

How to get to the next best version of your manufacturing operations

A guide to capitalizing on your growth opportunities



WIPFLI

How ready are you for growth?

The past year brought great growth opportunities for many in manufacturing, yet a [Wipfli study of nearly 200 manufacturers](#) found that many were not planning to pursue opportunities for growth over the next three to five years.

That could be a big mistake. Manufacturers have an extraordinary opportunity to create and put growth and expansion plans into action. And that doesn't necessarily mean going big with a major acquisition or product line. Sometimes, it's enough to focus on incremental improvements to existing capabilities or the addition of new ones. For example, improving your margins can provide the fuel to get you there by adding to your top line (sales) or curbing your bottom line (expenses). The cash you free up can then be reinvested in capabilities that enable growth.

Really, you just have to know where you're going before you get started. Are your operations optimized to support your plan? Do you need to get a tune-up and a roadmap before you start your journey?

[Our e-book can help. Read on to learn how you can:](#)

- Know where you're going
- Grow your operations with intelligence
- Build other capabilities to enable growth
- Assess manufacturing M&A opportunities
- Improve margins in your manufacturing operations



Knowing where you're going

If your manufacturing business was an app, what version of this app would you be running? Are your customers stuck with the same version that was in place when they first started working with you? Or can they expect to take advantage of new capabilities and interact with you in new and more helpful ways?

Whether your strategy calls for growing your core business, stretching into an adjacent business or expanding your customer segments, you need to have a plan for publishing that next version.

Three drivers behind every new release

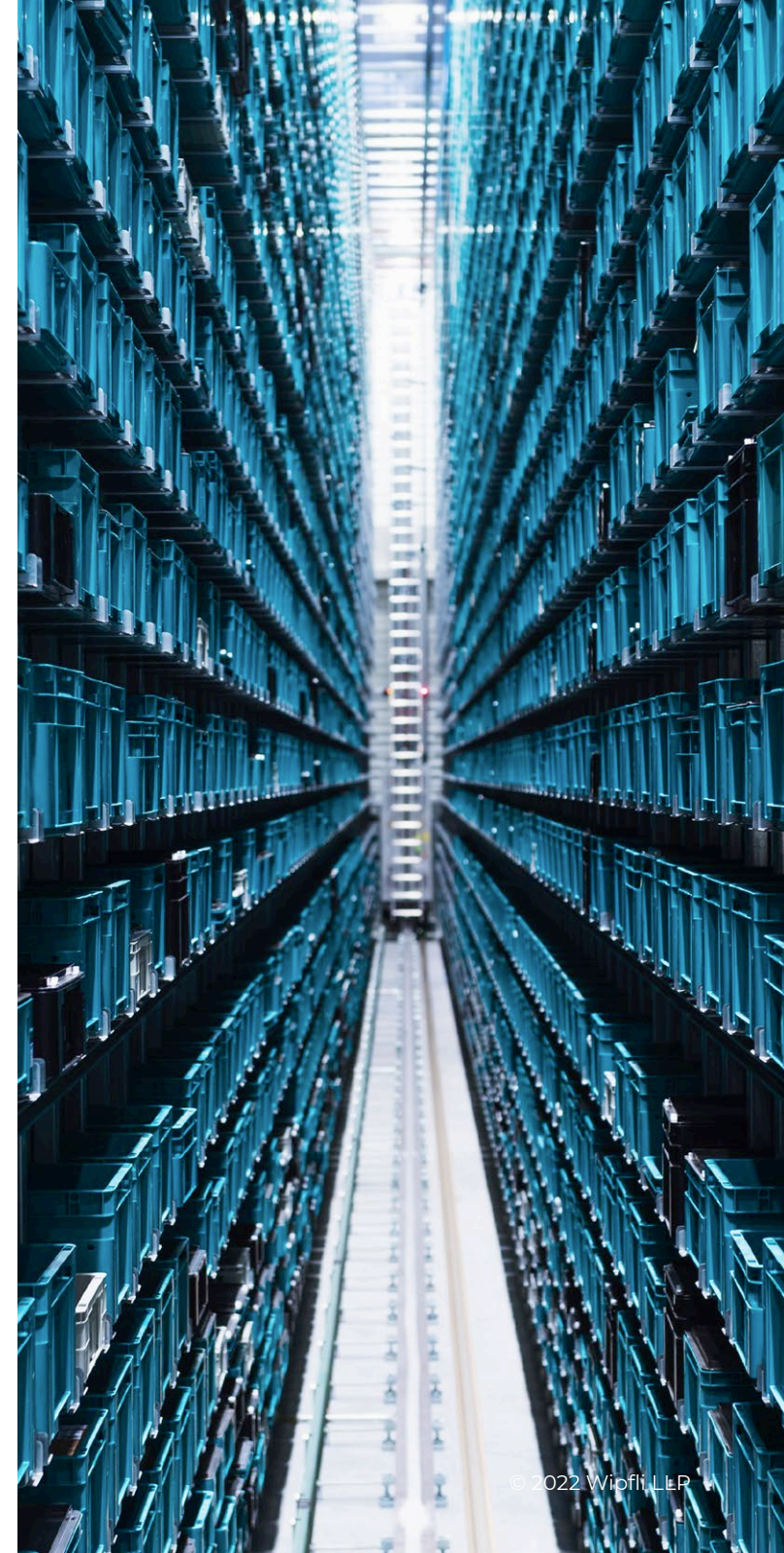
New versions of apps are published for three reasons:

