

How Lego Became The Apple Of Toys

After a decade-long slump, Lego has rebuilt itself into a global juggernaut. An exclusive look inside the company's top-secret Future Lab.

BY JONATHAN RINGENLONG READ

Every September, largely unbeknownst to the rest of the company, a group of around 50 Lego employees descends upon Spain's Mediterranean coast, armed with sunblock, huge bins of Lego bricks, and a decade's worth of research into the ways children play. The group, which is called the Future Lab, is the Danish toy giant's secretive and highly ambitious R&D team, charged with inventing entirely new, technologically enhanced "play experiences" for kids all over the world. Or, as Lego Group CEO Jørgen Vig Knudstorp puts it, "It's about discovering what's obviously Lego, but has never been seen before."

On a Tuesday morning, the group is gathered in a book-lined room just off the pool at the Hotel Trias, in a sleepy town called Palamós, where they've met each of the last six years. There are bespectacled dudes in futuristic sneakers, a small cohort of stylish blonde women, and a much larger contingent of techie millennial guys in superhero T-shirts, all filling rows of folding chairs. At the front of the room, Erik Hansen, a tall, professorial member of Future Lab's leadership team, is running through the week's planned activities, which include extensive brainstorm sessions and a field trip to Barcelona (visiting the telecom giant Telefónica and some local design firms). He presents the agenda with a sober, vaguely robotic tone that makes what he does next surprising. As he brings the proceedings to a close, he asks, brightening, "Is everybody feeling awesome?" The team laughs and applauds, Hansen hits play on a laptop and, suddenly, every single member of the Future Lab team joins in with summer-camp enthusiasm to sing a song seared into the memory of everyone who made last year's *The Lego Movie* a \$468 million global hit. On the off chance you aren't one of them, it goes like this:

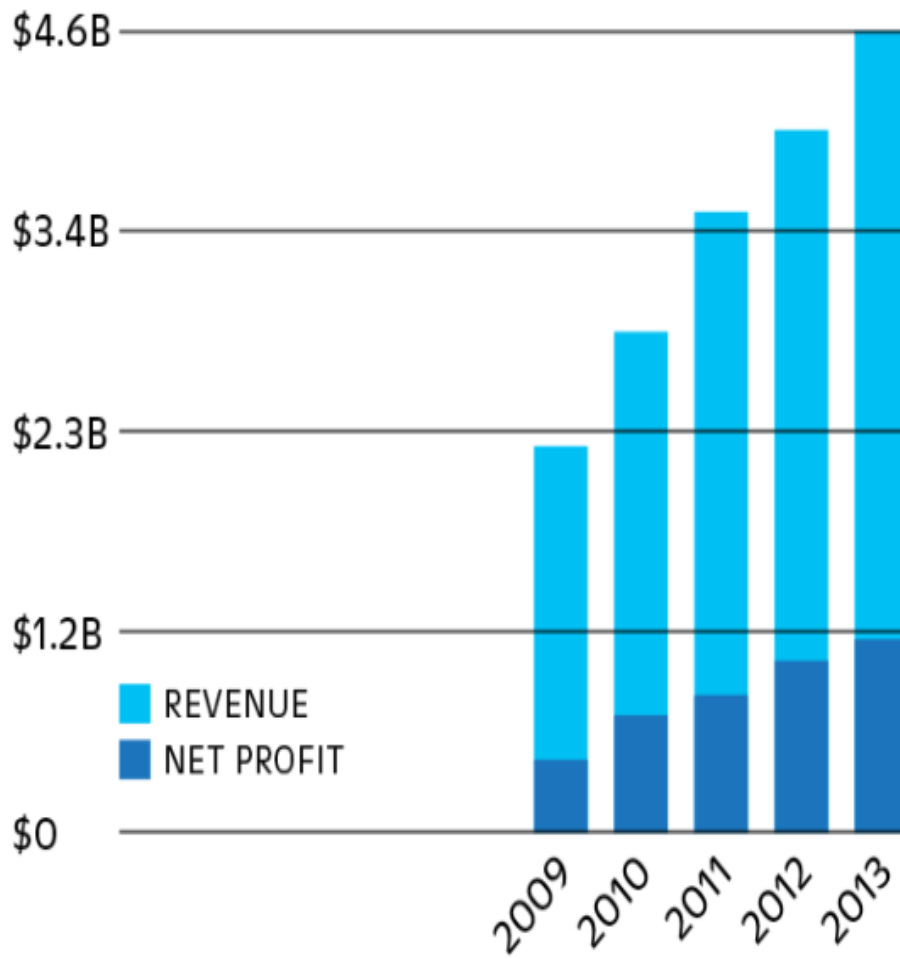
Everything is awesome!
Everything is cool when you're part of a team!
Everything is awesome!
When we're living our dream!

