Zero to One Summary

By Peter Thiel

'What valuable company is nobody building?'

Zero to One, by renowned venture capitalist and entrepreneur Peter Thiel, interrogates what valuable and innovative businesses are missing from the current landscape. Peter Thiel believes that instead of fine-tuning what's already been done, we need to focus on what hasn't been done before.

If you've ever used PayPal, you have Thiel to thank for this. He cofounded the company, which went public in 2002, and was later sold to eBay for 1.5 billion dollars. Thiel's success is contagious, and some of the early members of his PayPal team, went on to create billion-dollar companies, such as LinkedIn, Yelp, and YouTube. They're collectively known as the "PayPal mafia," given their incredible success and monopoly over their target markets. However, Thiel isn't just an entrepreneur; he's also a renowned venture capitalist.

Thiel has a clear understanding of what it takes to build a successfultech-based business. And his goal isn't just to *zero-in* on making a profit.He believes startups need to harness the potential and power of technological progress to build a better future. True to this aim, hestarted the Thiel Fellowship, which encourages youth to put "learningbefore schooling." The objective is to motivate youth to advancetechnological progress and to apply long-term thinking to what they do.He's also run a course on startups at Stanford, with the primary goal ofteaching students to think differently, see a future that's theirs to create, and build businesses that no one else has envisioned.

Shifting focus means viewing progress in two different ways. If a business strives to improve on what's already been done, they make horizontal progress. Horizontal progress is when you move from "one to n." So if you were to start with one typewriter, and then expand the volume to one hundred units, you've made horizontal progress. So as you can see, you literally copy and build on what exists, creating more volume. The message in *Zero to One* is that we need to shift to vertical progress. The idea here is that we should aim to create something new, where we move vertically, from "zero to one." So, instead of a typewriter, you build a word processor.

If we expand on this slightly, we instinctively know that the next Bill Gates won't develop an operating system, nor will the next Larry Page build a search engine. In other words, tomorrow's tech-industry leaders, won't just continue to build on today's innovations. They will transcend the competition altogether, and create something entirely new. It takes tenacity, imagination, and determination to change the world for the better. Few venture into the uncharted, but those who do, take the world from zero to one.

This summary will briefly look at the importance of vertical progress. If you want to build the next innovative tech-based business that could potentially alter the future, then this summary will give key insights and invaluable advice. We'll also briefly discover why most startups fail to be truly innovative and make a substantial difference, and what factors can help us build genuinely innovative tech-based businesses.

Being Contrary Is Not a Flaw

Growing up, some of us may have been told not to be so contrary. Going with the flow and not causing a fuss isn't the answer though, and Thiel asserts that it's entirely necessary to be a contrarian thinker.

Here's a question. What important truth do you hold, that very few people support? Thiel asks this question in every interview that he conducts. He calls it the "contrarian question." Although it may seem like a relatively straightforward question, it's actually tough to answer. Questions such as these can be Intellectually challenging, because school-based knowledge is by definition, universally agreed upon. Furthermore, it's also psychologically demanding, because it's likely that we'll respond with an unpopular response. Thiel maintains that most of the answers he hears, are often just different ways of seeing the present. By contrast, the answers he looks for, need to paint a picture of how tomorrow's world could be different.

Why do we need contrarian thinkers? For starters, without them, we'd exist in a world without iPhones, Uber's, and Airbnb's. Steve Jobs believed in "his truth" about how we would use a smartphone. He knew that we didn't need or want a physical keyboard, but almost everyone at that time disagreed with him. And, Uber and Airbnb believed in the

contrarian truth, that we'd be willing to get into a stranger's car or stay in a stranger's house.

Thiel argues that the startup mentality we adopt, shies away from contrarian forward-thinking. Much of what we do today, repeats or builds on what we've done before. If we want to make profits and create a better future, we need to create new things, instead of optimizing what already exists.

In short, we need to progress from zero to one.