1. To fix gaps, problems or bugs
2. To refine existing capabilities and features
3. To introduce new capabilities

If you think about your business's growth in terms of an app, you know to focus on one of these three areas.

For example, fixing a problem or bug could be about improving customer service or product quality. Or it could be about streamlining behind-the-scenes operations, such as job estimating. The goal is to improve operations to support your growth strategy.

The essence of refinement is making your business better, whether it's the way people interact with you, the services you provide or the products you manufacture. How do you make your app — in this case, your business — more appealing? How do you make it more accessible? How do you provide your customers and channel partners with a superior experience? Making it [easier to do business with you](#) and for you will help you grow your core business and customer base.





Making it easier to do business with you and for you will help you grow your core business and customer base.

Introducing new capabilities is where the potential for growth can take off – or be derailed. There are seven essential needs that are fundamental to a manufacturer’s ability to thrive. In introducing new capabilities to their “app,” manufacturers need to ensure they are focusing on one or more of these elements:

1. **Customer acquisition/service:** You must acquire and retain customers; this is the essence of building market share.
2. **Profitability:** You need to make enough money to survive the next year, and the one after, and so on.

3. **Enough talent:** You need to have enough people on the floor and in the back office to execute on the promises you made to your customers.
4. **Credibility:** Your credibility is the currency you need to keep existing customers, win new customers and earn the trust of lenders.
5. **Compliance:** You have to comply with the laws of the land. Period.
6. **Strong decision-making:** You need to have the tools to make strong, timely decisions so you can guide items 1-5 in this list.

7. **Ability to navigate the landscape:** Unforeseen challenges and opportunities are part and parcel of being a manufacturer. You need the agility to respond or capitalize on changes as they arise.

With these components in mind, manufacturers can start thinking about what to add in their next version.

How to start planning for growth

Understanding what key capabilities you will improve or build on in your next version is fundamental to knowing where your growth strategy will take you.

Having the right people at the planning table is essential. It's very important to think holistically for projects that will span multiple departments and teams. Rather than ask them to establish milestones on their own and hope that everything aligns at the end, first ask what the next version needs to accomplish. Then ask how each team can contribute to this version.

If a team or department can't contribute to that goal, then they should be getting ready to contribute to the next version. Because here's the thing — you should always be working on the next version of your business.



Incremental changes lead to big opportunities

How are manufacturers supposed to operate their current version while imagining and investing in the next version? The answer is, you don't need to boil the ocean.

Every version does not need to be the equivalent of implementing a [new enterprise resource planning system](#). Maybe that is a long-term goal. But in the meantime, you can add automation capabilities to improve throughput or add dashboarding tools to make better use of your data.

