regarding the price of substitutes, in preschool and pre-teens there is a broader range available, in teenagers and adults, mainly related with video games segment, the range price is narrow.

	Preschool	Pre-Teens	Teenagers	Adults
TSP Avg.	6,4	5,9	5,4	4,9

Bargaining power of Suppliers



Assessing bargaining power of suppliers is difficult because little information about suppliers is available to collect. For traditional toys the suppliers in the industry that are relevant to the big companies are the suppliers of the raw materials (plastics, metals etc.) typically the remaining process is made in house with many suppliers/ subcontractors competing for work for the larger company's meaning the suppliers have little bargaining power, this

impact mainly preschool and pre-teens segments. To cope with innovation requirements, more technologic toys and games require more differentiation in supplier's products.

	Preschool	Pre-Teens	Teenagers	Adults
BPS Avg.	4,8	4,6	5,4	5,2

Bargaining Power of Buyers

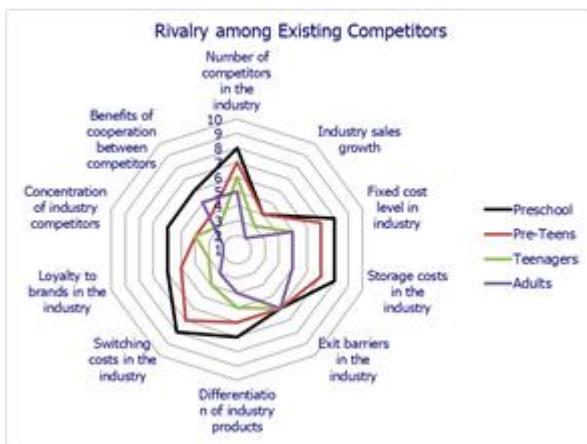


Buyers have some bargaining power, as they can affect price and quality of the products through the pressure they make to the industry. The high amount substitute products with low differentiation increases buyers' power, and above all, as toys are not essential goods companies rely on buyers' discretionary funds to purchase the products. However, as buyer size in

the industry in low this bargain power loose strength. In preschool and pre-teens, product differentiation is lower and brand has less importance buyers bargaining power is higher than in Teenagers and Adults, were brands a technological difference increase buyers switching costs, lowering bargaining power.

	Preschool	Pre-Teens	Teenagers	Adults
BPB Avg.	6,3	6,1	5,5	5,2

Rivalry among Existing Competitors

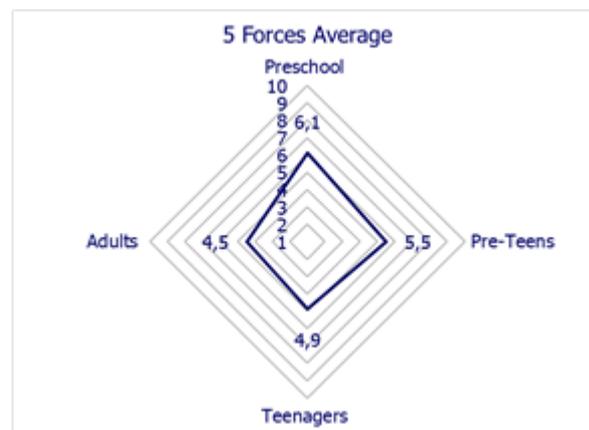


There is a high number of competitors in the toy and games market. A market that has been growing and due to specialized assets and fixed cost presents competitors with barriers to exit. Teenagers and Adults are more loyal to brands, and the switching costs are increased due to industry mechanisms to develop relate products, this is highly important in video games. The

decrease in toys life cycle, stressing competitors to innovate and to cope with rapidly changing trends, increases competition between top players.

	Preschool	Pre-Teens	Teenagers	Adults
REC Avg.	6,7	5,7	4,4	3,9

Overall, Adults segment is the most interesting in this Five Forces Model analysis and PreSchool the least.



3.2.2 Competition

In 2019, Toy and Games industry reached 224.7 Billion USD with a 36% growth YoY, split by Traditional Toys – 86.4 Billion and Video Games 138.3 billion. LEGO® Group core business is in the traditional toys segment and its close competitors are in there too. The increase importance of video games driving Industry growth in the last years and the trend towards digitalization are key markets drivers. Digital entertainment is shaping competitive dynamic and landscape, and as traditional toy makers are increasingly repositioning themselves within this shifting landscape as entertainment providers in multiple platforms rather than simply toy makers.

“One of the things people often overlook is the massive system integration and to what degree the LEGO® Group is actually an IT-driven company as much as a brand-driven company.” — Jørgen Vig Knudstorp, Chief Executive Officer

LEGO® competitive landscape is complex, particularly following LEGO® diversification strategy entering business such as theme parks (Legoland) or movie making (The LEGO® Movie). This competitor analysis will focus on LEGO® Core Business, Toys and Games industry; align with company strategy from 2004 onwards by reintroducing a strong focus on the core business – the brick and the LEGO® System in Play.

Top 10 Companies in Toys and Games: Key Facts and Figures, 2019

Company Retail Sales RSP - USD million - Current - Fixed 2019 Exchange Rates(Historic Period: 2016-2019 and Projected Period: 2019-2022)

Max. Company Rank in Current Year	Global Brand Owner	Company Sales	Company Shares	Historic CAGR	Projected CAGR	Absolute Projected Growth
1	Nintendo Co Ltd	13,446	6%	40%	3%	1,129
2	Tencent Holdings Ltd	12,797	6%	21%	10%	4,337
3	Hasbro Inc	9,044	4%	1%	4%	1,084
4	Sony Corp	8,784	4%	-5%	8%	1,996
5	Mattel Inc	7,910	4%	-4%	4%	860
6	LEGO Group	7,073	3%	2%	5%	1,052
7	Activision Blizzard Inc	6,981	3%	2%	8%	1,860
8	Electronic Arts Inc	6,330	3%	4%	8%	1,626
9	NetEase Inc	5,644	3%	19%	12%	2,232
10	Microsoft Corp	4,887	2%	-4%	8%	1,236

Note: Company projections are based on researched markets only and not directly comparable with historic data which includes modelled markets and top down adjustments

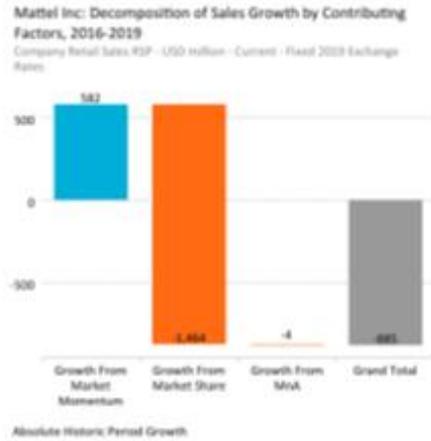
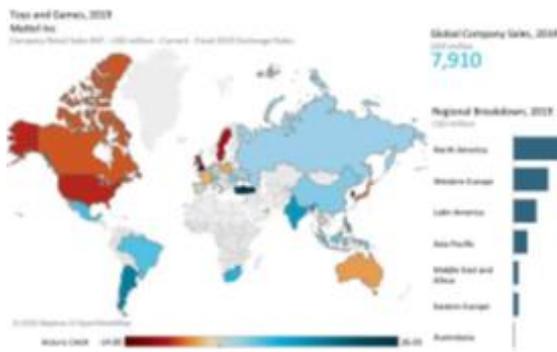
The 2019 RSP top 10 companies in the toy and games industry present different speeds; Video games companies dominate overall industry landscape, imprinting two-digit growth dynamics that is not replicated nor projected in Traditional Toy segment. Companies in the traditional toys, such as Mattel, Hasbro and LEGO® still have a significant presence in the industry but are all being challenged. Nintendo with Switch console launch, Tencent Holdings with League of Legends and Fortnite and NeatEase Inc with Westward Journey series guaranteed their growth with the successful launch of these products, stressing the constant need for innovation to old their own in this Market.



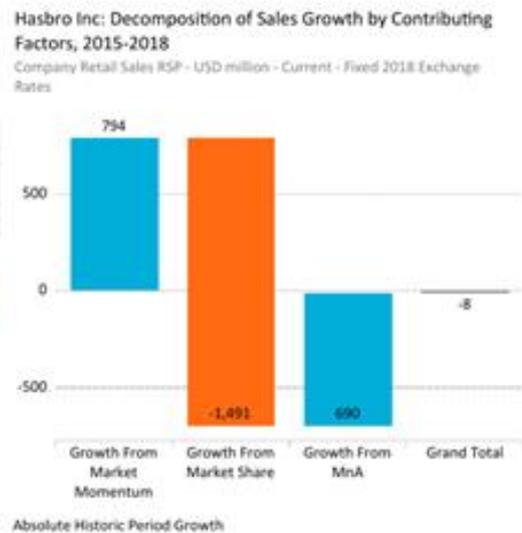
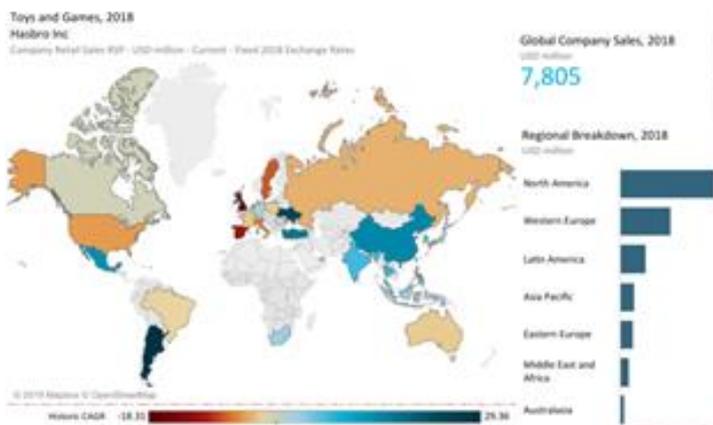
Next in the report will present further information on LEGO®’s main competitors: Mattel and Hasbro and on Industry top performer Nintendo.



Mattel is an American toy maker brand founded in 1945. First, they started with selling picture frames and after some hard times “the barbie doll” became the cash cow in 1959. Currently present in 40 countries and selling toys in more than 150 countries. North America Remains Mattel’s biggest market and they are investing in their mobile gaming apps for classic brands and during COVID-19 they created their own e-commerce platform to sell directly to consumers. Mattel depends heavily on sales of dolls and accessories. In the future Mattel is set to focus on emerging markets where middle class and disposable incomes are increasing quickly, such as Russia, Brazil and China and focus on multi-channel and multiple platforms can be a mid-to long-term new strategy that can lead to a new spike in sales. This will surely reduce the dependence Mattel has on physical stores. The negative historic CAGR (2016-2019) is impacted by a change in Market Share promoted by the weight North America has on Company sales and the poor performed North America had in the last years. Increasing presence in Asia and Latin America would balance the regional presence and diminish North America impact on overall company results.



Hasbro is an American multinational conglomerate with toy, board game and media assets, founded in 1923. Hasbro is enjoying the third position in the toy market, in terms of the stock market revenue with over \$5 Bill. Among its products are Transformers, G.I. Joe, Power Rangers, Rom, Micronauts, M.A.S.K., Monopoly, Furby, Nerf, Twister, and My Little Pony. Despite the flat trend in the last years, with a CAGR (2016-2019) of 1%, positively impacted by company M&A strategies, Hasbro has defined a set of action to increase future growth and performance. Hasbro is looking to expand its presence in media and entertainment, to strengthen connections with fan through crowdfunding designed to “bring dream products into the hands of fans”. Hasbro is also trying to mitigate competition from video games by embracing voice control technology.





Nintendo is a Japanese multinational consumer electronics and video game company headquartered in Kyoto, founded in 1889. What started with handmade playing cards is now the top player in toy and games industry with a strong brand image, coupled with technological advancements, marketing initiatives as well as industry and licensing partnerships. Nintendo Switch is the product driving the growth in markets such as the US, France, and Japan. While the company is expected to face challenges due to the upcoming new launches from its competitors, Nintendo aims at a significant boost as it officially enters the Chinese market via partnership with Tencent Holdings bypassing China’s regulatory restrictions.



3.2.3 Suppliers

The increasing importance of Corporate Social Responsibility extends to company’s suppliers. Guarantying that suppliers are fully aligned with company’s Responsible Business Principles, social, environmental, ethics is crucial. Industry players define rigorous procedures to avoid misalignment with define practices that could compromise products quality or safety and brand image.

“We have zero tolerance towards suppliers who intentionally mislead us or any of our representatives and such actions can result in termination of the business relationship. During assessments, suppliers are required to be cooperative and provide full access to work areas, records, workers, housing and childcare facilities where applicable. If we identify a non-compliance with our Responsibility Foundations, we expect the supplier to develop an action plan to address it.” - The LEGO® Group – Responsible Business Principles. This statement in Lego group reports reflcts toys and Games companies’ requirements towards industry suppliers.

China manufactures the majority of toys with 80% of them being fabricated there. COVID-19 pandemic challenged this dominance because the disruption in Chinese market led companies to seek for local or regional suppliers to bypass the blockages in material transportation. This short-term shift made companies rethink their supply chain strategies and company's now aim to decrease dependence from China as a global toy supplier.

3.2.4 Industry

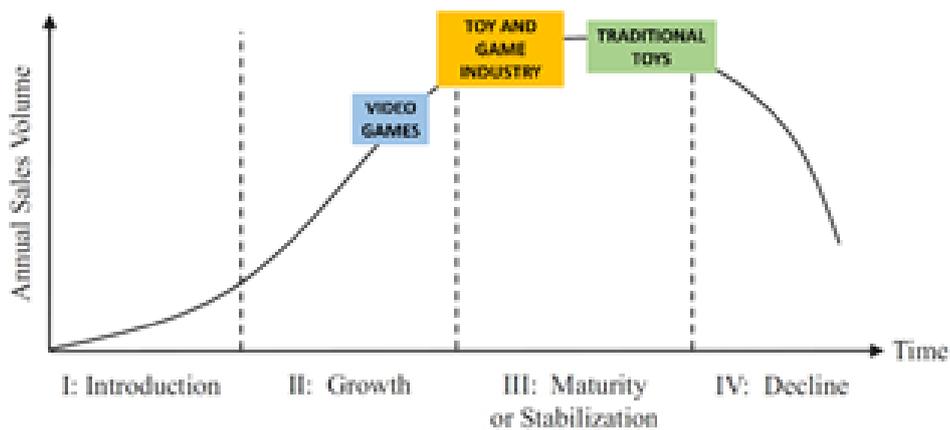
Toy and Games Industry is at a maturity stage in the industry life cycle, growth rate is more stable, players compete to consolidate market shares within the industry and no disruptive changes in demand and supply are expected to occur. Despite the fact that top players in the toy industry have remained stable, each individually cannot imprint intentional changes in the industry evolution overall. Toy and Games Industry is fragmented at a maturity stage turning it into a highly competitive environment without dominant players, one factor that potentiates the toy market fragmentation is its low entry barriers.

Analyzing yearly sales forecast for the two toy industry segments, Traditional Toys and Videos Games, aligned with the trends highlighted throughout the environmental analysis video games dynamics is closer to a growth industry than to a mature one while traditional toys fall into maturity stage.

Row Labels	2017	2018	2019	2020	2021	2022	2023	2024	CAGR
Traditional	101	100	100	101	105	108	111	114	1,52
Toys and Games	170	640	437	471	114	178	116	107	%
Video Games	150	159	168	187	202	215	227	239	6,00
	213	987	465	089	723	715	567	358	%
Grand Total	251	260	268	288	307	323	338	353	4,35
	382	627	901	561	837	892	683	464	%

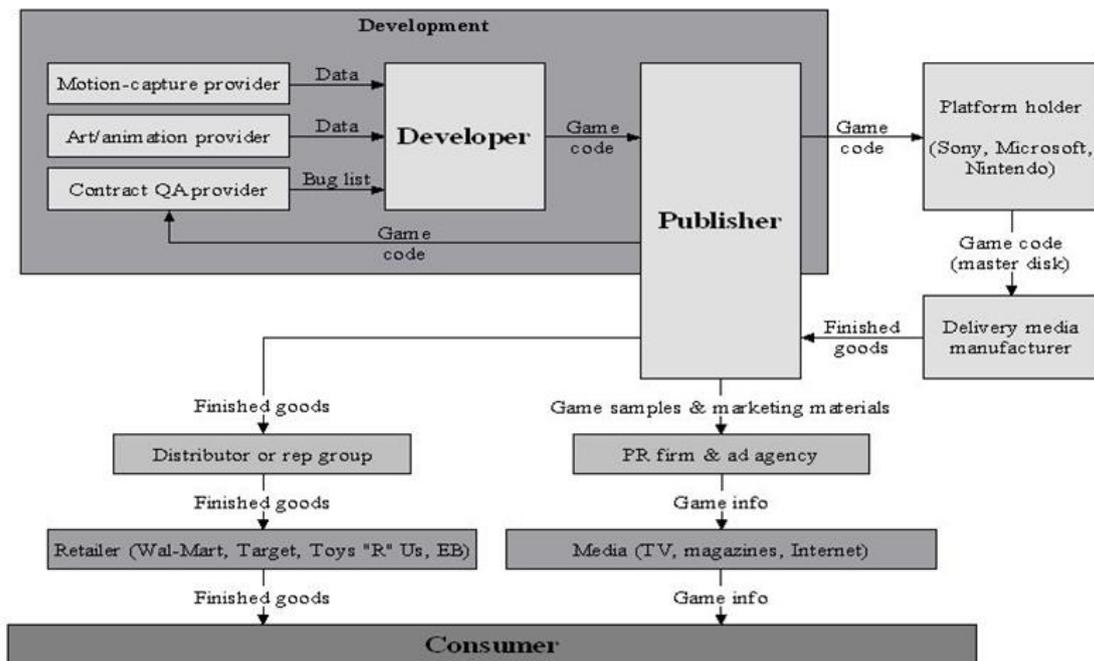
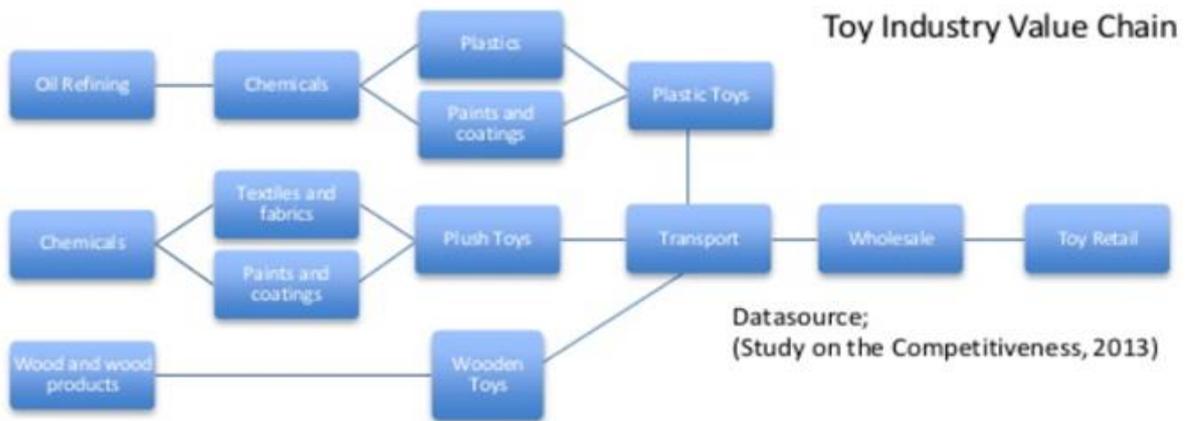
Forecast Retail Value Sales 2017-2024, Constant USD million

2019 constant price, 2019 Fixed year Exchange Rate



Industry Value chain analysis is also split in two segments, one is related with traditional toys, and the second one related with video games, namely software.

In the Traditional Toy segment, raw materials are transformed into the different parts of the toys, this chain is different because it is applied to the physical toys. In Video Games, mainly software the absence of physical element changes the value change, adding complexity with the development and publisher phase.



3.3 KEY SUCCESS FACTORS

To succeed in toy industry, companies need to master specific factors, Key success factors, details in the table below. For each segment, the critical issues to be address were mapped.

Why do consumers buy Traditional Toys? - Key Buying Factors and How competitors address client's needs.

	Key Buying Factors	Competing Factors	Key Success Factors
Preschool	Quality; Safety; Innovation, Learning/stimulation	Marketing; Availability (omni-Channel); Price	Brand Recognition; Quality; Innovation; Availability
Pre-Teens	Brand/Licenses; Learning capabilities; Variety; Quality	Marketing; Availability (omni-Channel)	Brand; Innovation; Availability
Teenagers	Consumer Trends, licenses; community; quality	Integrated digitalization, video gaming; price	Brand; innovation; Collectibles
Adults	Quality; collectibles; brand; community; licenses	Price	Brand; Quality; Innovation; Collectibles

Preschoolers - Parents buy toys and games only if they are safe and have quality. Apart from the fun playtime, parents seek toys that help preschoolers do learn and be stimulated aiming to provide the best environment for children development. Marketing is a key element in toy industry, focusing on brand awareness while making their products available to purchase in an increasing omnichannel presence that enriches customers buying experience. For Preschoolers segment a brand awareness is key and must be associated with safety and quality, the highly competitive landscape obliges companies to be continuously innovative and optimize supply chain to allow customers to have the products available efficiently.

Pre-Teens – Pre-teens are strongly linked to brands or to a specific fictional character. They, or their parents, seek pre identified brands and toys meaning that licensing is essential for this segment, and brand awareness and recognition through marketing activities from industry players. Extensive market efforts, ensuring brand recognition, maintaining brand or licensee's popularity high is also key. Once again, the availability of the products in an industry with low product differentiation is essential to diminish potential products substitution. Innovation for pre-teens and

s one of the ways companies try to differentiate. Innovation in digital integration, take advantage of pre-teens increasingly interest in video games.

Teenagers – Marketing is crucial for teenager segment; they are always aligned with popular trends but also seeking communities to shares their interests. Fictional Characters from licensing and a strong digital portfolio integrating video game in a *hometainment* experience will meet segment expectations. Innovation brand awareness and popularity are key. As teenagers star to buy toys from themselves, price gains an additional importance to this segment. Quality is transversal for all segments and for teenagers, companies should present a broad portfolio of products because pre-teens like collectible products.

Adults– Brands and collectibles are essential in adults' segment and drives purchase. Bringing constant innovation to the market is a key factor for adults' segments, many times through product augmentation engaging customers in a continuous relationship with a brand. Quality also a key factor within Adults.

Aligned with the previous sectors of microenvironment analysis, the key success Factor analysis was also detailed for the two main segments in the Industry.

	Key Buying Factors	Competing Factors	Key Success Factors
Traditional Toys	Quality; Safety; Innovation; Brands	Marketing; Availability (omni-Channel); Price	Brand Recognition; Quality; Innovation; Availability
Video Games	Interactivity; Challenging; Sense of belonging (Community effect); Previous experiences with the brand	Marketing; Innovation; Technological capabilities; Plot Development, game evolution; Interconnectivity and Exclusivity	Agility; Marketing; Uniqueness; Fast and intuitive gameplay; innovation

4 ORGANIZATION ANALYSIS

Kjeld Christensen identified, in the beginning of 2004, several internal as well as external factors that resulted in certain weaknesses driving the turning down LEGO® was facing. LEGO® showed at that time to be dynamically capable of analyze the manner on how the organization should acquire and deploy its resources in the best way possible according to market demand and market environment. Thus, LEGO® decided to divest Legoland parks and other assets which did not go along to the roots of the company. The year of 2004 is when the strategical and organizational turnaround happens for LEGO®, imprinting the foundations of a successful company as we know it today⁶.

4.1 RESOURCE AND CAPABILITIES

LEGO®, as most of the companies, uses a wide variety of resources in its daily business. It is in the way these resources are managed and leveraged that companies are more or less profitable. Every company wants to optimize their resources spending, either tangible like plants, machines, offices, or intangible, like human resources work, licenses or information. Resources can be divided into 4 categories: Human Resources, Financial Resources, Physical Resources and Organizational Resources.

Resources	Description
Human Resources	18,800 employees Thomas Kirk Kristiansen & Jørgen Vig Knudstorp in the Board of Directors Company policies towards Diverse & Inclusion and making LEGO® a great place to work to unleash the power of the people Lifelong learning and career development solutions plan Initiatives for employees' families (for instance, Summer Camp) Health, financial, security and work-life benefits
Financial Resources	Revenue 38.5 bn DKK Operating Profit 10.8 bn DKK Cashflow from operations 9.6 bn DKK Current Ratio = 1.9 Solvency ratio = 63.5%

⁶ LEGO Group Case Study. Academic Assist. <http://myacademicassist.com/pdfs/LEGO%20Group%20Case%20Study.pdf>

Debt ratio = 36.5%

ROE = 37.8%

ROA = 31%

Physical Resources	5 Manufacturing sites 37 sales offices LEGO®'s headquarters in Billund, Denmark 570 LEGO® branded stores 4 Regional Hubs
Organizational Resources	One of most renown brands in the world Solid reputation Differentiated partnerships End-to-end capabilities from production to sales and customer support Innovation and The LEGO® Future Lab

One the most important asset of LEGO® is its **employees**, “the people who make LEGO® play experiences possible” they say. LEGO® has roughly 18.800 colleague highly motivated and embedded within the company’s culture and mission. They are the workforce that think, creative, innovate and end-to-end operationalize the company to achieve the proposed goals. Through a wide range of benefits, talent and personal development plan, family support, and a playful and innovative culture, LEGO® is able to create a great place to work, unleashing the power of people to create additional value to the company, to the people and to the customers⁷.

Looking at the **financial resources**, LEGO® has shown through the last years that it has a comfortable financial position. Revenue has been steadily growing until 2017, when Toy’r’Us went bankruptcy right before the holiday season, which has negatively impacted toymakers across the board like LEGO®. Since then, Lego came back on track and revenue in 2019 was higher than that before 2017 (although the op and net profit is still to catch up that one of before 2017. LEGO® is currently able to pay almost 2 times its short-term obligation with the available current assets showing also a low indebtedness of only 36.5% in 2019 (Debt ratio), being the remaining 63.5% of the asset owned outright by the investors – in this case owned by KIRKBI A/S (75%) and the LEGO® Foundation (25%)⁸.

⁷ LEGO 2019 Sustainability progress

⁸ LEGO 2019 Annual Report

(mDKK)	2019	2018	2017	2016	2015
Revenue	38 544	36 391	34 995	37 934	35 780
Operating profit	10 837	10 774	10 359	12 448	12 244
Net profit for the year	8 306	8 076	7 806	9 436	9 174
Financial ratios (in %, except the current ratio)					
Gross margin	72.0	71.4	70.7	72.2	72.6
Operating margin	28.1	29.6	29.6	32.8	34.2
Net profit margin	21.5	22.2	22.3	24.9	25.6
Current ratio	1.9	2.1	2.0	2.0	1.8
Solvency ratio	63.5	69.1	69.3	66.9	63.7
Debt ratio	36.5	30.9	30.7	33.1	36.3
Return on equity (ROE)	37.8	38.0	38.3	49.9	60.0
Return on Assets (ROA)	32.6	35.1	34.6	43.1	43.9
Equity ratio	63.5	69.1	69.3	66.9	63.7

Note: The Financial Highlights for 2019 are affected by the implementation of IFRS 16 Leases as from 1 January 2019. Comparison figures for 2018, 2017, 2016 and 2015 have not been restated due to the use of the modified retrospective approach. The implementation of IFRS 16 Leases in 2019 has a negative impact on ROIC (approximately 8 percentage points) and on Equity ratio (approximately 6 percentage points) compared to 2018. Implementation of IFRS 16 Leases is described in note 1.2 and 4.4.

The comfortable financial position allows to constantly invest in new **assets**. In 2019 LEGO® strongly invested in retail experiences and opened 150 branded stores around the world, a trend that kept going in the first half of 2020, despite the Covid-19 pandemic, by opening 46 more stores and having 120 more planned, 80 of those only in China. Having in Billund its bulwark, LEGO® operates from this LEGO® town the 5 manufacturing plants, 4 regional hubs and 37 sales offices that together with supplies and partner allow to globally develop, manufacture and distribute LEGO® blocks. This end-to-end capability is based on the **organizational structure** LEGO® has built-in throughout the year, creating a strong and reputable brand, through differentiation, quality and innovativeness. Actually, looking at the NPS⁹ (Net Promoter Score) 2020 Benchmarks, LEGO® scores 6 (Scores higher than 0 are typically considered to be good. The industry average for Leisure is 0) in opposite to its competitors Mattel and Habro scoring -8 and 3, respectively. The NPS is indeed a customer loyalty metric that measures customers' willingness to not only return for another purchase or service but also make a recommendation to their family, friends or colleagues. This customer engagement goes beyond the simple purchasing transaction and LEGO® invites them

⁹ <https://customer.guru/net-promoter-score/lego>

to be part of the process of innovation and development, growing the LEGO® communities. LEGO® has embraced open innovation as part of its strategy to stay relevant in an age where playtime is increasingly dominated by screen time.

These are 3 key strategic **capabilities** that support LEGO®’s success:

COMPETITIVE ADVANTAGE		
Customer-focused innovation	A core brand identity	Efficient operations
<ul style="list-style-type: none"> • LEGO® Brick is an icon of the LEGO® brand • LEGO® mini figures evolve with cultural changes • New products are developed to fit LEGO® brand • Strong focus on education 	<ul style="list-style-type: none"> • Innovation involves Customers¹⁰ to get ideas - LEGO® Ideas¹¹ • Innovation is critical and new products represents 60% of the portfolio/year • Responsible digital transformation 	<ul style="list-style-type: none"> • Manufacturing as core operation • Cutting¹² Edge molding technology + high automation • Strong retail relations • Strong supply chain relations • Focus on sustainability

¹⁰ <https://michaelfearne.com/lego-future-lab-the-rebels-of-innovation-at-lego/>

¹¹ <https://digital.hbs.edu/platform-rctom/submission/everything-is-awesome-product-innovation-at-lego/>

¹² <https://www.murrayplastics.com/blog/legos-the-most-famous-injection-molded-plastic>

4.2 CORE COMPETENCIES

As seen above, LEGO® preserves a wide variety of resources and capabilities. However, these capabilities must be used in the best way possible and applied to specific areas in order to create more value than the competition.

The LEGO® VRIO analysis is basically the extension of the LEGO® PESTEL analysis, which allows the organization to understand the resources, competitive edge, value proposition and its value in the market. The Basic idea of the LEGO® VRIO model is to analyze factors that are valuable for the organization.

	V	R	I	O	Core Competency	Competitive Advantage
Large capacity & production facilities	√			√	NO	Parity
Raw Materials, production and experience curve	√	√		√	NO	Temporary
Efficient supply and Distribution chain	√	√	√	√	NO	Sustainable
High Quality Standards	√			√	NO	Parity
Innovation Process	√	√	√	√	YES	Sustainable
Partnerships and licenses	√	√	√	√	YES	Sustainable
Creativity in Product design	√	√	√	√	YES	Sustainable
Brand Name	√	√	√	√	YES	Sustainable
Efficient Management and Leadership	√	√		√	NO	Temporary
In-store experience	√	√		√	NO	Temporary

The current **physical production plants** are being expanded, i.e. increasing warehousing and processing capacity in its factory in Nyíregyháza, Hungary (a factory using state-of-the-art machinery) and opening a new warehouse in Monterrey, Mexico. In this aspect, we conclude that the plants and modern facilities are valuable due to the locations; the resources are not rare but are

rare for state-art-machinery and can be imitated by other companies, as they are not costly. The resulting competency in the physical aspect is a competitive equality.

The **experience curve** provides a competitive advantage by building up the company experience either through expansion of stores, automating or design creativity. Competitors are unable to compete with companies with a strong experience curve, which is necessary to continuous improvement costs reduction, knowledge on raw materials and technological partners and suppliers. In this case, the best way to reduce costs and be sustainable is through processes and inputs sharing, the exploitation of economies of scale and scope and improvements in design, labor and factory. One of the major key factors of LEGO® current success is the way they mastered the **raw materials** they're using, as well as those to be used in the future as highlighted in the Sustainability chapter.

LEGO® works closely with **suppliers** to ensure they meet not only their demand responsibilities, but also the quality and sustainability of raw materials, as for instance the sugarcane suppliers who must meet the Responsible Ethanol Sourcing Framework based on best practices. In addition, to tackle environmental and optimizations issues in LEGO®'s **supply chain** it run the Engage-to-Reduce program, which aims to lower suppliers' carbon emissions and optimizing its processes. LEGO® works in a transparent way with suppliers who share this ambition and commitment. LEGO® has also built a culture among **distributor & dealers** where the dealers not only promote company's products but also invest in training the sales team to explain to the customer how he/she can extract the maximum benefits out of the products. LEGO®'s intention is to build long-term relationships, work together to solve challenges and identify opportunities and to reward those who strive for best practice – similar to what Toyota has develop in its *keiretsu*.

