

CLOSING CASE

LEGO'S SECRETS

Lego is everywhere. If all the approximately 400 billion colourful interlocking bricks ever produced by Lego were to be divided equally among the world's population, each person would have 86 bricks! *Fortune* magazine half-joked that 'at least ten billion are under sofa cushions and three billion are inside vacuum cleaners'. By itself, a single plastic brick is lifeless. But snap two of them together and suddenly they take on a life of their own and a world of nearly infinite possibilities opens up. Igniting the imagination of millions of children and adults, the little Lego brick has become a universal building block for fostering creativity. Around the world Lego fan clubs abound, often with their own conferences and competitions. 'With the possible exception of Apple, arguably no brand sparks as much cult-like devotion as Lego', noted an expert. What are Lego's secrets?

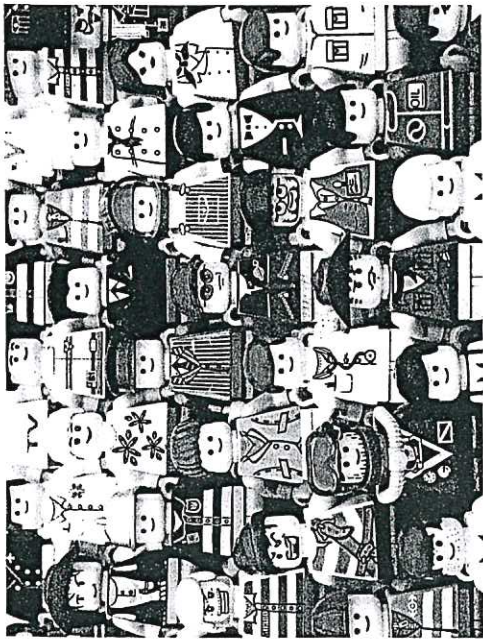
Innovation and experimentation are among the foremost characteristics of Lego. Derived from the Danish *leg godt* ('play well'), Lego was founded in 1932 by Ole Kirk Christiansen, a carpenter from Billund, a rural town in the West of Denmark (where Lego Group is still headquartered). As a firm self-styled 'to stimulate children's imagination and creativity, and 'to nurture the child in each of us', Lego is known for being willing to entertain numerous experiments in order to capture the hearts and minds of its fickle primary customers – kids aged 7 to 16 – as well as the wallets of their parents. Lego started with wooden toys. In 1947, it became the first Danish toymaker to experiment with plastics. Lego tinkered with the brick, and initial efforts were not successful. The bricks snapped together, but could not be separated easily. Lego continued to experiment, eventually hitting a stud-and-tube coupling design that was patented in 1958. When a child snaps two bricks together, they would stick with a click and stay together until the child separated them with an easy tug. Because such bricks would not come apart, kids could build from the ground up, leveraging what Lego continues to call 'clutch power'. Lego's experiment marched on, with numerous hits and also numerous misses over the last five decades.

Another Lego hallmark is insisting on excellence. Coming from the founder, 'only the best is good enough' is a company motto engraved on a plaque that graces the entrance to Lego Group headquarters' cafeteria. The seemingly simple tight fit of two bricks – and their easy separation – calls for extremely precise manufacturing. Since the size of each brick is so tiny, misalignment in the range of a few micrometres can easily create a misfit when bricks are stacked together. Competitors can produce Lego look-alikes that tolerate higher levels of variations, but kids often quickly figure out Lego is the best after playing with competing products for a short while. This is not to say Lego's quality is perfect. It is not, as on average 18 out of one million bricks produced fail to meet Lego's quality standards and have to be tossed.

Lego is also world-famous for generating a system, not merely a product. Long before the days when computer programmes were supposed to be backward compatible (a new version of Windows needs to allow users to open old files), Lego made its bricks backward compatible – new bricks would click with old bricks of the 1950s vintage. As a result, kids (and adults) can mix and match old and new sets and the Lego universe can grow exponentially.

Of course it has not always been plain sailing for Lego. In the 1990s, Lego entered numerous related lines of business, ranging from book publishing to business consulting inspired by children playing. For example, Lego diversified into theme parks known as *Legoland* – first in Billund and later also in Germany and the UK. While these parks were popular among children and their parents, the finances never quite worked out and Lego kept losing money. In 2005, Lego eventually sold its theme parks. In the early 2000s, Lego also produced products like Harry Potter-branded toys under licence to Hollywood film studio Warner Brothers. While this venture was profitable in the short term, it distracted the focus of the company.

After many years of poor performance, Jørgen Vig Knudstorp was brought in as new CEO in 2004. The first question he had to address was: what does the Lego name stand for? A toy brand, or a specific type of toy, or an experience? His team developed the new vision 'to inspire and develop the builders of



tomorrow'. Under Knudstorp's leadership, Lego radically refocused on its core business, the bricks, as an inspiration for creative children – and adults. New product lines, such as 'Lego Friends', built on the age-old idea of using the brick to create new playing and learning experiences.

A more specific problem was the high costs in the primary production sites in Denmark and Switzerland. Lego in 2006 thus offshore outsourced production to Flextronics plants in Hungary and the Czech Republic. Yet Flextronics was unable to deliver the expected quantity and quality of bricks; both Lego and Flextronics had underestimated how difficult it is to manufacture those simple yet very precise bricks. Thus in 2008 Lego bought the Flextronics plants and invested in automation and quality control to ensure that every brick ever sold under the Lego name would easily click together with any other Lego brick.

Under Knudstorp's leadership Lego enjoyed a decade of rapid and profitable growth, with a tripling of employment. This growth defied intense competition in the toy industry and children turning from traditional toys to smartphones and computer games. Yet, in 2017, revenues suddenly dropped by 8% and its

new CEO, Niels B. Christiansen, faced challenging questions. Had the success made the company too complacent to compete in a changing market place? To regain efficiency and flexibility, Lego decided to lay off 1400 of its employees. Yet the bigger challenge, was to reinvigorate the creativity of the Lego organization.