Version 2.0 of your business is likely to be much different than version 1.0. But along the way, you're still making improvements and adjustments. Think of these as versions 1.25, 1.5, maybe even 1.85. They don't need to be a big leap, but they can get you ready for the next big leap.

Thinking about growth in these terms makes it easier to define and prioritize elements of your growth strategy. It also helps you manage investments. By thinking in terms of versions, you can narrow the thinking from "what's possible tomorrow" to "what's necessary today" to be relevant, responsive and ready to capitalize on new opportunities.



Growing your operations with intelligence

Data is one of the most underutilized assets in the manufacturing industry. Most manufacturers are awash in data – even shops that haven't fully embraced Industry 4.0 capabilities. Yet it's still a struggle for many manufacturers to access and make the best use of this information.

Information flow is often hampered by disparate data sets and resource-intensive processes. But without an accurate handle on demand forecasting, inventory, machine uptime, job costs, market share and other intelligence that is foundational to your business, how can you have confidence that your strategy is targeting the right opportunities for growth?

For example, let's say you want to grow your profitability by purchasing additional equipment to expand capacity. Are you using your existing machines to full capacity? Are

process bottlenecks throttling throughput? Could you build on current capabilities? Would you be better served by investing in sensors and machine learning to improve uptime?

Performing a deep dive on your data will help determine whether additional equipment will generate the returns you anticipate. More importantly, you may uncover other, more cost-effective solutions that would otherwise be overlooked.

Or maybe your growth strategy isn't defined yet because you don't know where to prioritize your efforts. Again, use the data to uncover areas of opportunity. If third-party data reveals that you have a significant market share, then perhaps your growth strategy should focus on innovation or expansion into an adjacent market.



Optimize your data framework with integrated perspectives

The crux to growing with intelligence is having access to data that is [timely, actionable and relevant](#). Real value comes from the ability to pull and assess data from across your organization in real time. Business intelligence tools and advanced analytics are fundamental to getting a solid understanding of your operations. But if the data is consistently lagging by weeks or months or your data sources are incomplete, you may be relying more on assumptions than you realize.

If this sounds familiar, you're not alone. With the pace at which new technologies are being developed and deployed, manufacturers are understandably reluctant to invest in expensive applications that may be obsolete in a few years. Unfortunately, there isn't one system that can do it all. Building an integrated pipeline to keep information in motion requires an ecosystem of applications.

A [data roadmap](#) will help you build a nimble and scalable data framework by prioritizing what you need right now, while positioning you to add capabilities in the future. For that reason, it cannot be a strictly finance or operations or IT venture. It needs to incorporate a cross-company perspective.

Think of your roadmap as a means to build bridges between departments to capture more value. After all, many of the metrics that finance is concerned with — such as profitability — are rooted in operations. The most valuable insights are gained by automating the pipeline to pull, transform, cleanse and normalize data from across the enterprise.

Building a true data framework may require more resources on the front end. But at the end of the day, you will have a best-in-class solution that will grow with you so that you can track your progress, fine-tune your strategy and intelligently plan for the next iteration of your business.

The benefits of big data

72% of manufacturing executives rely on data to increase productivity

97% of organizations are investing in data and artificial intelligence

10% is how much overall costs decrease by when businesses use data

58% is how much more likely businesses are to beat revenue goals when they focus on data

Building other capabilities to enable growth

It's not just data that can help you grow. There are more practical and highly effective ways manufacturers can build the workforce and the capabilities they need to support their growth and expansion strategy.

Nontraditional recruitment strategies

Traditional recruitment avenues are coming up short. Here are five methods manufacturers are using to expand the talent pool:

- **Look to adjacent industries:** Hospitality workers are generally not well-compensated, and the sector was hit hard by the COVID-19 pandemic. Manufacturers that make a compelling case for the higher pay and greater stability offered by their industry could tap into a labor pool that is already attuned to service and collaboration.