In the movie, the song is used satirically. The Lego people living in a Lego world sing it because they've been brainwashed by an all-powerful corporation to mindlessly—but joyfully—accept a prepackaged set of beliefs and desires, including adamant rule-following. It is, as the film goes on to demonstrate, the opposite of the free-range creativity that's made Lego's toys beloved by kids and their parents for decades, and it's a slightly ironic choice for the meeting today. But taken at face value it's an effective team-building exercise, and the Future Lab can definitely use the boost, because their job is hard.

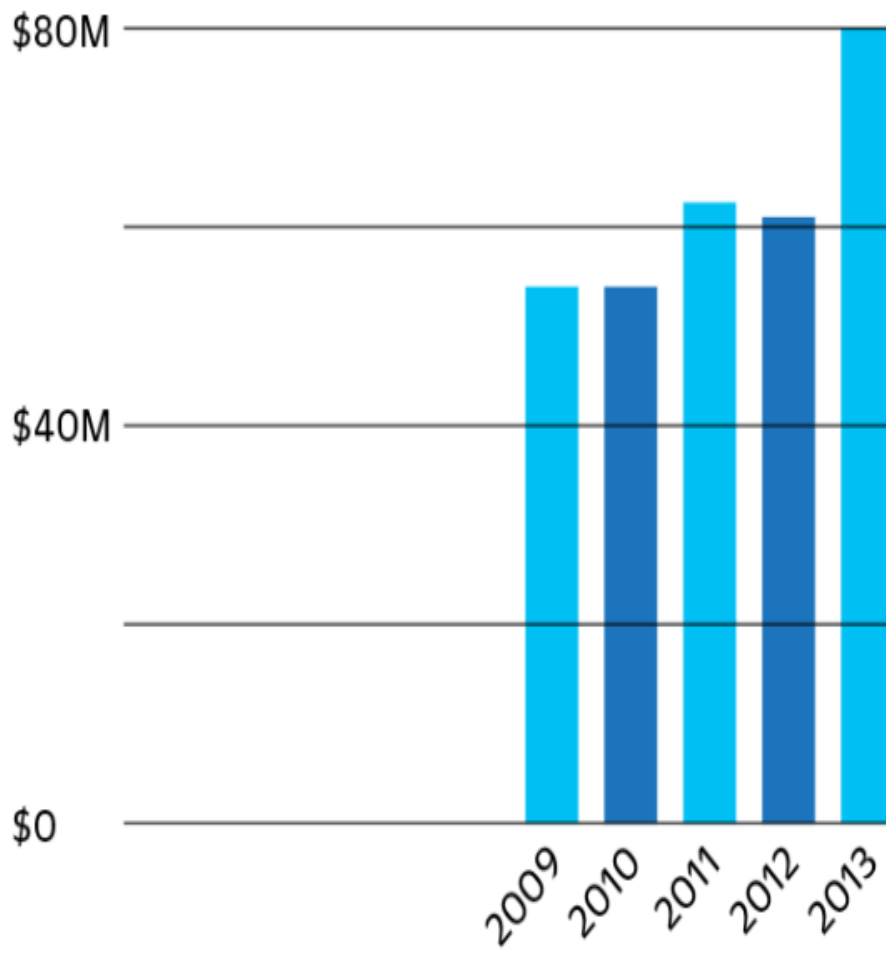
In the last 10 years, Lego has grown into nothing less than the Apple of toys: a profit-generating, design-driven miracle built around premium, intuitive, highly covetable hardware that fans can't get enough of. Last year, fueled in part by *The Lego Movie*'s Pixar-size popularity, the privately held company briefly surged ahead of rival Mattel to become the biggest toy manufacturer in the world, reporting first-half profits of \$273 million on revenue of \$2.03 billion. It's a remarkable achievement, particularly considering that [Mattel](#) makes a huge range of products—including Barbie, Hot Wheels, Fisher-Price, and even the Lego knockoffs Mega Bloks—while Lego mostly sticks to variations on a single toy. The company has recently moved beyond its core markets of Europe and North America with a major push into Asia, where it saw double-digit growth in 2013. A brand-new manufacturing and distribution center in China is being built solely to meet growing demand on that side of the planet. "It's a very simple idea," says Knudstorp. "All bricks are complementary. They all fit together. Which creates a system that you can be endlessly creative in."