During the 2000s LEGO®'s crisis, the CEO Jorgen oversaw the operation of the company and implemented a strategic plan that avoided the collapse of the company, due to lack of cash, ensuring a shared vision, which was fundamental to achieve the goals. Lego Company has employed **mission** and **vision** statements that guide the core operations – Mission: “Inspire and develop the builders of tomorrow”, Vision: “A global force for establishing and innovating learning through play” – which allowed the company to achieve considerable amount of success. Thus, the results are that the resources of **organization and management** are valuable and rare to some extent, because it's costly to imitate, as finding the best CEO to implement proper strategies aligned with the company

values does not come easily. The organization is well organized with a chain of command and direction, which leads with the conclusion of a competitive parity.

Intellectual property includes trademarks, copyrights and patents or process of innovation product and trade secret secured within the company or licensed. The trademark of bricks is registered by LEGO®, but brick patent expired. No other company can use the LEGO® name in its business making the resource valuable to the company. The company also has creative processes of innovation and design, being constantly investing heavily in new products, thus making their resource costly to imitate, rare and valuable. In addition, several **partnerships and licenses** have been put in place to add value to the portfolio of products. These partnerships and licenses are valuable due to some of them be exclusive, what turn into a rare advantage. The innovation processes are organized, resulting to the company having a sustainable competitive advantage. This sustainable advantage began a long time ago when LEGO® pioneered the creation of a brick system, in which bricks from different themes are compatible among each other¹³.

LEGO® **brand** is high rated and valuable. Customers expect high quality and satisfaction from the LEGO® brand products and thus LEGO® has a relentless focus on product safety, producing high-quality products that meet or exceed the rigorous international safety regulations for toys. In 2019, we had our tenth consecutive year of zero product recalls. Moreover, the brand values are attached with the ability to improve the skills of children i.e. hands-on, minds-on approach to Learning and increase creativity through LEGO®'s play system.

The LEGO® Group's long-held approach to operating its business and year-over-year improvement culminated in a strong first-class renowned brand. The LEGO® Group ranked first place in Reputation Institute's 2019 Global Corporate Responsibility Study, knocking off some lead and larger multinational companies, such as Google, Natura, Microsoft or The Walt Disney Company. The core strength in corporate responsibility translates into 57% of consumers saying they would definitely buy The LEGO® Group's products — which is a net 13.7 percentage points higher than the CR RepTrak 100 average¹⁴.

¹³ <https://www.lego.com/en-us/service/help/products/themes-sets/duplo/building-with-lego-and-duplo-bricks-40810000007962>

¹⁴ <https://www.lego.com/es-es/aboutus/news/2019/september/the-lego-group-is-ranked-first-place-in-reputation-institute-s-2019-global-corporate-responsibility-study/>

To leverage the brand the power of the brand, LEGO® is investing in retail ecosystem, by creating **immersive brand experiences** in physical stores and convenience, which offer shoppers one-of-a-kind experiences including personalized minifigures and self-portraits made from LEGO® bricks.

This makes LEGO® a valuable brand due to the **reputation** and customer's higher confidence level, which is costly to imitate and takes years to reach. LEGO® reputation creates a competitive advantage that is sustained in comparison to competitors. Reputation can last for long, if proper maintained and increase the company sales in the long run, which is the case for LEGO® with continued performance.

The company **innovation** is notable with the introduction of new products every year. Innovation is critical to the success of the LEGO® Group and each year new products make approximately 60% of the portfolio. A high demand for innovation capacity has led to its innovative progress to invest in mechanical and scientific skills. A cross-functional system introduced in the LEGO® Company has improved its innovative programs and included community building, market channels, plans of pricing and process of business¹⁵. Indeed, the innovation^{16,17} shave of Bionicle produce consistent sales due to use of complementary innovations making it a resource valuable. The resource to imitate is costly, rare and inimitable, resulting in a competitive advantage.

The capabilities of the LEGO® Group have been organized and interpreted via the VRIO framework analysis. The production and innovation processes of LEGO® have been effectively optimized since 2004 to change the operation model in order to grow sales positively and let the negative outlook behind. The **organizational capabilities** of LEGO® are unique and proved to be effective very recently, in opposite to the traditional toy market that declined 3% in 2019, LEGO® grew 6%, achieving the best year ever in revenues. However, this is a temporary competitive advantage, which means that LEGO® still has a place to improve in order to keep the competitive advantage against the other companies, mainly in the digital transformation, which was accelerated by the COVID-19 pandemic. LEGO® must invest in marketing, great quality over the years, product innovativeness, creativity and purpose. If it follows where its customers are leading it, everything will continue being awesome.

¹⁵ <https://digital.hbs.edu/platform-rctom/submission/everything-is-awesome-product-innovation-at-lego/>

¹⁶ <https://www.theguardian.com/technology/2004/apr/29/shopping.toys>

¹⁷ <https://robertsoninnovation.com/what-next-for-lego/>

4.3 STRATEGIC FIT

Companies with strong core competencies can sustain the value creation in any industry. In this case, even with the toys market decreasing, LEGO® can was able to focus in its core competencies and create value in every dimension, either economics with a 6% growth or sustainability by the accomplish of the proposed sustainability goals.

The level of Strategic Fit of a company is reflected in the correlation degree between its core competencies and key success factors. The following strategic fit is presented by segment. The grading presented is from 1 (poor adequacy of Core Competency to the Key Success Factor) to 5 (strong adequacy of Core Competency to the Key Success Factor). “-” means no correspondence between Core Competency and Key Success Factor.

4.3.1 By Demographic Segmentation

Pre-school				
Core Competencies	Brand Recognition	Quality	Availability	Innovation
Innovation Process	5	5	3	5
Partnerships and licenses	3	-	-	5
Creativity in Product design	4	5	-	4
Brand Name	5	4	4	4
Supply & Distribution chains	-	-	5	-
Strategic Fit [1-5]	4.3	4.7	4.0	4.5

Pre-teens			
Core Competencies	Brand Recognition	Availability	Innovation
Innovation Process	5	4	5
Partnerships and licenses	4	-	5
Creativity in Product design	4	-	4
Brand Name	5	4	5
Supply & Distribution chains	-	5	-
Strategic Fit [1-5]	4.5	4.3	4.8

Teenagers		Brand Recognition	Collectibles	Innovation
Core Competencies				
Innovation Process	5	5	5	5
Partnerships and licenses	5	5	5	5
Creativity in Product design	4	5	4	4
Brand Name	5	4	4	4
Supply & Distribution chains	-	-	-	-
Strategic Fit [1-5]	4.8	4.8	4.5	4.5

Adults		Brand Recognition	Quality	Collectibles	Innovation
Core Competencies					
Innovation Process	5	5	5	5	5
Partnerships and licenses	5	-	5	5	5
Creativity in Product design	5	5	4	4	4
Brand Name	5	5	4	4	4
Supply & Distribution chains	-	-	-	-	-
Strategic Fit [1-5]	5.0	5.0	4.5	4.5	4.5

LEGO® is a very well-known brand, recognizable everywhere. As presented in the previous tables, it is noticeable that Brand recognition is a Key Success Factor for all demographic segments, which LEGO® has been working on and building since its establishment and it's impacted by almost all LEGO®'s core competencies. It's through Quality, Innovation and maintaining a strong and reputable Brand Name that LEGO® can continue expanding its business to new markets and even adventure into new segments such as Videogame and Theme Parks (Legoland).

To keep up with the market it is crucial that innovation and partnerships with trendy partners and brands continue. This won't only strengthen LEGO® brand, but it also brings interest from customers into new products and novelties. Innovation is another Key Success Factor transversal to all segments, although in a different way. For teens and adults, collections can be a key success factor, as they available to keep buying a collection they appreciate. As previously, all core

competencies play an important role on this Key Success Factor, as creativity, innovation and partnerships are crucial.

For pre-school and pre-teens segments, innovation is more about having fun while learning and developing creative capacities. While the brand name plays an important role in here, availability is a Key Success Factor that must tackle. In each of these segments, it the Key Success Factor with the lowest score. LEGO® must keep an eye on this and strengthen its core competency Supply & Distribution chains. LEGO® toys must be available in as many stores and possible, because the buyer and user of these segments are not the same. Parents for sure recognize reputation and quality on LEGO® toys, but these may not be enough to look for LEGO® toys if they are hard to find easily in retailers.

Overall, LEGO®'s core competencies tackle almost all Key Success Factors necessary for the future success of the company. But if it is hard to get this point of strength, it can be harder to keep all core competencies updated and strong to fulfill the Key Success Factor, so LEGO® must focus in doing and continuously improving what they are good at.

4.3.2 By Product Type Segmentation

Traditional Toys		Brand Recognition	Quality	Innovation	Availability
Core Competencies					
Innovation Process	5	5	5	5	3
Partnerships and licenses	5	4	5	5	-
Creativity in Product design	5	5	4	4	-
Brand Name	5	4	4	4	5
Supply & Distribution chains	-	-	-	-	5
Strategic Fit [1-5]	5.0	4.5	4.5	4.5	4.3

Videogames		Agility	Marketing (Community)	Uniqueness	Gameplay	Consistency
Core Competencies						
Innovation Process	4	5	4	3	3	3
Partnerships and licenses	3	5	5	4	4	3
Creativity in Product design	4	4	4	4	4	4

Brand Name	5	5	5	-	-
Supply & Distribution chains	3	4	-	-	-
Strategic Fit [1-5]	3.0	4.6	4.5	3.7	3.3

Traditional toys have been discussed in the previous point. As we could see, the Key Success Factor relies on Brand Recognition, Quality, Innovation and Availability, and LEGO knows how to manage it as it fulfils almost all core competencies necessary to succeed the traditional toys industry. However, Digital toys and Video Games are a whole new world, in which different core competencies from traditional toys are required in order for a company to succeed. “*The success of the industry ... depend on the successes of individual companies, and those successes will depend on the creation of video games that consumers want to play.*” said Wolf in this paper *Video Games Around the World*.¹⁸ Indeed, companies within the videogames industry must produce really good games, that reach through the market noise and built by a professional team. All these attributes can make a videogame successful, through Consistency, Uniqueness and Gameplay. Videogame after videogame must show consistency, i.e., they must be coherent, technically good, aesthetically pleasant and follow a pathway of improvement, along with a compelling and continued story script. At the same time, in parallel with the more technical aspects, companies must be able to create noise around the games and build a sense of community. LEGO has proven itself that Marketing, making noise and communities creation are a strength of it, as is shown on the Strategic Fit Table. Nevertheless, it is notorious the weaknesses of LEGO and the core competencies that must be worked on in order to succeed and meet the Key Success Factors of the Videogame Industry. LEGO must be a more agile company, to be able to keep up with the constantly movements on the digital world, mainly in the videogame. Innovation process and creativity must follow a culture seen in the start-ups, in which the decision making is faster and easier. For this it is important that LEGO makes great partnerships with key player and stakeholders in the market, as LEGO has done when licensing rights of use, what makes LEGO games **unique**.

¹⁸ Wolf, 2015, *Video Games Around the World*, p5. <https://mitpress.mit.edu/books/video-games-around-world>

4.4 SWOT ANALYSIS

Strengths	Weaknesses
<ul style="list-style-type: none"> • Brand is highly emotionally and reputable • A form of creative expression. Creates a LEGO® community • Long term experience of market • Excellent quality • Multiple Themes. Adaptation capability to the latest market trends • Strong relationship with suppliers & distributors 	<ul style="list-style-type: none"> • High pricing • Does not have innovative capability to compete with digital toys • The high cost of research • Cost of material • Rookie in the digital market • Negative impact in environment of plastic toy production
Opportunities	Threats
<ul style="list-style-type: none"> • More parental focus on creative toys • Nostalgia building-up • Leveraging LEGO® Education • Potential through web • LEGO® digital transformation • Expanding global presence in emerging markets (e.g. India, China) • Production in cheaper geographies (outsourced) • Leverage Competitions (e.g. First LEGO® League) and social networks 	<ul style="list-style-type: none"> • Changing trends in toy industry like video game consoles, websites, smartphone mobile games, electronic games – Fierce competition in digital • Outsourcing the manufacturing to Asian countries puts pressure on pricing • Counterfeits • The threat of substitution. Substitute products available for lower prices • Expiring patents • High pressure to avoid plastic toys

LEGO® has numerous **strengths** that enable it to thrive in the marketplace. These strengths not only help it to protect the market share in existing markets but also help in expanding to new markets.

LEGO® has built a strong dealer community where the dealers are true partners that invest in training the sales team to promote LEGO®'s products. For this to happen, the strong brand name and reputation of LEGO® was a key asset. LEGO® is a world leading supplier of creative play and learning products, enjoying a strong brand name and reputation as mentioned previously. Innovation is a key part of LEGO®'s strong brand. Over the years LEGO® has invested in building a strong brand portfolio. The SWOT analysis of LEGO® just underlines this fact. This brand portfolio can be extremely useful if the organization wants to expand into new product categories. The ongoing creativity, allied to robust innovation processes and key partnerships, allows LEGO® to

constantly bringing new and innovative products to the market. This means a high level of customer satisfaction, which through its dedicated customer relationship management department has able to achieve a high-level satisfaction among present customers and good brand equity among the potential customers.

Weaknesses are the areas where LEGO® can improve upon. Strategy is about making choices and weaknesses are the areas where a firm can improve using SWOT analysis and build on its competitive advantage and strategic positioning.

LEGO® has all its expertise based on brick system. The accumulated expertise (with employees highly qualified), LEGO® not only built a strong brand and also a reputation of quality. To achieve the requires standards of quality, LEGO® invests heavily in new technology, raw materials and productions controls. All these strengths lead LEGO® to be more expensive than competitors, looking for a segment of buyers with higher income. This can be a weakness as LEGO®'s short-term strategy is to expand to Asia, where high prices can be an entry barrier in some markets.

Investment in Research and Development is below the fastest growing players in the industry. Even though LEGO® is spending above the industry average on Research and Development, it has not been able to compete with the leading players in the industry in terms of innovation. It has come across as a mature firm looking forward to bringing out products based on tested features in the market.

This lack of agility can bring be a problem in the near future, as LEGO® is currently heavily investing in its digital transformation. Although LEGO® digital approach has been successful¹⁹, LEGO® and its teams keep trying to find growth through digital play experiences, which might defocus from its core competency of making bricks, and the company may struggle again, as it happened in the 2000s due to an overdiversified portfolio. LEGO® must keep investing in digital solutions in a sustainable way, keeping in mind what is actually its engine that pushes everything else with the brand.

Finally, the production of LEGO® products has a huge impact in the environment. The continuous pressure from customer and communities to be environmentally sustainable, can be an issue in the future. Although LEGO® is already investing in new and more sustainable materials, these may come in a slower pace than that demanded by the market, communities and rulers.

¹⁹ <https://www.forbes.com/sites/forbesinsights/2020/03/05/what-legos-retail-expansion-teaches-us-about-digital-leadership-for-any-business/?sh=275decf632f3>

LEGO® is a long standing brand recognizable through generations, which can bring a lot of **opportunities**. The prime audience are kids who don't have a lot of discretionary incomes, and they need parents to drive them there with all that entails in a world of 24/7 workloads. These parents of today probably played and learned with LEGO® bricks, what may be an advantage that LEGO® can explore. Leveraging this emotional attachment, a positioning in this segment is crucial to keep LEGO as a leading toy brand. Bringing back that nostalgia and creating communities will keep LEGO® as a must among next generation children's toys. In addition, LEGO®'s vision "A global force for establishing and innovating learning through play" must be the way to build customer engagement and connect with LEGO® communication, and LEGO® Education is the basis to create this Play and Learn culture around LEGO®. For this to happen, LEGO® should continue reshaping its strategy towards the digital channel, because the parents of today have different purchase behaviors, as they are the new customers from online channel. Indeed, over the past few years the company has invested vast sum of money into the online platform. This investment has opened new sales channel for LEGO®. In the next few years, the company can leverage this opportunity by knowing its customer better and serving their needs using big data analytics.

Moreover, LEGO® must keep building up its community by placing challenges, like the LEGO® Ideas. Nowadays, social networks are a key and cheap communication channel, which can be used as an advantage if things are done differently. Through challenges, engagement posts and competitions, LEGO® can fast growth and strengthen its relationship with the community.

New trends in the consumer behavior can open up new market for the LEGO®. It provides a great opportunity for the organization to build new revenue streams and diversify into new product categories too, yet in a sustainable way, keeping in mind its core competencies.

Finally, new geographies are the key to keep growing, and Asia countries are still emerging markets for LEGO®, where growth can be substantial is proper developed. LEGO®'s presence in these new geographies, may also give build enough knowledge so LEGO® can explore further way to make production cheaper. This opportunity must be taken very carefully, as one of LEGO®'s core competencies – Quality – may be put at risk. Although, if this Asia expansion is properly taken ahead, allied with quality and innovation standards, it may be a huge opportunity.

Apart from being a huge opportunity, expansion to Asia, can also be considered a **threat**. For instance, the huge investment LEGO® has done in China can lead to serious pressure on profitability, taking into account the continuing rising pay level and increasing prices in the China.

The Possible outsourcing could be a solution, but LEGO® must keep its quality and innovation standards high, which is one of LEGO®'s key assets. Imitation of the counterfeit and low-quality product is also a threat to LEGO®'s product especially in these emerging and low-income markets. Counterfeit products together with expiring patents are serious threats, which LEGO® must fight with more and faster innovation than competitors in order to get ahead of both competition and counterfeits products.

As mentioned before, LEGO® is still a rookie in the digital market, although is has done greatly through the past few years. The digital market is constantly changing, and trend evolve rapidly. For LEGO® to keep up, it must too turn into a more agile structure, so the decision-making process can follow the digital trend and market, in which fierce competitors have already a well stablished position.

Lastly, the world is getting more and more aware of environmental changes and sustainability is today even more a key aspect people is willing to pay attention when choosing what product or brand to buy. On top of that, investors are also keen to invest in sustainable companies, those that have proper strategy plans to last decades and be responsible with everyone and everything. LEGO® bricks are a historically a durable plastic toy, which may be an issue in the future. LEGO® must continue to invest in the development of sustainable materials and in sustainable actions, so the customer can perceive LEGO® as a leading sustainable brand to be followed as an example.

4.5 NEW SWOT ANALYSIS

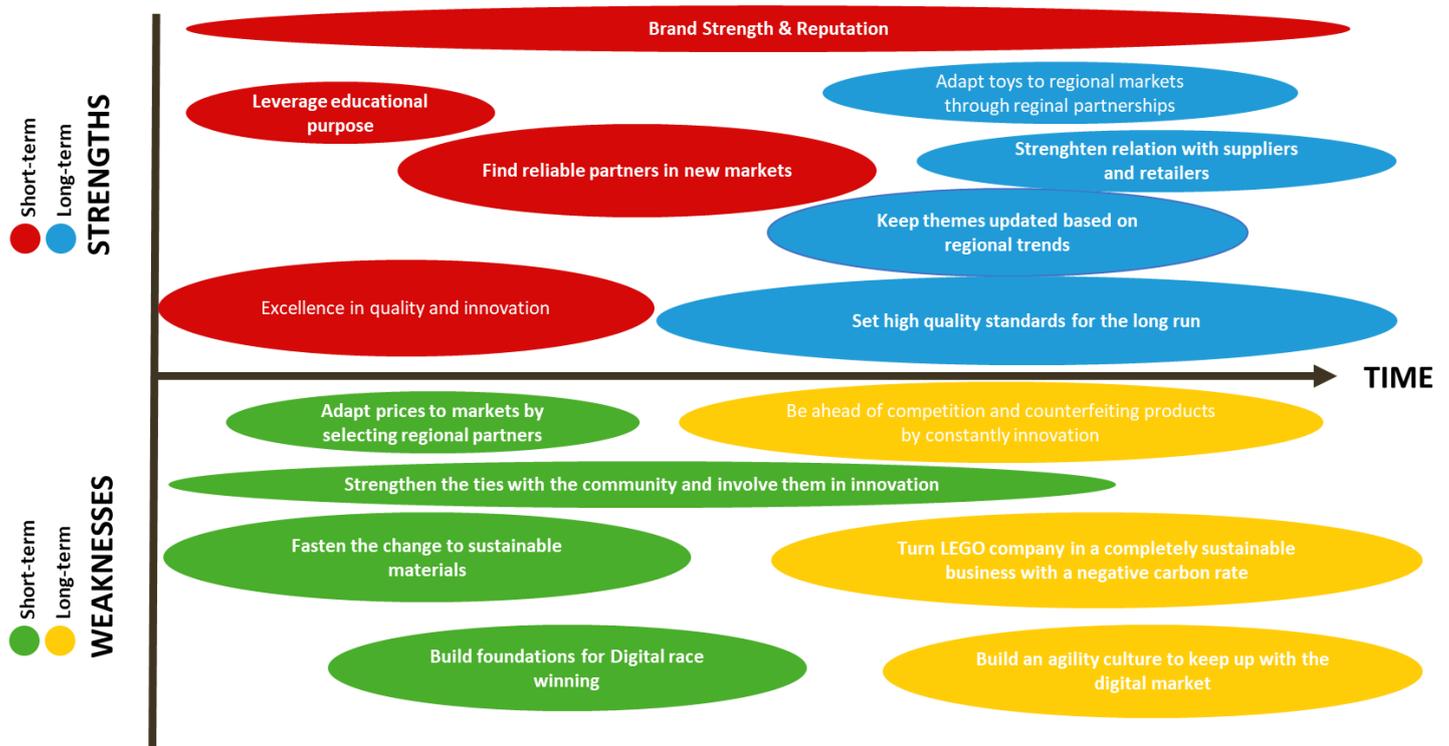
Although the SWOT analysis is widely used as a strategic planning tool, the analysis does have its share of limitations. Certain capabilities or factors of an organization can be both a strength and weakness at the same time and it doesn't take time into consideration, which is one of the major limitations of SWOT analysis. For example changing environmental regulations can be both a threat to company or an opportunity in the sense that it will enable the company to be on a level playing field or at advantage to competitors if it is able to develop the products faster than the competitors. SWOT does not show how to achieve a competitive advantage, so it must not be an end itself.

SWOT is a static assessment - analysis of status quo with few prospective changes. As circumstances, capabilities, threats, and strategies change, the dynamics of a competitive environment may not be revealed in a single matrix, and the threats must always be seen as opportunities, if properly assessed.

Thus, following the new SWOT analysis is presented by turning threat into opportunities, including specific suggestion on how to tackle them.

	Short-term Opportunities	Long-term Opportunities
	<ul style="list-style-type: none"> • Parental Focus & Nostalgia • Potential of Digital transformation • Leveraging LEGO® Education • Expanding global presence in emerging markets Production in cheaper geographies • Leverage Competitions and social networks 	<ul style="list-style-type: none"> • Leverage the foundations built to win the Digital Race • Take advantage from expanding to Asia emerging markets • Be the only choice in brick system toys • Development of regional partnerships to create tailored toys • Environmental Social and Governance Responsibility trend
Strengths	Suggestions	Suggestions
<ul style="list-style-type: none"> • Strong Brand (Emotion & Reputation) • Creativity & LEGO® Community • Long-term experience of market • Excellent quality • Adaptation capability to the latest market trends • Strong relationship with suppliers & distributors 	<ul style="list-style-type: none"> • Appeal to nostalgia and today's parents with proper toys and through new channels • Leverage the educational part • Find suppliers in new markets, keeping excellent quality and innovation standards • Find reliable partner in new markets 	<ul style="list-style-type: none"> • Strengthen even more the relation with retailers & suppliers • Adapt toys to regional markets and develop regional partnerships • Keep themes updated based on regional trends • Set high quality standards for the long run
Weaknesses	Suggestions	Suggestions
<ul style="list-style-type: none"> • High pricing • Lack of Innovative capability and agility compared digital toys • The high cost of research • Cost of material • Rookie in the digital market • Negative impact in environment of plastic toy production 	<ul style="list-style-type: none"> • Adapt prices to markets by selecting regional partners • Strengthen the ties with the community and involve them in innovation • Fasten the change to sustainable materials • Build foundations for Digital race winning 	<ul style="list-style-type: none"> • Be ahead of competition and counterfeiting products by constantly innovation • Build an agility culture to keep up with the digital market • Turn LEGO® company in a completely sustainable business with a negative carbon rate

OPPORTUNITIES



The matrix is only a starting point for a discussion on how proposed strategies could be implemented. It provided an evaluation of window plan based on the strategic competitiveness of LEGO®.

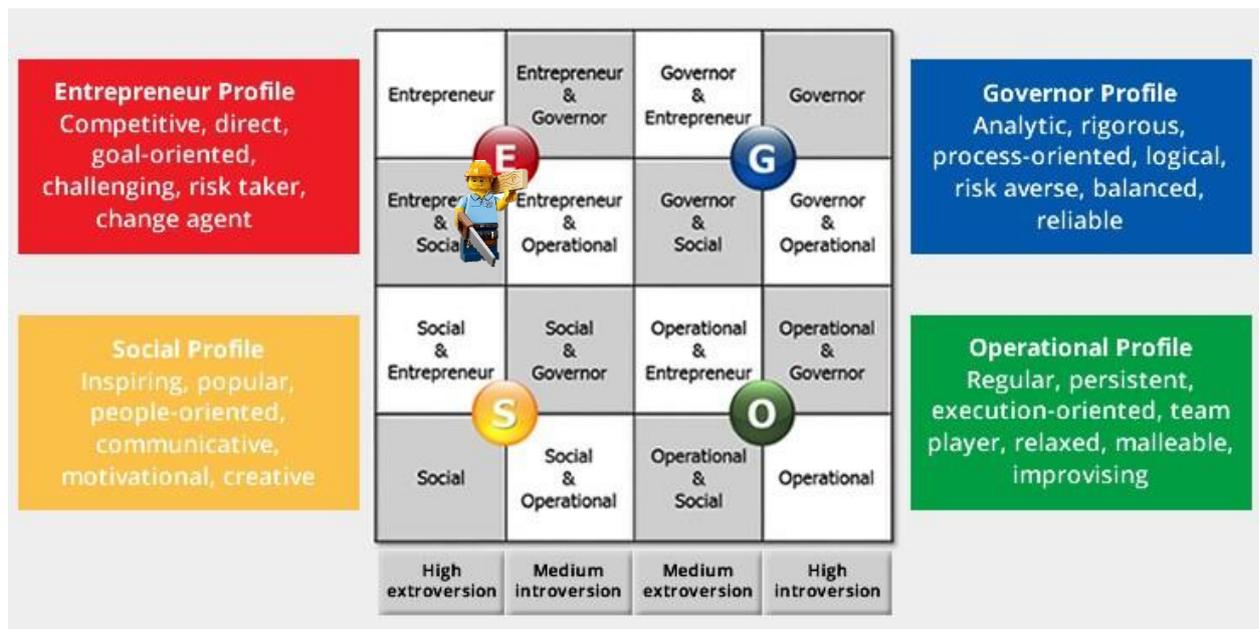
Clearly, LEGO® should strengthen even more its core competencies and innovate towards new markets, leveraging possible suppliers in it. In addition, looking for regional-tailored themes may help LEGO® find new sources other than the current licenses it holds, tackling this way the expiration of contract and patents. By keeping excellence in quality and innovation, LEGO® will be ahead of competition and low-cost imitation or counterfeits, by setting the pace of trends in toys. Also, to win the digital race in the toy industry, LEGO® must start now building the foundations to agile the decision-making, what is a critical factor in the digital toy industry. Finally, sustainability is key to every business that want to thrive for long time. LEGO® must be a leading example on how to be completely sustainable, as for instance turning a current plastic in a toy made of sustainable sources and turning the company into a business with a negative carbon rate.

4.6 EGOS MAP

4.6.1 Ole Kirk Christiansen

Ole Kirk Christiansen, a Danish carpenter born in 1891, was the founder of LEGO® Group in 1932. Right after the Great Depression, Ole, a skilled carpenter, began to make small, affordable, wooden household products such as ladders, ironing boards, stools, Christmas tree stands and toys. Ole's company started to focus primarily on the production of toys. In 1935, combining the two Danish words “Leg Godt”, meaning Play Well (coincidentally, it also means “put together” in Latin) Ole gives a name to his company and in 1949, after buying a plastic injection molding machine, he convinced his sons about the potential of plastic bricks: “*Have you no faith? Can't you see if we do this right, we can sell these bricks all over the world?*”, LEGO® bricks were born.

Ole was a truly entrepreneur, visionary and resilient inventor for his time. Paying attention to is vision and mission, he seemed to be a social person, trying to find purpose on what he was creating and doing.^{20,21,22}



4.6.2 Niels Christiansen

Niels is a Danish businessman, former McKinsey consultant and the ex-chief executive of Danfoss, which got known for his work on the turnaround of the latter company. Niels is the first “outsider” to be appointed CEO of LEGO®. “He is nothing flashy, just quietly one of the most impressive

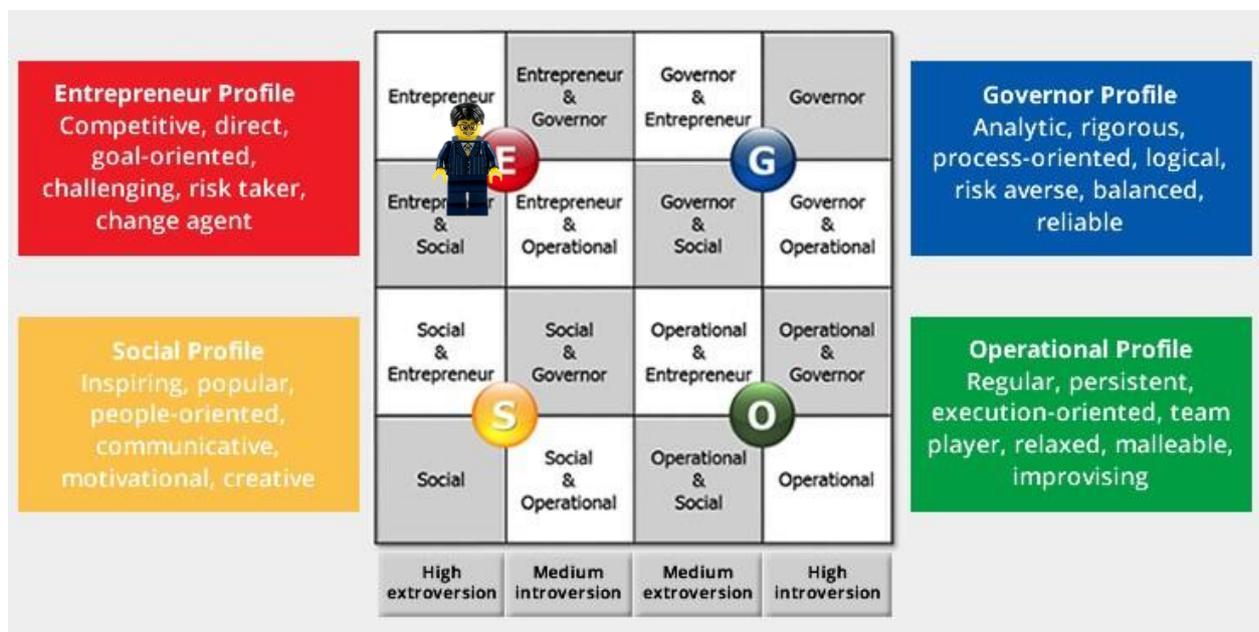
²⁰ <https://www.lego.com/en-us/aboutus/lego-group/the-lego-group-history>

²¹ <https://www.famousinventors.org/ole-kirk-christiansen>

²² https://brickipedia.fandom.com/wiki/Ole_Kirk_Christiansen

business people I’ve met,” said one Danish business executive around his appointment. Niels describes his approach to leadership as “not so high-flying” and almost deceptively straightforward. “It has always been to try to be as honest and as simple in the language as possible. Say what you’re going to do . . . and stick at it; live it yourself as leaders,” he says.

Niels is a less extroverted manager than his chairman, but at the same time a visionary who inspire people. This is what he brought to LEGO® a refreshing vision and pathway to follow: Building a creative work environment; taking corporate social responsibility seriously; and evolving through Digital innovation at LEGO® ^{23,24}.



4.6.3 LEGO Company

LEGO® is a family-owned Danish company. According to Adriano Freire, 2020, the Danish culture falls into a Governor-Operational organization, based its dominant societal and cultural aspect of responsibility and dedication to work, awareness and detailed on project. LEGO® is a family-owned Danish company, embedded also part of the culture from the country where it was established.