- **Become a second-chance employer:** Individuals with a criminal record face many barriers to employment. Second-chance hiring opens up access to an often-overlooked source of talent while giving these people a chance to make a good living.
- **Offer friends-and-family referral bonuses:** Companies are quick to give recruiting bonuses to new hires. But the recruits who stay the longest are typically friends or family of existing employees. So why not offer a referral bonus to the people who are helping you find talent that is more likely to stick around? It may result in a higher payout on the front end – but turnover costs more in the long run.





- **Add daycare to your benefits package:**

There is a share of the workforce that stays home after having children because of a lack of affordable daycare. More companies are responding by offering daycare benefits, even to part-time workers. It's a creative way to remove barriers, both for people who want to work and for employers who need more people.

- **Consider job-sharing opportunities:** Not everyone wants to work full time, so more manufacturers are turning to job sharing. In this scenario, two employees who want to work part time form a unit and work alternate days. In return, manufacturers can cover an entire shift.

Upskilling and job paths

Finding talent isn't the only hurdle to growth. According to [Wipfli's survey of manufacturers](#), a majority of respondents reported that they are grappling with innovation skills gaps. As digital transformation accelerates across the manufacturing sector, competitiveness will increasingly hinge on having a [workforce that can run complicated and digitized operations](#). To help, leverage these three tips:

- **Use accelerated learning labs:** Traditional training methods have relied on one employee looking over the shoulder of another during the workday. It's typically unstructured and stressful.

Accelerated learning labs take the stress out of the situation by enabling employees to learn independently, away from the line. Employees can build a solid foundation of knowledge before they start hands-on training.

- **Employ augmented reality (AR):** The use of AR for training goes hand in hand with accelerated learning labs. This technology overlays real-world environments with interactive graphics. Because employees can work through real-world training modules on their own, it's a more efficient and less disruptive way to build the workforce of tomorrow.

- **Incentivize training with pay-for-what-you-know:** One sure-fire way to grow a highly skilled workforce is to incentivize training with pay-for-what-you-know. Employees can increase their pay for every new capability or skillset they learn. You'll have greater employee buy-in for building a digital-ready workforce and more flexibility for managing day-to-day workflow. Likewise, employees who have more control over their job paths and the opportunity to earn higher pay will be more inclined to stay.

Automation, cobots and workflow technologies

Employees tend to feel threatened by automation and other Industry 4.0 capabilities, but this is not about replacing humans. It's about [building capabilities to enable growth](#). Manufacturers that are chronically short-staffed should target difficult-to-fill positions: jobs that require highly skilled but hard-to-find specialists, as well as jobs that are monotonous, repetitive, dirty or pose a safety risk.

Here are five tips to get started:

- **Invest in welding with smart tables:** Welders are one of the most difficult, highly skilled trades to fill. To get around this, manufacturers are investing in robotic welders and, more specifically, tabletop welders with smart tables. With this technology, welding robots can be programmed in a matter of minutes, and they don't require previous automation or programming experience. An employee with limited experience — someone recruited from the hospitality industry, for example — could be running one of these cells with a few hours of training.
- **Automate repetitive activities:** Repetitive activities like pick-and-place and checking-and-counting are ripe for automation. Robots can more efficiently fulfill orders because they don't require breaks, and vision sensors can more quickly and accurately check and sort items than humans. Employees can be redeployed to more solution-oriented work where they are likely to experience greater job satisfaction. Everyone wins.
- **Add cobots to your team:** Cobots are designed to assist people with everything from minor operations — such as picking and presenting parts to a human — to handling operations that pose a safety risk. Humans can focus on higher-order work, while their cobots can handle repetitive, monotonous or lower-value tasks.
- **Streamline workflows:** Disruption is the new reality for manufacturers. Workforce automation technology enables companies to adapt workflows with ease. Experiencing a high rate of absenteeism? Instead of relying on shift supervisors to redeploy your available workforce, the technology can match skills and capabilities with job orders before the shift even begins.
- **Implement robotic process automation (RPA):** The shop floor isn't the only place where manufacturers are struggling to find people. Back-office positions are also going unfilled. RPA automates rules-based business processes, such as accounts receivable tasks, enabling manufacturers to accomplish more with fewer people.