How Lego Stacks Up

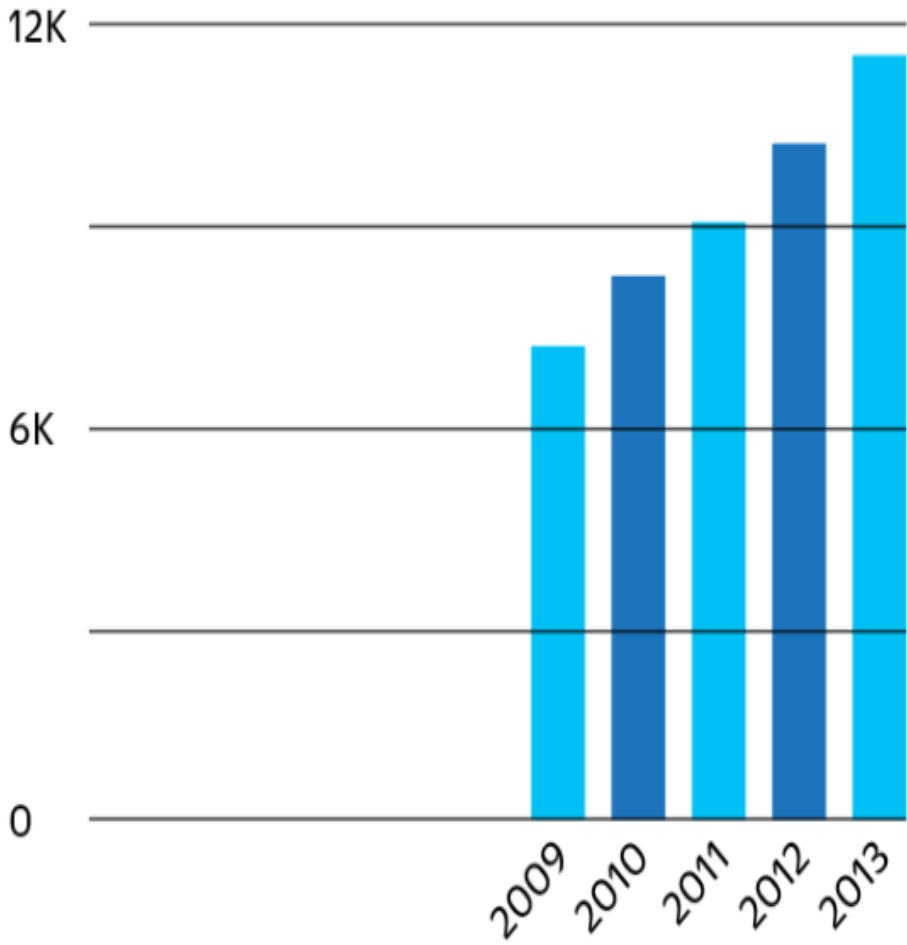
REVENUE & NET PROFIT



R&D EXPENDITURES



FULL-TIME EMPLOYEES



PRODUCTION FACILITIES

1947
DENMARK



2000
CZECH REPUBLIC
(EXPANDING IN 2015)



2008
MEXICO
(EXPANDED IN 2014)



2008
HUNGARY (RELOCATED TO
NEW, BIGGER PLANT IN 2014)



2017*
CHINA



*Estimated (currently under construction)
Source: Lego

Now, as the rest of the company continues to refine its half-century-old mission, making cool, craveworthy helicopters and fire trucks and ninja castles, the Future Lab has to live up to its lofty name and invent Lego's future—in a world where play is increasingly digital.

Which is why the Future Lab relies on this intense week of brainstorming, group meals, and mid-ideation leaps into the pool. It all leads up to a 24-hour hackathon, where small teams—various combinations of industrial designers, interaction designers, programmers, ethnographic researchers, marketers, and even master builders (Lego wizards who can create anything out of bricks, such as George Washington's head or an X-Wing Starfighter)—compete to generate bigger, deeper, more awesome ideas that will be pursued back in Denmark. “We come here because we get the place cheap,” half-jokes Future Lab head Søren Holm, a jovial Lego lifer. “But, really, the team spirit we get? They'll be talking about this trip all year.”

