Blasting the classic LEGO brick into the digital age

Faced with decreasing brand relevance and a lack of credibility in the digital world, the LEGO Company ventured into the global market place to blast the classic LEGO brick into the digital age. Experience how the LEGO Company used an untraditional marketing approach to revitalize the LEGO brand and launch MINDSTORMS globally telling the story about The Intelligent Brick in more than 80 countries reaching in excess of one billion people without advertising spending.

Unfolding the potential for global storytelling

After more than 14 years of research and development, the LEGO Company and MIT were ready to announce the arrival of a new interactive product - MINDSTORMS. Competing against five agencies including one of New York's leading communication agencies - Porter Novelli - SIGMA won the pitch to launch the product worldwide.

"The LEGO Group has had a long lasting dream to combine the creative qualities of LEGO bricks and our basic LEGO values with the power of computers. Now we are able to put the LEGO universe into the computer and the computer into the LEGO brick."

Kjeld Kirk Kristiansen, President and CEO, the LEGO Company

To evaluate the potential and to develop the launch strategy SIGMA presented the MINDSTORMS product description to journalists, scientists, parents, children and the trade. The interest was overwhelming pointing in the direction of an entirely new category of computer-based toys and a story of global news interest. In an industry increasingly characterized by passive entertainment of children, television and violent computer games, media, trade and parents welcomed the introduction of a product that combined the pedagogical qualities of the LEGO brand and the popular computer.

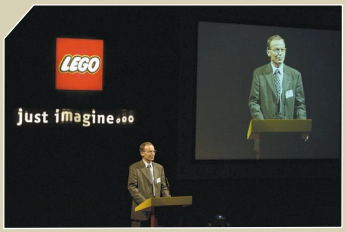
"Non-commercial" activities create synergy to "commercial" activities

The launch objectives included the positioning a new product category and the revitalization of the LEGO brand; strengthening relevance and getting LEGO back on the "talking list", selling MINDSTORMS boxes and using MINDSTORMS to sell the traditional product range. How was this done?

LEGO MINDSTORMS™

Global introduction
of LEGO MINDSTORMS

First, leading – and non-commercial - opinion leaders outside the toy industry, i.e. IT/ learning experts, were sought to rubber stamp the principles behind the Mindstorms learning concept and the technology developed at MIT – without actually mentioning the products. During November 1997, almost one year before the products would be available in-store, print & web media kits and a video news release (VNR) were distributed to the global press creating high expectations for a new and interactive product technology enabling kids to become better at learning to learn. In this way SIGMA created a solid foundation for the commercial launch: Trade, media and consumers knew that something revolutionary was about to be introduced by the LEGO Company.

