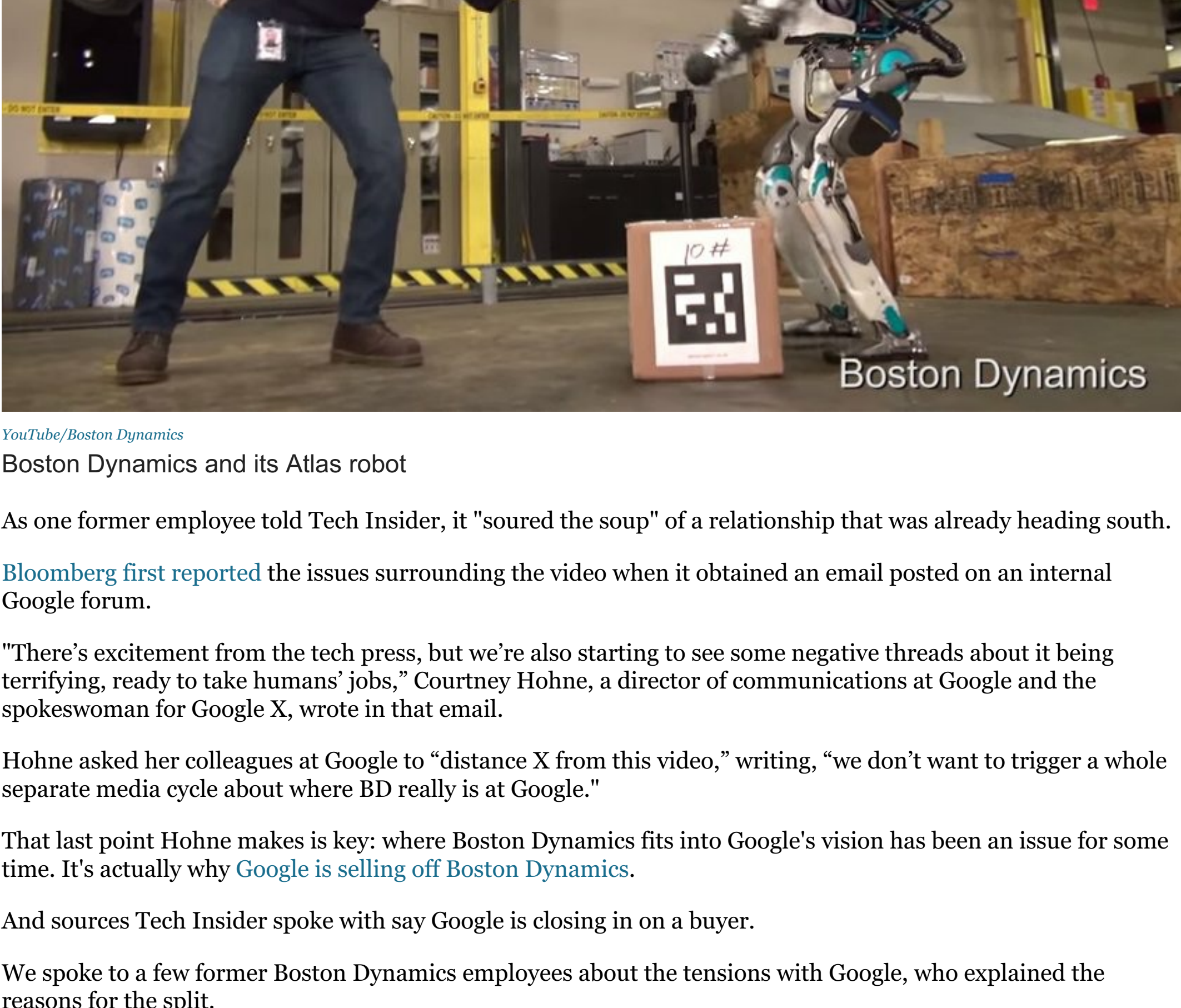


Boston Dynamics employees were frustrated with Google's plan for a household robot

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When Boston Dynamics posted a [video of its humanoid robot, Atlas](#), walking in the snow and recovering from getting kicked, Google was not happy.



YouTube/Boston Dynamics

Boston Dynamics and its Atlas robot

As one former employee told Tech Insider, it "soured the soup" of a relationship that was already heading south.

[Bloomberg first reported](#) the issues surrounding the video when it obtained an email posted on an internal Google forum.