About a decade ago, it looked like Lego might not have much of a future at all. In 2003, the company—based in a tiny Danish village called Billund and owned by the same family that founded it before World War II—was on the verge of bankruptcy, with problems lurking within like tree rot. Faced with growing competition from video games and the Internet, and plagued by an internal fear that Lego was perceived as old-fashioned, the company had been making a series of errors. Day-to-day management had been handed in 1998 to a “turnaround expert” with no toy background who continued to live in Paris, as business writer David C. Robertson outlines in his 2013 Lego history, *Brick by Brick*. There were disastrous detours away from the core experience, including the abysmal morning cartoon Galidor, and experiments with bigger, more macho minifigures with a line called Jack Stone. The company kept opening Legoland theme parks around the world, despite having limited expertise in hospitality. Sales of several of Lego's most successful products, including Lego's *Star Wars* and *Harry Potter* lines, bobbed up and down based on movie release schedules over which Lego had no control. And the company wildly increased the number of products it released each year, resulting in a dreadful 2002 Christmas season, when major retailers ended up with around 40% of their Lego stock unsold.

Enter Jørgen Vig Knudstorp, a deeply process-based thinker—and, not incidentally, a father of four—who arrived from McKinsey & Co. in 2001 and was promoted to CEO three years later, when he was 36. (He took over from Kjeld Kirk Kristiansen, grandson of Lego founder Ole Kirk Christiansen.) Knudstorp points to an expensive venture called Darwin as an example of what Lego had been doing wrong. The project was intended to establish a meticulous digital library of every Lego element, which involved setting up what Robertson, in his book, referred to as “the largest installation of Silicon Graphics supercomputers in Northern Europe.” The main application ended up being an online software tool called Lego Digital Designer, which allowed fans to design their own kits using the digital bricks and receive their custom sets in the mail. The problem was that it lacked any appeal. “We found that most consumers think that's already the whole core experience of Lego—they buy some bricks and they make their own products,” says Knudstorp. “There's no reason for them to design it up front and pay for that. They just want to buy the bricks.”

Knudstorp began turning the company around by making several key moves: improving processes, cutting costs, and managing cash flow. Then came stabilization. “But after

that, we knew there'd be a third phase of organic growth," he says. That required figuring out what a modern Lego should even be, which Knudstorp accomplished in part by investing in a kind of research the company had never done before—deep ethnographic studies of how kids around the world really play. Today, Lego may know as much about that subject as any organization on earth. The Future Lab (along with a similar group that preceded it) has been responsible for that work. "There's the famous quote that if you want to understand how animals live, you don't go to the zoo, you go to the jungle," Knudstorp says. "The Future Lab has really pioneered that within Lego, and it hasn't been a theoretical exercise. It's been a real design-thinking approach to innovation, which we've learned an awful lot from."

This year, the small team inside Future Lab that was in charge of research became part of the company's fast-growing Global Insights team—one of the main ways Future Lab thinking is making its way into the broader company. It's run by Anne Flemmert-Jensen, a former academic with an artsy vibe, reflected today in the leather leggings, long nubby sweater, and asymmetrical necklace she's wearing. Global Insights conducts a lot of its research itself, but also partners with universities around the world and works with big agencies like Ideo. Global Insights is even charged with tracking a wide range of sales data and keeping tabs on what the competition is up to. They know a lot about you and your children, and not all of it is flattering. "There's a clear distinction between American and European parents that keeps popping up everywhere," Flemmert-Jensen says. "American parents don't like play experiences where they have to step in and help their kids a lot. They want their kids to be able to play by themselves. We see among European parents, it's okay to sit on the floor and spend time with the kids." (Asked if it's possible that American parents just want their kids to be independent, she responds, somewhat dubiously, "That's one of many possible interpretations.")

The Friends line "has been very, very successful," CEO Knudstorp says. It's caught on with girls in markets from China to Germany to the U.S."

In 2011, Lego acted on some of its research by launching a major effort to attract girls to the brand with a line called Lego Friends. Lots of girls already enjoyed Lego toys, but there wasn't a play theme—Lego-speak for a top-level category, like Lego City or *Star Wars*, which can cost hundreds of millions of dollars to launch—designed for them. For the pink- and purple-accented Friends, the original marketing commitment alone was \$40 million, and while it attracted some criticism for kits including the Heartlake Shopping Mall and a juice bar, there's also a news van and a farm stand and several sets devoted to the curvy, long-haired characters rescuing endangered animals in a jungle. And it reveals some interesting Lego insights about play. For one, boys tend to be more compelled by a strong narrative—which is reflected in Lego's popular boy-focused lines like Ninjago and Legends of Chima, which come with almost comically detailed backstories. Girls, on the other hand, tend to use their sets for role-play. (Both boys and girls love the building aspect of Lego.) In any case, Friends, according to Knudstorp, has been a major hit. "It's very, very successful," he says. "It caught on with girls in markets from China to Germany to the U.S. And it continues to grow very strongly for us."