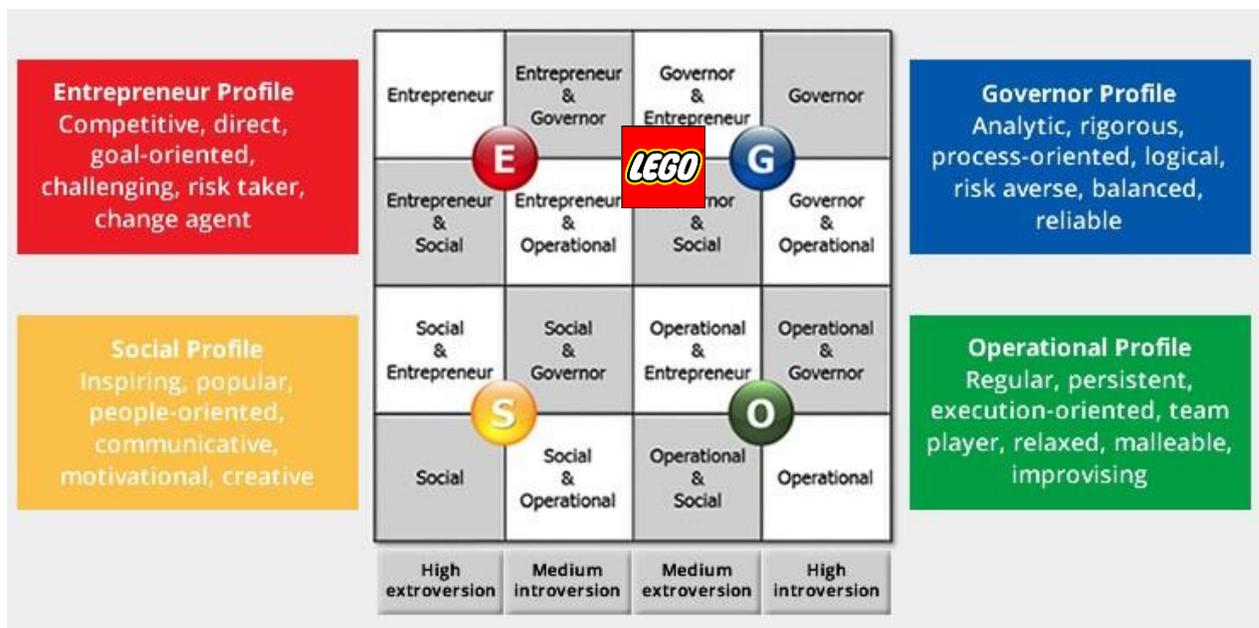
Because LEGO® is a primarily a secondary sector company – it’s a toy manufacturing company – there is a strong governance and operational profile within the company (what at some extent, it’s an organizational profile expected for this sector). Although, LEGO® stands out as a fun,

²³ <https://www.ft.com/content/18e921a8-d091-11e9-99a4-b5ded7a7fe3f>

²⁴ <https://www.ns-businesshub.com/business/lego-ceo-niels-christiansen/>

motivational and a good place to work, in which People are invited to innovate, to be accountable, to share ideas and constantly improving. At the same time, as mentioned before, LEGO® is highly customer centric, one of the pillars of LEGO® since its turnaround. If we look through the big picture, we can say LEGO® owns an Entrepreneur & Social culture as well. In addition, under the leadership of Niels Christiansen these aspects got even more pronounced.

LEGO® is mainly a Governor profile company, what is crucial to improve processes and supply chain, optimizing the manufacturing, distributions and selling of its products. As a secondary profile, LEGO® is Social and a little bit Entrepreneur, due to its current strategy of bringing in everyone into the LEGO® innovation process.



5 BUSINESS MODEL AND SUSTAINABILITY

5.1 BUSINESS MODEL

The LEGO® Group's main activity is the development, production, marketing and sale of play materials. Making bricks and selling them has always been LEGO®'s core activity for many years, however during the 90s, LEGO® turn into branded products like clothes, books, video games, defocusing from its core activity and overdiversifying its product line. Later on, this strategy combined with a growing competitive environment in the toys industry and kids showing less interest in toys, like LEGO®, and more interest in video game and tech products, lead LEGO® Group, during the 2000s, to the verge of bankruptcy. But a turnaround in its business model tell us a different story today, a story in which LEGO® Group is such a successful company. The company brought LEGO® bricks back to households around the world and turned its **business model** around (see Figure 2) by creating more value for customers while using less resources. They first reengineered their operations improving the backstage of their Business Model (Canvas). Then, they turned to customers (**costumer centricity**) and boosted value creation.

Operations focus: Streamlining activities and using the resources in the backstage of the Business Model (Canvas), i.e. Back to the basics²⁵:

- LEGO® first streamlined its operations and decreased the complexity of its manufacturing processes. In particular, they reduced the number of different LEGO® bricks by eliminating those that were difficult and costly to source. LEGO® focused on a standard design of their bricks, which made their operations more nimble and allowed them to react quickly to market trends.
- LEGO® also decided to get rid of LEGO® branded products that were tangential to their business and weren't profitable.
- Optimize the supply chain, through a smaller nr. of supplier and focus on larger retailers.

²⁵ <https://www.strategyzer.com/blog/posts/2015/4/13/legos-great-business-model-turnaround-story>

LEGO® expanded its business model only after establishing a robust operational base, ensuring a profit on the sets they were selling. Then they turned to **customers** and designed new and improved value propositions that would create more value for their customers.

Customer focus: Creating more value with new value propositions in the frontstage of the Business Model (Canvas), through Innovation with a reason²⁶:

- LEGO® adapted their kits to the dreams and desires of kids in the 21st century (e.g. LEGO® Mindstorms include smart bricks with both software and hardware to build customized robots).
- LEGO® expanded to new markets by designing sets for undeserved segments (e.g. LEGO® friends targeting girls) and expanding to emerging countries where their growth was soaring.

We will build a smaller and less complex organization than we have today, which will simplify our business model in order to reach more children. It will also impact our costs. Finally, in some markets the reset entails addressing a clean-up of inventories across the entire value chain.

Jørgen Vig Knudstorp, LEGO's CEO (2004-2017)

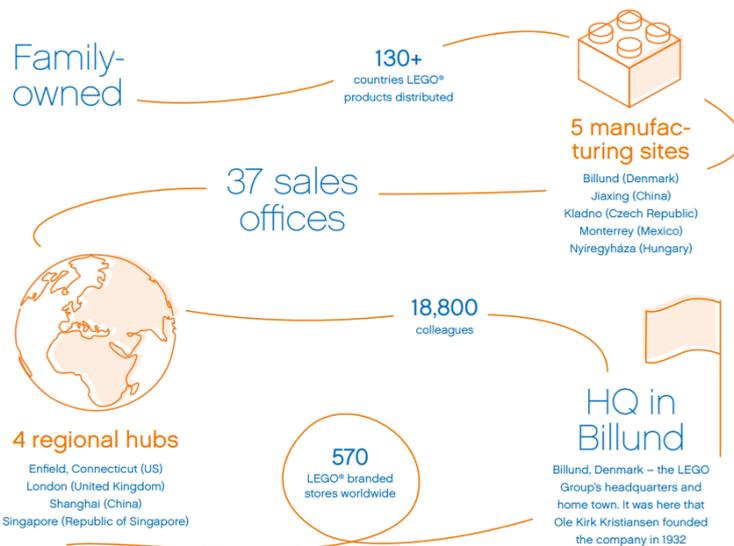
²⁶ <https://digital.hbs.edu/platform-rctom/submission/the-lego-success-story-getting-everything-to-awesome/>

Figure 2: LEGO® Brand Group's Business Model Canvas



Today, toy blocks are the building blocks of success at LEGO®. Its strong and renowned brand (named the most powerful brand in the world by Brand Finance²⁷) allowed LEGO® to rethink its business model and make strategic partnerships. Apart from well-known and successful partnerships originating LEGO® films and LEGO® themes, such as StarWars, Super Mario's or Marvel, LEGO® also partnered with Merlin Entertainment (world's second largest visitor attraction operator) to explore **Legoland** parks. These partnerships allowed LEGO® to focus its efforts in its core business

The LEGO Group at a Glance



by rethinking operations and costumers activities, as above mentioned.

LEGO® Group is present in more than 130 countries, owns more than 570 stores and 5 manufacturing plants. Lego invested in its retail ecosystem, partnering with established retail customers to create unique brand moments online and immersive brand experiences in stores²⁸.

Innovation is critical to the success of the LEGO® Group and each year new products make up approximately 60% of the portfolio. The LEGO® Group invests in innovating core play themes as well as exploring new play patterns. Digitalization is influencing how children play and the LEGO® Group has stepped up investment to understand the intersection between digital and physical play and create new products to meet these changing needs. R&D activities include developing new technologies to enable learning through play; trend spotting; anthropological studies; and collaborating with educational institutions to deepen our understanding of children's development. Actually, in 2018, LEGO® founded **LEGO® Ventures** to invest in the future of learning, creativity, and play. LEGO® Ventures aims to work with entrepreneurs, ideas, and startups centered around playful learning, which includes industries like gaming, adaptive education, and virtual reality.

²⁷ The Most Powerful Brands In 2017, Forbes, at <https://www.forbes.com/sites/jeffkaufin/2017/02/14/the-most-powerful-brands-in-2017/?sh=47329b6bf1f8>

²⁸ LEGO 2019 Annual Report

LEGO® Education have been working with teachers and educational specialists to deliver playful learning experiences that bring subjects to life in the classroom and make learning fun and impactful. LEGO® has a wide range of physical and digital educational resources that encourage students to think creatively, reason systematically and release their potential to shape their own future.

Finally, **LEGO® Serious Play** methodology is an innovative process designed to enhance innovation and business performance. LEGO® has available this consultancy service based on research which shows that this kind of hands-on, minds-on learning produces a deeper, more meaningful understanding of the world and its possibilities.

LEGO®'s business model has its foundations based on end-to-end capacity to develop, manufacture, promote and sell its products (either direct sale or e-commerce) and on strategic partnerships with retailers and expert partners to leverage trademarks and products outside its expertise, as for instance the Legoland theme parks operationalized by Merlin Entertainment. In addition, LEGO® systems allow users to recombine parts within LEGO® collection, but not with other toys. This ability to recombine parts together with an unlimited amount of individualization opportunities adds value to LEGO® products, leading to a lock-in for customers. ²⁹

²⁹ Business Model Navigator. Lego at <https://businessmodelnavigator.com/case-firm?id=55>



We are satisfied with our performance given the transformative shifts which continue to reshape the global toy industry. Against this backdrop, we continue to grow consumer sales and market share in our largest markets.”

Niels B Christiansen, CEO



Investing in long-term growth

Play experiences: Blending digital & physical play

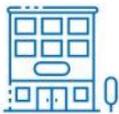
LEGO® Hidden Side™ Best of augmented reality and building



LEGO® BOOST coding & robotics for ages 7+



Retail experience: When & where people want to shop



590+
stores
worldwide by
end of 2019



**Innovative
ecommerce
platform**



**Mutually
beneficial
customer
partnerships**

New markets: Bringing play to more children

China



140+
stores

In **35** cities by the end of 2019
Strong double digit growth

India



**Mumbai
Office**

Opening in early 2020



**Top selling
themes**



LEGO®
City



LEGO®
Marvel Avengers



LEGO®
Technic



LEGO®
Creator



LEGO®
Friends



LEGO®
Star Wars™

5.2 SUSTAINABILITY

The ‘green’ and sustainable mindset has been growing worldwide, mainly among developed and highly educated countries. This trend has been impacting all industries during the recent years. People are getting more aware of the humanity footprint on the planet and their interest in sustainable brands is a growing trend, transversally to several sectors, as shown by a recent study led by CGS, in which 68% of consumers rate sustainability as an important factor when making a purchase³⁰.

The LEGO® Group works to have a positive impact on its stakeholders and its local communities. In 2003, the LEGO® Group signed the United Nations Global Compact to demonstrate its support of human rights, labor standards, anti-corruption and the environment.

To show their commitment with sustainability, LEGO® publishes every year its Sustainability Progress Report, sharing its goals and ambitions in terms of the different tiers of sustainability and display their performance through countable indicators as following³¹:

Sustainability performance data

KPI name	Accounting policy	Unit of measure	2015 result	2016 result	2017 result	2018 result	2019 target	2019 result	2020 target
Children									
Net Promoter Score*	1	Score	71.8	73.0	72.7	72.7	≥70	72.1	≥70
Product recalls	2	Number	0	0	0	0	0	0	0
Children reached by Local Community Engagement activities	3	Number	n/a	n/a	n/a	839,120	≥1,100,000	1,859,601	≥2,000,000
Environment									
Waste (t)	4	Ton	16,496	15,625	15,859	18,549	n/a	18,270	n/a
Recycled waste	5	Percentage	93	93	94	93	≥93	93	≥94
Waste efficiency improvement	6	Percentage	n/a	1.6	-2.9	-3.4	≥0	0.5	2
Energy consumption (GWh)	7	GWh	309	303	313	340	n/a	340	n/a
Carbon efficiency improvement	8	Percentage	n/a	n/a	-25.4	11.3	≥1	-0.1	10
Water consumption	9	1000 M ³	528	538	684	683	n/a	712	n/a
People									
Motivation and satisfaction	10	Number	16	16	8	12	≥10	15	Top in class*
Injury rate with absence	11	Rate	1.4	1.3	1.4	1.3	≤1.3	0.9	≥1.2
Females appointed and recruited	12	Percentage	43	44	41	43	≥40	43	≥40
Business integrity training	13	Percentage	99	100	89	100	100	100	100
Percentage of suppliers audited	14	Percentage	n/a	n/a	100	93	100	100	100
Percentage of suppliers with no non-conformities that require immediate correction	15	Percentage	n/a	n/a	71	67	≥70	69	≥70
Employees engaged in Local Community Engagement activities	16	Number	n/a	n/a	n/a	2,408	≥3,000	3,168	≥3,300

*in 2020 we will change our benchmark and measure ourselves against comparable businesses. Our ambition is to be top in class and be among the top quartile of our provider Ennova.

³⁰ CGS's 2019 Retail and Sustainability Survey

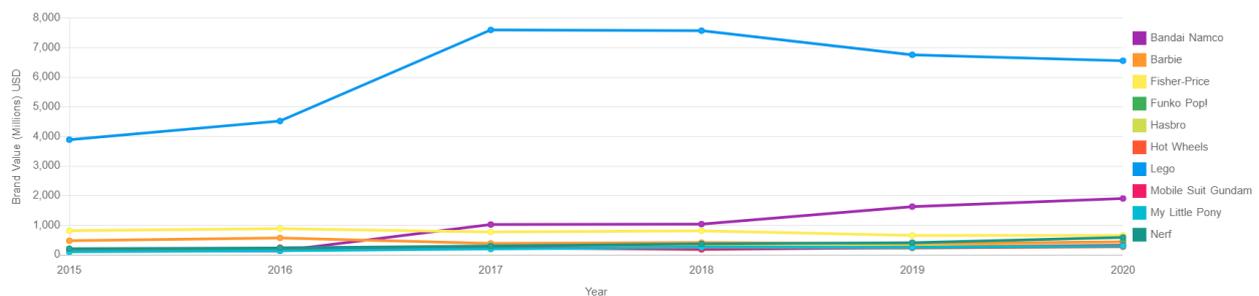
³¹ LEGO's 2019 Sustainability progress

According to CRS HUB³², an organization that provides corporate social responsibility and sustainability ratings and information on 17,268+ companies from 134 industries in 143 countries, shows a 100% percentile rating score on LEGO® CSR/ESG, when compared to other companies.



5.2.1 Economic sustainability

As described in the previous section – Business Model – LEGO® has in its business strategy the goal to create value for costumers. This value creation and recognition is well seen in the BrandFinance³³ Annual report on the most valuable and strongest toy brands since 2015, in which LEGO® is the world’s leader for a couple of years.



In 2019, the company achieved revenue, consumer sales and profit growth. Both revenue and operating profit have been steadily increasing during the last three years. Indeed, the 1st half of 2020 confirm the growth tendency with the revenue growing 7% and operating profit 11%.

³² CRS HUB. LEGO at https://www.csrhub.com/CSR_and_sustainability_information/LEGO

³³ Brand Finance. LEGO at <https://brandirectory.com/rankings/toys/overview>

Looking at financial ratios of 2019, it is noticed that they have been stable during the last three years, slightly below from those in 2015 and 2016, but always creating value. Showing LEGO®'s satisfactory performance, 8 000 mDKK of dividend has been proposed.

(mDKK)	2019	2018	2017	2016	2015
Other financials (in %)					
Revenue growth in constant currency	4	7	(7)	6	19
Financial ratios (in %)					
Gross margin	72.0	71.4	70.7	72.2	72.6
Operating margin	28.1	29.6	29.6	32.8	34.2
Net profit margin	21.5	22.2	22.3	24.9	25.6
Return on equity (ROE)	37.8	38.0	38.3	49.9	60.0
Return on invested capital (ROIC)	69.0	78.9	72.3	92.0	107.3
Equity ratio	63.5	69.1	69.3	66.9	63.7

Note: The Financial Highlights for 2019 are affected by the implementation of IFRS 16 Leases as from 1 January 2019. Comparison figures for 2018, 2017, 2016 and 2015 have not been restated due to the use of the modified retrospective approach. The implementation of IFRS 16 Leases in 2019 has a negative impact on ROIC (approximately 8 percentage points) and on Equity ratio (approximately 6 percentage points) compared to 2018. Implementation of IFRS 16 Leases is described in note 1.2 and 4.4.

5.2.2 Environmental Sustainability

LEGO® is working hard on its sustainability efforts to ensure a better, cleaner planet. LEGO® is one of the leading manufacturers of play material, and in its case historically related to single-use plastic, the main raw material of LEGO®'s brick. For this reason, it's not surprising that LEGO® is trying to reduce its environmental footprint. But LEGO® didn't limit to find sustainable raw materials, instead it took further steps to the extra mile towards environmental sustainability.

LEGO®'s Environmental Policy follows the international environmental management standards ISO 14001 and states the following objective: "The LEGO® Group strives to ensure a high environmental standard across our value chain, i.e. from our suppliers through to our customers and consumers."

By 2030 LEGO® aims to make LEGO® bricks from **sustainable sources**, like polyethylene from sugarcane. Sugarcane grows at the same rate as LEGO® uses it and it's sourced sustainably using guidance from our partner WWF (World Wildlife Fund) and doesn't compromise food security. Also leveraging its Partnerships with WWF, LEGO® is revising its processes to reduce the amount of waste every year. LEGO® ambition is to ensure **Zero Waste** in all factories, offices and stores. LEGO® also continues reducing climate impact by being balanced by **renewable energy** due to on-site solar power production and investments from the parent company (KIRKBI A/S) in offshore wind energy.

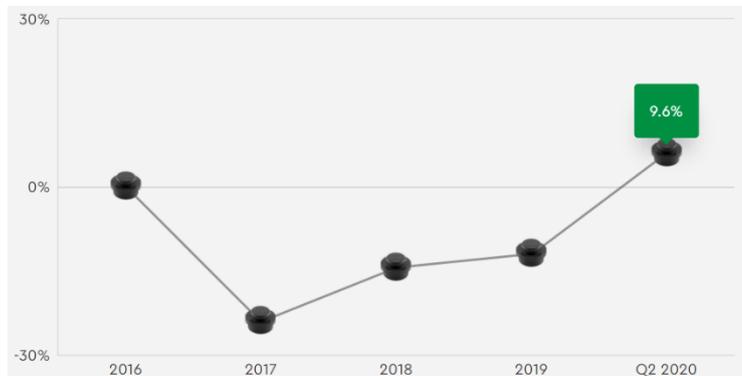


Figure 3 – Carbon efficiency

Roughly 90% of LEGO®'s total CO₂ footprint comes from the supply chain, so in parallel LEGO® is working closely with suppliers to help them report data and identify carbon reduction projects specific to their business. In Q2 2020, carbon efficiency increased by 9.6% compared to the same period last year (Figure 3).

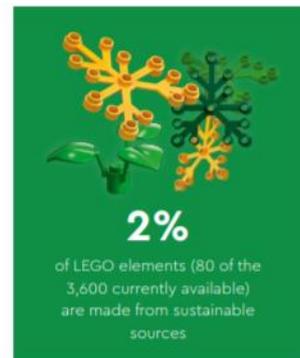
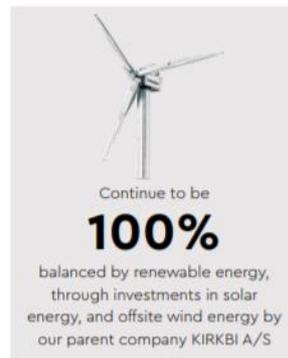
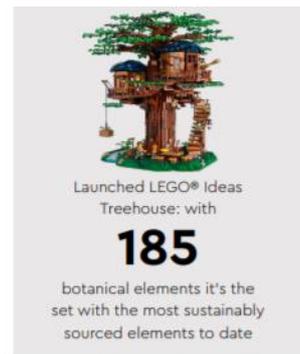
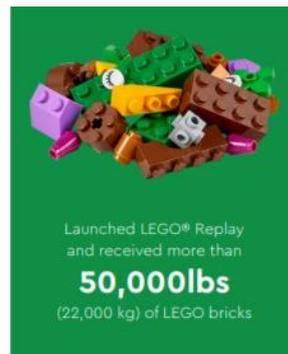
In 2019 **LEGO® Replay** was launched, with the purpose of giving a 'new life' to the brick aren't being used anymore. Current LEGO® bricks owners are invited to send their bricks to LEGO®, so they can be donated ensuring that LEGO® bricks can be rebuilt and replayed with. As of today (Nov 2020) 78,434 kg of LEGO® bricks have been donated so that 23,412 children can replay with them. As part of LEGO®'a commitment, these results are public updates constantly.

Below some highlights on LEGO® 2019 achievements from Environmental Sustainability Policies:

HEADLINES

Environment

We want to make a positive impact on the planet, creating a better world for our children to inherit



5.2.3 Social Sustainability

LEGO®'s Social Sustainability is focused mainly in the children. Its primary focus is driven by the desire to put children first and learning through play, building valuable life skills while having fun. Working closely with **LEGO® Foundation** and **LEGO® Education**, LEGO® believes that learning through play, which we believe is where we can make the most positive impact on society. To achieve these goals, LEGO® is reaching local communities with several events and initiatives as for instance RE:CODE, Play Day for Children, Build to Give, Summer Camps, among others. But not every child has access to LEGO® bricks, so the above-mentioned LEGO® replay plays its part in social responsibility around the world. Together with LEGO® Foundation (which shares the same goal - to inspire and develop the builders of tomorrow), LEGO® is dedicated to re-defining play and re-imagining learning, aiming to build a future in which learning through play empowers children to become creative, engaged, lifelong learners.

Apart from the product safety priority (zero product recalls in 2019), LEGO® is committed with the **digital safety** of children. For that, LEGO® partnered with UNICEF and set new standards in everything LEGO® does, promoting and implementing the **Children's Rights and Business Principles**. This partnership developed the Child Online Safety Assessment tool (COSA) to assess how children's rights can be integrated into online operations and strengthen child protection policies, codes of conduct and due diligence (open access to all companies).

Below some highlights on LEGO® 2019 achievements from Social Sustainability Policies:

HEADLINES
Children

Everything we do is driven by our desire to put children first. We champion the power of learning through play to inspire children to become the builders of tomorrow

More than **1.8** million children reached through local community engagement activities

More than **3,100** LEGO® employees volunteered to help kids learn through play

Zero product recalls for the tenth consecutive year

More than **2,000** children participated in the first Play Day for Children in need of play

Captain Safety inspired more than **660,000** LEGO® Life users to sign the digital Safety Pledge

Together with the **LEGO Foundation** we partner with UNICEF to advocate for the rights and wellbeing of children

Launched the first **Braille bricks** and audio building instructions together with the LEGO Foundation, supporting children with impaired vision to play

Donated **1 million DKK** to support children in India affected by flooding, as part of the new Emergency Relief Response Policy, supported by the LEGO Foundation

5.2.4 Governance Sustainability

The LEGO® Corporate Policy Framework embraces the spirit, “Only the best is good enough” and sets the corporate behavioral directions and framework for company processes. The Framework consists of 12 Corporate Policies and a number of underlying Corporate Standards, which are followed by all employees globally.

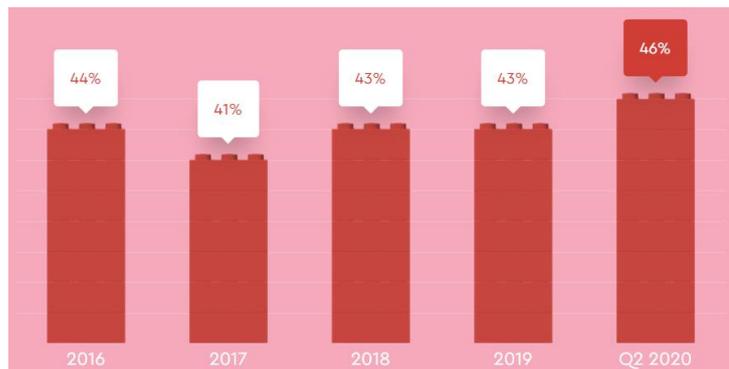
The LEGO® Group want to be responsible towards children, people and the environment and to have a positive impact on society and the planet. This is embedded in LEGO®’s values, Policy Framework and long-term commitment to the UN Global Compact, the UN Guiding Principles on Business and Human Rights, the Child Rights and Business Principles and the Sustainable Development Goals.

To enforce its aspirations, expectations and goals on ethics and positive impact, LEGO® developed the LEGO® Group **Responsible Business Principles** for its own production sites, suppliers and partners. There are 12 Principles, relating to ethics, people, children and the environment. Additionally, LEGO® implemented the **Modern Slavery and Transparency** in Supply Chain Statement, reinforcing its commitment to a positive world. LEGO® expects its employees and

partners work together to apply high ethical standards and principles of integrity, honesty and legality in all that they do as outlined in LEGO®'s Code of Ethics. LEGO®'s approach to working with suppliers who show non-conformances during their audits is to work with them to identify the root cause and support them in correcting issues within agreed timeframes. Our aim is to create long-term, sustainable solutions.

LEGO® cares deeply about the people and work to ensure their workplace and supply chain are safe and inclusive. In addition to employee **safety**, which is LEGO®'s top priority, the group strive to ensure that the company is a motivating workplace for colleagues. To measure its performance and progress

LEGO® scores the motivation and satisfaction of all employees through an annual employee engagement survey 'the LEGO® Pulse'. In 2019, LEGO® compared itself with a stricter external benchmark only reflecting



the scores of multinational companies and were 7 points above this benchmark. LEGO® aims to have great workplaces, and for that 8 out of the 12 Responsible Business Principles are related to Worker Rights & Well-being. But LEGO® doesn't stick to a mere great workplace only and strive to create a diverse and inclusive workplace that brings together people with different skills, characteristics, interests, backgrounds and aspirations. Moreover, LEGO® strives to bring together people of different nationalities, ethnicities, genders and capabilities. In 2019, women accounted for 43% of positions filled at manager level and above (including 63% of the Vice President and Senior Vice President roles filled). And in the first half of 2020, that figure has increased to 46%.

Below some highlights on LEGO® 2019 achievements from Governance Sustainability Policies:

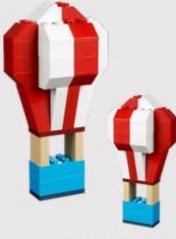
HEADLINES

People

We care deeply about the people who make LEGO® play experiences possible, and work to ensure our workplace and supply chain are safe and inclusive



Held a
Summer camp
program at our factory in China, supporting 500 children of migrant workers



90%
of LEGO® employees participated in Play Day



43% women appointed and promoted to manager level and above, and
63% women appointed and promoted to VP and SVP levels



Made progress on
Workplace safety
with 0.9 injuries per million working hours



Employee motivation and satisfaction
Exceeded expectations
ahead of our external benchmark



69%
of suppliers audited had zero non-conformities with our Responsible Business Principles that required immediate correction, and we worked with suppliers to resolve non-conformities

6 OBJECTIVES AND STRATEGY

6.1 VISION AND MISSION AND VALUES

LEGO®'s Vision, Mission and Values contribute to the company status of being one of the worldwide leaders of toys manufacturers with a strong brand amongst consumers.

Through almost a century, the LEGO® Group has grown from being a small local company into being one of the world's leading suppliers of creative play and learning materials. As a family-owned company with a long-term mission, the LEGO® Group aims to deliver a positive impact on children, society and the planet.

LEGO® Brand Framework is the LEGO® Group's mindset on the brand and the values they attach to the company culture. It shows clearly and unequivocally what the Group's vision, mission, motto and values are, in addition to their four promises. The Framework gathers the whole character of the LEGO® brand in one place. The LEGO® Brand Framework is to this day, the essence of LEGO®.³⁴

³⁴ <https://www.lego.com/fr-fr/aboutus/lego-group/the-lego-brand/>

Belief	Children are our role models			
Mission	Inspire and develop the builders of tomorrow			
Vision	A global force for establishing and innovating Learning-through-Play			
Idea	System-in-Play			
Values	Imagination – Creativity – Fun – Learning – Caring – Quality			
Promises	Play Promise Joy of building Pride of creation	Partner Promise Mutual value creation	Planet Promise Positive impact	People Promise Succeed together
Spirit	Only the best is good enough			

6.1.1.1 Vision

The vision statement for LEGO® is to be “A global force for establishing and innovating Learning-through-Play”.

The vision statement relates to LEGO® key aspirations:

- Deliver play experiences for every child, Lego aims to bring high-quality LEGO® experiences to millions of children around the world, that reflect the individual needs and interests of every child. As stated by the CEO Niels B. Christiansen in 2019: *“Our ambition is to bring the power of LEGO play to even more children around the world.”*³⁵
- Become the strongest brand among families with children, by being the innovation reference for learning through play, where play is associated with a range of benefits, not only for the child but for the parent, and the family unit as a whole.

These aspirations drive all of LEGO®’s priorities, activities and decision-making process and are key to the company evolution in the market, as well as the recognition of “Toy of the Century”.

6.1.1.2 Mission

LEGO® mission is to **“Inspire and develop the builders of tomorrow”**, a formal statement that seeks to translate its main ideals and guidelines for the future. It states a clear focus on future generations

³⁵ <https://www.lego.com/en-pt/aboutus/news/2020/march/annual-report>

that drives LEGO® responsibility efforts, yet it does not specify the nature of LEGO® business model and operations in order to keep the possibilities open when considering new lines of products and diversification, although the word “builders” relates to the LEGO® bricks which are the core of LEGO® Business.

The LEGO® system in play plays an important part in the success of LEGO®. In 1955 LEGO® introduced this idea, resulting in an increase in sales and in the company’s awareness of the potential of the brick. In 1960 LEGO® decided to stop the production of wooden toys alongside with other plastic toys. This new core focus on the LEGO® brick and the system in play leads the LEGO® Group on the path they are found in today.

The name ‘LEGO’ is an abbreviation of the two Danish words “leg godt”, meaning “play well”. It is the name and the ideal of LEGO® and reflects LEGO® deep commitment to inspire and develop children through play.

With LEGO® play experiences, LEGO® wants to make a positive difference to children all over the world by giving them new opportunities to reach their potential by learning through play.

6.1.1.3 Values

LEGO®’s vision and mission are supported by the company **core** and **brand** values, that were designed to support and guide the company in maintaining the right focus.

Ever since the LEGO® Group was founded in 1932, their focus has always been on providing fun and engaging play materials of the highest quality and safety for children³⁶. LEGO® is recognized as the world’s most valuable toy brand valued at US\$6.7 billion³⁷ and LEGO® considers it to be the company main asset. *“Beyond our strategic priorities, we invested in our most valuable asset, our brand”³⁸.*

The Brand values play into the business strategy, without overwhelming it, for example, the Creativity Brand Value is related to the Innovation Core Value, but new product design needs to be informed by market research and user feedback, keeping complexity as low as possible, therefore creativity is balanced with complexity *“Complexity is something you need to watch very closely.”³⁹.*

³⁶ https://www.lego.com/cdn/cs/aboutus/assets/blt2278c7a21e58e900/LEGOCCompanyProfile_2020.pdf

³⁷ <https://www.statista.com/statistics/399131/value-of-the-leading-global-toy-brands/>

³⁸ <https://www.lego.com/en-us/aboutus/news/2020/march/annual-report>

³⁹ <https://hbswk.hbs.edu/item/hbs-cases-lego>

Fun remains at the heart of LEGO® business and a key pillar for the company culture. The values of LEGO® define who they are, and what they stand for, and they guide LEGO® in their work towards the ambition of enabling future generations to build a better world.



6.2 OBJECTIVES

LEGO® has determined their objectives focused on **long term growth** which are based on four key areas:

- Innovating Play: Blending digital & physical
- Innovating Retail: Great Brand Experiences, Online and In-Store
- Expanding into Growth Markets
- Sustainability

Ideally the company objectives should be SMART: Specific, Measurable, Achievable, Relevant and Timely, but for LEGO® they are mainly stated in broader terms as we can see from the next table, which is based on the latest company's Annual Report (2019) and Semi-Annual Reports (1H2020). LEGO® is not open to clearly share their financial targets, instead they prefer to communicate their main aspiration "We have the ambition of getting to as many kids as we can around the world"⁴⁰, yet the Sustainability objectives are very clear and defined, which reflects the company commitment to track their progress against their sustainability promises.