"There's excitement from the tech press, but we're also starting to see some negative threads about it being terrifying, ready to take humans' jobs," Courtney Hohne, a director of communications at Google and the spokeswoman for Google X, wrote in that email.

Hohne asked her colleagues at Google to "distance X from this video," writing, "we don't want to trigger a whole separate media cycle about where BD really is at Google."

That last point Hohne makes is key: where Boston Dynamics fits into Google's vision has been an issue for some time. It's actually why [Google is selling off Boston Dynamics](#).

And sources Tech Insider spoke with say Google is closing in on a buyer.

We spoke to a few former Boston Dynamics employees about the tensions with Google, who explained the reasons for the split.

Google declined to comment for this story and Toyota did not respond to a request for comment.

Google's initial vision

To understand the tensions between Google and Boston Dynamics, it's important to see how the visions of each company differed.

Marc Raibert founded Boston Dynamics in 1992. It was born out of MIT's Leg Lab, a lab that builds and studies legged robots that Raibert founded in 1986.

It's pretty easy to see the connection with the MIT Leg Lab considering Boston Dynamics' robots, often showed off in YouTube videos, were all advanced, bipedal robots boasting skills in mobility. In addition to the most recent Atlas video, there was [Spot](#), a four-legged robot dog designed to work with the marines. And [Cheetah robot](#), another four-legged bot that's a bit faster than Usain Bolt.



YouTube/Boston Dynamics

Boston Dynamics' robot Wild Cat.

As Boston Dynamics wrote in the [About](#) section of its YouTube page: "Our mission is to build the most advanced robots on Earth, with remarkable mobility, agility, dexterity and speed."

Google acquired Boston Dynamics in 2013 for an undisclosed amount, in addition to eight other robotics companies. Andy Rubin, the co-founder of Android, was set to oversee the nine robotics companies as part of a new robotics division called Replicant.



AP/Paul Sabano

Andy Rubin

Rubin was always tight-lipped on how Google planned to use the robotics companies, but he [told the New York Times](#) in 2013 that he did not expect initial product development to go on for years.

That's a similar sentiment echoed by a few former Boston Dynamics employees.

"The impression I got was Rubin's robotic companies were sort of allowed to get some leash," one such person told Tech Insider.

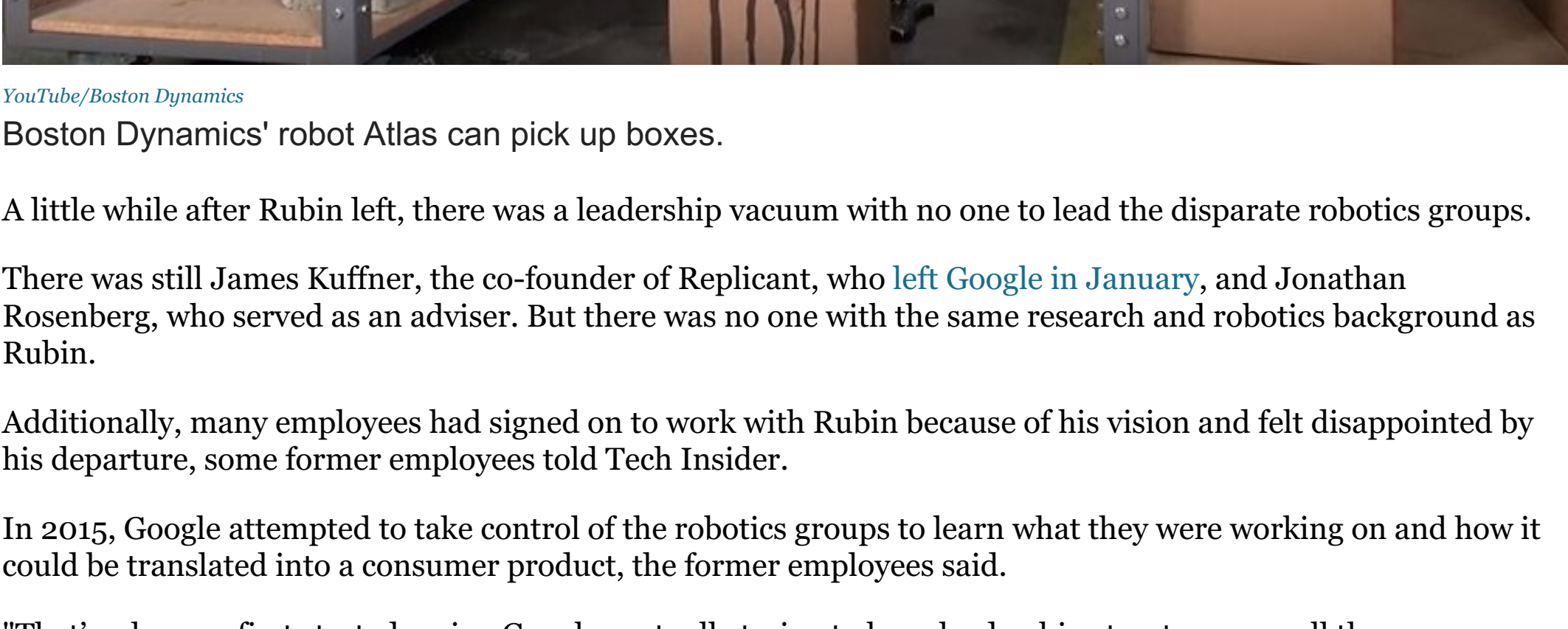
A few former employees told TI that Rubin was willing to let Boston Dynamics, as well as the other acquired robotics companies, continue with their research as planned. The idea was to see what kind of ideas and innovations the robotics companies came up with, and let that guide Google's eventual robotics vision.