Friends, like Ninjago and Chima—and *The Lego Movie* and its coming sequel—represents the company's increasing reliance on its own intellectual property. Licensing deals still flourish, Knudstorp says, "but they contribute no more of our business than

about a third,” he adds. “They’re on a list of about 10 things that drive the growth of the company.”

What’s Lego’s ultimate goal? Is it growth for growth’s sake? As a privately held company, Lego has no need to demonstrate anything to markets or shareholders. According to Knudstorp, he only has to worry about “the shareholder”—Christiansen’s heirs—who have two official objectives: that Lego continue to create innovative play experiences and reach more children every year. “They are not pushing us very hard on the financial target,” he insists. “What they like about, say, Lego Friends is that we’re engaging more children. They see growth as one testimony of whether we’re sufficiently innovative.”

Eight years ago, a Chicago architect named Adam Reed Tucker, who had been building impressive Lego models of iconic buildings, reached out to Lego, suggesting that the company might be interested in making official kits similar to his homemade creations. “Doing anything that wasn’t for the target group, which was boys between, say, 5 and 11, used to be almost a complete no-go,” says David Gram, Future Lab’s head of marketing and business development. But a free-thinking Norwegian Lego exec named Paal Smith-Meyer—Holm admiringly describes him as “a true rebel”—saw value in AFOLs (Adult Fans of Lego) and came up with a stealthy, shoestring plan to prove their worth to the company. It came in the form of a counteroffer—which would help usher in the current era of innovation at Lego.

“We told him to do it,” Gram says. “We provided him with the bricks and he sat in his kitchen in his two-bedroom flat, doing the first 200 boxes of the Sears Tower and the Hancock tower.” In 2007, the homemade sets that would go on to become the wildly popular Lego Architecture line appeared in some local shops, and not only did they sell, they sold for way more money than a kids’ kit with the same number of pieces would have, because Lego could charge grown-up prices. “Seventy dollars instead of 30!” Gram adds. “That proved the case.”



David Gram runs marketing and business development for Lego's Future Lab
PHOTO: NIKOLAJ MØLLER

In 2011, Lego rolled out another innovation, which it had been testing under the name Lego Cuusoo in Japan since 2008: the crowdsourcing site Lego Ideas, where superfans can submit suggestions for sets, other fans vote, and Lego produces limited editions of the best and most popular (such as *Back to the Future*'s DeLorean and the *Ghostbusters* Ectomobile, which are now widely marketed). "Kids aren't buying those," Gram points out. "They don't know what those things are." Surprisingly, even a year ago management still wasn't entirely comfortable with the idea. "They were saying, 'This is something we don't know about—it's very gimmicky.'" And now? "I can't tell you the numbers, but it performed well," Gram says. "Like really well!" He laughs happily. "And it's now being looked upon as something that could be a serious thing for the company going forward."

In addition to learning about who is playing with their products, Lego is learning about how. Future Lab research has shown that kids no longer make meaningful distinctions between digital play, like Minecraft, and physical play, like snapping together a Nindroid MechDragon (a half-robot, half-pterodactyl ninja nemesis, obviously) out of Legos. It's the basis of Future Lab's ongoing brief, called "One Reality," which

emphasizes novel hybrid digital-physical Lego experiences that typically involve playing with a set of bricks alongside a piece of software running on a phone, tablet, or computer.

Late last summer, Lego quietly debuted a Future Lab pilot project called Lego Fusion, limited to North American Toys “R” Us stores and Lego’s own retail outlets. There were four versions, at \$34.99 each: Town Master, Battle Towers, Create & Race, and Resort Designer. The play experience is similar for each—a kid builds a model of a house or castle, takes a photo of it with a tablet, and watches his or her creation become part of a virtual world inside an accompanying app.

The Future Lab offers “a real design-thinking approach to innovation, which we’ve learned an awful lot from,” says Knudstorp.