GOALS	Description	S	M	A	R	T
GROWTH	Deliver single Digit growth in 2020, staying ahead of the Global Toy Market. Increase Revenue and Operating Profits.	x	x	x		
	Strong double digit growth in China in 2020	x	x	x		x
MARGIN	Operating Margins to evolve positively and remain high. [28% to 30%].	x	x	x	x	
RISK	Balance Sales for Customers of different Generations: develop a strong portfolio for builders of all ages.	x			x	
	Increase the number of LEGO Stores: to balance between own and partner stores open 120 new retail stores in 2020, 80 of those in China.	x	x	x	x	x
SUSTAINABLE	Eliminate the environmental impact of making LEGO bricks.	x		x		
	Make LEGO bricks from sustainable sources by 2030 without compromising quality or safety	x	x	x	x	x
	By 2025, we aim to have 100% sustainable packaging	x	x	x	x	x
	Balancing 100% of our energy consumption with production of renewable energy by 2020 and beyond	x	x	x	x	x
	Zero Waste: It's our ambition to ensure no waste from any LEGO® factory, office or store globally will be landfilled by 2025.	x	x	x	x	x
	Improve waste efficiency from our own operations in 2016, by 10% in 2020	x	x	x	x	x
	Improve the carbon efficiency of making a LEGO brick in 2016, by 10% in 2020.	x	x	x	x	x
STRATEGIC	Quality & Safety : zero product recalls.	x	x	x	x	x
	Innovation: Each year, approximately 60% of our portfolio is new. Launch new products that can integrate digital and physical play: FLUID PLAY.	x	x	x		
	Brand: Be the strongest toy brand in the World	x	x	x		
	Digitalization and e-commerce: Increase digital engagement, e-commerce transactions and company's digital play experiences.	x				
	Expansion in Growth Markets: Open an Office in India in 2020, Reinforce China presence.	x	x	x	x	x

In order to understand the strategic impact of LEGO® goals we've mapped them into:

- the four sustainable value creation factors of the aggregate indicator: Growth, Margin, Risk and Sustainability;
- strategic objectives related to the key success factors.

⁴⁰ <https://www.ft.com/content/18e921a8-d091-11e9-99a4-b5ded7a7fe3f>

The LEGO® Group expects single-digit growth in 2020, ahead of the global toy market. This is expected to be achievable due to continued focus on product innovation, growth in established and strategic markets, such as China.

LEGO® Brand is a key strategic success factor and LEGO® has been investing in their brand with the launch of the “Rebuild the World,” LEGO®’s first global brand advertising campaign in more than 30 years and the acquisition of BrickLink, the largest online community of adult fans. On the other hand, LEGO® is focused on increasing their branded retail stores presence all over the world in order to create physical immersive brand experiences, targeting to open 120 new stores in 2020, 80 of those in China.

LEGO® understands that 2032, 90% of the world’s two billion children will live outside Europe and North America, with more than three quarters of these living in Eastern Asia. Having this in mind, LEGO® has decided to expand its retail stores in China and increase the Chinese families Brand affinity with LEGO®, by designing stores with strong bonds with



local tradition and by developing culturally relevant new sets like the Monkie Kid™. LEGO® has also been developing strong partnerships like with the Chinese tech giant Tencent, one of the biggest mobile developers in the world. In order to further expand LEGO® presence in Middle East and Africa, LEGO® has recently opened an office in Dubai and plans to open an office in India in 2020.

Visitors to the LEGO.com e-commerce platform doubled to more than 100 million in the first half of 2020, and there was a significant increase in engagement in the company’s digital play experiences. We can expect LEGO® to continue to invest on their digital platform’s capabilities.

Innovation is critical to the success of the LEGO® Group and each year new products make up approximately 60% of the portfolio. The LEGO® Group is also investing in Fluid Play: merging physical and digital, which is part of a long-term strategy. In 2020 LEGO® has launched LEGO® unveiled LEGO® Super Mario™, an entirely new play experience which blends digital and physical play. Another recent product is LEGO® Hidden Side a theme that seamlessly blends building and augmented reality. With LEGO® Ventures, LEGO® is investing in new ideas to understand the

intersection between digital and physical play and create new products to meet these changing needs.

6.3 VALUE CREATION

LEGO® has stated four Promises that are aligned with their business activities and how they want to positively impact their stakeholders, their promises are: Play, People, Planet and Partner.

For the scope of this report we will focus the analysis of value creation for customers, shareholders, employees and community.



6.3.1 Value Creation for Customers

LEGO® is very focused on their customers, while children are at the heart of their mission, parents and adults are the ones that actually buy their products.

LEGO® value proposition of LEGO® to children, parents and adult fans is:

Value Proposition for Children

- Enable Learning through Play
- More LEGO® bricks equal more fun
- Diverse range of products with different building techniques suitable for their age and skills.
- Theme-based LEGO® products provide storytelling settings
- Unleash Creativity and Imagination
- Innovation

Value Proposition for Parents

- Play builds stronger family bonds
- LEGO® delivers quality and safe physical and digital products
- LEGO® enables kids to develop their ability to work in a team, critical thinking and problem-solving skills, and imagination. A report by the World Economic Forum found that these are the top skills that the companies of tomorrow are looking for.
- STEAM skills

Value Proposition for Adults

- Collectables Sets
- Mindfulness
- Getting in the Zone: full immersion task that provides immediate feedback and potentiates a psychological change that make people feel more productive and creative.

Next we look into the **value creation indicators** for Customers, which are not limited to the sales indicators, therefore we've included a broader range of information in the next table that should indicate if customers are actually happy with the experience and loyal to LEGO®. We analyze some value-creation indicators in three phases of customer lifecycle: Pre-Sales, During and After Sales.

Indicators	Value Creation for Customers Before Sale
Journey	1. Potential customers go to LEGO® Brand stores, Website, Retailers (online or offline). The number of branded stores is increasing, at the end of 2019 there were 570 stores 2. Customers can choose from a wide variety of available products in stock. Availability of LEGO® products is high. 3. Customers pay and collect the product
Interaction	Customer interaction with LEGO® before SALE occurs in stores and online in lego.com. LEGO® is in close contact with consumers through digital initiatives such as LEGO® communities, LAN (LEGO® Ambassador Network), LIFE (Social Network) and LEGO® Ideas.
Internet	Visitors to the LEGO.com e-commerce platform doubled to more than 100 million in the first half of 2020 (in relation to previous year)

LEGO® is increasing the availability of their products in LEGO® Branded stores and we can see from their goals that LEGO® will continue to invest on increasing their physical presence around the globe with new offices and stores that aim to create immersive brand experiences to customers. At the end of 2019 LEGO® had 570 stores globally. The investment of LEGO® on their online presence

is also increasing and LEGO® has been able to double the number of visitors from 2019 to more than 100 million. These investments are key for long term growth.

Customers can interact with LEGO® before Sale through different channels, namely, LEGO® stores and LEGO.com. LEGO® is in close contact with consumers and fans through other initiatives such as LEGO® Ideas that brings together LEGO® fans in an online community and where participants can submit creative ideas and become LEGO® designers, if a design gets approved and gets 10000 votes from the supports LEGO® will give them 1% of the profits from that set.

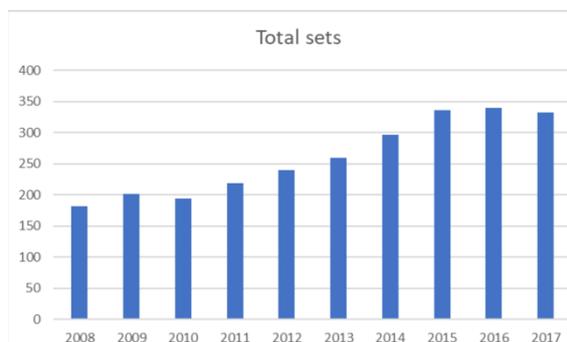
During Sale

Revenue/Customers	Every second, 7 LEGO® sets are sold around the world. Consumer sales growth 14% in the 1H2020 comparing with the same period on the year before. LEGO® Revenue is increasing.
Product/Services	LEGO® has increased diversification and increased product range. Every year There are 3,700+ different LEGO® elements (this includes all LEGO® bricks and other LEGO® elements.): Each year, approximately 60% of LEGO® portfolio is new.
Price	LEGO® sets price can range from 5 euros to hundreds of euros. The most expensive LEGO® set launched is the Millennium Falcon 10179, around 700 euros. On average, one LEGO® piece costs 10.4 cents. LEGO® is increasing the number of pieces per set and therefore the LEGO® set price average is increasing.

In terms of pricing, LEGO® price range can vary from just a few euros to hundreds of euros, the company maintains a premium pricing strategy, sustained by quality of products and LEGO® brand, but competition has led LEGO® to use more offers and discounts to attract customers and grow penetration. LEGO® incurs in heavy costs on the quality of material it uses, as well as in marketing and other areas.

LEGO®'s product range has changed significantly during the last decade and appears to expand year on year. Every year new LEGO® sets are launched; the novelty of the portfolio and the licensing strategy is key in order to be able to increase sales. The quantity of larger sets is also growing, increasing both the average piece count and the average cost of items released during each twelve-

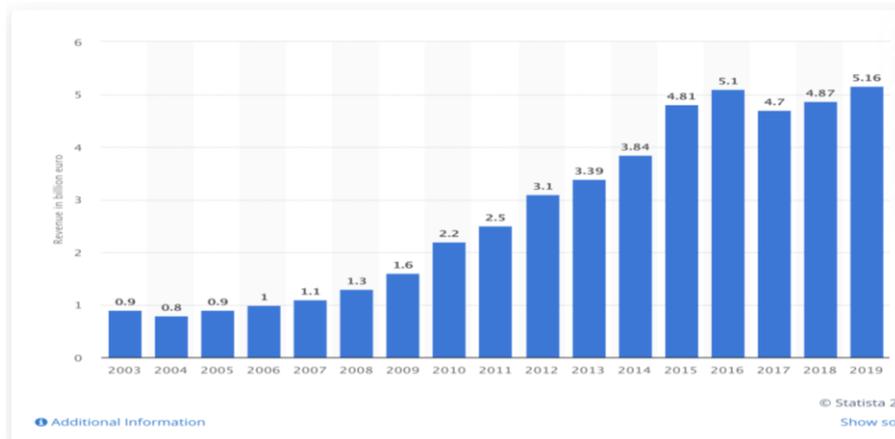
Year	Total sets	Total pieces	Avg pcs	Total / £	Avg	Total / \$	Avg
2008	182	70873	389	£ 4,688.46	£ 25.76	\$ 6,497.20	\$ 35.70
2009	201	67500	336	£ 5,802.70	£ 28.87	\$ 7,392.37	\$ 36.78
2010	194	70582	364	£ 6,438.56	£ 33.19	\$ 7,700.09	\$ 39.69
2011	219	68639	313	£ 6,641.86	£ 30.33	\$ 7,826.84	\$ 35.74
2012	240	76494	319	£ 6,926.10	£ 28.86	\$ 8,362.64	\$ 34.84
2013	259	89659	346	£ 9,622.10	£ 37.15	\$ 12,041.43	\$ 46.49
2014	296	104480	353	£ 9,086.04	£ 30.70	\$ 10,907.11	\$ 36.85
2015	336	116532	347	£ 10,667.84	£ 31.75	\$ 12,768.60	\$ 38.00
2016	339	132220	390	£ 11,826.88	£ 34.89	\$ 13,634.63	\$ 40.22
2017	332	154080	464	£ 13,530.00	£ 40.75	\$ 15,375.00	\$ 46.31



month period⁴¹, as can be seen in the next images.

⁴¹ <https://brickset.com/article/31370/a-decade-of-lego-in-graphs>

Except for the year of 2017, LEGO® Revenues have been steadily increasing, which is directly related to the value created for customers:



Post Sale

Customer Satisfaction LEGO® NPS target is 70+. Their NPS has been consistently above 70 from 2015 until 2019.42

Support 6.3M followers in Instagram. 9M users in Lego Life (1H2020 report) . 13.1+M likes on Facebook

Product Returns Zero Product Returns since 2015

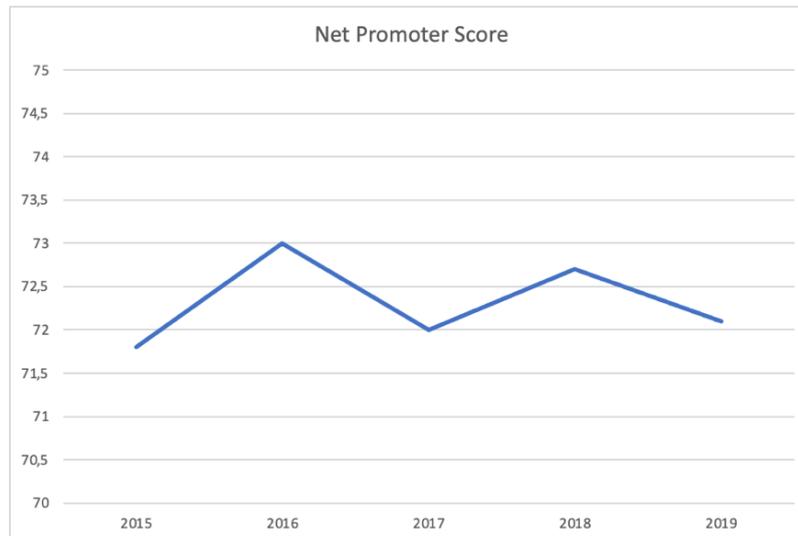
Brand Value LEGO® Brand value is the strongest in the TOY manufacturing industry. LEGO® is valued at US\$6.7 billion versus US\$1 billion of Bandai Namco (second amongst the competitors)

Net Promoter Score (NPS) is a key indicator for Customer Satisfaction. LEGO® started collecting Net Promoter feedback since 2005 in order to understand the reasons behind customer dissatisfaction. As a result, the company was able to make critical improvement decisions early in the process and meet customer expectations.⁴³ By collecting customer feedback at every touchpoint

⁴² https://www.lego.com/cdn/cs/aboutus/assets/blt50e84da94f92098d/The_LEGO_Group_Sustainability_progress_2019.pdf

⁴³ <https://customer.gauge.com/benchmarks/blog/how-nps-helped-lego-from-going-bankrupt>

(shops, online, consumer services), LEGO® ensures it delivers an exceptional experience wherever customers interact with the brand. LEGO® NPS has consistently scored above 70 since 2015:



LEGO® is also acting upon receiving customer feedback through NPS and it has established and action plan when it comes to detractors in order to be able to respond in the same day (as little as 24 minutes). Shifting detractors to promoters meant an increase of 20% in consumer spend value.

Regarding customer support LEGO® ensures that it ships back free LEGO® bricks to the customer address as can be read in LEGO®'s terms and conditions page⁴⁴. It also goes further highlighting the importance they give to customer feedback by making sure that the situation will not be repeated:

“If you find a faulty or broken toy or LEGO® piece in your order, we will of course replace it free of charge or refund you for the faulty item”.

“Please keep any faulty or broken items until you have received your replacement from us. This is important, since we may ask you to return the faulty or broken piece to our Quality Department for inspection. After all, we want to make sure that the error does not occur again. If we ask you to return something to us, we will pay your shipping fees either upfront or as soon as you have sent us the receipt for the cost of postage, depending on local circumstances.”

⁴⁴ <https://www.lego.com/en-pt/page/terms-and-conditions>

The value of the brand is another key indicator for customer value creation. As we can see in the next figure, LEGO® is the strongest toy brand in the world.

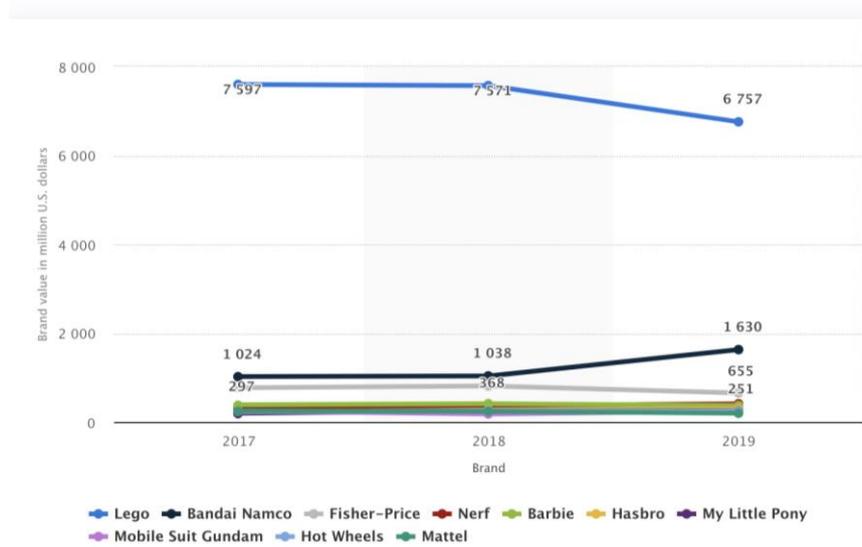


Figure 4 - Value of leading toy brands worldwide from 2017 to 2019

Taking into consideration these value creation indicators for customers, the business model and sustainability discussed in the previous sections, LEGO® is able to demonstrate value creation for Customers.

6.3.2 Value Creation for Shareholders

The LEGO® Group is 75 percent owned KIRKBI A/S and the remaining 25 percent is owned by the LEGO® Foundation.

KIRKBI is the Kirk Kristiansen family’s private holding and investment company founded to build a sustainable future for the family ownership of the LEGO® brand through generations. KIRKBI mission and aspirations are completely aligned with LEGO®’s children focus. LEGO® Foundation focus on development Programs and Projects in order to enable initiatives that actively work to ensure creative learning through play. LEGO Foundation activities are funded through its 25% ownership of the LEGO Group.

Key value creation indicators for Shareholders such as net profit, operating margin and return on invested capital (ROIC) are analyzed next:

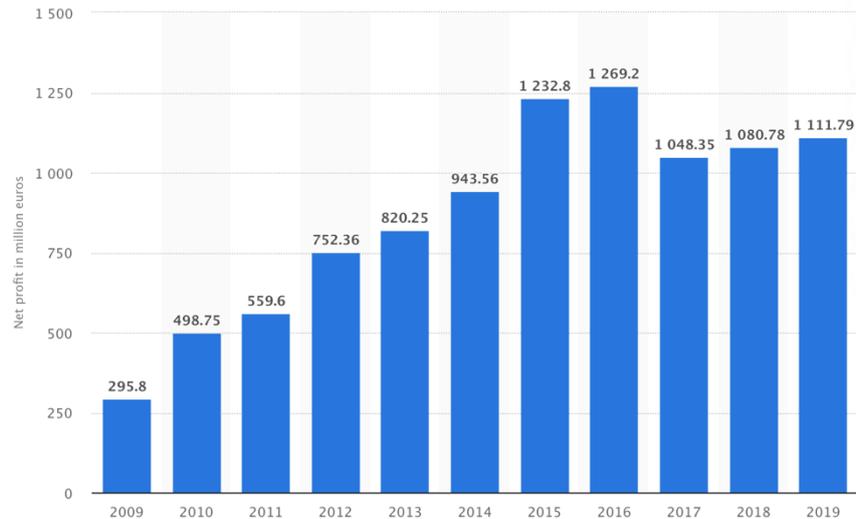


Figure 5 - LEGO Net Profit

LEGO® net profit is very positive; the company has declared profit of 1 111,79 million euros in 2019. The company was increasing profits since 2009, until 2017, when LEGO® profits dropped more than 200 million euros, in 2018 the company was able to get back to positive growth. In the first half of 2020, LEGO® has declared net profit has increased by 1,4% comparing to the same period of previous year, which is aligned with previous LEGO® results of steady growth.

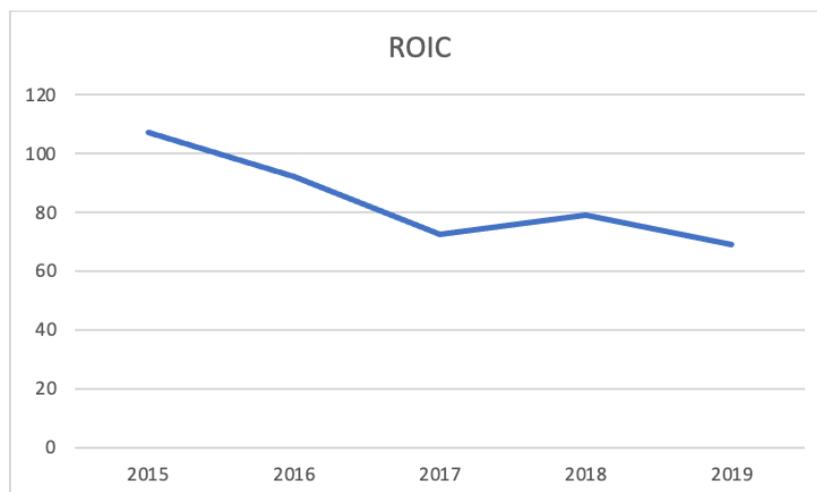
LEGO® has 88 years of history, always inside the Christiansen family that owns the business since its founder Kirk Christiansen created the company in 1932. In 2003, LEGO® almost entered bankruptcy, but the company was able to refocus on their core (bricks) and realign to what mattered the most: customer satisfaction. LEGO® is currently growing ahead of the toy industry and pays dividends to its shareholders, in 2019 the proposed dividend is DKK 8000 million (1074,23 million euros).

LEGO®'s operating margin is also positive and equals 28.1% in 2019, Bandai Namco, which is the world largest toy company in revenue, presents an operating margin of 11.5% and net income of 571.71 million euros.

The evolution of LEGO® operating margin is negative as can be seen in the next figure, this is mainly due to the investment in long term growth initiatives such as China expansion (assets), innovation (software) and digital presence (e-commerce) and increase in expenses, such as expenses with sales.



Return on Invested Capital is positive (69%) but also shows a decrease from previous years, which also reflects the investments in strategic opportunities, we can also note that there has been a slow-down on the rate the ROIC has been decreasing.



LEGO® value creation indicators for shareholders are positive, which indicate that LEGO® is able to create value for their shareholders. In 2019 LEGO® has implemented IFRS 16 Leases, LEGO® annual report states the implementation of IFRS16 had a negative impact on the ROIC (8 percentage points approximately) and on Equity Ratio (6pp). Although LEGO® shows good finance and economic outlook, its expenses outpace their revenues which impacts the performance of the Operating Margin and ROIC. However, investments in long term growth are fundamental for LEGO® to capture the market opportunities that mega trends such as digitalization, demographic and economic shifts will have on future generations.

LEGO® brick produced since 1958 are still fully compatible with LEGO® bricks produced today.

This raises a question:

How is LEGO business sustainable, if their bricks last forever?

Customer focus: Until 2004 LEGO® relied on an annual feedback survey to understand customers' needs but the company was failing to obtain clear insights in sales decrease which was impacting economic and financial performance. At this time LEGO® introduced new products based on intuition of LEGO® engineers instead of what children wanted. LEGO® recovery started with the introduction of the Net Promoter System. NPS helped the brand meet its customers' needs and expectations as well as understanding what drove customer dissatisfaction.

Product Compatibility: LEGO® is proud of guaranteeing product compatibility since 1958 and building bricks that last forever. Although this could be seen as a potential disadvantage, LEGO® sees this as a strong differentiator. The more LEGO® bricks you have, the more you can play!

Quality & Safety: LEGO® has standardized 4 stages of Safety Assessment. Each LEGO® element and all LEGO® products adhere to the strictest global safety and quality standards, and LEGO® meticulous approach to product quality and safety has ensured zero product recalls since 2009.

Innovation and Design: LEGO® designers have solid insight into children's play patterns and interests at different ages.

Including children in concept and product testing is an integrated part of LEGO® innovation process. LEGO® also takes into consideration all feedback they receive on LEGO® play experiences from children and parents, once the products have been explored throughout playrooms across the world, in order to improve LEGO® play experiences. Apart from the internal innovation design process, LEGO® is also developing co-creation initiatives for innovation such as LEGO® Ideas, which serves as a tool for identifying innovation from external sources. Another example of co-creation is the long and successful partnership with MIT Media Labs, that produced LEGO® Mindstorms, a hardware and software structure for the development of programmable robots based on LEGO® building blocks.



Brand: LEGO® has a very strong brand, with a powerful emotional connection to their consumers that goes on through generations. Their recognized brand value is a clear proof of how LEGO® brand is able to translate their culture into the consumer. Recently LEGO® has launched their winter campaign which showcases LEGO®'s ability to encourage creativity, this festive spot “And I think to myself” is the UK’s most emotionally engaging Christmas ad of 2020 so far, according to Unruly⁴⁵.

Sustainability: LEGO® has a strong Environmental, Society and Governance (ESG) Sustainability proposition as analyzed in the Business Model and Sustainability Section.

6.3.3 Value creation for Employees

LEGO® employs 18800 people around the world. The company is committed in making workplaces inclusive, safe and motivating, where only the highest standards of ethical business behaviour are maintained. Employee satisfaction and motivation is tracked every year with LEGO® Pulse. In 2019 LEGO® scored 79 points, 15 points ahead of the external benchmark score of 64, which led to the recognition as ‘Top in class’ category⁴⁶ - representing the top quartile, of all multinational companies measured.

Some examples of value creation for Employees are:

No Compromise on Safety: In the first half of 2020, injury rate was just 0.2 injuries per million working hours.

Annual Play Day, in this almost all LEGO® employees from over the world take the day off work to simply play. The aim of Play Day is to let LEGO employees experience the power of play through various play activities, and to equip them to create more playful moments in their everyday life, at work, at home and in their local communities.

Summer Camp Program: Launched in 2018, in China with the aim of uniting non-local workers with their children. In 2019, children of employees from the LEGO® Group’s factory in Jiaxing also

⁴⁵ <https://www.campaignlive.co.uk/article/lego-builds-festive-spirit-engaging-christmas-ad-so-far/1699778>

⁴⁶ https://www.lego.com/cdn/cs/aboutus/assets/blt50e84da94f92098d/The_LEGO_Group_Sustainability_progress_2019.pdf

participated in the summer camp program alongside around 500 children of employees from 14 factories in LEGO® supply chain.

Performance Management Program: The program is designed to ensure all employees work towards achieving the LEGO® Group’s short and long-term growth ambitions. Employees have targets which are aligned to Groupwide targets and awarded a bonus based on performance versus target.

Diversity: LEGO® is committed to build a diverse organization, including dimensions from gender, ethnicity, background and experience to other such as lifestyle and family responsibilities. LEGO® goal is to increase the representation of all dimensions to reflect the increasingly diverse and global marketplace we live in. In 2019, women accounted for 43% of positions filled at manager level and above (including 63% of the Vice President and Senior Vice President roles filled). And in the first half of 2020, that figure has increased to 46%.



6.3.4 Value Creation for Community

Everything LEGO® does is driven by the desire to put children first, focusing the power of learning through play to inspire children to become the builders of tomorrow, and provide safe physical and digital products that promote children’s wellbeing.

LEGO® has multiple initiatives that target value creation for the community as referred on the Governance Sustainability part of this report. Let’s look into some of them:

Learning through play: Most of LEGO® traditional programs are designed to encourage children to play together. In the first half of 2020, COVID-19 reshaped LEGO® reached children with Learning Through Play initiatives. In collaboration with the LEGO® Foundation, they shifted the focus to making financial donations to charity partners who support children in Learning Through Play, expecting to reach over one million children with these grants in 2020.

LEGO® Braille Bricks: The LEGO® Foundation and the LEGO® Group rolled out the first program in partnership with local sight loss organizations to help children with vision impairment learn critical thinking, problem solving and collaboration through play⁴⁷. “With these Braille Bricks, the LEGO® Foundation has



created a totally new and engaging way for children with vision impairment to learn to read and write,” says **David Clarke, Director of Services at the Royal National Institute of Blind People**. As LEGO® Braille Bricks toolkits launch in each respective country, they will be distributed free of charge to select institutions, schools and services catering to the education of children with visual impairment.

LEGO® REPLAY: LEGO® Replay wants to inspire LEGO® brick owners to pass along the bricks they aren’t using. The LEGO® Brick is recognized by LEGO® owners to last for generations for the high quality and longevity. 97% of LEGO® owners keep or share their bricks, passing them on to friends or family. As part of Planet Promise, LEGO® owners ensure that LEGO® Bricks can be rebuilt and replayed with using the Give Back Box in order to ship the bricks to organizations such as, Teach for America and the Boys & Girls Clubs of Boston.

Responsible Supply Chain: All suppliers to the LEGO® Group must comply with LEGO® 12 Responsible Business Principles. In 2019, 69% (41 out of 59) of suppliers audited did not have non-conformities that required immediate correction, an increase from 67% in 2018 but marginally below the target of 70%. One supplier to the LEGO® Group was included in a report from China Labor Watch alleging poor working conditions. LEGO® take these findings very seriously and have worked with the supplier and the ICTI Ethical Toy Program (IETP) to conduct a thorough review of conditions at the factory and addressed the issues raised.

⁴⁷ <https://www.lego.com/pt-pt/aboutus/news/2020/august/lego-braille-bricks>

7 BUSINESS STRATEGY: PRODUCTS-MARKETS

As a first step to create value, a company must sell its products or services to their customers. If a company does not make its products available, it will for sure not be able to create value for their customers. Although it all starts with selling the products, the company first needs to decide which needs it will address and the best products and markets to fulfill those needs.

LEGO® has a wide range of products that has evolved from the traditional bricks to video games and other digital products. Still, as the company’s mission is clearly centered on developing the “builders of tomorrow”, the focus of their products-markets strategy lies on all the physical products that are related with the construction bricks – as their CEO stated in 2019 annual report “Make no mistake, the brick will always be the heart of our business”. Furthermore, the evolution of their products-market strategy will also be analyzed according to the Ansoff model. These products will be referred to as “toys”, “bricks” or “sets” along this chapter.

Expectedly, LEGO®’s products-markets strategy impacts all four sustainable value creation components (growth, margin, risk and sustainability), as is summarized on the next table:

Growth	<p>LEGO® resorts to all sorts of product related strategies to grow, for instance:</p> <ul style="list-style-type: none"> • Launching products targeted to female, that represent historically a lower share of their customers • Launching new products with licensing agreements • Entering new markets, such as digital products one: augmented reality products, programmable sets • Introducing culturally relevant products, following the identification of strong demand for these products • Sets usually run for a limited period, so loyal customers know that if they want a specific set they should get it as soon as possible otherwise it may be retired and they will only be able to find it in the secondary market
Margin	<p>While designing new products LEGO® considers, among other factors, the bricks production complexity and the sourcing of materials, in an effort to reduce production and sourcing costs. They also strive for having a limited number of different types of bricks in order to reduce manufacturing</p>

	<p>complexity, while reusing the same designs and taking advantage of economies of scale.</p> <p>Moreover, they routinely retire the production of sets not only to give room for new products but also to discontinue the less profitable sets. The company manages the set “availability window”</p>
<p>Risk</p>	<p>As presented before, the company has a wide and diverse range of products targeted to different age groups, with some themes reaching every segment. They complement sluggish growth in developed countries with investing in new regions, mainly in China.</p> <p>Additionally, they have some long running themes and sets, while launching new ones every year.</p> <p>LEGO® VIP is a free loyalty program that offers discounts, early access to products and other benefits to induce repeated purchases.</p>
<p>Sustainability</p>	<p>As previously mentioned, the company is already working to replace the materials it uses to make the bricks with sustainable ones (currently 2%), such as renewable polyethylene made from sugarcane. They also launched the LEGO® Replay, an initiative to give new life to bricks by collecting parts that are not being used anymore and donate them to children who cannot afford them. Additionally, they recycle 93% of all the waste produced in their factories and are 100% balanced by renewable energy.</p>

The next sections will provide Other products offered by LEGO® will be further analyzed in other sections of this report, namely on the Diversification part.

7.1 PRODUCTS-MARKETS MATRIX

LEGO® is mostly recognized as a manufacturer of children toys, but their wide range of products also includes products targeted to adults. Therefore, it is important to place their product offering across several segments.

The company offers several sets themes with designs targeted to different age groups. They usually segment their toys products in the following age segments:

- Age 1 to 2 years;
- Age 3 to 5 years;
- Age 6 to 8 years;
- Age 9 to 11 years;
- Age more than 12 years.

Besides the targeting objective, age segmentation also plays a role in LEGO®’s safety policies, namely for younger children to whom the size of the parts is designed to prevent accidents.

For the sake of simplicity, we will segment LEGO®'s current offering in a simpler segments, but also in an attempt separate the products targeted adults that would otherwise be mixed in the “more than 12 years” category. The segments used to construct the products-markets matrix are the following:

- Pre-school (includes ages up to 5 years)
- Pre-teens (from age 6 to age 11)
- Teenagers (from age 12 to 17)
- Adults (above 18 year)

All the LEGO® sets are launched associated to at least one theme, among more than 40 themes that are currently commercialized, that may be a LEGO® branded theme, such as City or Technic or a licensed one, such as Star Wars or Batman. The presence of the products in each segment was based on the number of sets currently offered by LEGO® on their website for each of the themes (+ means less than 15 different sets; ++ between 15 and 30 different sets; +++ more than 30 different sets). A minor number of sets falls under more than one them, usually complementary themes such as power units and special parts.