The Path of Progress

The path of progress can be horizontal or vertical. Horizontal progress is doing what's been done before. It results from duplicating success. This means going from "one to n." Globalization is an example of "horizontal progress" because it entails taking something that works in one area, and replicating it elsewhere. For example, China's 20-year plan was to be like the West as we know it today. This might be progress, but it's worth asking whether duplicating Western economic paradigms and practices, is globally sustainable? It's almost certain that this isn't sustainable, and the industrialization of more countries will lead to more problems. Unless technological innovations are introduced, China will double its industrial production, but double its air pollution at the same time.

In contrast, harnessing technology to solve air pollution, is "vertical progress." Going from zero to one requires doing something new, and this makes it more difficult, because we have to envision what's never been seen before. Henry Ford said that if he'd asked people what they wanted, they would have said faster horses. If he'd given them faster

horses, he would have moved from one to n. Instead, he believed that the world needed the automobile. If you want to create a startup that'll not only improve, but drastically change the world, then you have to go from zero to one. Zero to one thinkers such as Henry Ford, imagine a better future and use technology to get there.

When it comes to such quantum leaps in progress, startups provide a good launching-pad. Many large corporations are hindered by bureaucracy, red tape, and risk aversion. As a result, they tend not to produce any *new* technology. But it's difficult for one person to build new technology on their own, so teamwork matters. However, teams should be small enough to allow for both the momentum and flexibility to stay on the vertical track. So, the best startups consist of just a few founders who share a joint mission.

Be Bold in the Face of Game-Changing Technology

New startup ventures are often the source of game-changing technology. The difficulty is that many startups are still hamstrung by four erroneous lessons, drawn from the 1990's dot-com bubble, and the subsequent crash.

Founders of startups are warned to be wary of big visions that drive significant change. Instead, they're told to take small incremental steps towards a more practical goal. They're encouraged to stay lean and flexible, not be caught up in too much planning, and build on what works. Rather than create something new, they improve on products that people are already buying from a competitor. And finally, they focus heavily on the product but too little on sales. The thinking is that if you have a great

product, customers will arrive without you needing to do too much advertising.

If it's a game-changing innovation that we're after, then the opposite of each of the four lessons should apply. Thiel says, 'It's better to be bold and inconsequential; a bad plan is better than none; don't compete with competition; and, your sales strategy matters.'

If you want to be in the business of doing new things, new ventures are the way to go. However, to go from zero to one, be sure to question existing ideas and rethink business models from scratch. It's crucial to think differently about market monopoly, the team, and how to generate sales from the start. Monopolies can be useful for business and society. They might get bad press for having outsized profit margins, and taking out the competition, but monopolies can actually do good and drive social change.

Google clearly has a monopoly over the market when it comes to the search engine industry. With so little competition, they can set their prices and profit up to 25% of revenue. However, they can also use their resources creatively to improve their business and do good for society. If they didn't have this search engine monopoly, it would be impossible to pursue projects like free internet for everyone, self-driving cars, and open access to Google Maps. Creative monopolies can drive social progress because they don't have competition. Monopolies often have the capacity to be ethical, and they can have a significant impact on social awareness and change. Whereas when the competition is fierce, it's easy to get caught in the daily struggle for survival. So, if you've got a monopoly, you're assured of profits, and therefore you can focus on other aspects.

So let's turn to some actionable advice.

Start Small and Gradually Scale

A lot of people make the mistake of scaling too quickly. The suggestion here, is that we need to dominate a unique market, rather than a pre-existing one. So to begin with, cast a narrow net and focus on serving a particular target audience.

As an example, take the e-commerce giant Amazon. Amazon started by just selling books. Only once they'd become the go-to online book retailer, they then started tapping into other markets and expanding their product offering. So the crucial bit of advice is, once you've gained the monopoly over a small market, that's when you gradually expand into related markets.

Take Advantage of Technology, Network Effects, the Economics of Scale, and Branding

There are four key characteristics that help companies gain a *sustainable* competitive advantage. In other words, there are four ways to maintain a monopoly.