Kids and parents seem intrigued, and Fusion Town Master ended up on last year’s Toys “R” Us list of the 15 hottest Christmas toys (which some Future Lab staff seemed to believe had as much to do with Lego’s relationship with the retailer, and the exclusivity deal, as with its actual popularity). But even its creators admit that Fusion was at best a 1.0 version of a digital-physical play experience. “Maybe a 0.9,” says Gram with a grin. The thing is, it’s just not that cool yet. In Town Master, for instance, kids don’t build a 3-D house—they use a handful of special bricks to make a flattened outline of a house, which only becomes fully 3-D when it appears in the app. “With Fusion we created one type of play,” he continues. “Right now it’s very based on, ‘You build a model, you scan it into a game.’ I think we’ll see other patterns.”

There’s an old *Simpsons* episode where Bart visits *Mad* magazine and is disappointed to discover it’s just a boring old office—until he ducks his head in the door one more time and catches Alfred E. Neuman and the gang in a state of total pandemonium. Visiting Billund, the town Lego built, is a little like that. Only 6,194 people live here—the population balloons each weekday morning when Lego’s 4,000-some employees arrive. (There’s so little to do in Billund at night that a large percentage of employees lives more than 50 miles away in the closest major city, Aarhus.) Nestled near the Lego campus are a few small businesses, an uninviting modernist church, some low-slung office buildings, and, in an almost surreal testament to the founding family’s wealth and influence, Denmark’s second-largest airport.

But if you’re lucky, you might just get a taste of some Willy Wonka-esque magic. For one, you’ll likely stay in the Hotel Legoland, possibly in a room with—for better or worse—a pirate or princess theme and boxes of bricks you can play with after you raid the minibar. (The hotel is attached to Lego’s original theme park, which the company sold a majority share of, along with three other outposts, to a British company called Merlin in 2005.) Just up the road is the primary administration building, with a bright yellow lobby designed to resemble the world’s biggest 2×4 brick and a massive logo behind the reception desk, built from 12,500 minifigures.

Walk just a little farther and you’ll hit the main campus—a cluster of buildings that has grown around a stately old home sporting a pair of lions out front. The house is Lego’s most holy site, built in 1932 by the company’s founder, Ole Kirk Christiansen, when he set up shop in Billund as a carpenter. When demand for furniture tanked during the Great Depression, he began making wooden toys, such as ducks and tractors and yo-

yos. He called the company Lego—a contraction of the Danish phrase leg godt (which translates to “play well”)—in 1934.

The entire saga, from wooden ducks through recent near-bankruptcy and beyond, is told in a charming private museum called Idea House, which winds its way through Christiansen’s old home. It’s open to staff seeking inspiration, retailers, and other VIP visitors, and includes an archive of almost every Lego kit ever made, stored in climate-controlled basement stacks. ([Fans who want a similarly immersive adventure will have to wait until next year, when the Lego House “experience center” opens around the corner.](#)) Alone in a hallway is a piece of 1940s-era tech: an injection-molding machine that would change the way kids play forever. In 1945, Christiansen met with a supplier of these machines and quickly recognized their potential for producing colorful objects in virtually any shape. Amazingly, he didn’t actually come up with the idea for the bricks himself. The supplier had several examples of things one could make—including a plastic stacking brick that a British company called Kiddicraft already had on the market. Intrigued, Christiansen pocketed one for further study. Deciding there was potential, he purchased one of the machines, redesigned the brick, and, in 1949, released his own version, calling them Automatic Binding Bricks. If you somehow came across one of those first Lego sets, you’d be pleased to discover they’re compatible with all the billions of bricks that have followed.

Even if Christiansen couldn’t take credit for the idea, he did come up with the key twist that makes Legos so satisfying. Bricks in early sets had the studs on top, so they’d stack neatly, but were hollow underneath, so models had a frustrating tendency to fall apart. He experimented with his stud-and-tube solution until it had precisely the right amount of “clutch power,” which is Lego-speak for the perfect, patented amount of stick—tight enough to build models that can sustain rowdy play, but loose enough that they can be easily pried apart. Except for a material swap in 1963 to the shiny, hard ABS plastic still used today, the basic bricks have never changed.

But almost everything else has, starting with the introduction of the preschool-focused Duplo in 1969 and minifigures in 1978. The best way to get a sense of the variety of the current Lego portfolio—which includes approximately 3,000 unique elements in more than 50 color options—is to see them all in one place. Innovation House, an airy, open-atrium building (complete with an interior slide) where most of the designers work, has a public-library-size room where designers can grab any element they need, like 2x4s in every color and hundreds of tiny Darth Vader heads. If a project requires a piece that doesn’t currently exist, a prototyping workshop can whip it up. (Future Lab head Holm remembers having to hand-draw schematics and send them off for fabrication. Now the process happens at the push of a button.) New elements aren’t added to the portfolio lightly, though, because it costs as much as \$250,000 to make a new mold, and all new elements must first be vetted by the Model Committee.