	Pre-school	Pre-teens	Teenagers	Adults		Pre-school	Pre-teens	Teenagers	Adults
Architecture				+	Marvel	+	+++	+++	+
Art				+	MINDSTORMS®		+	+	
Batman™	+	++	++	+	Minecraft™		++	++	
Boost		+	+		Minifigures		++	++	
Brick Sketches		+	+	+	Monkie Kid		+	+	
BrickHeadz		++	++		NINJAGO®		+++	+++	
City		+++	+++	++	Originals				+
Classic		++	++	+	Overwatch		+	+	
Creator 3-in-1		++	++	+	Power Functions		++	++	
Creator Expert			++	+	Powered UP		++	++	+
Disney™	+	++	+++	+	Serious Play				+
DOTS		++	++		Speed Champions		+	+	
DUPLO®	+++				Spider-Man	+	+	+	
Friends	+	+++	+++		Star Wars™	+	+++	+++	++
Harry Potter™		+++	+++	+	Stranger Things			+	+
Hidden Side		++	++		Technic™		+	+++	++
Ideas		+	+	+	THE LEGO® MOVIE 2™	+	+	+	
Jurassic World™		+	+	+	Toy Story 4	+	+	+	
LEGO® Education	+	+	+		Trolls World Tour	+	+	+	
LEGO® Frozen 2	+	++	++		Xtra	+	+	+	
LEGO® Super Mario™	+	+++	+++						

Considering the products-markets matrix should show a global perspective of the all the segments, it is simpler to aggregate the wide range of LEGO® products in a smaller number of categories, namely:

- Construction sets
- Licensed sets
- Tech products
- Other

The construction sets category includes all the LEGO® branded themes that do not include electrical parts or digital functions. This includes their traditional construction sets: City, Classic, Creator 3-in-1, DUPLO, Friends, Monkie Kid, NINJAGO, Thecnic, but also Architecture, Creator Expert, Speed Champions, The LEGO® Movie 2 and Xtra.

The licensed sets category includes all the set LEGO® sells that were licensed with other brands, mainly based on TV series or movies, but also video games and car brands. This category includes the following currently commercialized themes: Batman, Disney, Harry Potter, Jurassic World, Frozen 2, Super Mario, Marvel, Minecraft, Overwatch, Spider-man, Star Wars, Stranger Thins, Toy Story 4 and Trolls World Tour.

The tech products category includes all the products that include electrical parts or digital activities that interact with the physical toys. This category includes the following currently commercialized themes: Boost, Hidden Side, MINDSTORMS, Power Functions, Powered UP.

The Others category includes some of the more recent sets that do not fit within the other categories, such as the ones related with the themes Art, Brick Sketches, BrickHeadz, DOTS, Education, Ideas, Minifigures, Originals, Serious Play, among others.

It should be noted that some of these set themes, mostly the licensed ones, (e.g. Star Wars) are present in all the segments, while other are only present in one segment (e.g. DUPLO), showing LEGO® has different strategies depending on the segments it wants to reach.

To construct the products-market matrix, the presence in each segment was defined based on the previous table and the themes allocated to each of the categories. To assessment of the segment attractiveness was based on qualitative and quantitative information gathered during our research.

	Pre-school	Pre-teens	Teenagers	Adults
Construction Sets	😊😊	😊😊😊	😊😊😊	😊😊
Licensed Sets	😊😊	😊😊😊	😊😊😊	😊😊
Tech Products	😊	😊😊	😊😊	😊😊
Other		😊	😊	😊

Attractiveness		Presence	
High	🟩	High	😊😊😊
Medium	🟨	Medium	😊😊
Low	🟪	Low	😊
No		No	

Moreover, it goes without saying that there is hardly any product with more complementary uses than LEGO® parts. Since the patent of the “LEGO® Brick” in 1958, most of the construction sets, licensed sets and some digital products are complementary!

One could argue that if so many durable parts are compatible there would be a huge risk of not being able to sell more items. Still, LEGO® has managed to appeal to their customers with sets with new themes and parts. They have also introduced specific sets to improve or add new functions to existing ones. For instance, LEGO® Powered UP was introduced to complement other product lines such as the LEGO® Technic, City, Boost and some Licensed Sets with the possibility to add movement to the constructions, such as in cars, roller coasters, dragons, trucks and more. Similarly to other complementary themes, Powered up not only reinforces the interest of their current customers but may also appeal to new customers, such as “Do-it yourselves” who see in this products an easy and, to some extent, standardized way to work on their experiments and builds.



7.2 ANSOFF MATRIX

LEGO®’s vision as a global force for establishing and innovating Learning-through-Play clearly shows their commitment to provide their customers with sustainable value. Furthermore, with

such an old history, LEGO®’s products had several phases of development, otherwise the company would probably not have survived until today, much less having good results. Thus, analyzing LEGO®’s products-markets strategy is of utmost relevance. The following Ansoff matrix relates to LEGO®’s recent products evolution.

The matrix shows only some examples of recent products that are offered by LEGO®. In the next sections more details will be given, and some extra examples will be shared. LEGO® has both expanded its product line with new products, but it also has withdrawn some of them, although not necessarily because they had bad commercial acceptance. Whenever useful for the analysis, some examples of the latter will be described even if they refer to past moments of LEGO®’s history.

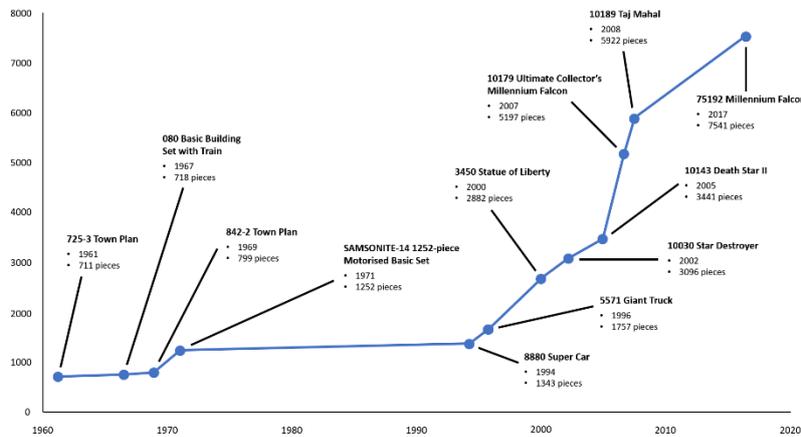
	Existing Products	New Products
Existing Markets	<p>Market Penetration</p> 	<p>Product Development</p> 
New Markets	<p>Market Development</p> 	<p>Range Diversification</p> 

7.2.1 Market penetration

In order to ensure that existing customers keep buying LEGO® sets, the company renews each year 60% of their existing sets, including new sets for top-selling core themes such as LEGO® City, LEGO® Technic, LEGO® Friends and LEGO® Creator.

LEGO® also has a wide range of products designed to appeal all the customers segments, in order to reach the largest possible range of customers. They also offer several large and complex sets targeted

to teenagers and adults, that may also appeal to heavy LEGO® users and collectors. Selling larger sets is also a way LEGO® found to sell more. One of their first largest sets had only 711 pieces, while they just launched in November 2020 the largest set ever: the Colosseum, with 9036 pieces. The next figure shows the evolution of the largest set offered by LEGO® 48.



Recently, following a study that showed females represented only 9% of their users⁴⁹, they revamped the LEGO® Friends minidolls and gave them new looks in order to appeal to girls. The Friends product range replaced LEGO®'s previous female-oriented theme LEGO® Belville, which had been in production since 1994, and featured dolls that were much larger than both the minidolls and minifigures. LEGO® also has a history of themes designed for girls in the past, such as the Homemaker (1971–1982), Paradisa (1991–1997) and Scala (1997–2001), showing their efforts to increase their number of customers in this segment.

7.2.2 Product development

LEGO® has a recognized track record of product development. They have been launching new themes across their product range since the 70's. They currently offer more than 40 themes, with 6 out of them introduced in 2020. A quick glimpse at Wikipedia (source) shows that, in addition to the currently offered themes, they have offered more than 100 different ones, with some of them lasting only for one year while others lasted decades. And this does not consider special event sets (Comic Cons, LEGO® Inside Tour) and other product endeavors they participated in, such as Coca-Cola and McDonald's sets and promotions.

⁴⁸ <https://brickset.com/article/44726/the-growth-of-lego-sets>

⁴⁹ <https://fuelcycle.com/blog/market-research-done-right-how-market-research-gave-lego-a-facelift/>

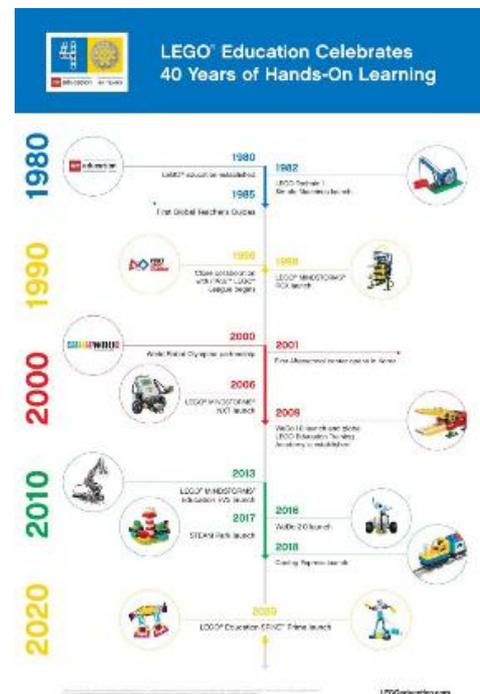
More importantly than launching new themes is the concept behind them. And LEGO® has been able to leverage the growing demand for known movies and TV shows' memorabilia. LEGO®'s first movie and TV-based licensed sets were introduced in 1999: Star Wars and Winnie the Pooh. Since then, they started launching several sets and other items with licensing agreements with brands of wide global appeal, such as the ones related with Harry Potter, Batman, Disney, Marvel superheroes, Super Mario, Spider-man, Stranger Things among many others. This kind of agreements are common among the toy industry, but LEGO® has managed to draw a distinction from other toymakers by merging the licensed properties with their own style and, in some cases, creating new properties. For instance, among several other examples, their Star Wars licensing has become a brand of its own: LEGO® Star Wars. It goes even to extent of some classic characters assuming a different personality in LEGO than in their original film or comic: the original Batman is dark and brooding, but LEGO® Batman is comedic and suitable for children⁵⁰.

7.2.3 Market Development

LEGO® has an old history of internationalization among developed countries. They started their internationalization in the 50's in the countries close to Denmark. During the same decade they expanded to several more countries in Europe and to USA. More recently they expanded to the Asian markets, with a focus in China, and are considering growing into India.

Along this path, most of their products had few or no adaptations to the regional markets they were expanding to. They offered a timeless but also very universal brand. During the 60's and 70's the only variants across their international export strategy seemed to be related to packaging and exclusive brands for Italia (Minitalia) and Japan (OLO)⁵¹.

The small exception to this rule is their recent expansion to China. LEGO® carefully researches and chooses the market to expand to, and the results for this expansion showed that Chinese children enjoyed the LEGO® toys already available. Still, in an effort to build on the Chinese culture, the company



⁵⁰ <http://mttlr.org/2014/03/smart-licensing-lifts-lego-to-the-top-of-the-toy-world/>

⁵¹ <https://wolfestone.co.uk/insights/blogs/legos-international-export-strategy-building-bricks-global-success>

decided to modestly differentiate their product range for this market with limited exclusive sets celebrating the Lunar New Year (Chinese New Year's Eve Dinner and Dragon Dance). They also launched the Monkie Kid sets this year, based on the Monkey King Chinese legend, and consider sourcing theme ideas out of culturally based characters to follow the growing diverseness and inclusiveness trends⁵².

After noting the dissatisfaction of their loyal customers about the launch of these regional exclusive products, the company decided that they would make them widely available via their LEGO® Brand Retail stores and LEGO® Shop at Home after a limited period of time (3-6 months) of the initial launch, showing the company is able to quickly adapt their strategy to satisfy their customers⁵³.

Additionally, LEGO® has been launching products with education in mind since its early beginnings. But they only entered the education sector in the 80s with the launch of 7 Education sets that came with activity cards featuring inspiring ideas for students⁵⁴. Since then, their education-based sets have evolved from mere construction sets to more advance sets with programmable, multi-port Hub, sensors and motors, powered by an App based on the Scratch coding language, along with software, lesson plans and content for students and their teachers in early learning, primary, and secondary education as well as through after-school programs and competitions⁵⁵.

More recently the company entered the Arts market with the launch of a new canvas for creative expression – LEGO® Arts. They launched 4 sets to help adults relax and recharge, giving them a different way to transform their passion into art by designing their very own LEGO® artwork portrait and proudly display in their homes. The sets come with a soundtrack chosen to help adults fully immerse themselves in the building experience and unwind while they explore their love of music, art or film in a new way.

7.2.4 Range Diversification

LEGO®'s recent strategy is focused on unifying physical and digital elements, with physical characters such as LEGO® Super Mario connected to an app via Bluetooth for example – what they call “fluid play”. In that sense and considering that digitalization is not only changing how people shop, it is also influencing how people play, they have been investing considerably in R&D to better

⁵² <https://www.cnn.com/2020/09/02/lego-ceo-says-toymakers-digital-future-is-a-10-year-journey.html>

⁵³ <https://brickset.com/article/43442/lego-pledges-to-stop-launching-regional-exclusives>

⁵⁴ <https://www.brothers-brick.com/2020/01/14/a-history-of-lego-education-part-1-strong-foundations-feature/>

⁵⁵ <https://www.lego.com/en-us/aboutus/news/2020/january/spikeprimeavailable/>

understand the intersection between digital and physical play and create new products to meet these changing needs.

Within this strategy they launched, in 2018, LEGO BOOST – a creative kit that combines the traditional LEGO® set with a programming app to bring toys to life and to inspire additional coding, building, and play. The app, developed by LEGO®, lets children add voice recordings to their creations and includes more than 60 activities.



Still, LEGO® has combined physical and digital experience through coding before, with the launch of WeDo in 2009 and its second version in 2016. While WeDo was designed to allow groups of people to learn and created coding bases that could even be reused later in a professional environment, BOOST was designed as a personal experience to get users to create playful behaviors related to the programming.

However, even before WeDo, LEGO® had launched one of their first digital standalone products quite a while before, in 1998: LEGO® Mindstorms – a hardware and software structure for the development of programmable robots.

In the beginning of 2019, LEGO® introduced the HIDDEN SIDE – combining building with augmented reality to create a new way to play, one of the few play experiences available today that integrates augmented reality with the physical sets to open up children to a world of interactive play. The associated app lets kids assume a first-person perspective and even play together in both on and offline multiplayer mode.

One can conclude that LEGO®'s digital endeavors are not new and have been evolving along time, showing the company has been able to diversify its range of products in these new digital markets and to follow the trends and behaviors of its customers.

In addition to their digital product diversification, LEGO® has also launched DOTS - a new 2D play concept based on multiple shapes and colorful tiles with surfaces designed for individual customization and self-expression. This product taps into the crafts market and is supported by a wide portfolio that ranges from wearables to room décor and includes mood tiles such as facial expressions, music note, paw prints and many more.

7.3 PRODUCTS-MARKETS EVOLUTION

As already mentioned in previous section, LEGO®’s products offerings have evolved considerably along the past decades. Adapting its product-markets strategy has been of utmost importance for the company to be able to remain relevant in such a changing time. The next table shows the evolution of LEGO®’s products-market matrix along their last three phases.

	Pre-school	Pre-teens	Teenagers	Adults
Until 2000: Market Penetration and Market Development				
Construction Sets	😊😊	😊😊😊	😊😊😊	😊
Licensed Sets		😊	😊	
Tech Products				
Other				
From 2000 to 2017: Product Development				
Construction Sets	😊😊	😊😊😊	😊😊😊	😊😊
Licensed Sets	😊😊	😊😊😊	😊😊😊	😊😊
Tech Products		😊	😊	
Other				
From 2017: Market Development and Range Diversification				
Construction Sets	😊😊	😊😊😊	😊😊😊	😊😊
Licensed Sets	😊😊	😊😊😊	😊😊😊	😊😊
Tech Products	😊	😊😊	😊😊	😊😊
Other		😊	😊	😊

Until the end of the 20th century, LEGO®’s products-market strategy was mostly focused on offering construction sets across all segments with the LEGO® themes, that ranged from Towns to Pirates or even Space concepts in order to increase their market penetration. During this period, they also expanded internationally, so they were also developing their market.

From the beginning of the 21st century, they entered a new phase mostly supported on developing their market by launching several licensed sets related with known movies and TV shows. Additionally, they also started their digital endeavors with the launch of Mindstorms and the WeDo themes.

More recently they have been focused on developing what they call the “fluid play” – blending the physical sets with digital elements. Besides investing in technology, LEGO® is also investing in longer-term initiatives to strengthen their portfolio, making it more diverse, while also touching more passion points across different ages.

By analyzing this products-markets matrix it is clear LEGO® has always been strong in their core products, namely the construction sets. Nevertheless, the company has been following the most attractive segments and categories of the market, such as the licensed sets in the beginning of the 21st century and, more recently the digital trends.

7.4 GENERIC STRATEGIES

Building on the previous sections, in addition to solving its needs, a company must be able to attract or convince customers to buy its products and, in case of LEGO®, it must do so in markets with a wide range of product choices available to the customer. Thus, the more customers LEGO® attracts, the more sustainable value it creates. But in order to do that in the long run, the company must have some competitive advantage that will make it bring more sustainable value than its competitors.

Regarding this topic, LEGO® started with an advantage: they were the pioneers of the children building blocks. They built on that advantage to expand their products and operations and, even though LEGO® is a mass market brand that everyone knows, it's also a niche player – they position themselves as a premium niche player⁵⁶. So, differentiation is part of their competitive advantage.

They are top-notch in the incredibly high-tech molding plastic industry and are able to manufacture 100 billion bricks a year in many different sizes, formats and colors, all the while focusing on delivering high quality products and experience for their customers and keeping their creativity and innovation skills and environment at the forefront of their activities. LEGO®'s product development process stages are carefully treated and considered from the ideation through the project selection, development and production, until the market launch with the new product portfolio.

⁵⁶ <https://www.licenseglobal.com/archive/rebuilding-lego>

Marketing is at the core of the company, and the results show their marketing strategy has been successful: for several years now, they have been leading most valuable toy brand by a long way and have been able to remain relevant in an industry being threatened for 20 years by animated television, internet and by the increased digitalization of children’s ways of play⁵⁷. Even during COVID19 pandemic, with their strong marketing strategy and customer loyalty, they were able reach new customers who are looking for ways to stay busy at home.

It goes without saying that in their differentiation strategy, they are highly exposed to copycats, even more considering their brick system patents expired long ago. The company uses their salesforce to get feedback on possible counterfeits, and also counts on with customs seizures and raids done by government authorities. Furthermore, they also count on their fans, mostly people that belong to their adults’ fans clubs, to report the situation they stumble upon.

Nevertheless, LEGO® also has another advantage they conquered along time: their product design and manufacturing processes allows them to have lower costs than their competitors. For instance, in the first half of 2019, their revenues of \$2.2bn were way above Hasbro’s \$1.7bn and Mattel’s \$1.5bn, while also having considerably larger operation profits: \$520m, compared to \$164 for Hasbro and loss of \$182m for Mattel⁵⁸. It becomes clear that in the adapted model of generic strategies, LEGO® is following a differentiation with cost leadership strategy, as is highlighted in the following matrix.

		Cost Leadership	
		Low	High
Differentiation	High		
	Low		

7.5 INNOVATION STRATEGY

⁵⁷ <https://brandfinance.com/press-releases/worlds-top-25-most-valuable-toy-brands-could-lose-up-to-us3-billion-of-brand-value-fromcovid-19>

⁵⁸ <https://www.ft.com/content/18e921a8-d091-11e9-99a4-b5ded7a7fe3f>

Since its early beginning LEGO® has leverage their products-markets strategy with their innovation skills. Their pioneering will is, and has been, widely present in their culture – so present that they in the beginning of the 21st century they “over-innovated” and launched so many new initiatives that the company lost its sense of identity and almost went bankrupt. Despite those turbulent times, LEGO® was able to turn around and followed a more structured innovation path that, in the end, served their owners objective of continuously creating innovative play experiences and reaching more children every year.

LEGO® follows an innovation leadership strategy, considering they control the core technologies that support their core competences of Innovation process, Partnerships and licenses, Creativity in product design and Brand Name, that, in their turn, uphold their key success factors of Brand Recognition, Quality, Innovation and Availability. The table on the right reflects where their innovation strategy is placed.

		Core technology competences	
		Low	High
Innovation approach	First Mover		
	Follower		

After turning around the early 2000’s problems, in an effort to successfully sustain their operations, the company needed to figure out what a modern LEGO® would be. In order to do that the company created a workgroup that eventually turned in the Future Lab - a pioneering real design-thinking approach to innovation that invested in deep ethnographic studies of how kids around the world really play⁵⁹.

Since then LEGO® followed a sustainable innovation strategy – a range of low-risk and low-cost innovation practices used to test ideas and cultivate expertise, based on the following elements⁶⁰:

- **Smart Licensing** – as previously mentioned, LEGO® has leveraged their licensing agreements since the early 2000’s by launching sets and products of highly appealing brands;
- **Rapid prototyping** – focused on creating minimum viable products to prototype and get new products to market in small scale at speed, a process that in the past could range up to more than 1 year.
- **Open Innovation** – the company launched in 2014 LEGO® Ideas: a crowdsourcing platform where LEGO® fans can share their ideas for new sets and, if they gather enough support from other fans, the company will analyze them and eventually launch that product and

⁵⁹ <https://www.fastcompany.com/3040223/when-it-clicks-it-clicks>

⁶⁰ <https://theleadershipnetwork.com/article/lego-sustainable-innovation>

give a 1% royalty to the idea proponent. Additionally, one of their adult-targeted themes, LEGO® Architecture, was launched following a suggestion from an architect. This openness entices their customers to submit new designs and ideas while supporting the company in its innovation path.

- **Low-Risk Experimentation** – within Future Lab, the company has been able to experiment and test ideas in a safe way by starting with small projects and small budgets, then test, learn and prove. All the while without damaging their brand.

LEGO® also has a venture arm founded in 2018: LEGO® Ventures. Its operation is focused in investing in the future of learning, creativity, and play – the core vision of LEGO® – in areas that they refer as “Supercharging Education” and “Digital Play” and independently of company’s size or maturity stage.

In today’s context, where children are increasingly exposed to technology and digitalization at earlier ages, one may consider that the toy industry is in an introduction phase of this digital era. Considering LEGO® has the needed core technology competences, it should take the leadership role in its innovation strategy, so it can ripple the benefits before its competitors. However, considering it is competing with players that already have a huge a range of technology and digital products, it only has a medium competitive force in this product category. It is recommended for LEGO® to follow a continuous improvement innovation model so it can refine, along time, its processes and tech products targeted to pre-teens, teens and adults. As for Licensed Sets and Construction sets, in which it has a high competitive force, but higher market attractiveness in the former, it should follow, respectively, concept (launching significantly new products) and process innovation (reinforce development capacity) models. As for Other products targeted for adults (e.g. LEGO® Art and some Ideas) it should also follow a concept model to take advantage of the high market attractiveness, while following a process innovation model for the remaining segments within this product category.

		Core technology competences		
		Low	Medium	High
Competitive force	High			
	Medium			
	Low			

		Market attractiveness		
		Low	Medium	High
Competitive force	High		Construction Sets (all segments) Other products (pre-school, pre-teens and teens)	Licensed Sets (all segments) Other products (adults)
	Medium			Tech Products (pre-teens and teens, adults)
	Low			

8 VERTICAL INTEGRATION

Vertical integration can be defined as the degree to which the company develop the activities along its value chain either resorting to internal resources, competences and knowledge or through external contracting.

The decision to vertically integrate any activity in the value chain is taken individually for each activity and should strive to maximize the sustainable value creation of the company. Thus, if an activity is strategic for the organization, and there is internal competences that maximize its competitiveness, it should vertically integrated.

In the other hand, if there is no value-added (or in many cases if there is value destruction) by integrating an activity, the company should subcontract said activity, in a process called vertical disintegration.

The vertical integration decision is dynamic, meaning that an activity that is better done with contracted resources and knowledge in a given time period, might be a good target for vertical integration later on.

As of 2019, the generic value chain of LEGO® can be represented and quantified as represented in the Porter value chain diagrams of Figure 6. All values presented are taken from LEGO® 2019 Income Statement⁶¹ and are a percentage of LEGO® sales in 2019.

⁶¹ LEGO Annual report 2019

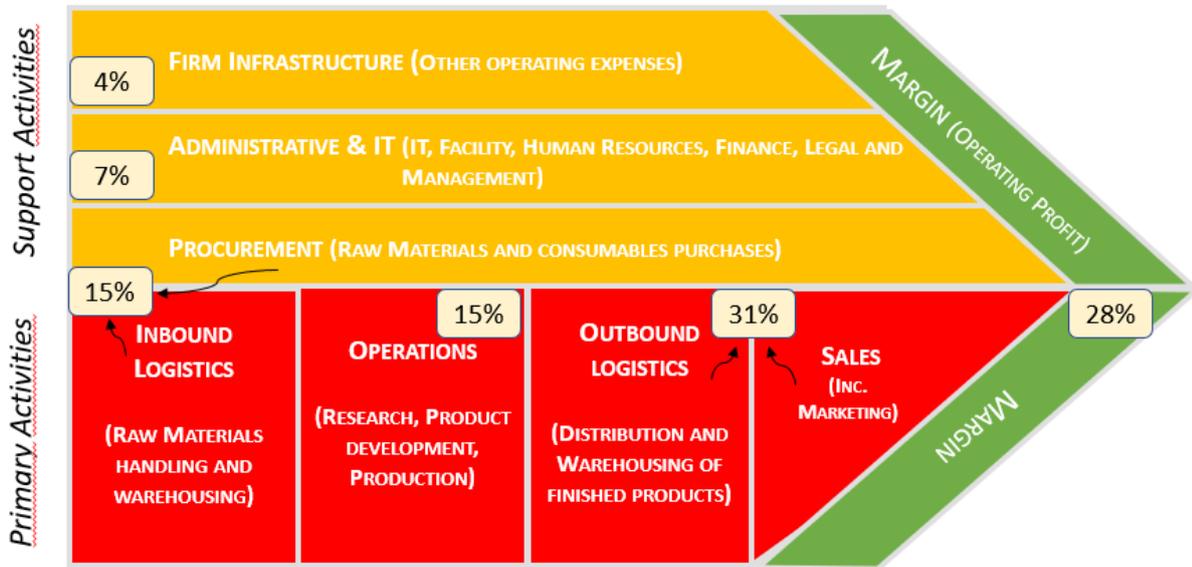


Figure 6 - Porter Diagram of LEGO value chain

The aggregate of distribution and sales represented 31% of LEGO®'s costs in 2019, which can be easily explained by the centralized nature of its production in a few plants, located in specific points of Europe, North America and China (Vertically Integrated production), but at the same time, the very large geographical dispersion of retail shop that sell LEGO® products, most of them not owned by LEGO® (Vertically Disintegrated sales). A large amount of products (75 billion bricks per year⁶²) needs to be transported from production facilities to final retailers (with eventual intermediate stops) which explains the large share of Distribution and Sales in LEGO® cost structure. It is important to note that that these costs also include Marketing expenses.

In the other hand Operations, a very important contributor to LEGO® cost structure, is dominated by the costs of Production in the firm's manufacturing facilities as it was expected (13% of total sales in 2019), but have also a very important contribution of Research and Development (2% of total sales in 2019) – which understates the importance of innovation and product development for LEGO® business strategy.

⁶² <https://www.bbc.com/news/business-43298897>

8.1 VALUE CREATION

The central element of the vertical integration strategy is the company's value chain. For the specific case of LEGO® and focusing mostly in the core business of LEGO® Bricks, the main activities in the value chain are represented in Figure 7.



Figure 7 - LEGO® Value Chain

The core activities of a company are the ones that are paramount to pursue its defined strategic and generate competitive advantages in sustainable value creation. For LEGO®, and given the nature of its business, these are the early stages of the product: Research and Product Development.

In terms of Research,⁶³ LEGO® dedicates significant effort in understanding the children's patterns of play and their interests at different ages and the evolution of these through time. LEGO®'s innovation process integrates children from different ages in concept and product testing. The feedback received from children and their parents is used as a crucial source in updating and improving LEGO® experiences.

Development is a core activity since every year new products make up approximately 60% of the LEGO® Bricks portfolio. LEGO® needs to keep investing in innovating products that explore new ways for their customers to play with them, following the feedback received during research.

This is a crucial part of LEGO® strategy, where most of value is created and competitive advantages can be achieved against competitor. As such, it is no surprise, that the majority of product development is not only done with internal competences, but also based in the company's headquarters in Billund, Denmark⁶⁴.

The complementary activities of the company are the ones that complement and facilitate the achievement of core activities. These activities should be guaranteed by the company or through partners having in mind cost/benefit optimization.

In the case of LEGO®, several activities in the value chain can be identified as complementary activities, such as, for example Production and Sales.

⁶³ The LEGO Group Short presentation - Company Profile 2020

⁶⁴ The LEGO Group Annual Report 2019

Production of LEGO® Bricks is done exclusively by 4 company-run factories, located in Billund (Denmark), Nyíregyháza (Hungary), Monterrey (Mexico) and Jiaying (China). The decoration and packaging is also performed with company resources, smaller plants in Denmark, Hungary, Mexico and Czech Republic.

In terms of Sales, LEGO® runs around 130 LEGO® Brand Retail stores in 10 countries that present a large assortment of LEGO® Bricks, including some exclusive sets that would be very hard to find elsewhere. However, the bulk of their physical retail is done through thousands of third-party toy stores, supermarkets, specialty gift shops and department stores around the world. Online sales are performed both through LEGO®'s own online store (at www.lego.com) and other platforms (e.g. Amazon).

Digital – meaning the development and marketing of LEGO® digital content - is also a complementary activity that has gained recently an increased importance and can become a core activity in the near future. The investment in understanding and exploring the intersection between digital and physical has been matched with moves such as the acquisition of Bricklink digital marketplace and a strategic partnership with Tencent for digital play experiences.

Regarding base activities – the ones where competitive advantages of doing internally are scarce – the best example is the production of plastics for use in LEGO® Bricks. The company buys these materials from external suppliers, keeping however a list of approved vendors to keep control of quality and delivery⁶⁵.

8.2 MODES OF VERTICAL INTEGRATION

Vertical Integration can be total (Internal performance) or partial, when the company decides to perform just a part of the activity and resort to external suppliers for the remaining of these activities.

Taking into account what was described in the previous section, and current partnerships in place by LEGO®, Figure 8 gives an overview of current modes of vertical integration along the value chain.

⁶⁵ The LEGO Group suppliers list 2017

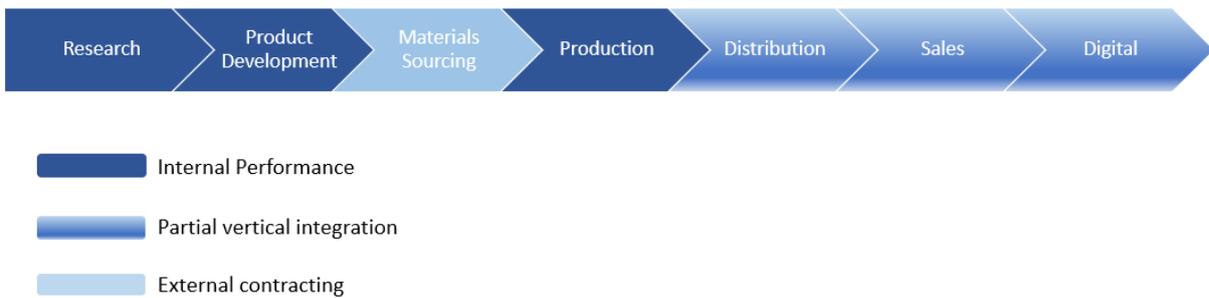


Figure 8 - LEGO® Vertical Integration Modes

Production has been historically performed by LEGO® with internal resources and means. This is in stark contrast to competitors such as Hasbro⁶⁶ that resort to manufacturing by third party production facilities, most of them located in Asia, particularly in China.

However, in 2006, as part of a larger move into restructuring LEGO®'s supply chain, the company decided to offshore and outsource the majority of its production to Flextronics, a large Singaporean electronics manufacturing provider. The objective of this partnership was to reduce costs (by moving production to lower cost countries) and at the same time learn from Flextronics expertise in reducing complexity and improving organization in general⁶⁷.

During this strategic partnership lifetime, production plants moved from higher cost countries such as Switzerland to lower cost European countries such as Hungary and Czech Republic and all production operations were run by Flextronics (with the exception of molding and packing). But, due to a mismatch in Flextronics competences – its main expertise was on the manufacturing of electronics, that proved to not be very relevant as a manufacturer of toy – the partnership came to an end in 2008. Since then LEGO® Production activities are vertically integrated, an example of forward Vertical Integration.

8.3 STRATEGIC OUTSOURCING

In some cases, the option between internal performance and external purchasing should not be made purely based on cost comparison. There are cases in which other vectors such as long-term relationship, supplier quality and future potential or synergies between the company and suppliers

⁶⁶ https://csr.hasbro.com/downloads/Hasbro_factories.pdf

⁶⁷ <http://www.onrychua.com/2016/12/lego-outsourcing-vs-insourcing.html>

are very relevant to the choice of supplier. In those cases, the company should resort to Strategic Outsourcing.

		Strategic Vulnerability to Outsourcing		
		Low	Medium	High
Potential Competitive Advantage	High	-	-	Research; Product Develop.
	Medium	Customer Engagement	Brick Production Brick Distribution	Online Sales
	Low	Traditional Plastics Offline Sales	-	Theme Parks Digital Content

	Internal Performance
	Market Purchase
	Strategic Outsourcing

Figure 9 - LEGO Strategic Outsourcing Frame

Strategic Outsourcing is best fit to situations where the company would not be able to perform the activity with a clear competitive advantage but where a simple market purchase strategy would involve strategic risk. Our analysis on the Strategic Outsourcing framing of LEGO® is presented in Figure .

