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REORGANIZATION

How We Reorganized Instagram's Engineering Team While Quadrupling Its Size

by James Everingham

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When I joined Instagram in 2015 as head of engineering, the company had been part of Facebook for three years. It had 115 engineers, but we would soon scale to 300, and later grow to over 400 in 2017. It was not an easy task, but I had a powerful weapon in mind from the start: reorganization.

Companies frequently underutilize - or, worse, misuse — reorganization. While it sounds like (and is) a big step, it's often the most important tool a company has. When I was brought on, Instagram's executives knew they needed help. The engineering department needed better organization and management, and its employees were craving more career development. It took us three months to

reorganize, and another 18 months to scale to a bigger department. By the end, my group had quadrupled in size, yet functioned even better than it had before. We were shipping more products, more quickly, than ever.

Determine What You're Working Toward

Once we decided to reorg, the first thing we did was determine our desired outcomes as a team. We gathered our leadership in a room and came up with 20 different outcomes — from speed to cost efficiency — and prioritized them, No. 1 to No. 20.

We picked our top five outcomes, which became our organizational principles:

1. Minimize dependencies between teams and code
2. Have clear accountability with the fewest decision makers
3. Groups have clear measures
4. Top-level organizations have roadmaps
5. Performance, stability, and code quality have owners

Our new organizational structure revealed itself naturally once we solidified our guiding principles. We transformed the team from three departments (mobile, backend, and data & monetization) into two foundational teams and six vertical teams, with each capable of handling both back-end and front-end engineering. Our foundational teams—core infrastructure and core client—maintain the app's back-end and front-end functionality as we add new features and scale the user base. The six vertical teams reflect our key priorities: engagement (how much value people get from Instagram); business platform (how businesses connect with people on Instagram); growth (helping more people access Instagram around the world); protect and care (keeping the community safe); creation (giving people the flexibility to express themselves the way they want to); and communication (how people connect and share experiences with their communities on Instagram).

With our new structure, we had autonomous, full-stack teams. But this came with tradeoffs. As you can see, we chose to move fast over moving cost-effectively. This meant we were willing to duplicate code—that is, have two teams come up with the same code separately so they wouldn't be dependent on each other.

When I came to Instagram, we had an iOS team, an Android team and a backend team. This meant, for example, that our search function had a frontend search team for iOS and a frontend search team for Android. We had multiple teams in different organizations working on the same thing: search. After reorganizing, all of the search people were in one place, working on the same problem with a clear decision-maker.

Clearly defining roles within these verticals was key, and made a significant impact on employee satisfaction (which translated into retention). Clearly defined roles encourage overachievement because you gain efficiency when everyone knows what their job is and feels empowered to do it.

Get Buy-In, and Not Just From Leadership

Good structure should be simple. An organizational model is like a machine, so the fewer moving parts there are, the less likely it is to break. Complexity is a warning sign of poor structure.

Once we were confident in the new organization, it was important to get concentric buy-in. I first took my organizational ideas to my direct reports and incorporated their feedback. Then I moved to the next level of management, then to other departments — product, design and research — iterating with each layer of people. This prevented design by committee while we were building consensus.

But even with team support, reorganizations are a big deal. They're unsettling and disruptive, and they can make people feel unsafe. How you communicate and execute a reorganization is very important. If you've done your job and involved a lot of people and incorporated their feedback, they should believe in the new structure and organizational principles. At Instagram, we made sure our founders and other top executives were fully on board so that their confidence could reverberate across the organization. For us, this came through in company all-hands meetings and internal posts that transparently explained the reorganization.

Avoid Ambiguity

There are a lot of misunderstanding about reorganization. Many executives don't know how to use it or don't execute well. Like all powerful tools, it can do damage or jump-start progress. It just depends on how that power is wielded.

In my 25 years as an engineer, including my time as an executive at Instagram and Yahoo, I've come to realize the majority of dysfunction in an organization stems from ambiguity. This goes for everything from accountability chains to job descriptions. Organizations are machines. They must be set up correctly. The result is smoother scaling, better communication, faster execution and very

little in the way of politics. Now at 400-plus people, with a goal of doubling within the next two years, we're actually moving faster than we were when we were a team of 115. We have reorganization to thank.

James Everingham is head of engineering at Instagram.

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Manuel Lafuente   7 days ago

I´m scared you said organizations are machines, they must be set up correctly. I disagree with you. Organizations have a clear purpose to serve people and they are formed by people who bring all what they are to work. Structures must be designed by and for people to let all the talent they have flow.

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