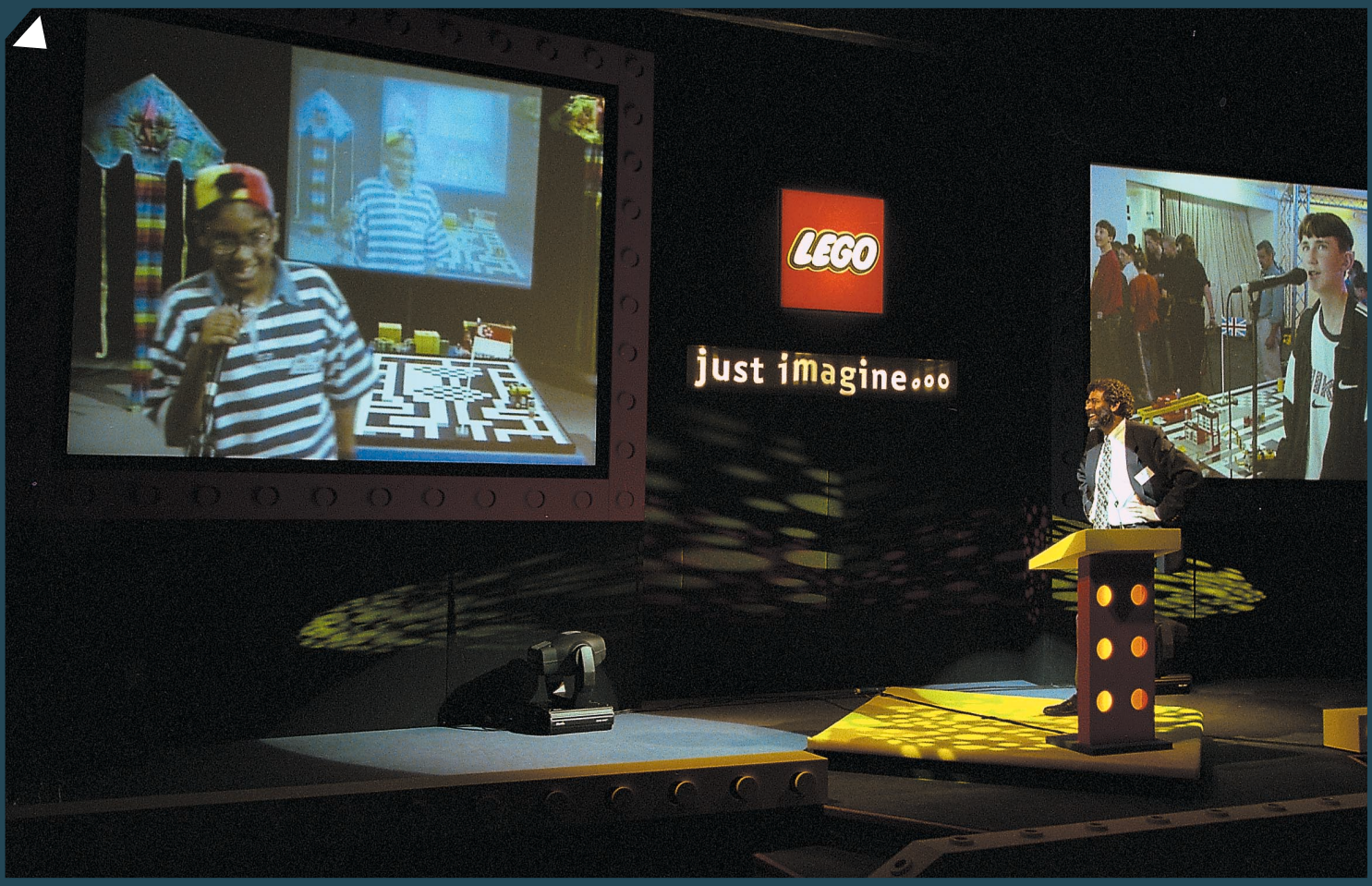


Then, in January 1998 – 9 months prior to the actual product launch and two weeks before the annual toy fairs – MINDSTORMS was presented to more than 200 journalists from all over the world at events hosted from London and New York. Presenters included LEGO Company spokespersons, IT & learning experts and children. Print and web media kits were distributed along with a wire press release and a second VNR. Combined, these actions generated massive media interest for the products reaching more than one billion people.

Launching MINDSTORMS to the media two weeks before the toy fairs in Nürnberg, London, New York, Paris and Milano was no coincidence. The message of "the intelligent brick" reached trade representatives who demanded the product no questions asked and offered attractive store placement in return – even though MINDSTORMS was not commercially available yet.

To top everything off and to keep enthusiasm high Reviewers Guides in 8 languages were pitched to entice key media to review and cover the MINDSTORMS story. Also, the MINDSTORMS RoboTour traveled the United States and Europe hosting more than 25 events. The promotional tour was designed to make consumer robotics more relevant and provide alternative media hooks to the MINDSTORMS story: In Hamburg a MINDSTORMS bungy jumper plunged a hair-raising 30 meters from a platform exciting both children and media. And the Wienna RoboTour featured seven robots, which created and played music for an audience of kids and journalists.

Finally, to secure even more attention nationally, to reach the 9-16 year-old consumers and to create impact for the message in more "commercial" media - the September 1998 product launch was supported by product demonstrations in-store, a television advertising campaign and a web community (www.legomindstorms.com). Yet another press event hosted for international journalists from London showed how kids were now able to play with and program Singapore kids' MINDSTORMS robots over the Internet.