The actual strategy of LEGO® in terms of Vertical Integration and Strategic Outsourcing is very similar to the outcome of the exercise above with a main deviation: production:

Production would be a good candidate for Strategic Outsourcing not only due to the medium level of potential competitive advantage and strategic vulnerability to outsourcing, but also due to seasonality: 65% of LEGO®’s annual production must be complete in the third quarter to be ready for Christmas time⁶⁸.

LEGO® tried to outsource this activity with the partnership with Flextronics (as mentioned in previous section) but the failure of that strategic led the company to assume a Vertical integration option on Production.

The Distribution of Bricks is done through a Strategic Outsourcing partnership with DHL⁶⁹, while LEGO® keeps warehousing and logistics facilities of their own (a Partial Vertical Integration model).

⁶⁸ <https://iveybusinessreview.ca/5757/lego-restructuring-brick-brick/>

⁶⁹ <https://postandparcel.info/13755/news/lego-group-outsources-logistics-to-dhl/>

This partnership was initiated during the same move into restructuring LEGO®'s supply chain that led to Flextronics partnership, but was more successful.

The outsourcing agreement with DHL started in 2005. At the time, LEGO® ran 5 European distribution facilities in Flensburg and Hohenwestedt (Germany), Billund (Denmark), Lyon and Dunkerque (France) and in Prague (Czech Republic) that were discontinued. The partnership with DHL included the construction of a new, very large (56.000 m²) distribution center in Jirny (Prague) run by DHL that is responsible for inbound and outbound logistics, storage, assortment packing and customization.

The benefits of this partnership for LEGO® were clear, since DHL was the global market leader of the international express and logistics industry and, as such, they had an expertise that was required for LEGO® if the company was to go ahead with its plan to centralize European distribution.

DHL distribution center in Jirny became responsible to handle distribution to LEGO® customers in Europe and to other LEGO® distribution centers throughout the world (except North America). Through time, the partnership has been expanded to include also Distribution in USA, Mexico and, in 2017 Brazil – through DHL distribution center in Louveira⁷⁰

Other Strategic Outsourcing partnerships of LEGO® include:

- MIT – The company keeps a partnership with MIT Media Lab since 1984, to add intelligence and behaviour to LEGO® play.
- Tencent – For LEGO® digital social networking services and product as well as for Development, publication and operation of software applications that support LEGO® toy sets. This partnership has a special focus on the Chinese market
- Merlin Entertainment – This company, the second-largest operator of visitor attractions globally, owns the Legoland theme parks. In a Vertical Integration move, LEGO® parent company KIRKBY A/S acquired Merlin Entertainment in 2019 for £4.8bn⁷¹.

⁷⁰<https://www.dhl.com/br-pt/home/imprensa/arquivo-de-imprensa/2017/dhl-assume-logistica-de-distribuicao-da-lego-do-brasil.html>

⁷¹ <https://www.bbc.com/news/business-48797245>

9 INTERNATIONALIZATION

Over almost 100 years of history, LEGO® company evolved from a small carpenter's workshop to a modern, **global enterprise** that is now one of the world's largest manufacturers of toys.

Each year, more and more toy purchases are influenced by digital marketing and currently roughly a third of all toys are bought online. At the same time, however, shoppers continue to seek immersive brand experiences in stores. In 2019, LEGO® upgraded their own e-commerce platform and opened almost 150 branded stores ending the year with **570 stores** worldwide.⁷²



LEGO®'s internationalization impacts all four sustainable value creation components (growth, margin, risk and sustainability).

Growth	As mentioned in previous sections of this report, LEGO® has determined its objectives focused on long term growth (Section 1.4). Entry into new markets allows to cover more customers with current products and services but it also allows to launch new products and services (e.g success of sets designed to celebrate Chinese New Year, showing there is strong consumer demand for culturally-relevant products).
Margin	New markets allow the exploitation of commercial and industrial scale, experience and scope economies. This is aligned with LEGO® objective of positively evolve operating margins (28-30%). (Section 1.4)
Risk	Entering new countries/ geographies allows to diversify risk taking advantage from different market stages, levels of income, etc. This may have both positive and negative impacts.
Sustainability	This is a key topic for LEGO® since the company has the objective to produce and sale more sustainable products over the world. Internationalization may support LEGO® sustainability objectives by accessing to technologies and materials in other markets.

⁷² The LEGO Group Annual Report, 2019

9.1 FOREIGN MARKETS EVALUATION AND COUNTRY ATTRACTIVENESS

An analysis of country attractiveness was performed, clustering the key regions for LEGO® taking into consideration business characteristics.

Table 1. Country attractiveness matrix

Factor	Weight	CHINA	Middle East and North Africa (MENA)	North America	India	Europe
Sales						
Market Size in Volume	9%	8	7	9	8	5
Average Price Level	7%	5	5	9	3	6
Access to the Distribution Network	2%	4	4	5	4	9
Cultural Proximity	3%	3	3	6	3	9
Sales assessment	21%	1.24	1.15	1.72	1.1	1.32
Growth						
GDP Growth Rate	4%	8	5	6	7	4
Population Growth Rate	11%	7	6	4	9	3
Market Growth Rate	15%	8	9	4	7	4
Growth assessment	30%	2.29	2.21	1.28	2.32	1.09
Margin						
Access and Cost of Labor	10%	8	8	3	8	4
Cost of land, materials and equipment	7%	8	7	6	7	6
Legal Regulation/bureaucracy	3%	7	2	5	5	7
Margin Assessment	20%	1.57	1.35	0.87	1.44	1.03
Risk						
Foreign Exchange Risk	5%	3	3	7	3	9
Political Risk	3%	2	4	6	4	9
Competitive Risk	3%	3	8	3	8	3
Risk Assessment	11%	0.3	0.51	0.62	0.51	0.81
Sustainability						
Environmental Sustainability	11%	3	3	5	3	7
Social Sustainability	7%	3	4	6	3	6
Sustainability Assessment	18%	0.54	0.61	0.97	0.54	1.19
Global Assessment	100%	5.94	5.83	5.46	5.91	5.44

LEGO® internationalization strategy takes into consideration that, despite the fact that North America still remains the world's largest toy market, generating some \$28 billion in annual sales⁷³,

⁷³ <https://www.jpost.com/middle-east/lego-builds-future-in-middle-east-amid-youth-population-boom-581517>

looking to the future, China, MENA (Middle East and North Africa) and India represent the most significant growth opportunities for the toy sector.

By 2028, it's estimated there will be 125 million children aged between 0 and 14 years in Middle East and North Africa⁷⁴ and by **2032**, 90% of the world's two billion children will live outside Europe and North America, with more than three quarters of these living in Eastern Asia.⁷⁵

Apart from **growth**, those markets also predict expansion of middle-class affluence⁷⁶ generating expectations of **sales increase**. At the same time, low production costs allow greater **margins** than in Europe or USA.



In 2019, LEGO® opened an office in Dubai to support expansion in the Middle East and Africa and announced plans to open an office in India in 2020.⁷⁷

China is a growth priority for LEGO®. In 2019 the company invested in building their brand presence and geographic reach and ended the year with 140 stores in 35 cities and achieved strong double-digit growth in China.⁷⁸



High import taxes in Chinese market may be a barrier but LEGO® has already taken the necessary steps to get around this problem. In 2016, LEGO® opened their first Chinese factory. In the short term, they are working to ramp the Jiaxing factory to full capacity while maintaining quality standards and aggressively expanding their Chinese and wider Asian market share. LEGO® has announced their new supply chain strategy for the Asian market: all of the products they produce in China will be sold in Asia, with the remaining Asian demand met via shipments from Europe. ⁷⁹

⁷⁴ <https://www.jpost.com/middle-east/lego-builds-future-in-middle-east-amid-youth-population-boom-581517>

⁷⁵ The LEGO Group Annual Report, 2019

⁷⁶ <https://www.jpost.com/middle-east/lego-builds-future-in-middle-east-amid-youth-population-boom-581517>

⁷⁷ The LEGO Group Annual Report, 2019

⁷⁸ The LEGO Group Annual Report, 2019

⁷⁹ <https://digital.hbs.edu/platform-rctom/submission/lego-the-missing-bricks-in-their-global-supply-chain/>

Moreover, by owning the factory in China, the LEGO® Group retains full control of production in a market in which there are many copy products.⁸⁰

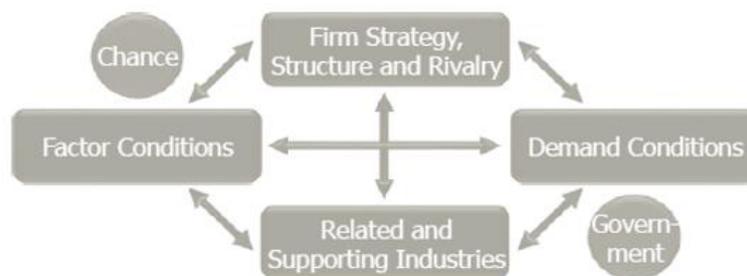
Additionally, production in China allows to compete with local companies and reduce costs. LEGO® estimated at the time that this might save as much as 20% on manufacturing and distribution costs, thus creating an international export strategy which is better value for money.⁸¹



LEGO® partnership with Chinese internet company Tencent was also key for success, it ensured that LEGO® emerged into the market hand-in-hand with a trusted partner that could also provide an insulation to any possible cultural mistakes.⁸²

LEGO® should continue investing in expanding to these territories, taking in consideration also specific opportunities and risks. For instance, they should consider expanding Chinese partnerships, with partners such as Alibaba, to increase the speed of market penetration.

9.2 COMPETITIVE ADVANTAGE OF THE NATIONS – NATIONAL DIAMOND



The national diamond framework was hereafter applied into two periods of LEGO® history: at LEGO®'s foundation and nowadays, presenting some insights on how the national Danish context might have had an impact on the international performance of the company.

I - LEGO's foundation

⁸⁰ <https://www.lego.com/en-us/lego-history>

⁸¹ <https://wolfestone.co.uk/insights/blogs/legos-international-export-strategy-building-bricks-global-success>

⁸² <https://wolfestone.co.uk/insights/blogs/legos-international-export-strategy-building-bricks-global-success>

LEGO® relied on its own competitive advantages, with the support of the National Association for Danish Enterprise in order to early succeed in the external market.⁸³

Factor conditions

In a context of economic crisis, LEGO® founder Ole Kirk Kristiansen, a carpenter, has lost his clients. But, on the other hand, he had the know-how and human resources available to work on new wood products.

Demand conditions

There was a market for readily marketable products, such as toys.

Related and supporting industries

As a former carpenter, LEGO® founder already had in place wood supply needed to manufacture his products.

Firm strategy, structure and rivalry

Firm strategy was to use its resources and know how in order to face the economic crisis. The National Association for Danish Enterprise (an association created with the purpose of promoting Danish manufacturing and the sale of Danish goods both in Denmark and abroad) supported Ole Kirk Kristiansen's business efforts during the economic crisis.

Chance

The Wall Street stock market in New York crash in October 1929 was determinant for the foundation of LEGO®. Denmark was impacted by a severe economic crisis, as well as other countries forcing Ole Kirk Kristiansen to change business and found LEGO®. Also, following World War II, plastics became available in Denmark, and this was key for change from wood toys to the LEGO® as we know today.⁸⁴

Government

The fact that Denmark, contrary to other countries, did not impose any restrictions to exports, allowed LEGO® to ambition early expansion into other markets.

II - Nowadays

Factor conditions

Denmark is world-leading in tech and sustainable innovation. “with its well-educated workforce, significant public and private investment schemes, and a forward-thinking approach to solving the most significant global issues, the Danes are challenging the tech giants in China and Silicon Valley in terms of shaping the future.”⁸⁵ Additionally, Denmark has an extensive rail network, a wide port system and good logistic facilities, allowing Denmark to stay connected to other parts of the world through air, sea or land.⁸⁶

⁸³ <https://www.lego.com/en-us/lego-history>

⁸⁴ https://en.wikipedia.org/wiki/History_of_Lego

⁸⁵ <https://www.bachelorstudies.com/article/3-reasons-to-study-in-denmark/>

⁸⁶ <http://www.investineu.com/content/invest-denmark>

Demand conditions

LEGO®'s has nowadays a huge network of stores outside Denmark as well as e-commerce platforms and partnerships allowing to launch new products in a global scale.

Related and supporting industries

Denmark has a strong cooperative ecosystem allowing Danish industries to leverage knowledge and foster national innovation.

Firm strategy, structure and rivalry

LEGO competes with the biggest Toys and Games industries in the world. Its strategy is to compete in the biggest markets, aiming long term growth.

Chance

Denmark is known as the country with the happiest people. This may contribute positively for LEGO® reputation.

Government

The Danish Business Authority aims to ensure that their Danish framework for creating growth through innovation, entrepreneurship, and design is among the best in the world. It also supports Danish companies to have green and circular business development and works to create the best conditions for the development of sustainable solutions for the future.⁸⁷

9.3 SECTOR CLUSTERS

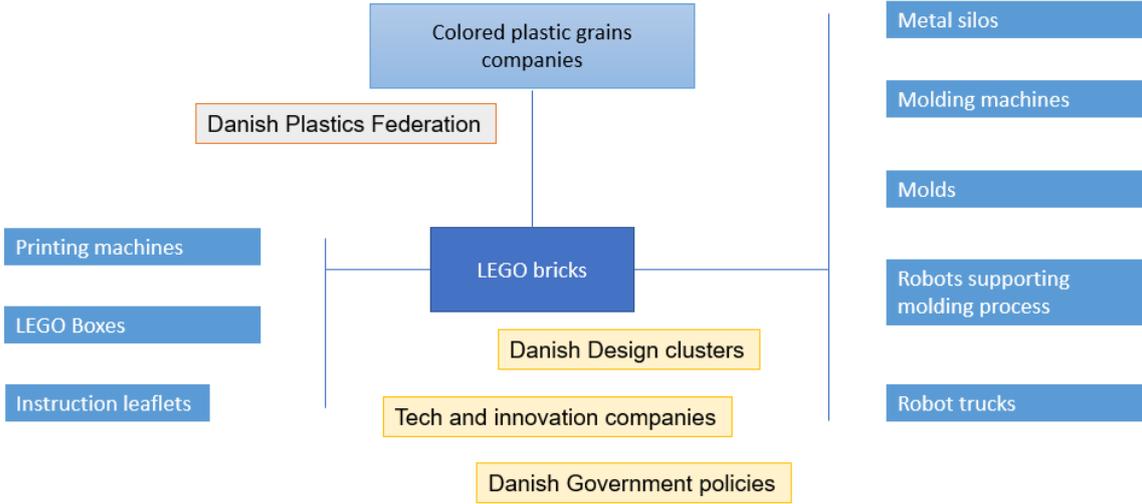
Nowadays in Denmark, clusters play an import role by facilitating and promoting cooperation within the ecosystems in the strongest and most promising industries in Denmark.⁸⁸

The Danish Design Cluster was identified as playing a central role as one of the service clusters bound to become increasingly important to the future prosperity of the Danish economy. The principles of Danish Design were also implemented by large companies including LEGO®.⁸⁹

⁸⁷ <https://danishbusinessauthority.dk/innovation-and-growth>

⁸⁸ <https://erhvervsfremmebestyrelsen.dk/danish-economic-strongholds-and-clusters-future>

⁸⁹ https://www.isc.hbs.edu/resources/courses/moc-course-at-harvard/Documents/pdf/student-projects/Denmark_DesignCluster_2007.pdf



9.4 INTERNATIONALIZATION MODES

Investment and transaction modes of internationalization are nowadays applied by LEGO, as follows.

Transactions	Investment
Export via agents or distributors	Integrated joint-ventures
	Integrated subsidiaries
	Integrated stores

9.5 COUNTRY AND FIRM ADVANTAGE

The presence of LEGO® in countries such as North America and Europe is vital for the competitive positioning of the organization. These geographies are **strategic markets** for LEGO® concentrating more purchase power from customers as well as highest standards and key competitors. Companies in these markets are exposed to competitive pressure and need to reinforce their skills in order to create sustainable value for the company.

Additionally, in the toy sector market, China is also a strategic market with high growth potential but also highly competitive.

On the other hand, there are markets such as Middle East, Africa and India with high growth potential and key from a perspective of sustaining volume growth. These are **complementary markets**.

		Country advantages	
		Low	High
Firm advantages	High	Complementary Markets: India, Middle East and Africa	Strategic Markets: Europe, North America
	Low		Strategic Markets: China

9.6 INTERNATIONALIZATION STAGES

Over almost 100 years of history, LEGO® company evolved from a small carpenter’s workshop to a modern, global enterprise that is now one of the world’s largest manufacturers of toys.

	Stage			
Features	Domestic 1930-1949	International 1950-1955	Multinational 1956-2016	Global >2016
Geographical Scope	Domestic Market (Denmark)	Denmark and a few close countries	Expanded number of countries	Virtually, the whole world (China internationalization)
Internationalization modes	None	Distributors (Sweden), Licensing agreements (Norway and Iceland)	First subsidiaries (Germany Switzerland, Netherlands, Austria, Belgium, Italy and Portugal) and USA.	Direct Investments, joint ventures and transactions
Business Orientation	Domestic	No product adaptations	Some regional adaptations	Exceptional regional adaptations
Main issues	NA	Post-war restrictions	Distribution channels and agreements	Interconnections and flow of information, money and people

Early expansion

In the 1950s, the LEGO® Group makes its first moves into foreign markets. Early focus is on the Nordic countries. Licensed production starts in Norway in 1953 in partnership with Svein Strømberg, Oslo, under the corporate name Norske LEGIO A/S.

In the 1950s, Sweden has placed fewer restrictions on toy imports than Norway. The LEGO Group therefore chooses to appoint a distributor to handle sales of LEGO® products in the Swedish market rather than to enter into a license agreement with a local plastic manufacturer – as is necessary in Norway.

In 1959 the LEGO® Group decides to set up its own sales company in Sweden. In the early 1960s, the Norwegian government removes import restrictions on toys, LEGO sales company in Norway similar to the Group’s international companies that have been operating in Europe since 1956.

In 1960, the LEGO® Group sets up a subsidiary, under the name Oy Suomen LEGO AB, to market and distribute LEGO® products in Finland.

1956-1973

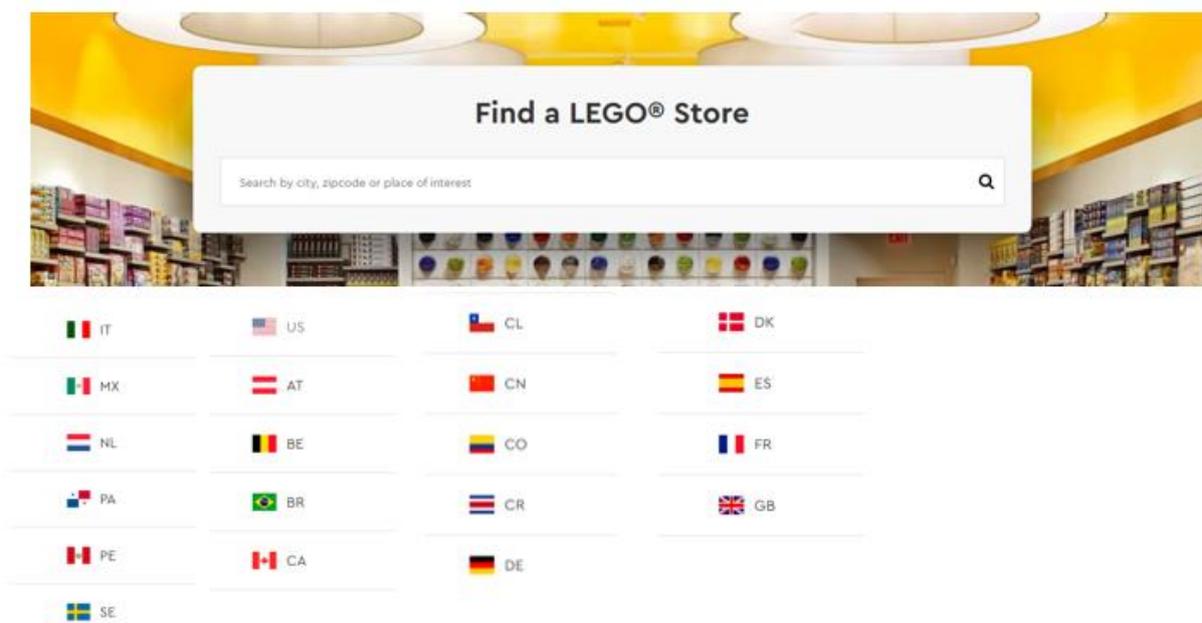
In the period 1956-1958 the LEGO Group sets up sales offices in Switzerland, Netherlands, Austria, Belgium, Italy and Portugal.

But the company had its eye on the rest of the world. In 1961, the LEGO Group licensed an American luggage company, Shwayder, to produce and sell LEGO products in the US and Canada. Under the agreement the LEGO Group supplied machinery, moulds and other equipment, while Shwayder handled production and sales. In 1965, Shwayder changed its name to Samsonite.

In mid-1973, the LEGO Group sets up a subsidiary in the US.

Nowadays

LEGO is still a family-owned company. Headquarters are in Denmark, and there are with 5 manufacturing sites, 4 regional hubs, 37 sales offices and 570 owned stores.



In 2012, a new strategy is drawn up for the Asian markets. A Corporate Management meeting in Shenzhen, China, in 2012 decides to increase company activities in the Asian markets. Existing

organizations will be expanded, and new markets opened. There will also be significant investment in both marketing and in-depth consumer analyses. China is a high priority market.

In 2013 the LEGO® Group announces its decision to build a factory in China under its strategy of locating production close to its core markets. Asia is regarded as a future core market for the LEGO® Group, partly in the light of rising LEGO® Group sales in the region.

Moreover, by owning the factory the LEGO® Group retains full control of production in a market in which there are many copycat products.⁹⁰

LEGO® Group strategy towards 2032

Sustain core commercial and operational momentum delivering annual growth
Create the organization of the future securing strong organizational health
Expand global presence pursuing global stronghold through three regions of equal proportions
Leverage digitalization utilizing potential in e-commerce, digital communication, one reality and digital infrastructure.⁹¹

⁹⁰ <https://www.lego.com/en-us/lego-history>

⁹¹ <https://www.lego.com/en-us/lego-history>

9.7 INTERNATIONAL INTEGRATION AND RESPONSIVENESS

LEGO® started as a local company and expanded globally with a strong diversification of the products offered, some of them specific to a given region.

However, in April 2019 LEGO® pledges to stop launching regional exclusives due to customer feedback received. Being so, only with a few exceptions, regional exclusives launched after May 1, 2019 become now widely available via LEGO® Brand Retail stores and LEGO® Shop at Home after a limited period of time (3-6 months) of the initial launch.⁹²

Local responsiveness		
	Low	High
Global Integration	High	Global Company (Currently)
	Low	Local Company (1930-1950)

International Adaptation and standardization

Factor					
	Culture/Habits	Design	Language	Size/Package	Price
Concept					
Marketing					
Technology					
Product	*				

Note: Green color indicates local adaptation | *Some regional products but available worldwide

⁹² <https://brickset.com/article/43442/lego-pledges-to-stop-launching-regional-exclusives>

10 DIVERSIFICATION

The case of LEGO® diversification is particularly interesting.

In 1934, Ole Kirk Kristiansen, a carpenter forced to produce new easy saleable product due to global economic crisis made a decision: To stop producing other products such as buildings and furniture and to concentrate on wood toy production. This was the first step for the creation of LEGO®.⁹³

Later in the company history, the '90s external environment presented a set of threats to LEGO®. With the introduction of an increasing number of playing options, the company feared that kids' interest in playing with traditional toys may be vanished and, consequently, the brand felt an enormous urge to diversify its business away from the core product, the bricks.

LEGO® started launching products on areas such as software, learning tools, lifestyle products, girl's toys, books, magazines, television, theme parks, etc. In the 2000's, LEGO® was developing an average of five adjacent businesses every year.⁹⁴

In 2003, however, something has to change once LEGO® was about to go bankrupt. The company was believed to have lost its focus, wandering around businesses other than its core one. Net sales suffered an overall decline of 26% and inventory jumped by 40% at some outlets. Among many other unsatisfactory financial results, it also presented a pre-tax loss on earnings of € 188 million, a drop of € 268 million compared to 2002. Some authors classified the cause for the above as a case of “diworsefication”.⁹⁵

⁹³ <https://www.lego.com/en-us/lego-history/the-beginning-of-the-lego-group-a148d3b09fb045c5a52ea65f9257f085>

⁹⁴ Fonseca M, A diworsefication case study: Rebuilding LEGO brick by brick, April 2019

⁹⁵ Fonseca M, A diworsefication case study: Rebuilding LEGO brick by brick, April 2019

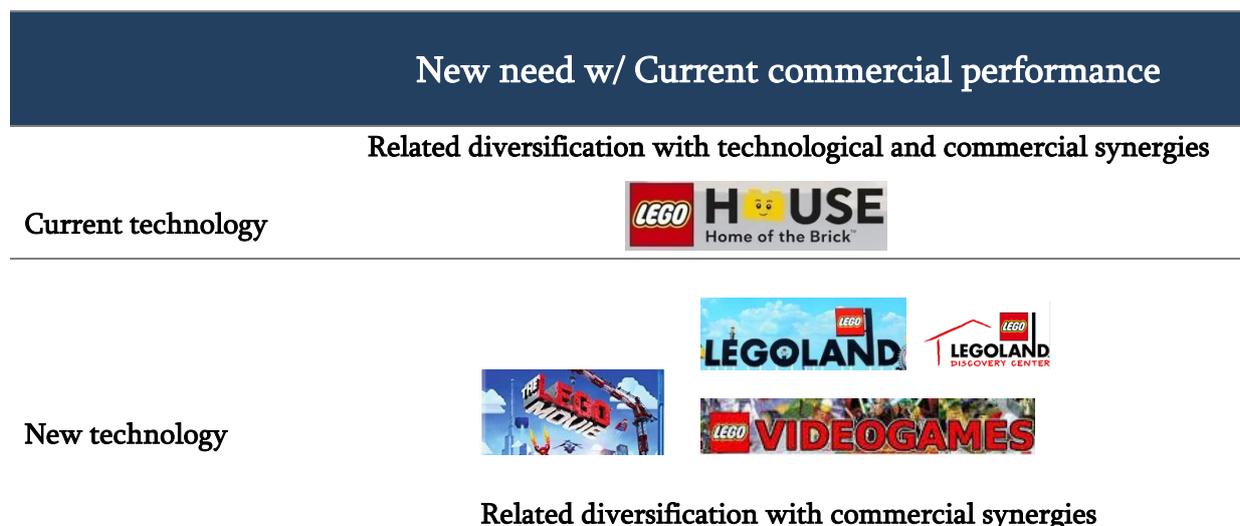
The overstretch and overexpansion of business lead to a situation of near bankruptcy from which the company recovered as a result of a successful business turnaround strategy, becoming now the second largest toy company in the world. ⁹⁶

This turnaround strategy involved a refocus on bricks as the core product and cutting costs.

Nowadays, LEGO® follows a different diversification strategy, arguing that they are actually staying very close to the core (bricks).

The fact is that Kids are living in a multidimensional world, and they are so used to having multitudes of different touch points around themes that they love. Being so, nowadays, LEGO® diversification targets a 360 holistic experience for its customers.⁹⁷

10.1 DIVERSIFICATION MATRIX



On the diversification matrix, we considered LEGOLAND Parks and discovery centers, LEGO® Video games and LEGO® movies **related diversification with commercial synergies**, since the brand LEGO is used in all these activities, but the main technology is not based on bricks.

⁹⁶ Fonseca M, A diworsefication case study: Rebuilding LEGO brick by brick, April 2019

⁹⁷ <https://www.cnn.com/2016/11/09/how-the-lego-group-built-itself-back-together-again.html>

On the other hand, despite other experiences offered LEGO® HOUSE, the greatest majority is using the same technology, bricks. For that reason, we considered LEGO® HOUSE a case of **related diversification with both technological and commercial synergies**.

Some details on these businesses provided below.

Business	Description ^{98,99,100}
<p>Video games</p> 	<p>LEGO® has a long history in video games, especially when it comes to crossing over with entertainment properties, from Star Wars to The Incredibles.</p>
<p>LEGO MOVIES</p> 	<p>LEGO® entered the film industry in 2014, with “The Lego Movie” and launched other since then. Indeed, new LEGO® toys related to LEGO’s films have tended to sell very well and have contributed to LEGO sales growth over the last few years. This is a good example of successful content marketing, where films can boost sales of branded products.</p>
<p>LEGOLAND Parks</p> 	<p>LEGOLAND Parks are family parks presenting exciting worlds of adventures inspired by the creativity and endless opportunities of the LEGO® brick and fun LEGO® play themes. Legoland parks are operated by Merlin Entertainments.</p>
<p>Legoland Discover Centres</p> 	<p>Smaller versions of these Legoland parks.</p>
<p>LEGO House</p> 	<p>A 12,000sqm playhouse with 25 million colorful LEGO® bricks inside. Different color zones exist within the house to foster different skills, from creativity to logic, empathy and social skills.</p>

10.2 BUSINESS PORTFOLIO PLANNING

GE/McKinsey matrix and BCG Matrix are presented below. A selection of LEGO® products and businesses was made, combining both this and previous sections of the report.

⁹⁸ Passport, LEGO IN TOYS AND GAMES (WORLD), Euromonitor International, Sep 2019

⁹⁹ <https://screenrant.com/lego-video-game-crossovers-marvel-star-wars-all-explained/>

¹⁰⁰ The LEGO group, a short presentation, www.lego.com

10.2.1 GE/McKinsey matrix

		Company's competitive Strength		
		Low	Medium	High
Industry attractiveness	High	<i>Expand carefully</i>	<i>Invest to grow</i> LEGO® Boost, LEGO® Education, LEGO® Mindstorms, LEGO® Hidden side; Video Games	<i>Protect position</i>
	Medium	<i>Grow selectively</i> Legoland and Discovery centers	<i>Manage return</i> LEGO® Movies	<i>Strengthen position</i> LEGO® Bricks
	Low	<i>Divest</i>	<i>Monetize</i>	<i>Protect return</i>

LEGO® Bricks: Company has competitive strength in bricks, they should **invest in the attractive segments in order to strengthen their position**. Here, investment in product evolution using sustainable materials will be key to support long term success.

LEGO® Boost, LEGO® Education, LEGO® Hidden side and LEGO® Mindstorms: LEGO® should **invest to grow** to be the leader. This is currently a growing and very competitive market. The global “connected toys market” size is expected to grow from USD 5.7 billion in 2019 to USD 13.8 billion by 2024, at a Compound Annual Growth Rate (CAGR) of 19.3% during the forecast period.¹⁰¹

Video Games: The company already has some partnerships, namely with Tencent in China which are important to gain competitive strength. The global video game market size was valued at USD 151.06 billion in 2019 and is expected to grow at a Compound Annual Growth Rate (CAGR) of 12.9% from 2020 to 2027.¹⁰² LEGO® should **invest to grow and strength leadership** focusing efforts on this very competitive market.

¹⁰¹ <https://www.marketsandmarkets.com/Market-Reports/connected-toys-market-38031230.html>

¹⁰² <https://www.grandviewresearch.com/industry-analysis/video-game-market>

LEGO® Movies: Returns on the LEGO® film franchise have been in decline and LEGO® just announced a partnership with Universal Pictures.¹⁰³ The global movies & entertainment market was valued at USD 80.98 billion in 2016 and is expected to keep growing over the forecast period with CAGR of 4.1% from 2018 to 2025.¹⁰⁴ Movies also are an important marketing strategy for LEGO®. For that reason, they **should protect business and look for ways of strengthening return.**

Legoland and Discovery centers: The global amusement park market to grow with a CAGR of 5.9% over the period from 2019-2025. This is a market with strong competitors such as Walt Disney and Universal.¹⁰⁵ LEGO® should grow selectively, expanding risk-free and **limiting investment.**

10.2.2 BCG Matrix

		Relative Market Share	
		High	Low
Market Growth	High	 LEGO® Boost; LEGO® Education; LEGO® Mindstorms; LEGO® Hidden side;	 LEGO® Movies Video games
	Low	 LEGO® Bricks; Legoland theme parks;	

Cash cows: The BCG cash cows for Lego are LEGO® Bricks and Legoland theme park as they are operating in mature market with high market share. Strategic recommendation is to optimize gains in order to further finance question marks and stars.

Stars: LEGO® Boost, LEGO® education, LEGO® Mindstorms and LEGO® Hidden side are part of a fast-growing market of robotics with LEGO® being one of the key players.¹⁰⁶ The strategic recommendation is to keep investing in order to strengthen leadership so it can evolve to cash-cow position when market growth slows down.

¹⁰³ <https://fortune.com/2020/04/23/why-universal-beat-warner-bros-for-the-lego-movie-franchise>

¹⁰⁴ <https://www.grandviewresearch.com/industry-analysis/movies-entertainment-market>

¹⁰⁵ DUBLIN, Feb. 24, 2020 /PRNewswire/ -- The "Amusement Park Market: Global Industry Analysis, Trends, Market Size, and Forecasts up to 2025"

¹⁰⁶ <https://www.verifiedmarketresearch.com/product/global-educational-robot-market-size-and-forecast-to-2025/>.

