

The Durability Paradox: LEGO's Billion-Brick Dilemma

MANAGEMENT DECISION

The authors prepared this case solely as a basis for class discussion and not as an endorsement, a source of primary data, or an illustration of effective or ineffective management. Although based on real events and despite occasional references to actual companies, this case is fictitious and any resemblance to actual persons or entities is coincidental.

Action 1: CSR Integration & The Product Take-Back Model

8 October 2019: The Launch of LEGO Replay

In response to the “Durability Paradox” and the mounting global crisis of plastic waste, the LEGO Group launched the LEGO Replay initiative in 2019 as a pilot program in the United States. The primary objective of this strategy is to provide consumers with a safe, accessible way to pass on their unused LEGO bricks, ensuring these highly durable products are reused rather than discarded into landfills. Strategically, LEGO Replay is positioned as a core Corporate Social Responsibility (CSR) activity deeply intertwined with the company’s broader circular economy and sustainability goals. By embracing a product take-back model, LEGO demonstrates a tangible commitment to mitigating the environmental impact of its petroleum-based ABS plastic, actively extending the product lifecycle, and shifting its narrative from simply manufacturing new toys to stewarding the long-term use of existing materials.

“We know people don’t throw away their LEGO bricks. The vast majority hand them down to their children or grandchildren. But others have asked us for a safe way to dispose of or to donate their bricks. With Replay, they have an easy option that’s both sustainable and socially impactful.”¹

The operational mechanism of LEGO Replay is designed to be frictionless for the consumer while relying on strategic partnerships for reverse logistics (see **Exhibit 1**). Consumers collect their loose, unused LEGO bricks and sets, place them in any cardboard box, and print a free shipping label directly from the LEGO Replay website. In the United States, the packages are shipped to Give Back Box, a charity partner specializing in recycling and logistics. Once received, every single brick is sorted, inspected by hand, and subjected to a rigorous cleaning process to ensure it meets strict safety and quality standards. The refurbished bricks are then repackaged and distributed to children in need through educational non-profit partners, such as Teach For America, Boys & Girls Clubs, and First Book. This entire mechanism is only made possible by the extreme durability of the original ABS plastic, which allows the bricks to survive decades of use and rigorous sanitization.

Since its inception, the LEGO Replay strategy has yielded significant social and environmental impacts. Celebrating its fifth anniversary in 2024, the program has successfully collected and redistributed over 300 million individual LEGO bricks, keeping vast amounts of non-biodegradable plastic out of the waste stream. These salvaged materials have been converted into more than 191,000 LEGO Replay boxes, reaching over 10,000 educators and impacting the lives of nearly 400,000 children across all 50 U.S. states. Driven by this success, the company has expanded the strategy internationally, rolling the program out to Canada in 2021 and launching a pilot take-back scheme in the United Kingdom in early 2024.

¹ Tim Brooks (2019), Vice President, Environmental Responsibility at the LEGO Group

Action 2: Strategic Management and Monetizing the Second-Hand Marketplace

November 26th, 2019: Acquisition of the Data Engine

Action: The LEGO Group has officially purchased BrickLink Ltd., which operates the world's largest secondary marketplace for Adult Fans of LEGO (AFOLs). The Executive Board decided to maintain the platform's existing peer-to-peer relationship, so LEGO only has responsibility for the technical architecture of the marketplace, and not for physically sorting, cleaning or dispatching used bricks.

Rationale: The acquisition of BrickLink was an example of management mitigating a threat through acquisition (cannibalization risk). The secondary marketplace had created competition, and hence, acquiring BrickLink provided the executive board with the ultimate data engine (price guide and wanted list). The logic of this decision was also pragmatic: management could outsource the logistical problems associated with physically (re)cycling used bricks to their fan community and, at the same time, build a central repository of market intelligence to determine primary production and ultimately determine the value of their own secondary inventory.

2023 - Current: BrickLink Designer Program and a New Form of Managed Cannibalism

The executive board, rather than merely observing, is now actively utilizing the community data available through BrickLink to its advantage. LEGO has fully integrated the BrickLink Designer Program (BDP) as part of their core strategy, which allows adult fans to submit digital designs that use existing brick molds to create sets. Once completed, the community votes on the best designs, and LEGO will manufacture the winning designs as limited edition, crowdfunded sets directly for their fans.²

This recent intervention by LEGO demonstrates how the board has successfully transitioned from being a victim of the secondary market to one that actively controls this market, referred to as being in a state of managed cannibalism, (see **Exhibit 2**). As illustrated in the chart, LEGO's linear "New Brick" sales remain its primary financial engine, funding costly circular initiatives like LEGO Replay that currently operate as cost centers due to reverse logistics. However, this primary engine faces a growing "Cannibalization Risk" from an uncontrolled shadow market of highly durable used sets, which appreciate aggressively at an average 11% annual return³. To neutralize this threat, LEGO acquired BrickLink to establish a Strategic Control Loop. Functioning as a data engine, BrickLink captures real-time market intelligence via its

² BrickLink, 2025

³ Dobrynskaya and Kishilova, 2022

Price Guide and Wanted List (BrickLink, 2024). LEGO loops this data back to optimize primary production and manage reissues, effectively transforming a cannibalizing digital resale market into a valuation engine that protects and fuels the core business. The rationale for the BDP is financially genius; it has no internal R&D cost, removes all risk of inventory (since the sets are produced through crowdfunded pre-orders), and allows LEGO to legally monetize the creativity of adult fans.

Exhibit 1 LEGO Replay's operational mechanism



Exhibit 2 Financial Reality – How LEGO can manage cannibalization