"We were just making the robot we all thought we should make for technology purposes and for pushing the envelope," the former employee said.

"Certainly during the Andy Rubin administration and a little while after that, yes, they just proceeded. They took all the knowledge and experience they had building other projects for other people, and took the best lessons learned and iterated it in a new generation of robots optimized for size and sound."

But in October 2014, less than a year after Google formed Replicant, Rubin left the company. That's where troubles started mounting.

The push for a robot in your home



YouTube/Boston Dynamics

Boston Dynamics' robot Atlas can pick up boxes.

A little while after Rubin left, there was a leadership vacuum with no one to lead the disparate robotics groups.

There was still James Kuffner, the co-founder of Replicant, who [left Google in January](#), and Jonathan Rosenberg, who served as an adviser. But there was no one with the same research and robotics background as Rubin.

Additionally, many employees had signed on to work with Rubin because of his vision and felt disappointed by his departure, some former employees told Tech Insider.

In 2015, Google attempted to take control of the robotics groups to learn what they were working on and how it could be translated into a consumer product, the former employees said.

"That's when we first started seeing Google...actually trying to have leadership structure over all those robotic groups," one former employee said. "Where they're saying, 'Okay, what do you do? Are you mobility, are you vision?' and grouping them and directing them toward a commercial product space."

It's still unclear what exactly Google wanted in terms of a consumer product. One former employee said Google wanted an easy-to-use robot that could help with basic tasks around the house. One idea pitched was that it would roam around on wheels, which could arguably be seen as more consumer friendly than a complex, legged robot.

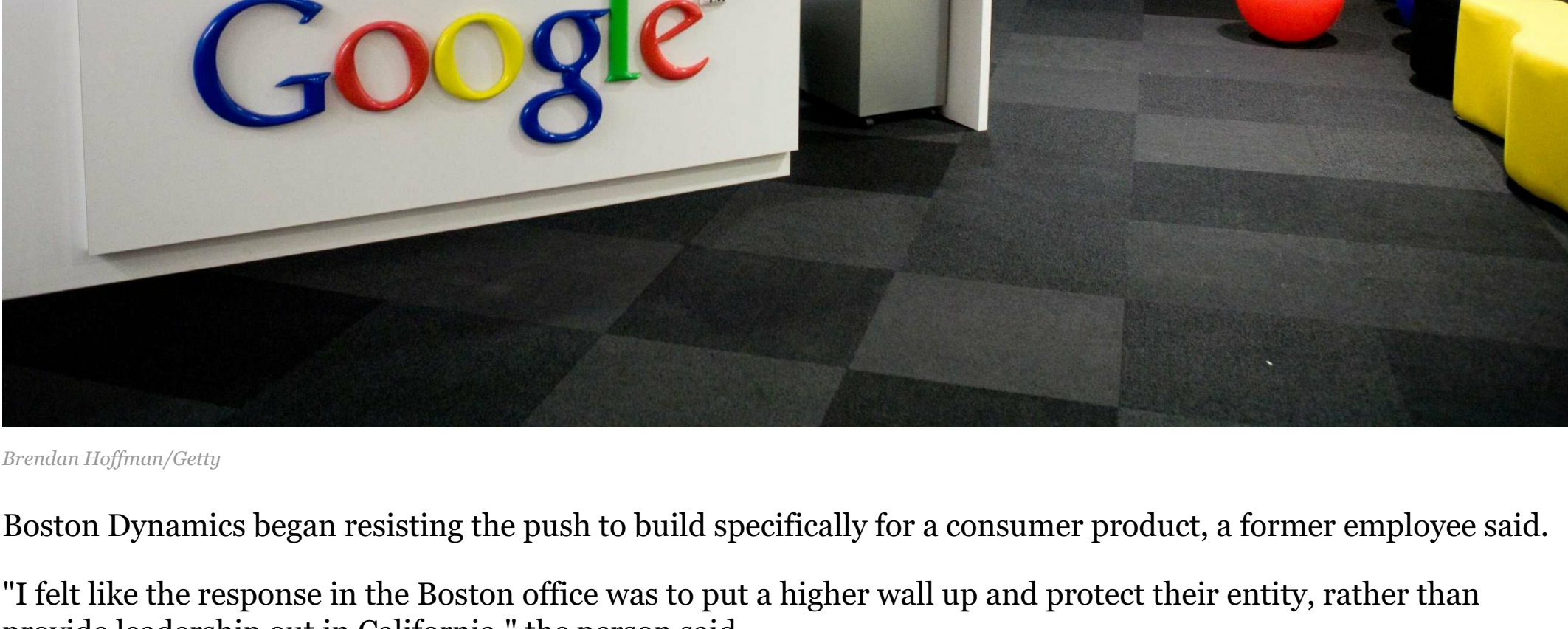
Boston Dynamics, given that it was born out of the MIT Leg Lab, was rubbed that wrong way by that concept.