The first is proprietary technology. This means that your company owns a technology, that's difficult or even impossible to replicate. For example, Google search algorithms return better results than anyone else's proprietary technologies. And, when Amazon launched in 1995, they were able to claim the title, "Earth's Largest Bookstore." This is because they

offered at least as many books as any other retail bookstore, and unlike their competitors who can only hold limited stock, Amazon doesn't physically store any books. They simply request the title from a supplier whenever a customer makes an order.

Next are network effects. A network effect, by definition, makes a product more useful as its usage increases. For example, how often would you use Facebook if none of your friends signed up? So, user growth improves the value of a product or service. Paradoxically, to generate the network effect, your product must be immediately valuable to its earliest adopters and then expand from there. The key is to start small. In the case of Facebook, Mark Zuckerberg started small and began by just getting his Harvard classmate to sign up to the platform.

The third is economies of scale. This means that a business gets more robust as it gets bigger, and fixed costs of creating products or acquiring new customers remain small. For example, Twitter already has more than 250 million users, yet it doesn't need to add too many custom features to acquire more users, and there's no inherent reason why it should ever stop growing. Alternatively, the wider spread of customers you have, the lower the cost per unit of the products you sell becomes. For example, Amazon can offer free shipping on a £100 couch, whereas most furniture retailers would charge you \$50 to ship the same couch. Because Amazon has such an extensive infrastructure in place and ships so many products, they can have fixed operating costs per item order, which allows them to make more profit on each item and offset the shipping cost. This makes it nearly impossible for smaller retailers to compete with them.

Finally there's branding. When people think of a fashionable electronic device, the Apple brand often comes to mind. It's tough for any other

brand to compete in the market of fashionable consumer electronics. Everything from their sleek minimalist product design, store design, close control over the customer experience, and the memory of Steve Jobs' way of operating, makes Apple a brand like none other. But Thiel does warn that 'beginning with branding over substance is dangerous.' Branding alone isn't enough. Apple's market dominance is based first and foremost on its superior products, supported by its proprietary technologies.

The Product Won't Sell Itself

Too many entrepreneurs underestimate the importance of sales and distribution. You might think, 'Surely if it's a great product, customers will come?' The truth is that startups tend to fail because of poor distribution, rather than because of an inferior product. So, like it or not, the process of selling via advertising, through various distribution channels is critical. Different sales distribution channels and viral marketing, are the cheapest methods and the most typical marketing strategy. Bear in mind that the more complex the product or service, the more one may need to spend on advertising.

In Conclusion

Thiel draws upon everything that he learned as a serial entrepreneur and venture capitalist. While most new companies decide to improve incrementally on existing products, Thiel argues that the most valuable, and game-changing startups create something new. They move the world from zero-to-one. His book encourages us to build businesses that rest on new ideas. However, the challenge is that there are no built-in formulas. He says, 'They simply cannot exist, because every innovation is

new and unique. No authority can prescribe in concrete terms, how to be innovative.' The lesson is that successful people find value in unexpected places. They do this by thinking about business and startups in terms of principles, not formulas. Furthermore, Thiel argues that, 'A company's most important strength is new thinking. *Zero to One* isn't a manual but rather an 'exercise in thinking,' because that is what a startup has to do: ask questions, come up with ideas, and rethink how business is done from scratch.'

Given that Thiel's intention is for the book to be a tool to exercise thinking, here are seven questions he suggests we reflect on if we want to progress from zero-to-one.

Can you create a technological breakthrough? Like Google, Is the technology you're using better than that of your competitors?

Is it the right time to launch and sell this 'contrarian' product or service?

In terms of monopoly, just as Amazon did with books, are you targeting a big share of a small market?

Can your team pursue this opportunity, and do you share the same mission and drive?

In terms of distribution, how will you deliver this product to your customers?

When it comes to sustainability, how will you dominate the market in the next 10 to 20 years?

And the last critical question is, what unique opportunity have others

missed? In other words, what valuable business is nobody else creating?