Global brand revitalization

The campaign generated massive and positive media coverage the world over via more than 6.000 print articles and 1.500 broadcast stories e.g. BBC, CNN, ABC, NBC, ARD, The Face, Wired, Spiegel, Wall Street Journal, Frankfurter Allgemeine Zeitung and the Financial Times - reaching a total of more than one billion people.

Using MINDSTORMS as a brand ambassador also had a positive effect on total LEGO assortment sales. With the MINDSTORMS launch as the only "out of the ordinary" campaign, UK sales increased by 15%.

More than 1000 Toys "R" Us managers in Europe and the United States demanded the product with no selling in required, and early sales results pushed retailers to increase budgets by several hundred percent - in some cases. In fact, demand was so high that sales exceeded supply by a factor 3. Also, the LEGO Company gained new distribution and new customers (Playstation target group) when computer and learning outlets such as CompUSA, Learning Smith, Tiger Direct and Discovery Channel decided to carry MINDSTORMS. An important battle in the digital world was won: The LEGO Company took ownership of a new interactive product category and gained a digital and more cutting edge image adding digital giants such as Microsoft and Sony to the list of competitors.

For a more in-depth presentation of the LEGO MINDSTORMS campaign please contact
SIGMA at +45 32 54 76 76 or e-mail: sigma@sigma.dk

LEGO MINDSTORMS media coverage

FINANCIAL TIMES

TECHNOLOGY

Intelligent as a brick

Playing will never be the same as Lego unveils a smart addition to its blocks, writes **David Blackwell**

Stick the words intelligent and brick together and you get a classic oxymoron.

But to Kjeld Kirk Kristiansen, the man responsible for filling toy boxes around the world with untold numbers of brightly coloured Lego parts, the intelligent brick is an inspired device in the battle against stagnant toy sales.

The brick, to be unveiled in London today, will allow children to create and program autonomous robots.

Not much bigger than a pack of cigarettes, and powered by the common AA size battery, the brick can be built into Lego models and programmed via an infrared transmitter connected to a personal computer.

Mr Kristiansen puts an enormous amount of faith in the new product's ability to woo children back from the virtual world of computer games to a more physical form of play.

The intelligent brick has emerged after many years of development and an investment of at least £10m that is likely to leave last year's profits down on the 1996 figure of DKr699m (£62m).

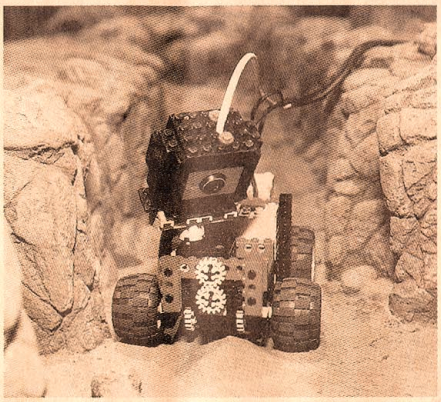
"I have had this dream for a number of years," says Mr Kristiansen, grandson of the founder of the Danish toy group, which is still owned by the family. But he has had to wait not only until the product could be made available at a reasonable price, but also until the software was sufficiently intuitive and easy to get started.

To that end, the group set up links more than 10 years ago with the Massachusetts Institute of Technology, which has been testing the bricks with children at a learning centre at the Chicago Institute of Science and Technology.

The group is planning to open further centres around the world under the Mindstorms brand. It will start at its theme parks in Windsor and at its headquarters in Billund, Jutland, where families or school parties will be able to build and program their own robots.

Mr Kristiansen aims to get the bricks, complete with software and associated Lego sets, on to the market in autumn in two forms – one under the Mindstorms brand and another to be linked with Lego Technic sets. Priced just above $200 (£125), they will be the most expensive toys ever sold by the group, and the first to be available via the internet.