A different former employee told Tech Insider that Google wanted a robot that could help around the house or in the office. It's for that reason Boston Dynamics was asked to switch to electronics over hydraulics.

"Basically, a battery-operated robot, even if its battery is operating a hydraulic pump, it's much quieter than a robot running on an outdoor motor and is really loud," the person said. "You want it quiet if it's going to be around people all day."

That same former employee said a factory robot wasn't out of the question, which is why you see Atlas stacking boxes in the [video](#) that "soured the soup."

'Us and them': Tensions mounting



Brendan Hoffman/Kerry

Boston Dynamics began resisting the push to build specifically for a consumer product, a former employee said.

"I felt like the response in the Boston office was to put a higher wall up and protect their entity, rather than provide leadership out in California," the person said.

That was made all the easier considering the physical distance between Boston-based Boston Dynamics and Google in Mountain Valley, California, a different employee noted.

Boston Dynamics continued to pursue their own research rather than go in the direction Google wanted, the former employees said.

"At the end of day what I saw was a sense of us and them instead of a we — we weren't part of Google, we were sort of a separate thing," the person said.

Bloomberg was able to obtain the minutes to a Nov. 11 meeting that highlights this exact issue.

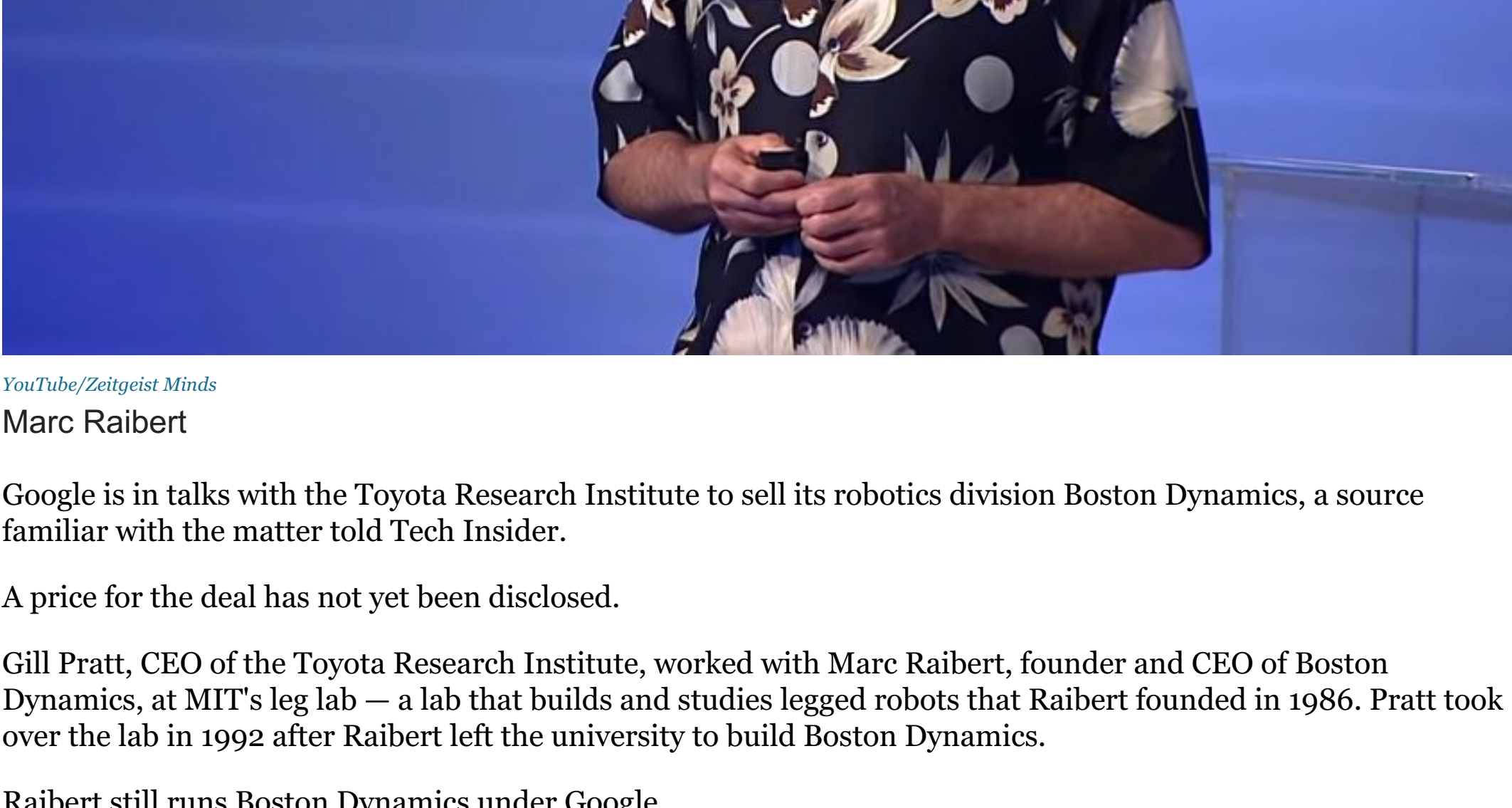
"As a startup of our size cannot spend 30-plus percent of our resources on things that take ten years," Rosenberg said, adding that "there's some time frame that we need to be generating an amount of revenue that covers expenses and (that) needs to be a few years."

Raibert pushed back, according to the minutes, stating the best way to get to an eventual consumer product is to let Boston Dynamics continue the type of work they've been doing.