Question marks: LEGO® movies and video games were considered question marks. These businesses sectors are growing fast, and LEGO® is not the market leader. The strategic recommendation would be to increase market share becoming stars or to leave the market since, as the market's growth rate is high, it may end up consuming the company's position and resources.

11 CORPORATE DEVELOPMENT

Corporate development impacts all components of sustainable value creation and is needed to create and execute innovative strategies that will help the company to increase its competitive advantage.

To understand the corporate development of LEGO®, we need to understand whether their products-markets, vertical integration, internalization and diversification strategies are supported by **internal or external development**.

11.1 VALUE CREATION IN CORPORATE DEVELOPMENT

The best way to develop a robust value creation strategy is to take a holistic approach that addresses the business strategy, financial goals and interaction with partners/investor. LEGO's corporate development must ensure the sustainable value in all dimensions, being:

Growth

LEGO® is seeking to grow internationality by consolidating their presence into the Asian market, and at the same time is developing new products and diversifying their offer through internal and external development.

After the 2017 crises, LEGO® invested considerably in its growth by almost triple their workforce and the number of lines offered. They invested in new products and new partnerships to increase their market share and to strengthen their brand awareness.

LEGO® recognized that to be a real global company, they needed to invest and expand their business to Asia, mainly China, mainly through joint ventures and joint R&D.¹⁰⁷

LEGO®' internal development is key for their growth in the current and new markets, that together with strategic alliances from all over the world allows LEGO brand to have a worldwide recognition.

Margin

¹⁰⁷ <https://www.askattest.com/blog/brand/legos-growth-strategy-how-the-toy-brand-innovated-to-expand>

LEGO®'s long-term strategy to invest in the Chinese market is a key to gain economies of scale, and this is only possible due to the partnerships they have with global and local entities.

In addition, by making use of the creativity of fans by the acquisition of a fan platform and through their several alliances with R&D partners, LEGO® is able to reinforce their technological and innovation characters.

Risk

Depending on the internal or external development level of internalization LEGO® uses in the different markets, there are risks, advantages and disadvantages in the usage of each.

By increasing and diversifying the partnerships, LEGO® is able to include in their portfolio a wider range of products with technology, market dispersion and quality that they would not be able to develop internally, or at least would take longer to be released into the market.

Sustainability

Sustainability is, as we already referred during this report, a strategic goal for LEGO, reason why they have several alliances with ONGs and companies to support their long-term plan and processes.

11.2 CORPORATE DEVELOPMENT ALTERNATIVES

The various corporate development alternatives of LEGO® differ in two critical factors: **strategic control and strategic integration**. The bigger the internationalization mode the bigger the capacity of control and integration of the activities.

The corporate development of LEGO® is carried out by its internal resources together with external entities through acquisitions and mergers, strategic alliances and market transactions.

In table 2 we combine the different levels of LEGO®'s internalization with its strategic control and integration, to allow a better understanding of each corporate development alternatives.

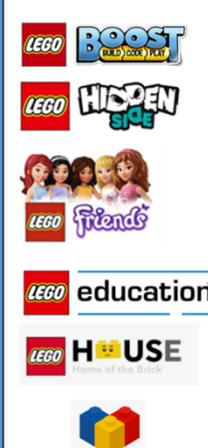
	Development's Level of internalization			
	Internal Development	Mergers and Acquisitions	Strategic Alliances	Market Transactions
Strategic Control	High	High	Intermediate	Low
Strategic Integration	High	High	Intermediate	Low
Corporate Development				

Table 2: Strategic control and integration in LEGO®'s corporate development

11.2.1 Internal development

LEGO®'s internal development is since 1932 based on the LEGO® brick. During the last 40 years, LEGO® introduced different products and unique experiences for children of all ages and adults by internally developing new products and digital programs.

The LEGO® products were discussed in chapters 7 (Business Strategy: Products-Markets) and 10 (Diversification) of this report, so we will now focus on the external development.

11.2.2 External development

11.2.2.1 Mergers and acquisitions

BrickLink

In November 2019, the LEGO® group announced the acquisition of BrickLink Ltd (www.bricklink.com), the world's largest online community of adult LEGO® fans to strengthen

their connection with its important adult fan base. BrickLink, with headquartered in Irvine, California, as more than one million members and comprises an online marketplace of more than 10,000 stores from 70 countries. It is a digital building software where builders can design and showcase their creations, sharing their ideas to all LEGO® fans community.¹⁰⁸



Niels B Christiansen, upon the acquisition of BrickLink, said: “Our adult fans are extremely important to us. They are passionate, committed and endlessly creative. We have worked closely with the community for many years and look forward to deepening our collaboration. We plan to continue to support BrickLink’s active marketplace and evolve BrickLink’s digital studio which allows our talented fans to take their creativity to the next level.”

With this acquisition, LEGO was able to strengthen the relationship with their adult segment that is growing for the last 70 years and at the same time, incorporate their creativity, innovative ideas and opinions into their strategy, creating additional value not only to this segment but also taking advantage of their knowledge for other segments as some of these adults have children who are also LEGO® fans.

¹⁰⁸ <https://www.lego.com/en-us/aboutus/news/2019/november/lego-bricklink/>

11.2.2.2 Strategic alliances

Environment Sustainability



The LEGO® Group partners with the **Worldwide Fund for Nature** (WWF) as part of their effort to reduce carbon emissions in their manufacturing and supply chain operations, and to promote global action on climate change.

With this partnership, LEGO® had set ambitious goals to ensure more sustainable means of producing LEGO® play experiences. The sustainability goals are described in chapter 6 of this report.

Children Sustainability

LEGO® Group is working with **UNICEF** since 2015 to implement and advocate for the Children's Rights and Business Principles. Together with UNICEF, LEGO® Group introduced an industry-first Digital Child Safety Policy to secure the safety and welfare of children interacting with LEGO® digital products.

For LEGO®, children's safety plays a key role on their digitalization and innovation strategy. To meet their goals in China, in January 2020 the LEGO® Group announced the extend of the strategic partnership with **Tencent Holdings Ltd**, providing more creative and safe digital play experiences for Chinese children. In the next two years, the two companies will collaborate in areas including video, game and digital child safety, and explore opportunities to collaborate in areas of digital social community, intellectual property and corporate social responsibility.¹⁰⁹

Movies partnerships

The first "LEGO movie" was released by **Warner Bros. Pictures** in 2014 and it was a worldwide success with a gross profit of 468.1 million dollars. "The LEGO Movie" story was focused on an ordinary LEGO® minifigure who



¹⁰⁹ <https://www.lego.com/en-us/aboutus/news/2020/january/lego-group-and-tencent-partnership/>

finds himself helping a resistance movement stop a tyrannical businessman from gluing everything in the LEGO® world into his vision of perfection.

After the first movie, LEGO® and Warner Bros produced three more movies, with the sequel “The Lego Movie 2: The Second Part” released in 2019 and the spin-off films “The Lego Batman Movie” and “The Lego Ninjago Movie”, both released in 2017.

The Lego Movie is a media franchise as the original Lego Movie characters and films are owned by Warner Bro.

However, in April 2020, LEGO® Group together with **Universal Pictures** announced a five-year exclusive deal that will lead to the development, production and theatrical distribution of films constructed from the fusion of original ideas to the colorful building blocks.¹¹⁰ LEGO® Group will serve as producer on all LEGO® projects developed and released by Universal.

LEGOLAND®

LEGO® brand (KIRKBI) holds 50% of **Merlin Entertainments**, the Europe’s leading and the world’s second-largest visitor attraction operator. It represented 15.3 billion DKK revenues for LEGO® group in 2019 with 67 million visitors during that year.



In 2024 the opening of the first Legoland in China is expected to be inaugurated, being a joint venture (strategic alliance) between Merlin, the **Shanghai Jinshan District Government**, **CMC Inc** and KIRKBI.

Renewables acquisitions

LEGO® group holds 31.5% of **Borkum Riffgrund 1**, 25% of **Burbo Bank Extension** and 87.5% of **Enerparc Inc**, strengthening their commitment to balance global consumption of energy with renewable energy from solar and wind and contribute to a sustainable development in the world.

¹¹⁰ <https://deadline.com/2020/04/universal-lego-group-construct-five-year-exclusive-film-partnership-to-create-new-movie-franchises-1202916170/>

LEGO Ventures

Founded in 2018, LEGO Ventures aims to work with entrepreneurs, ideas, and startups centered around playful learning, which includes industries like gaming, adaptive education, and virtual reality.

LEGO Ventures explores investment opportunities at the intersection of Play, Learning and Creativity to leverage and develop the original LEGO® idea and support the LEGO® brand mission “to inspire and develop the builders of tomorrow”.

LEGO® Ideas

LEGO® Ideas is an open innovation platform built to identify innovation from external sources, conducting market research and engaging end users. The platform uses an online voting system that serves as a tool for LEGO® core fanbase to engage with the brand and allow the company to test the financial viability of these ideas. If a submitted idea goes into production, the creator is rewarded with 1% royalty on global sales and credited inside the build instruction booklet as the designer of the set, increasing people’s motivations and engagement towards LEGO® brand.¹¹¹

LEGO® retains the control of all selective process, and once an idea crosses the 10,000th support mark and joins the “10K Club”, it will be submitted for review sessions that are held 3 times per year. LEGO® retains the rights to modify the original idea and produce subsequent sets following the same theme.

MIT Media Labs

The most successful product released by LEGO® in partnership with MIT is LEGO Mindstorms, a kit with a programmable computer first launched in 1998. The Robotics Invention System™ has fueled the imaginations and satisfied different generations of LEGO® and robotics enthusiasts alike.

In 2017, the Women of NASA set became an Amazon bestseller within 24 hours after its debut on 1st Nov 2017 and earned wide praise for paying tribute to the contributions of women in STEM.¹¹²

¹¹¹ <https://digital.hbs.edu/platform-rctom/submission/everything-is-awesome-product-innovation-at-lego/>

¹¹² <https://digital.hbs.edu/platform-rctom/submission/everything-is-awesome-product-innovation-at-lego/>

Other partnerships

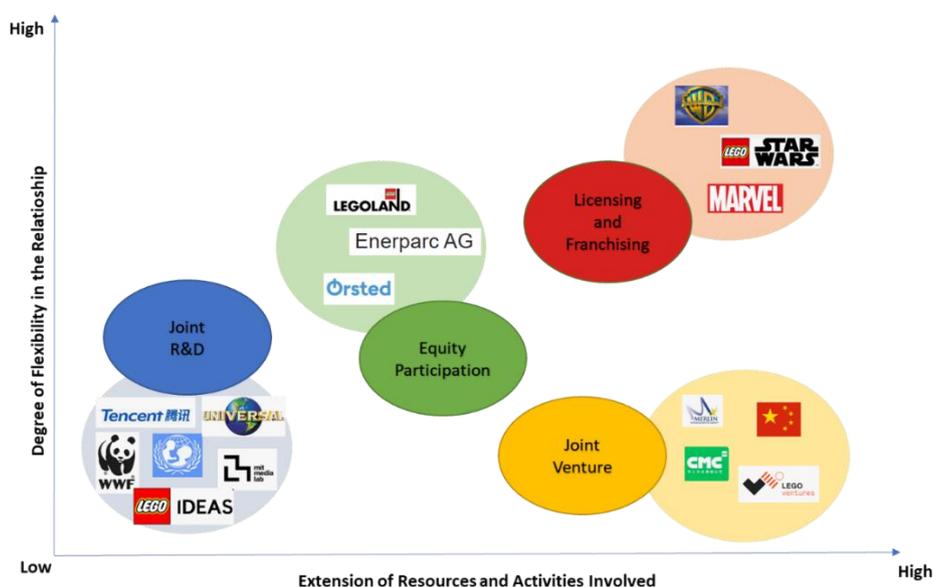
LEGO® has a considerable number of licensing and franchising with other brands as of Star Wars, Marvel or Harry Potter.

Lego Star Wars is a Lego theme that incorporates the **Star Wars** saga and franchise. The partnership started in 1999 and was agreed to 2008, but the LEGO® Group extended the license with Lucasfilm Ltd., first until 2011, then until 2016, then again until 2022. In 2019 the LEGO® group reveals new Star Wars™ sets in celebration of Triple Force Friday, with eight new buildings sets to celebrate the 20th anniversary of the Star Wars galaxy life.¹¹³



In 2012, **Marvel** granted LEGO® Group the rights to develop a distinct Marvel branded construction toy collection, the LEGO Superheroes collection, bringing the characters, vehicles and action of Marvel’s renowned universe to the world of LEGO® build-and-play adventure.¹¹⁴

As strategic alliances are key drivers for LEGO® short- and long-term success, let’s analyze LEGO®’s partnerships more extensively. The alliances vary according to the flexibility and resources involved in the relationship:



¹¹³ <https://www.lego.com/en-us/aboutus/news/2019/october/lego-star-wars-tff/>

¹¹⁴ <https://www.pnewswire.com/news-releases/marvel-entertainment-and-the-lego-group-announce-strategic-relationship-in-construction-toy-category-125895068.html>

The **advantages and disadvantages** of each strategic alliance of LEGO® can be summarized as:

Licensing and Franchising

- Flexible relationship and partnership that can be successively extended
- By being flexible, the relation is also unstable - Star Wars for example can end the partnership in 2022, considerably reducing LEGO's revenues
- Possibility to lose part of their entity when the licensing partnership ends. With the Warner Bros' contract cancelation, LEGO® lost the rights towards their characters as Warner Bros kept the ownership of LEGO® Movie characters and films
- Star War licensing has become a brand of its own, the LEGO® Star War, and with Batman LEGO® went even further to the original characters by creating different personalities, increasing their products portfolio
- The licensing with Star Wars and Harry Potter are long lasting partnerships that allowed LEGO® to increase their advantage over their competitors

Technology and R&D

- Medium investment and more resources allocated to the partnership but, on the other hand, possibility to incorporate in their toys the expertise of other areas. The MIT partnership was key to leverage LEGO®'s technological and digital concepts and their joint LEGO® Mindstorms was able to create more value through innovation
- This type of partnership tends to be for short periods of time that can be extended, providing a certain type of flexibility to choose different partners, invest in the partnership or simply disinvest
- R&D partnerships with local companies allow LEGO® to understand their customer and to develop innovative toys targeting specific cultures and segments. Their partnership with Tencent allow LEGO® to bond with Chinese traditions and develop culturally sets like to Monkie Kid™.
- Two of the most recent partnerships of LEGO® group are with UNICEF and WWF, with both entities providing support to LEGO®'s strategy towards children and sustainability and setting clear goals to LEGO® group. These partnerships set new standards in everything LEGO® does, promote and implement.

Joint Venture

- Very stable relationship as the projects tend to be for long term strategies
- The most important joint venture for LEGO® group is between Merlin, the Shanghai Jinshan District Government, CMC Inc and KIRKBI, the Kirk Kristiansen family's private holding and investment company. This joint venture in China is crucial for their internalization and growth as it will allow to increase their brand awareness in that market by building the Legoland Shanghai Resort, inspired by famous scenic spots in Shanghai, Jinshan District and Fengjing.
- However, joint ventures usually mean high levels of investments and indeed, for Legoland Shanghai, the total project investment is expected to be approximately \$550 million
- On a more product-market strategy, the LEGO® Ventures was created in 2018 to invest in the future of learning, creativity, and play, by intersection between digital and physical play and create new products to meet these changing needs.

Equity participation

- LEGO®'s equity participation in Merlin Entertainments is a stable relationship over the last years for the management of the LEGOLAND® theme parks worldwide. By investing in Merlin by end of 2019, LEGO® strengthened relationships and is sharing the responsibility towards the theme parks.
- The renewable strategy targets investments in solar, onshore wind and offshore wind assets. By having an active participation since 2012 in renewable energies LEGO® was able to develop a solid long-term business case fully aligned with the sustainability and financial ambitions.

11.2.2.3 Market transactions

Not all countries have LEGO® stores represented in their markets, and so LEGO® use a wide range of local **distributors** and retailers worldwide to sell their products. As an example, in Portugal the LEGO® products can only be find in retailers as Toys R Us, Continente, Worten, Fnac or El Corte Inglés.

11.3 EVOLUTION OF CORPORATE DEVELOPMENT

Corporate development of LEGO® was not stable over time, and it accompanied the natural life cycle of the industry.

Internal development started in the introduction phase with the LEGO® bricks.

During the growth stage, LEGO® made use of transactions partnerships to increase market share in different countries, through local distributors and retailers. Over this period, LEGO's sales and profits grew steadily but modestly as the firm focused primarily on its building sets with just a few variations, including castle and space themed toys.

However, in 1993, sales started to slow as the Chinese industries started manufacturing similar toys at reduced cost. LEGO® added more toys to its product line, some partnerships as MIT in 1998, but did not sell more items overall not being able to increase revenues.

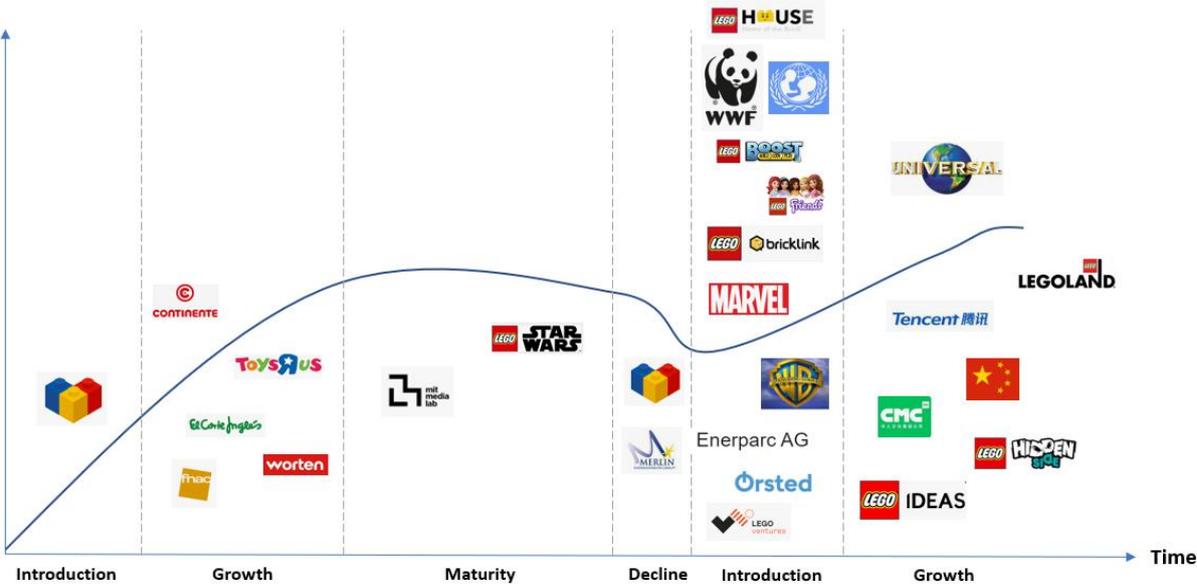
These challenges made LEGO® invest in brand partnerships as with Star Wars that was actually one of the few reasons why LEGO® survived, but still was not enough to avoid the declining stage between 1999 and 2004.

With Jorgen Vig Knudstorp taking the role of CEO, the company sold 70% stake of Legoland theme parks to Merlin Entertainment (nowadays the Kirk family holds 50% of Merlin Entertainment and is part of their strategic growth). During the decline period, Jorgen Vig Knudstorp focused the LEGO® business towards the plastic bricks. Any innovation had to prove to be consistent with the company goal of LEGO being recognized as the best company for family products.¹¹⁵

In the second introduction phase, LEGO® invested in technology and innovation through different alliances, mainly in R&D, licensing/franchising alliances and equity participation. This allowed LEGO® to increase their portfolio and focus on core strategic goals such as sustainability.

By making use of its strong introduction after the 2000's crisis, LEGO® gain enough experience (and money) to grow and invest in its internalization and diversification through joint ventures in China and joint R&D partners, increasing their sales and presence worldwide.

¹¹⁵ <https://knowledge.wharton.upenn.edu/article/innovation-almost-bankrupted-lego-until-it-rebuilt-with-a-better-blueprint/>



12 PLANNING

12.1 ORGANIZATIONAL STRUCTURE

LEGO® **organizational structure** reflects the relations that connects all activities of the company and can be analyzed taking into consideration the formalization, centralization and complexity of the organization.

LEGO® does not have a strict list of management procedures which have brought them to where they are today, but over time LEGO® became a robust and structured business organization increasing the **formalization** level inside the company.¹¹⁶

In addition, by being a family-owned family, LEGO® still keeps a certain type of **centralization** but at the same time their corporate culture is becoming more open, trustful and based on their company's core values: Creativity, Imagination, Fun, Learning, Quality & Care, which are reflected in everything they do.¹¹⁷

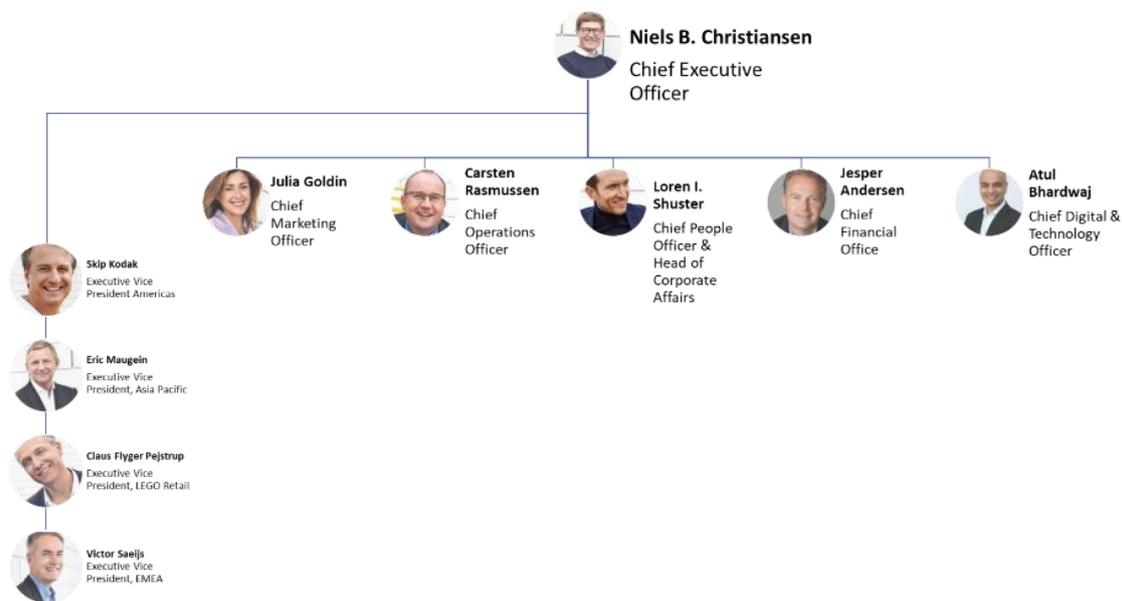


Figure 10: Management board

LEGO® consist of 5 functional areas organized in a **matrix macrostructure** according with the flowchart in Figure 10. The company has different departments to which they have delegated

¹¹⁶ <https://www.ukessays.com/essays/commerce/structure-and-culture-ikea-and-LEGO-commerce-essay.php>

¹¹⁷ <https://inside.6q.io/company-culture-example-LEGO/>

people to, and heads of that department according to the function. At the same time, they have executive vice presidents responsible for different markets, namely Americas, Asia and EMEA, showing LEGO®'s orientation for the medium and long run by decentralizing the decision-making processes. This matrix structure allows LEGO® to plan and execute worldwide initiatives, expanding the offer and executing rapidly, while adapting to local realities.

12.2 STRATEGIC AND OPERATIONAL PLANNING

LEGO® operations are key to its long-term strategy. Its restructuring in 2017 and digital investments since 2018 demonstrate how LEGO® adapts its operational planning in order to meet their internalization and digitalization strategies.

LEGO®'s strategic and operational planning can be considered **formal and top down**, as the decisions are leaders' responsibility and communicated to their employees. However, during the last 3 years, they are moving towards a **mix planning strategy** where top-down/bottom up planning is being stimulated with internal initiatives as the "Play Week".¹¹⁸

Both strategic and operational planning of LEGO® are being conceived towards sustainability and value creation, not only considering environment but also children and people.

The **strategic plan** of LEGO® can be analyzed with more detail by cross-referencing the modes of managerial development with the strategic dimension. In the table below (table 1) we can estimate the importance of the different initiatives for LEGO®'s development:

	Products- Markets	Vertical Integration	Internationalization	Diversification	Total
Internal development	8%	5%	2%	0%	15%
External development	0%	0%	0%	5%	5%
– Acquisition and Fusions					
External development	5%	0%	25%	15%	45%

¹¹⁸ <https://www.LEGO.com/pt-pt/aboutus/news/2020/june/virtual-play-week/>

– Strategic alliances

External development	12%	0%	18%	5%	35%
----------------------	-----	----	-----	----	-----

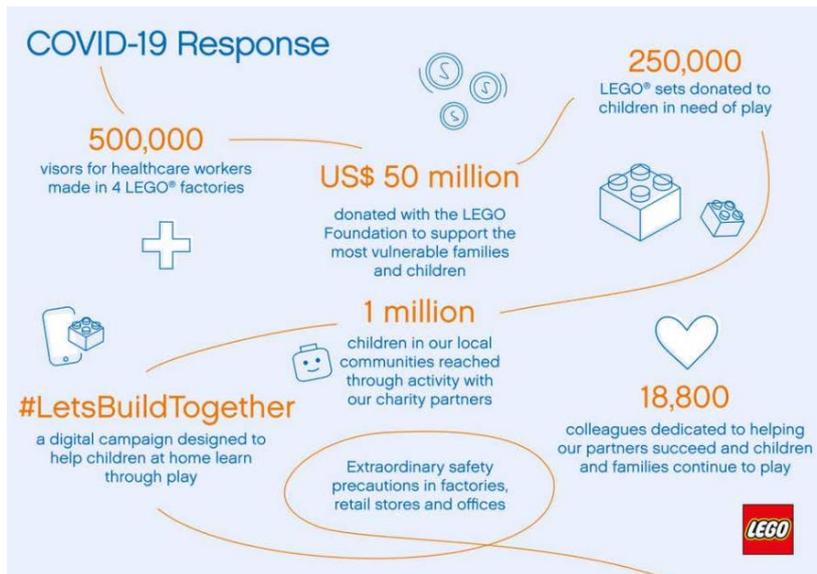
– Transactions

Table 1: Analysis of Sustainable value creation

12.312.4 PLANNING UNDER UNCERTAINTY

Before the new **coronavirus pandemic**, LEGO® was already expecting growth considering their long-term investments in e-commerce and innovation, but the demand for LEGO® products increased in the first half of 2020 considerably. Consumer sales grew 14% in the first half of 2020 compared with the first half of 2019, revenue grew 7% to DKK 15.7 billion compared with the same period in 2019, operating profit grew 11% to DKK 3.9 billion while investing in significant long-term growth initiatives.¹¹⁹

During the first half of 2020, LEGO® continued to invest in long-term growth initiatives to reach more children around the world and to increase market share on toys markets. Christiansen said: “Many of the major trends shaping our industry, such as



digitalization and e-commerce, are accelerating as a result of the pandemic. We saw strong growth in digital and traditional play, a rapid shift to e-commerce and the importance of having a truly global operating model”.¹²⁰

¹¹⁹ <https://www.LEGO.com/en-us/aboutus/news/2020/september/interim-results/>

¹²⁰ <https://www.LEGO.com/en-us/aboutus/news/2020/september/interim-results/>

LEGO® sees potential in an **omnichannel model**, where digital is allied to retail stores to continue creating physical brand experiences for shoppers and fans. The trend is expected to remain in place post-COVID19, with more consumers staying with digital shopping platforms as an option.¹²¹

One of the most critical aspects on LEGO® business is their supply chain. While expansion presents an opportunity for LEGO® to further scale operations and improve brand perception, it does not address the storm of unfulfilled demand and supply chain inefficiencies as different sets of bricks need different products, and they cannot be released if one type of brick is missing.¹²²

LEGO® is predicting that by 2032, 90% of the world's two billion children will live outside Europe and North America, with more than three quarters of these living in Eastern Asia, so their strategic planning involves the development of these markets.¹²³ Although potential short- to mid-term setbacks due to COVID-19, long-term expansion of middle and upper income in these markets, especially China, remains the leading contributor with growth in both traditional toys and video games.¹²⁴

During 2021, the **uncertainty plan is medium-low**, as although we do not exactly know how the COVID pandemic will evolve, we know that it will remain, and companies should be prepared.

The future is a **restrictive** set of alternative directions, and LEGO® should prepare a **technocratic planning** in order to increase flexibility and company competitiveness while identifying the future tendencies with the new coronavirus pandemic in mind. We were not able to find strategic reports for 2021 yet, but as of our analysis we consider that supply chain is the most critical part of the business and LEGO® should have **contingency plans** considering the possibility of any factory to close due to national legislation. LEGO® faced shortages on some products for the American market as the Mexican factory, the main manufacturing plant that supplies America, needed to close due to the new coronavirus lockdown.¹²⁵

¹²¹ [file:///C:/Users/u042688/Downloads/Toys and Games Global Industry Overview.pdf](file:///C:/Users/u042688/Downloads/Toys%20and%20Games%20Global%20Industry%20Overview.pdf)

¹²² <https://iveybusinessreview.ca/5757/LEGO-restructuring-brick-brick/>

¹²³ [https://www.LEGO.com/cdn/cs/aboutus/assets/blt55a9aaa4253b2fa5/Annual Report 2019 ENG.pdf.pdf](https://www.LEGO.com/cdn/cs/aboutus/assets/blt55a9aaa4253b2fa5/Annual_Report_2019_ENG.pdf.pdf)

¹²⁴ [file:///C:/Users/u042688/Downloads/Toys and Games Global Industry Overview.pdf](file:///C:/Users/u042688/Downloads/Toys%20and%20Games%20Global%20Industry%20Overview.pdf)

¹²⁵ <https://time.com/5888877/LEGO-ceo-niels-christiansen-play-covid-19/>

12.3.1 12.4.1 Planning with Scenarios

To better plan the future under uncertainty, LEGO® should set different **scenarios** to assess alternative views of the future, guiding the company along the decision-making process.

As of our analysis, we consider that the most important goals of LEGO® for the future are their presence and growth in China, sustainability, and digitalization towards innovation, so we assessed how different variabilities can affect LEGO®’s long-term strategy.

China

The key issue for LEGO®’s entrance into the Chinese market is their growth in sales in the world’s second largest economy, where the toys and game markets is projected to generate an additional USD18 billion in sales until 2024. However, LEGO® is aware that they need to bridge cultural divides to gain market share in China, and that this is dependent on the Chinese government laws and reinforcements. The different planning scenarios for LEGO® on the business growth in China are:

Scenario 1 - Investment: On the scenario that LEGO® is capable of increase market share in China, increase sales, and the toy market is competitive with low government impositions and/or restrictions, LEGO® should keep and even increase the investment in this market.

Critical elements Key issues	Low Government restrictions	High Government restrictions
High Sales	 <p>Scenario 1 Investment</p>	 <p>Scenario 2 External dependency</p>
Low Sales	 <p>Scenario 3 Maintenance</p>	 <p>Scenario 4 Disinvestment</p>

Scenario 2 – External dependency: If although the high government restrictions the company increase its sales, LEGO® should keep the business but study the external implications carefully.

Scenario 3 – Maintenance: If, on the opposite to scenario 2, the sales are not reaching the expected and LEGO® is not growing its market share, but the market is not highly controlled, LEGO® should keep and maintain de business until the point where they start having losses.

Scenario 4 – Disinvestment: If sales are low and government impose several restrictions, LEGO® should disinvest in the market and keep the strategic markets.

Main implications of possible scenarios in China:

Considering the four scenarios above, the main implications for LEGO® are:

- Increase/decrease **retail stores** that impacts the number of people that LEGO needs to hire and manage. LEGO® needs to be ready to provide training to people onboarding LEGO and understand how to retain talent on this highly competitive market. The expansion and maintenance scenarios lead to an increase on the LEGO® Chinese operations structure.
- Investments in **culture-relevant products**, LEGO® has sharply identified that in China it needed to increase their brand awareness and develop the emotional connection with the brand, therefore one of the key aspects of the strategy to develop this Market is the development of products specific for the Chinese culture, LEGO® must be able to continue to develop their expertise and know-how on this market in order to be able to innovate and launch new products. In the opposite scenario, where LEGO® must disinvest in China, they will need to quickly shift **product design and production** towards different geographies culture such as India or Middle East.
- Governmental and Social Relationships, LEGO® has been investing in initiatives such as Summer Camp or partnering with Save the Children China in order to **create value for the Chinese society**, further development of this type of initiatives is crucial also to increase LEGO® relevancy with Chinese Government. On the other hand, LEGO® needs to manage carefully the **supply chain partners in China** guaranteeing compliance with LEGO Responsible Business Principles in order to protect the brand.