He rejects any suggestion that the new toy is a gamble with the future of the group, maintaining that the development would have gone ahead whatever the state of the toy market. "I see it more as a logical step," he maintains. "In the 1960s we added motors, wheels and movement to the basic bricks – now we are adding intelligence and behaviour to our building systems."



Roving brief: a Lego Nasa space vehicle in a Martian landscape

The software requires a personal computer with Windows 95, a Pentium chip of 90Mhz or higher, 16MB of Ram and 40MB of free hard disk space, and a free serial port to connect the transmission tower.

Lego claims that children from the age of eight will be able to use it.

Tormod Askildsen, strategic projects manager, exhibits a childlike enthusiasm about the intelligent brick which he says – unlike many other Lego kits – appeals to girls as much as boys.

"It can be used to make all kinds of devices," he says, suggesting an intruder alarm that could be set up to empty a bucket of ping pong balls on an unsuspecting parent visiting a child's room.

The robot pictured above shows a Lego copy of a Nasa space vehicle on a model Martian landscape. Schoolchildren in Chicago have been able to program its movements using the pictures sent back from the digital camera.

"They can relate to something like last year's Mars mission," explains Mr Askildsen. "How did Nasa control the vehicle on a distant planet? They can try it for themselves."

Mr Kristiansen says that there is a high correlation between children who like playing with Lego and children who are fond of computing and programming. "It is about the same way of thinking – constructing and creating."

The intelligent brick will open up a new market in home learning, he believes. "Parents want to stimulate their children. Instead of just sitting at a computer with a video game, there is a physical model. Children want it to do something specifically – they can see how it works and change things because it did not do what they wanted."

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LEGO MINDSTORMS media coverage

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Lego Seeks to Build A Bright Future

Beyond Blocks

Lego Seeks to Build A Bright Future With 'Smart Toys'

New Gizmos Allow Children To Construct Robots, Program Video Cameras

A New Way to 'Leg Godt'

By Joseph Pereira
And Cacilie Rohwedder
Staff Reporters

LONDON—Stinger, a 30-centimeter-long plastic bee, squares off against a gangly robot who identifies himself with a threat. "I am Crusher and I will destroy you," growls the robot in a hoarse electronic voice.

Stinger is unfazed. In a few minutes, the insect corners his opponent, brandishing a yellow-and-black arm with a tip that zaps his foe with a small electrical charge. Crusher stops moving. Game over.

"It's great fun," beams 12-year-old Matt Bright.

The youngster from Bracknell, a London suburb, is being treated to a preview of Mindstorms, a new toy from Lego Group AS of Denmark. Unlike anything Lego has done before, Mindstorms has at its heart a palm-size microcomputer bristling with sensors. The device, dubbed the "brain in a block," has Lego's distinctive interlocking architecture and fits together with its standard building blocks, making possible the construction of robots and other "smart" toys.

Monumental Makeover

Mindstorms — which was unveiled at the Nuremberg Toy Fair in Germany last week and will make its U.S. debut today at New York's Toy Fair — is Lego's answer to the popular interactive toys and games of the likes of Nintendo Co. and Microsoft Corp. Indeed, worried that television has permanently eroded the concentration children need to be captivated by its traditional toys, Lego is attempting a makeover—of which Mindstorms is only a part.

In addition to Mindstorms, Lego plans to offer European children an equally advanced toy called "Cybermaster," which bears closer resemblance to a video game, complete with a fantasy world, a futuristic city and four virtual characters. Embracing TV as never before, the company also plans to come out with an animated show for preschoolers—featuring its own menagerie of characters—early next year. Also in the works are a live-action TV show for older children, a series of films, videos, CD-ROM games, and books and music in cooperation with business partners. It plans to add three LegoLand theme parks, including one scheduled to open in California in March—to the two it already operates. And soon, its red-and-yellow logo will be seen on a slew of children's merchandise, including clothing, bedsheets, paper goods and party favors.

By the year 2005, says Kjeld Kirk Kristiansen, Lego's chief executive officer, "it is our intention to have the most powerful brand among families with children."