The Future Lab’s headquarters are in an aging two-story yellow-brick building across the plaza, intentionally separate from the other design groups. “One thing I’ve learned is how important it is to protect yourself as a team,” says Holm. “We have a tendency to work on experiences that are far away from what Lego does today. The perception can be like, ‘Come on, guys, that can never work.’ And it’s so easy to kill an

idea.” Entrance requires several swipes of an ID card, and only the staff assigned to the group and a handful of the most senior management have access. It’s a clandestine place within a generally close-to-the-vest company, with one former designer comparing the Lab to working for the CIA. (Even staffers’ spouses have no idea what their partners spend their days working on.)

On a gray October afternoon, Future Lab’s head of design, Ditte Bruun Pedersen, is sipping a cup of herbal tea in a common area in Innovation House. A trained architect with cropped, Tintin-ish blond hair, she ranges from analytical to enthusiastic—a very Lego personality. (Holm describes her as “positive, energetic, and with a fantastic skill set—she knows beneath her skin what’s Lego and what’s not.”) Before she took on her current management role, Pedersen was the design lead on the Fusion project and knows as much about it as anyone in the company. It turns out there are many challenges raised by the prospect of physical-meets-digital play. For one, it’s not necessarily an intuitive experience for kids, so the flow between setting down the bricks and picking up the tablet (or vice versa) has to be carefully choreographed. It’s also crucial that neither the brick set nor the digital component feels tacked on, which turns out to be especially hard to get right. “We were very focused on making sure it feels balanced,” she says. “We had some experiences where we were like, ‘There’s something wrong here,’ and it turned out to be that the Lego had been diminished into a key that unlocked the digital play. Where’s the fun in that?”



Before Ditte Bruun Pedersen took on her current management role, she was the design lead on the Fusion project and knows as much about it as anyone in the company. PHOTO: NIKOLAJ MØLLER

Pedersen recently returned from a trip to Boston, where she spent time with kids who had been living with Fusion for a while. (These children weren't given the sets as part of a focus group—their parents actually went to a store, saw them on the shelf and decided to buy a set.) She'd observed some interesting things. For one, it oddly never occurred to anyone in Future Lab that the tablets kids would have access to might have covers on them, which, it turns out, changes the way a child is most likely to hold the device, making it hard to take the photo at the correct angle. It's a major, frustrating impediment to flow. They'd also discovered that one set, Create & Race, wasn't nearly as satisfying an experience as they had expected it to be. Almost all the fun turned out to be in the app, leaving parents wondering why they had shelled out for a box of bricks. By November that set had been discontinued.

Five years ago, Lego would never have considered a pilot product like Fusion, Gram says. There would have been too many concerns that a subpar product might tarnish the brand's reputation for quality. (One example of how thoroughly quality is policed:

Every brick is encoded with a tiny number so that if a defective one were to leave the plant, Lego could track it back to the machine that made it—one of thousands the company has around the world—to determine what went wrong.)

Some within the company still bear scars from pricey learning experiences including Lego Universe, a failed World of Warcraft clone that was discontinued in 2012, a little more than a year after its introduction. But that’s also one of the reasons for creating a division like Future Lab, which lives inside of a metaphorical walled garden—where mistakes can be made relatively cheaply and lots can be learned. “It’s led us to some extremely interesting concepts, even though 90% or more have never launched,” says Knudstorp. “But when you do such an exploration you become a lot more clever about everything from different business models to ways of developing a meaningful play experience. And you become wiser about the things you actually do launch.”



“The team spirit we get? They’ll be talking about this trip all year,” says **Søren Holm**, head of Future Lab. PHOTO: NIKOLAJ MØLLER

Back in Spain, Future Lab's whiz kids have been divided into eight teams for the hackathon. The bulk of the group is Danish and American—Lego's official work language is English—but employees also hail from Chile, India, the U.K., Thailand, and elsewhere. Almost all are young, at least slightly nerdy, and in possession of an advanced degree in design, technology, or business management. Holm, who joined Lego in his early twenties as a model builder without any real work experience (and went on to create some of the company's biggest hits, including the early-2000s craze Bionicle), admits he probably wouldn't be qualified for a design job in Future Lab now. "The technical requirements have changed so much," he says. "There isn't as much place for what in Danish we call *ole opfinder*." He searches for the word in English, and sounds a little wistful when he finds it. "You'd probably say 'inventors.'"