Sustainability

The second key issue for LEGO® long-term strategy is sustainability, as LEGO® is defining clear goals towards circular economies, usage of recycled and sustainable materials and reducing the CO2 gas emission into the atmosphere. However, the biggest constrain when using sustainable materials is that by being dependent of natural and bio raw materials, they are highly dependent of market fluctuation and shortages. Taking this important variable into consideration for our assessment on different scenarios, we concluded that:

Scenario 1 – New world: When there is no shortage of sustainable raw material in the environment and LEGO® is capable to incorporate those materials into their products, they will be able to achieve their sustainable goals and a new world comes into the toys market

Scenario 2 – Managing expectations: Although LEGO® can be able to switch their products towards sustainable materials and processes, the constant and sufficient supply of the market is highly

dependent of the raw material available in the environment. As of so, if the raw material are not sufficient to supply the market, the LEGO® should manage their expectations and change their strategy as, for example, vertically control of the process integrating the production of the raw materials or incorporating sustainable materials only in certain products/collections.

Critical elements Key issues	Sustainable raw materials available	Shortage of sustainable raw material
Sustainable materials	 <p>Scenario 1 New world</p>	 <p>Scenario 2 Managing expectations</p>
Non-sustainable materials	 <p>Scenario 3 Investment</p>	 <p>Scenario 4 Back to basic</p>

Scenario 3 – Investment: If the raw materials are constant and sufficient to supply the market but LEGO® is not able to produce sustainable products, then LEGO® should assess the business and invest in I&D and production, allowing them to change from non-sustainable to sustainable products

Scenario 4 – Back to basic: If, on the contrary to scenario 1, LEGO® don't have the expertise and capacity to use sustainable materials in their products and at the same time the sustainable raw materials are scarce in the environment, then LEGO® will need to keep producing the plastic bricks and toys, not being able to reach their goal.

Main implications of possible scenarios regarding Sustainability:

On the topic of Sustainability, the key implications for LEGO® are:

- **Innovation, safety and Security.** LEGO® must continue to investment in R&D to enable production from sustainable materials from multiple sources of raw materials, reducing risk of exposure to a single source and partnering with players that innovate on sustainable materials. This impacts LEGO® factories, partnerships and supply chain.
- **Production:** Bricks are highly dependent on plastic, as LEGO® does not want the consumer to notice any difference with new materials, new pieces must have the same physical properties as the old ones in terms of strength, colour and sticking power, in order to remain compatible with older pieces. While this can be seen as differenced value for customers it can also be a major future limitation. The future of LEGO® highly depends on their sustainability strategy as consumers are more and more concern with the environment. LEGO must also have a clear communication strategy with the audience in order to show

their progress, as if their sustainability efforts don't comply with public expectations, LEGO can be completely forced to rethink the materials that can be used on the brick or face brick extinction.

Digitalization

The long-term strategy of LEGO® is closely linked to its capacity to incorporate digital in its products as children have increasingly easy access to digital devices and are therefore moving away from traditional forms of games. However, a big concern to LEGO® is the safety of children when using their products. As digitalization is one of the main growth goals of LEGO® for the upcoming years, it is important to assess how the digital safety environment can affect LEGO®'s strategy:

Scenario 1 – New World: If LEGO® can assure digital safety and at the same time develop digital interactions, then they are on track to reach their digitalization strategy

Scenario 2 – Investment in safety: On the hypothesis of LEGO® being able to generate and incorporate digital on their learning

experience but not able to secure children's data confidentiality, then LEGO® should invest in safety data platforms and partnerships to improve the safety of their online/digital products, allowing to change from scenario 2 to 1.

Scenario 3 – Investment in digital: Considering the scenario where LEGO® is capable to assure the digital safety of the children using their products/applications, if LEGO® is not capable of adapting their products towards digital they should invest on resources or partnerships to develop digital experiments.

Scenario 4 – Back to basic: If, however, LEGO® do not have the right digital tools allied to lack of digital safety, then they should go back to non-digital products so that the brand is not associated with children data leaks and scandals.

Critical elements Key issues	Children's safety Assured	Children's safety compromised
Digital products	Scenario 1 New world	Scenario 2 Investment in safety
Non-digital products	Scenario 3 Investment in digital	Scenario 4 Back to basic

Main implications of possible scenarios regarding Digitalization:

- LEGO must design learning through experiences that are **safe for kids on the Digital World**, as pointed out before, digital safety is a key factor that will determine LEGO success or failure on the Digitalization path.
- For LEGO this means that they need to **invest on developing competences on Gaming and Online Safety**, that can be achieved via vertical integration models. Digitalization also impacts how design must evolve in order to continue increase the potential of fluid play.

13 IMPLEMENTATION

So far, strategic and macrostructure analysis of LEGO® company have been completed. In this chapter, the focus will be on the evaluation of the alignment of microstructure and processes with the existing macrostructure and on the relevance of both to the achievement of company's strategic goals.

13.1 DEPARTMENTAL STRUCTURE

Throughout the times, the LEGO® company macrostructure evolved from a simple family-owned structure to a more functional departmental structure that steel allowed them to have strong owner relevance while allowing for specialized decisions to be done at each department and finally moved to a matrix structure that provided the means to adapt functions to the specifics of each market, contributing to the internationalization success of the company.

LEGO® departmental structure and interdepartmental relations reflect the practices the company implements to pursue the strategic goals presented in the previous chapters. These structures and practices can be analyzed taking into consideration the microstructures put in place, their relevance to the integration of the departments and the desired degree of change that is expected from them.

Although current LEGO® macrostructure consists of 5 functional areas organized in a matrix with the executive vice presidents responsible for each different geography, the company has different departments to which they have delegated people to, and heads of that departments according to their function. To guarantee global company alignment and promote innovation, continuous development and integration of the existing processes, the company uses different types of microstructures that range from Liaison Groups, Joint Units and in some strategic situations Independent Teams.

Figure 11¹²⁶ represents some examples of the microstructures the company uses to split its innovation efforts into eight distinct types, from product development to business model innovation. It divides responsibility for them across four areas of the firm: the functional groups, the Concept Lab, Product and Marketing Development, and a unit called Community, Education,

¹²⁶ Innovating a Turnaround at LEGO, in: Harvard Business Review. (Harvard Business Review, September 2009)

and Direct. The areas' expected innovativeness ranges from incremental (“low”) to groundbreaking (“high”).



Figure 11 - Innovation microstructures

“Product and Marketing Development” (PMD) are Liaison Groups created to develop/innovate existing products, conceive advertises or packaging and ideate on new potential releases.

“Functional Groups” are Joint Units built to improve processes and these can be Light or Heavily integrated based on the level of change they will require from the organization. Strategic changes require more empowerment and are often put in place with leadership with more power that the departmental one.

“Community, Education and Direct” (CED) is a good example of a heavy joint unit that has the autonomy to change retail chain and develop experience based on direct customer feedback and suggestions.

The late 2000’s decade “Concept LAB”, equivalent to today’s “Creative Play LAB” (CPL) is the perfect example of and Independent Team built with the single purpose of trying new solutions/ideas/processes with the knowledge of what currently exists but without the influence of each department objectives and culture. For that they operate in a different building. LEGO® Hidden Side¹²⁷ and LEGO® Forma¹²⁸ are two examples of product variations built through CPL activities.

¹²⁷ <https://www.lego.com/en-us/aboutus/news/2019/february/lego-group-introduces-lego-hidden-side/>

¹²⁸ <https://www.lego.com/en-lt/aboutus/news/2019/october/lego-forma>

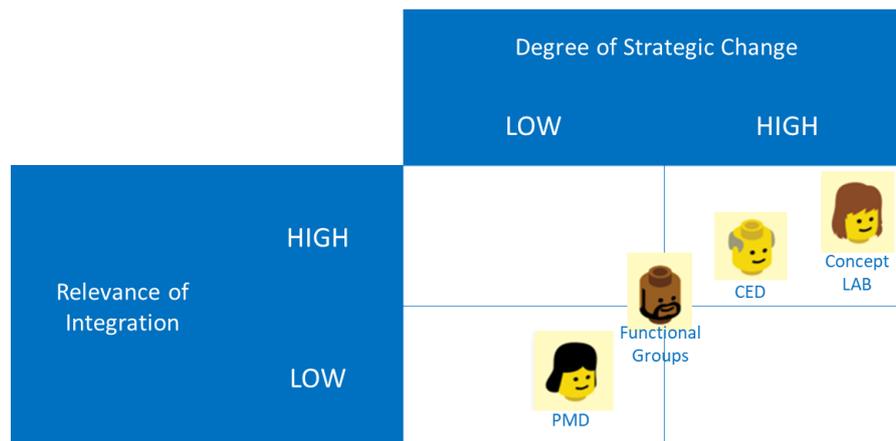


Figure 11 - Microstructure positioning in Change vs Integration

The range of microstructures used by LEGO®'s management is quite well aligned with their older formal and top-down structure and the newer strategy where top-down/bottom up planning is being stimulated with internal initiatives. Under current management it should be expected that more bottom-up initiatives are used, allowing innovation and broader employee involvement in the strategic decision process.

13.2 FUNCTIONAL MANAGEMENT

Sustainable value is the main goal of interdepartmental projects and transversal initiatives. In each department of each functional area, the strategic goal is efficiency and performance. LEGO®'s macrostructure consists of 5 functional areas:

- Marketing
- Operations
- People & Corporate Affairs
- Finance
- Digital & Technology

Sales Management is geographical with each Regional VP defining local market strategy. There are 3 regional VPs (Americas, Asia Pacific and EMEA) and one VP for LEGO-branded Retail and online e-commerce.

LEGO®'s functional structure is an adaptation of the regular 6 roles, detailed next, that companies use to group their activities, and this different division is mostly related with the individual skills and experiences of the management team.

13.2.1 Human Resources

The Human Resource Management is one of the responsibilities of the People & Corporate Affairs.

The company has clear policies towards Diverse & Inclusion and making LEGO® a great place to work to unleash the power of the people. Lifelong learning and career development solutions plan are part of the organization sustainability strategy as well as initiatives for employees and their families (for instance, Health, financial, security and work-life benefits such as Summer Camp).

The People & Culture¹²⁹ policy published in 2017 is a good example of the values of the company and the will for overall continuous development. It clearly describes the LEGO® Group Way with goals for Fairness, Performance, Accountability, Development, and Improvement.

One interesting fact about LEGO®'s hiring strategy is that potential employees are **invited to play** in/with the organization. This is well fitted with the company's Vision of Learning-through-Play and the desire that every worker is a fan of the brand and incorporates the Mission when joining the "LEGO® family".

13.2.2 Research and Development

Research and Development is part of the LEGO® culture and every employee, partner, customer, fan is invited to contribute to the continuous innovation of LEGO®'s products and processes.

Marketing team is responsible for developing the product portfolio and experience through research and insights, licensing, partnerships, and the LEGO® Group's in-house creative agency.

Digital & Technology direction is responsible for new technology integration in the digital transformation of the products. Production related technological research is part of Operations.

13.2.3 Operations

The Operations division is responsible for all aspects of the company's manufacturing, supply chain, quality, procurement, and corporate facilities.

13.2.4 Marketing & Sales

These roles are divided between the Marketing division and the three Regional Sales executive directions and the Retail and E-commerce Direction. While Marketing addresses global campaigns and advertising initiatives, regional directors oversee sales and marketing in their own regions.

¹²⁹ <https://www.lego.com/cdn/cs/aboutus/assets/blt33c4cda4ab9c3307/ENG-People-and-Culture-Policy.pdf>

13.2.5 Finance

LEGO® Group's finance team includes strategic financial planning and reporting, business partnering, audit, tax and treasury. The company's legal, compliance and risk management, strategy and transformation as well as remaining business services teams are also under the finance division coordination.

13.2.6 Information Systems

Digital Information is managed by the Marketing division and Internal IT Services are part of the Finance Division which enforces the corporate security measures. Although LEGO® has a Digital & Technology division it is dedicated to new product creation and not with corporate governance services.

Since LEGO® has its own R&D growing in the Digital area it is wise to keep data security and data privacy policies management and enforcement segregated from the R&D management.

13.3 PROCESS MANAGEMENT

Every successful manufacturing company needs excellent production process with continuous improvement tactics in place. Since the early years, efficient production lines have been a priority for LEGO®'s differentiation.

With production and packaging centralized in few facilities, excellence in all the supply chain is mandatory to LEGO®'s performance.

The Danish family owned manufacturer has gone through huge changes in the last 15 years when it comes to Supply Chain Management (SCM). They are innovative and are constantly changing their product line due to shifting trends and demands. That makes LEGO® interesting and especially because they rely a lot on good and efficient SCM, which the former CEO and now executive chairman, Jørgen Vig Knudstorp has emphasized: “The supply chain is a company’s circulation system and you have to fix it to keep the blood flowing”. In many cases companies look at SCM as many different processes (which it of course is) – but LEGO has stressed out the importance of seeing all the supply chain as a whole mass that is connected together.

The first step is to order plastic from the suppliers to produce the LEGO® bricks. The second step is molding of the LEGO® bricks from raw materials. The third step is the packaging process where the bricks are decorated and packed. The fourth step is the shipping process where the products are shipped from the plants to the distribution centers. The fifth step is to distribute from distribution center to the retail stores. Finally, the sixth step is the retail purchase where the end customers purchase the LEGO® products.

The molding and packaging processes take place on LEGO®'s facilities, which includes plants in China, Czech Republic, Denmark, Hungary, and Mexico. The largest markets for LEGO® are the European and the North American. The plant in Prague is mainly used for distribution center to serve the European market. On the other hand, the plant in Mexico is strategically placed there to serve the huge North American market but it also gives excellent opportunities to reach for the Latin American.

Since the crisis of 2004, mostly LEAN methods have been used to reduce costs and increase quality and efficiency. By reducing the number of factories and centralizing packaging and distribution, LEGO® successfully reduced distribution costs and increased quality by reducing and improving relations with suppliers and carrier partners. No waste policy in the production line, along with

supply chain restrictions shared with the designers allowed LEGO® to be, today, the most profitable payer in the toy's brick market.

Not all processes are suited for LEAN methodologies. Creativity and Innovation processes are typically the opposite and require full reengineering to achieve greater performance leaps.

Creative Play Lab's processes are that of agile iteration cycles using SCRUM, where prototypes are created and evaluated quickly to learn whether it makes sense to continue work. If the answer is yes, the cycles gradually grow longer as more and more hypotheses are verified and prototypes become more complex and teams grow. At some point, they are piloted at small scale and, if successful, handed off to a production team to turn into a "real" product. In general, the shortest projects last 2 weeks, while the project I worked on the longest lasted 1 year.¹³⁰

Even inside supply chain LEGO®, in the end of twentieth century, created a modular approach to their production lines that allows them to change their facilities and production lines to better meet demand at each moment in time. The factory consists of independent modules to which others can be added as the need arises.¹³¹

Another good example of the disruptive reengineering that LEGO® constantly evaluates is the Bright Bricks success with Convergent Modelling solutions. Bright Bricks is the subsidiary of the LEGO® Group that is responsible for creating the lavish models which populate the company's LEGOLAND theme parks. With this technology they were able to reduce a task that took at least two weeks to a current performance of less than two days.¹³²

13.4 PROJECT MANAGEMENT

While good processes are fundamental for all that is repetitive and/or standard, good project management practices are needed for all activities that are unique, ensuring that deviations to plan are detected and corrected and that decision making is done timely and accurately to avoid time waste or unnecessary costs.

As already mentioned before, innovation and creativity activities are unique projects that require specific methodologies to increase success rate or decrease cost of unsuccessful attempts. As already mentioned, LEGO® uses SCRUM and AGILE methodologies in their Creative Play Lab as a way to

¹³⁰ <https://simonwiscombe.com/cpl.html>

¹³¹ <https://www.lego.com/en-us/lego-history/molding-factories-in-billund-b127e2c119594fd2bf41ad663ddc3bd6>

¹³² <https://connectedmanufacturing.wbresearch.com/blog/legos-efficient-convergent-modelling-manufacturing-process-strategy>

quickly prototype ideas and evaluate if they are eligible to further development. These are excellent techniques when time is scarce, and uncertainty of result is high. When uncertainty reduces, after decision to develop an idea further, and efficiency of execution is needed, ITIL and waterfall approaches are better suited to track progress of the project through its lifetime.

For process optimization and or transformation, as already mentioned, LEGO® used Lean methodologies around the integration of all its supply chain. This is typically a top-down approach to incremental improvement, but LEGO® did complement it with some Kaizen characteristics, incorporating feedback and suggestions from all the stakeholders in the full supply chain.

14 CONTROL

14.1 ORGANIZATIONAL STRUCTURE

The LEGO®, the holding and investment company of the Kirk Kristiansen family and the LEGO® Foundation (25%), a corporate foundation that shares the mission with the LEGO® group: inspire and develop the builders of tomorrow.¹³³



An active and engaged ownership is about being guardians of how the Kirk Kristiansen family enterprises do business. To ensure a continued active and engaged family ownership, the Kirk Kristiansen family decided that in each generation one person should be taking the role as the most active owner. The most active owner will, on behalf of the whole family, be close to the LEGO® Group, the LEGO® Foundation, LEGO® Education and KIRKBI. The family agreed that Thomas Kirk Kristiansen should assume this role in the fourth generation. Furthermore, the family agreed that all owners in each generation are engaged and responsible shareholders as well as ambassadors and culture carriers of the family's core values. All owners are engaged in different ways in the business of the LEGO® Group, KIRKBI and the associated foundations – acting as members of the Board or undertaking representative duties.

Smooth handover between 3rd and 4th generation - In 2016, Kjeld Kirk Kristiansen and Thomas Kirk Kristiansen took the first steps in the smooth handover between the 3rd and 4th generation as they swapped roles in the Board of Directors in LEGO® A/S where Thomas Kirk Kristiansen became deputy chairman and Kjeld Kirk Kristiansen became an ordinary board member. On the board of the LEGO® Foundation,



Thomas Kirk Kristiansen became chairman and Kjeld Kirk Kristiansen deputy chairman. Kjeld Kirk Kristiansen continues to be the chairman of the board of KIRKBI A/S.

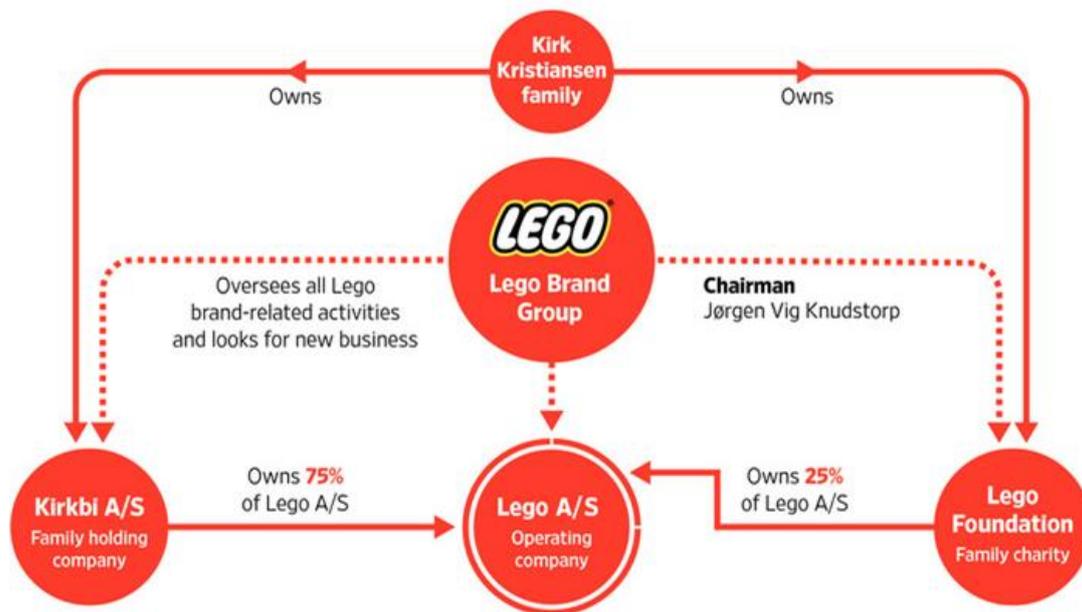
¹³³ <https://www.LEGO.com/en-us/aboutus/LEGO-group/ownership/>

In 2017, LEGO® Brand Group was established in KIRKBI with the dual purpose of protecting, developing and leveraging the full potential of the LEGO® brand and to ensure active and engaged family ownership of the LEGO® branded entities through generations.

LEGO® is undertaking the biggest Organizational shake-up in its 84-year history, in a move aimed at exploiting its toy brand more broadly after a decade of strong growth for the maker of plastic bricks.

Mr Knudstorp is also be chairman of a new entity, called the LEGO® Brand Group, which is being set up to allow private family shareholders to become more active owners and have more say on the boards of LEGO®-related businesses. His deputy chairman will be Thomas Kirk Kristiansen, the great-grandson of LEGO®’s founder.

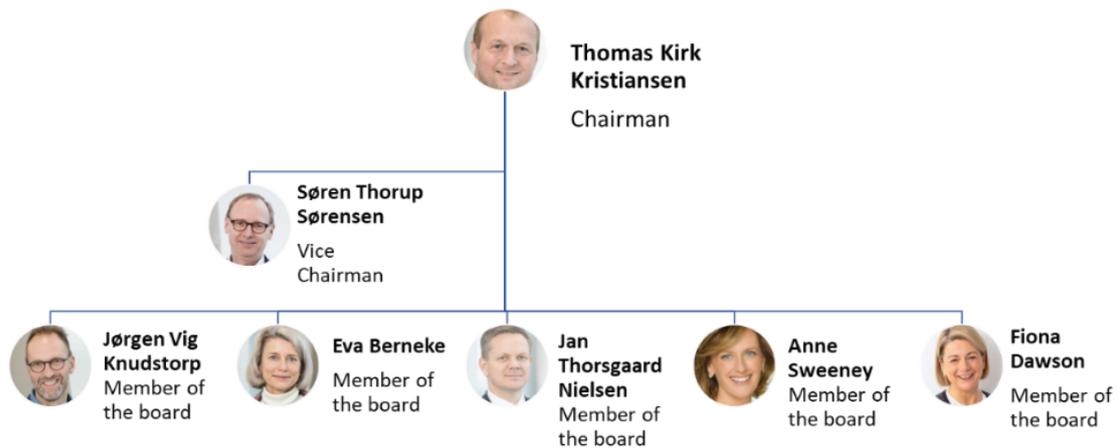
These changes come at a pivotal time, as LEGO®’s founding family moves into its fourth generation and the company takes stock after increasing its revenues fivefold since 2004 to become the world’s most profitable toymaker.



14.1.1 Board of Directors and Executive Leadership Team

LEGO® began in the early 1930’s by a gentleman named Ole Kirk Kristiansen and till date kept with the family, passed on by generation to the next generation. LEGO® has been named twice the “toy of the century” and has maintained the toy, the building brick. The organizational structure that LEGO® uses which best suits them is the functional structure, this structure is most widely

used by companies. Basically, the company has different departments to which they have delegated people to, and heads of that department according to the function. Some of these departments are Sales, Accounts, product development etc. Using this structure allows them to show the pyramid of hierarchy. It gives a clear view of the organizational chart and who are at the highest rank. LEGO® being based in so many countries uses a divisional structure which consists of three segments, and these are market, product and geographical. Further development of the



organizational structure is highlighted in chapter 12 Planning of this document.

The board of directors is constituted of a diverse number of people with different background and industry experience. The latest new entrants - Fiona Dawson has worked for family-owned Mars, Incorporated for over thirty years. In her current role she sits on the Mars, Incorporated Leadership team and is Global President for Mars Foods' portfolio of household brands, the various Multi-Segment markets in Mars, Incorporated, and the Global Customers. Additionally, Anne Sweeney became a member of the LEGO® A/S Board of Directors in April 2020. Anne is a member of the Board of Directors at Netflix, the Board of Trustees at the Mayo Clinic, and a Deans Distinguished Fellow at the Harvard University Graduate School of Education. Prior to embarking on a new chapter in the entertainment industry in 2015, Anne was co-chair, Disney Media Networks, and president, Disney/ABC Television Group, which includes The Walt Disney Company's global entertainment and news television properties, owned television stations group, as well as radio and publishing businesses.

14.1.2 Board of Directors and Executive Leadership Team

As LEGO® was growing, how did LEGO® stop complexity creeping in? How did you keep things less bureaucratic?

LEGO® tried to overcome by organizing in quite an unusual way. LEGO® has almost a circular structure. Instead of having a typical executive committee, the CEO meets on a monthly basis with a group of 20 senior vice presidents. It's quite a flat management structure that allows the company to have tentacles quite far into the operating business, and, at the same time, to get that broad group of leaders aligned around central execution matters, such as what are the financial estimate and targets, what is the demand plan, what are the supply capacities, and which customers are we putting priority on.

Those types of operating questions get resolved in this central group. It's cumbersome to bring 25 people together in a room or at a video conference, but if you really manage the material and the process well, you achieve huge speed advantages.

LEGO®'s colorful toy blocks have proved resilient to the rise of digital devices which is battering the traditional toy industry, but the company has also been adept at using different channels to engage with children. The group has allowed partners to develop branded video games, a Hollywood blockbuster, television shows and theme parks. The company has grown over the years but has always remained owned by the family of creator Ole Kirk Kristiansen since its founding in 1932.

The LEGO® Group maintains the importance of having a strong and competent board of directors, especially because of family-ownership. To support this, the company elects a chairman among independent board members to ensure professional board management. This process is regulated via: ensuring a diverse and complementary board composition; regular board self-assessments; competitive compensation; and clear & specific rules mandated for each management body.

14.2 BALANCED SCORECARD

Using a balance scorecard to evaluate company results makes it possible to reconcile four different and complementary perspectives, usually not considered together, in an integrated model – the four perspectives are:

- Customer Perspective
- Learning and Growth perspective

- Internal Process perspective
- Financial Perspective

Analyzing LEGO reports from 2019, it is clear this an approach that has been followed by the company – with some adaptations. The tables below represent LEGO main indicators on each perspective, taken from its 2019 reports (Annual report and Sustainability report) along with the target and results reached in 2019, and the target defined for 2020.

Customer Perspective			
Indicator	2019 Target	2019 Result	2020 Target
Net Promoter Score (a global loyalty metric that asks children and shoppers their likelihood of recommending LEGO products and experiences)	>= 70	72,1	>= 70
Product recalls (number)	0	0	0
Children reached by Local Community Engagement activities	>=1,100,000	1,859,601	>= 2,000,000

Internal Processes Perspective			
Indicator	2019 Target	2019 Result	2020 Target
Waste (ton)	Not disclosed	18,270	Not disclosed
Recycled Waste (%)	>= 93	93	>= 94
Waste efficiency improvement (%)	>= 0	0.5	2
Energy consumption (GWh)	Not disclosed	340	Not disclosed
Carbon efficiency improvement (%)	>= 1	0.1	10
Water consumption (thousands of m ³)	Not disclosed	712	Not disclosed

Learning and Growth Perspective

Indicator	2019 Target	2019 Result	2020 Target
Motivation and satisfaction of employees (score – points above external benchmark)	>= 10	0.9	Top in class (benchmarking changed)
Injury rate with absence	<= 1.3	0.9	<= 1.2
Females appointed and recruited (%)	>= 40	43	>= 40
Business integrity training (% of employees at director level and above)	100	100	100
Suppliers audited (%)	100	100	100
Suppliers with no non-conformities to LEGO code of conduct that require immediate attention (%)	>= 70	69	>= 70
Employees engaged in Local Community Engagement activities	>= 3,000	3,168	>= 3,300

Financial Perspective

Indicator	2019 Target	2019 Result	2020 Target
Revenue (billion DKK)	Not disclosed	38.5	Not disclosed
Operating Profit (billion DKK)	Not disclosed	10.8	Not disclosed
Revenue growth YoY (%)	Not disclosed	6	Not disclosed
Cash flow from operations (billion DKK)	Not disclosed	9.6	Not disclosed
Return on capital invested (%)	Not disclosed	69	Not disclosed

14.3 REWARD

LEGO Group has in place an annual Performance Management Program (PMP) by which the performance of the more than 18,000 employees is assessed. The program is designed to ensure all employees of the group work towards achieving the LEGO Group's short and long-term objectives. The employees have individual and team targets which are aligned to LEGO Group targets and are awarded a bonus based on performance versus target.

At the same time, each year LEGO employees answer to an employee engagement survey "The LEGO Pulse", from which results the indicator "Motivation and satisfaction of employees" on previous section is calculated.

These two annual assessments (Performance Management Program and LEGO Pulse) are a way of the company to give feedback and direction to employees and vice-versa. These act as Control mechanisms, as well as tools for the company and its people as a whole to grow and advance into the desired direction.

15 CONCLUSIONS & OUTLOOK

LEGO®'s objective is to “inspire and develop the builders of tomorrow”, and all products are based on the underlying philosophy of learning and development – through play. It is the LEGO philosophy that “good quality play” enriches a child’s life – and lays the foundations for later adult life.

Global toy and games producers are facing a changing world - Digitalization and Environmental concerns pose interesting challenges to the future. The main challenges for Toys and Games makers are related with Ecology, Supply chain, Digitalization and Counterfeiting. Throughout the years LEGO® did show successful strategies to deal with Supply chain and Counterfeiting. Ecology and Digitalization are challenges that still need to be addresses and present lots of uncertainty. The main Key Success factors for LEGO® are Brand Recognition, Quality, Innovation and Availability of their products. The company innovation is notable with the introduction of new products every year. Innovation is critical to the success of the LEGO® Group and each year new products make approximately 60% of the portfolio. A high demand for innovation capacity has led to its innovative progress to invest in mechanical and scientific skills. The consistence in quality of their products and marketing efforts has granted LEGO® the reputation and customer’s higher confidence level, which is costly to imitate and takes years to reach. LEGO® reputation creates a competitive advantage that is sustained in comparison to competitors. Extremely efficient production with a carefully maintained supply chain and distribution partnership allows LEGO® to achieve their goals in terms of product availability.

Digitalization is influencing how children play and the LEGO® Group has stepped up investment to understand the intersection between digital and physical play and create new products to meet these changing needs. R&D activities include developing new technologies to enable learning through play; trend spotting; anthropological studies; and collaborating with educational institutions to deepen our understanding of children’s development. LEGO® Ventures was created to invest in the future of learning, creativity, and play. LEGO® Ventures aims to work with entrepreneurs, ideas, and startups centered around playful learning, which includes industries like gaming, adaptive education, and virtual reality. LEGO® Education have been working with teachers and educational specialists to deliver playful learning experiences that bring subjects to life in the classroom and make learning fun and impactful. LEGO® has a wide range of physical and digital

educational resources that encourage students to think creatively, reason systematically and release their potential to shape their own future.

To address the Digitalization challenge, LEGO® built partnerships with specialized companies and created groups that allow them to be a more agile company and keep up with the constantly movements on the digital world. One can conclude that LEGO®'s digital endeavors are not new and have been evolving along time, showing the company has been able to diversify its range of products in these new digital markets and to follow the trends and behaviors of its customers. However, considering it is competing with players that already have a huge a range of technology and digital products, it only has a medium competitive force in this product category. It is important that LEGO continues to make great partnerships with key player and stakeholders in the market, since core competencies for this new business are not yet mastered within the organization. Strategic Outsourcing is best fit to situations where the company is not be able to perform the activity with a clear competitive advantage but where a simple market purchase strategy involves strategic risk.

Besides investing in technology, LEGO® is also investing in longer-term initiatives to strengthen their portfolio, making it more diverse, while also touching more passion points across different ages. LEGO® has always been strong in their core products, namely the construction sets. Nevertheless, the company has been following the most attractive segments and categories of the market, such as the licensed sets in the beginning of the 21st century and, more recently the digital trends. Addressing the adult segment is strategic for LEGO® to keep sales volume with their more traditional portfolio.

The Ecology challenge is perhaps the most difficult one for this giant player in the plastic bricks industry. LEGO® soon understood its fragility and the relevance of communicating a strong will to change into more sustainable eco-friendly products and practices. Production waste and supply-chain structure have been the focus of their ecological optimization goals while R&D is maintained to find valid substitutes to their plastic raw materials. These goals and recurrent communications keep brand loyalty of eco-friendly customers that keep their trust by believing on the efforts that are already being done and that better alternatives will be available soon.

The LEGO® Group strategy towards the future is to sustain core commercial and operational momentum delivering annual growth, to create the organization of the future securing strong organizational health, to expand global presence pursuing global stronghold through three regions

of equal proportions and to leverage digitalization utilizing potential in e-commerce, digital communication, augmented reality and digital infrastructure.

The more traditional LEGO® Bricks and their usage in different segments is key to complete the investment in what may be the future of LEGO® products which will most probably be related to the Digital World. The global “connected toys market” size is expected to grow from USD 5.7 billion in 2019 to USD 13.8 billion by 2024, at a Compound Annual Growth Rate (CAGR) of 19.3%. Also, the global video game market size was valued at USD 151.06 billion in 2019 and is expected to grow at a Compound Annual Growth Rate (CAGR) of 12.9% from 2020 to 2027. LEGO® should invest to grow and strengthen leadership focusing efforts on these very competitive markets.

In terms of international expansion LEGO® should continue investing in ASIA, probably adding India to the list taking in consideration also specific opportunities and risks. This expansion would allow them to achieve a quicker return of their investment on facilities in China. They should also consider expanding Chinese partnerships, with partners such as Alibaba, to increase the speed of market penetration.