As important as it is for Lego, Mindstorms is also a long-awaited test for a team of scientists and educators who have toiled for the past decade to find ways of putting artificial intelligence into the hands of young children. For the most part, their efforts have been consigned to the classroom and quiet after-school projects.

"This is, I would say, perhaps the most dramatic moment in my long years of making artificial intelligence more children-friendly," declares Prof. Seymour Papert, who occupies a Lego-endowed chair at Massachusetts Institute of Technology and who, with his colleagues at the university's Media Lab, helped Lego develop Mindstorms. Just as Lego gave children the ability to make things with plastics a quarter of a century ago, Dr. Papert says, it will now, as a result of the Media Lab's research, allow children to do the same with digital technology.

The Lego system will start appearing on retail shelves in the U.S. and Europe in August or September for about $200. The company claims it is more agile and varied than robots and interactive toys already on the market. Combining light, touch and heat sensors and voice-recognition capabilities with a microcomputer that serves as a primitive central nervous system, Mindstorms robots can fetch things, wake you in the morning, run from you or chase you, deal cards, warn of an intruder—and, of course, duel other robots.

Mindstorms creations don't have to be robots, either. They can be configured as trucks or bridges, or any moving creation—an invitation for young users to brainstorm. Or so goes the Lego pitch.

Anxious Lookers-On

How Mindstorms does at the cash register will be of interest not just to Lego, but also to a number of corporate sponsors of the Media Lab. Among them: Mattel Inc., Hasbro Inc., Intel Corp., Motorola Inc., Tomei Ltd. and Walt Disney Co. These companies, along with Lego, have signed on as sponsors of a Media Lab joint venture called the Toys of Tomorrow. The areas of research are confidential, but MIT Prof. Mitchel Resnick, the project's director, describes them generally as "anything from stuffed animals that can engage in conversation to digital toy sets and kits."

Not every partner has been a happy customer. In 1991, Nintendo gave $3 million to the university group in hopes of discovering new links between learning and

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Lego Builds a Future With 'Smart Toys'

Continued From First Page

video-game play. The video-game maker says it is no longer a sponsor. Dr. Papert, who headed the Nintendo project, says: "Though we did a lot of research and really came up with some interesting things—including making tools that would enable children to make really elaborate computer games—neither Nintendo nor any other video-game maker really became enthusiastic about it."

If successful, Mindstorms would be a chance for the Media Lab to redeem its reputation, says Karen Coyle, Western Regional Director for the Computer Professionals for Social Responsibility, a group of technologists at the University of California at Berkeley that advocates greater assimilation of computers into society. "If you feel that scientists are responsible for the betterment of society, then you have to rate the Media Lab fairly low," she charges. "Because if you look at what the Lab has turned out, until recently it hasn't been all that useful."

Mindstorms could also be a turning point for Lego, a company that has been singularly—and successfully—block-headed for most of its history. Its headquarters in Billund, a small town in central Denmark, features Christmas trees made of Lego blocks, Lego mosaics and giant fiberglass sculptures of Lego blocks.

Lego began as a small carpenter's shop in 1916 and was converted into a wooden-toy manufacturer when housing construction collapsed during the Great Depression. In 1934, company founder Ole Kirk Christiansen, the current chief executive's grandfather, commissioned an employee contest to devise a brand name, choosing a variation of the Danish words leg godt, or "play well."

Its first plastic toy, a tractor that could be dismantled and reassembled, came out after World War II. When the wooden-toy factory burned down in 1960, Lego decided to bet its future exclusively on plastic bricks. It won customers by convincing schools of the blocks' educational value in preschool play and by enlisting toy shops to feature elaborate Lego creations as promotional displays. The company for about 20 years consistently racked up annual double-digit growth, eventually taking an 80% share of the global and U.S. construction-toy markets.

A Guy Thing

But over the past three years, Lego has sputtered. Sales of about $1.2 billion in 1997 barely represented a gain over 1996, after inflation is factored in—due partly to disappointing results in Germany and the U.S., Lego's two largest markets. An effort to interest girls in construction toys has been unremarkable. The girls' line, introduced earlier this decade, is no longer marketed in the U.S., says Rob Ellis, Lego's vice president of brand marketing for the U.S.