"I firmly believe the only way to get to a product is through the work we are doing in Boston. (I) don't think we are the pie in the sky guys as much as everyone thinks we are," the minutes show.

It's for that reason the video of Atlas "soured the soup" with Google. As the internal Google email obtained from Bloomberg said, it raised questions of "where BD really is at Google."

What's next: Toyota



YouTube/Zeligpetat Minds

Marc Raibert

Google is in talks with the Toyota Research Institute to sell its robotics division Boston Dynamics, a source familiar with the matter told Tech Insider.

A price for the deal has not yet been disclosed.

Gill Pratt, CEO of the Toyota Research Institute, worked with Marc Raibert, founder and CEO of Boston Dynamics, at MIT's leg lab — a lab that builds and studies legged robots that Raibert founded in 1986. Pratt took over the lab in 1992 after Raibert left the university to build Boston Dynamics.

Raibert still runs Boston Dynamics under Google.

James Kuffner, the co-founder of Google's robotics division, [left the company](#) in January to join the Toyota Research Institute.

Joseph Bondaryk, the operation manager for Boston Dynamics under Google, also joined the Toyota Research Institute in January, according to [LinkedIn](#).

Other notable moves include Philipp Michel, who worked as a senior roboticist for Google's robotics division before moving to the Toyota Research Institute in February, a [LinkedIn](#) search found. And Adam Gebhoff, senior systems and hardware engineer for Replicant, joined the Institute in April, according to [LinkedIn](#).

Toyota is showing increasing interest in the tech deals space. It's in talks to make a major investment in Uber.

While it's unclear exactly what Toyota might have planned for the robotics company, a former Boston Dynamics employee referred to the deal as a "friendly buyout."

"It's a more friendly buyout when you have interpersonal connections there already," the person said.