At their disposal are bins of Lego bricks, laptops loaded with animation software, a preschool's worth of arts-and-crafts supplies, pro-quality [digital cameras](#), and, for [energy](#), endless plates of gummi candy and other sugary snacks. (A real treat, because sugar is banned on the Lego campus, except in coffee.) An inspiration wall features long shelves loaded with hot new gadgets and competitors' products, including [Oculus Rift](#) virtual-reality gear and a tablet accessory they admire so much they ask for it not to be mentioned. "It's a small startup and things would go crazy for them," says Gram.

When the teams present their ideas to leadership the following day, they are strikingly polished. They range from way cooler Fusion-ish toys to [Internet-of-Things](#)-style experiences—and a couple feel like they could go directly into development. Which they may well have by now, joining at least four projects that are currently making their way through various parts of the Future Lab's system.

In February, the Future Lab will be bringing out a second product: Portal Racers, a free, entirely digital game with a hovercraft theme, designed to work with a new 3-D laptop camera from Intel called RealSense (which the processor giant has just started to roll out on new computers). The camera, which can track users' body movements, allows for new Kinect-like ways of interacting with a computer, which the game harnesses. The original idea was to have kids build their own hovercrafts out of bricks and scan them into the game, Fusion-style, but unless Portal Racers somehow becomes a huge success, Gram says it will remain a digital-only experience. And while it certainly looks fun in the video they have of kids testing it, it will be a much more modest launch than Fusion. It seems to be as much about Future Lab getting to understand a new technology as about creating an awesome game for kids.

Which will be increasingly valuable information. During one of the final presentations in Palamós, a young designer mentions that no matter how well Lego sets are selling, their research shows that kids are spending less and less time playing with them every year, that other pleasures are pulling them away. Gram is sure that's one Future Lab message the rest of the company has heard loud and clear: Experimentation "is something we can't afford not to do."

BRICKS, BOTS, AND BEYOND



A guide to Lego's most experimental projects.

“It’s a classical skunk-works approach,” says Lego CEO Jørgen Vig Knudstorp of Future Lab and its predecessor groups, which have been charged with developing entirely new play experiences (that often end up reaching the market in controlled trial runs). “It’s a small area of the company that operates a little outside the rules,” he says, yet one that delivers vital information.

1. LEGO MINDSTORMS

Launched: 1998 (Worldwide)

Lego's robotics platform, created with [MIT's Media Lab](#), gave the Future Lab some of its key DNA. It was the company's first hybrid digitalphysical experience, and was the first time adult fans were brought into the design process. (Lego realized that its most hard-core users knew more about programming toys than they did.)

2. LEGO ARCHITECTURE

Launched: 2007 (Chicago); 2009 (Worldwide)

Now a global hit helping fans build models of nearly 20 buildings, Lego Architecture started in the most grassroots way possible: Lego employees, without management approval, provided bricks to an architect in Chicago, and he created replicas of the Sears and Hancock towers—hundreds of them.

3. LEGO IDEAS

Launched: 2008 (Japan); 2011 (Worldwide)

Fans vote on new-kit ideas submitted by amateur designers. Anything with more than 10,000 votes goes to a review phase, and Lego decides which get made. So far, the process has created more than 10 limited-availability kits, including a model lab staffed by female scientists and the Big Bang Theory apartment.

4. LEGO GAMES

Launched: 2009 (England and Germany); 2010 (Worldwide)

The line began with 20 board games, including Lava Dragon and Pirate Code, and combined traditional game play with Lego bricks. Future Lab's Ditte Bruun Pedersen came up with the idea of Lego Dice, which snap together and can be configured in different ways depending on the game. The line was discontinued in 2013.

5. LIFE OF GEORGE

Launched: 2011 (U.S.); 2012 (Worldwide)

The puzzle game, targeted at families, combines a special set of bricks with a smartphone app. Part of the experience involves importing shapes built with the bricks into the app via the phone's camera. It marked a breakthrough for the company in blending physical and digital play, which has become the Future Lab's primary focus.

6. FUSION

Launched: 2013 (U.S. Toys "R" Us and Lego Stores)

An evolution of Life of George, Fusion's three kits (Town Master, Battle Towers, and Resort Designer) provide a similar interactive experience: users build something with the included bricks and scan it with a camera into a tablet game. Future Lab is studying how kids play with the toy to try to improve the experience.