Something new was needed. "It's become quite clear that to be a superbrand, we can't only be in construction sets any more," says company spokesman David Lafrennie. "Bricks will not get us to where we want to be in 2005."

For one thing, children weaned in the age of video games may not be accustomed to the intensity of concentration required for construction toys. "I think kids are a little more impatient today," says Peter Eio, head of Lego's U.S. unit. "They want faster results. They want instant gratification."

TV, which is blamed inside the company for much of the change in children's play habits, figures heavily in the makeover. Lego plans to launch a TV ad campaign in the autumn to trumpet to parents the imaginative and educational aspects of its toys. The campaign, plus Lego's Mindstorms promotions, will double the company's U.S. advertising budget to more than $32 million this year from last.

But there's a risk that Lego's loyal fans may not cotton to the new TV-and-space-age Lego, says Andy Brown, a brand researcher for Total Research Corp.'s Equitrend Report in Princeton, New Jersey. Given that Lego's hard-core customers tend to come from affluent and well-educated social strata, "Lego needs to be extremely careful trying to broaden its market appeal," he says. "In doing so, it could reposition itself as a brand it doesn't really want to be" and lose cachet among its established customers.

Internal company studies indicate some erosion in name recognition among consumers, many of whom don't instantly identify Lego with education and imagination anymore. "In recent years, Lego has introduced some sets that didn't sell," says Klaus Westenhoefer, owner of Puppenkoenig, a large toy store in Bonn, Germany. "The Lego name alone doesn't guarantee that the product works."

"While the brand continues to stand for high quality in the minds of consumers," says Lego's Mr. Ellis, the falling name recognition, "if left unchecked for a longer period of time, could become serious."

Prof. Levin says subtle changes in the company's core line of Lego-block products in recent years reflect attempts to respond to changes in the market. After years of selling generic, all-purpose construction sets, the company several years ago began selling single-purpose building kits. Then the violence-eschewing firm started marketing more toward the aggressive instincts of boys, coming out with castle themes, featuring cannons, swords, and bows and arrows. (The company maintains its policy of not making guns.)

'Veiled Violence'

"It's what I call veiled violence," says Marjorie Stanley, a mother of four boys from Sturbridge, Massachusetts, who says she has been a big Lego buyer in the past but has been less enamored of newer products. She says Mindstorms sounds interesting enough to get her into the store, but she adds that she will scrutinize the toy carefully before making any decision.

Then there's the question of whether children are willing to invest the hours it can take to program the robots—especially to gain more-sophisticated robotic effects. In one of Dr. Papert's favorite examples about Mindstorms, two eight-year-old girls decided to build a cat and a kitten in one field test of the toy. The idea was to have the mother come to the kitten when it beeped and flashed its eyes. By Dr. Papert's account, it took weeks for the toys to function as programmed.

From a parental point of view, the diligence children need to work through the bugs and technical quirks would provide strong lessons for a child. But some analysts doubt that many children have the patience and determination to make playing a serious project.

Lego isn't waiting to find out. Mindstorms sequels already are in the works. At the Build-It-Yourself Workshop in Cambridge, Massachusetts, children experiment with prototypes from the Media Lab that interest Lego.

With one of these, a microcomputer even tinier than the one used in Mindstorms, 10-year-old Kayty Himmelstein was able to solve a problem with her bird-watching hobby. Since she is usually at school during the day, Kayty often misses sightings at her backyard feeder. So she set up a video camera to record their feedings. But instead of taping for hours and then searching for what she wanted, she programmed the microcomputer, called Cricket, to turn on the camera only when birds alighted on the feeder and touched off a weight sensor.

At the workshop, children tinker with a variety of Cricket-driven gizmos: Cuckoo clocks, dancing robots, temperature gauges, fortune-telling wizards.

"Building these projects is fun," says Kayty. "But I wouldn't call it playing. For play I like to kick a soccer ball."