Assessing manufacturing M&A opportunities

M&A activity in the manufacturing sector is at a 10-year high, and it isn't likely to slow down anytime soon.

The favorable tax code, unspent Paycheck Protection Program funds, and a wave of retirements among baby boomer and even Gen X business owners have created an unprecedented opportunity to expand through acquisition. Savvy manufacturers are using this environment to increase their customer base, add new capabilities, gain entry into fast-growing sectors and even [accelerate digital transformation](#). In the process, they're adding millions to their EBITDA faster than organic growth could ever achieve.

But before you acquire a manufacturing business, you need to first make sure you're not buying someone else's problems — or compounding your own.

Steering clear of risky endeavors

When sizing up an M&A deal, never make assumptions. This is common sense and the reason why you conduct due diligence. However, there is an emotional component to every deal that can cloud levelheadedness, especially when speed is of the essence.

Taking an honest and unbiased assessment of both the financial numbers and nonfinancial fit is critical. With that in mind, here are 10 best practices for assessing M&A deals that will position you for a better return.

1. Build a due diligence team before you start exploring deals

Successful deals don't just happen; they require meticulous planning and execution. So before you start scouting out opportunities, build a due diligence team.

At a minimum, include your accounting firm, attorney, and insurance and benefits providers. Lean on your team to provide an impartial assessment of your readiness to grow and of the strengths and risks of potential acquisitions. This is not an area to skim on. Thorough due diligence will save you time, money and heartburn by ensuring you are informed and protected.

2. Define what you want to achieve

Most buyers recognize that M&A deals need to support long-term growth plans. Yet it's easy to lose sight of this when M&A activity is hot or an exciting opportunity pops up. Whatever your growth and expansion plan calls for, build a strategy to achieve it and let that guide your pursuit. If you can't answer why you want to acquire a business, then the business likely doesn't align with your strategy.

3. Assess the workforce

Manufacturers across the board are having a tough time filling the floor. Acquiring a business could create an opportunity to add capabilities along with a built-in workforce. But that only works if the seller isn't stretched for talent. And finding talent isn't your only concern. You also need to ensure the seller's employees can pass a background check. Otherwise, you could be staring down potential legal problems in addition to a labor shortage.

4. Evaluate growth potential

Has the seller been in a growth mode, or have they been serving the same customers for the past 20 years? Stagnant growth doesn't necessarily indicate a lack of potential. But long-term clients may be eyeing retirements themselves. If the seller has been running on autopilot for years, you'll need to quickly and cost-effectively build up your customer base to cushion against drift. Likewise, if the seller has been operating with a growth mindset, make sure you have the capabilities and resources to support that trajectory.

5. Dig deep behind the numbers

The COVID-19 pandemic has added a lot of static to profit and loss statements. Are current margins and profits sustainable, or are they based on temporary consumer demand or stimulus? We have seen sellers attempt to pass off PPP funds as profits to command a higher selling price for their business. You need to separate the real numbers from the noise to avoid making a decision based on transitory profits. In the current inflationary environment, beware of growing inventory. Is it due to quantity build or rising costs?

6. Consider the payback period

Henry Kravis, co-founder of KKR & Co., Inc., once said, "Don't congratulate us when we buy a company, congratulate us when we sell it. Because any fool can overpay and buy a company, as long as money will last to buy it." Think of the acquisition as something to monetize rather than something you'll keep forever. This will put your expected return into perspective. There's a direct correlation between how much you pay over EBITDA and how long it will take you to realize a return. If that payback period is too high, then it's time to re-evaluate the deal.



7. Determine whether it's a good cultural fit

Shared values are important, but there's more to determining cultural fit. You need to take a hard look at what the seller does that you don't — and vice versa. How do they market their services — or do they? How do they interact with their top customers, and are you prepared to treat them the same way? How digitally mature are their operations? What nontraditional perks do they offer employees? Do they have a management team and a governance structure in place, or does the owner run everything by fiat?

You can't fit a square peg into a round hole. If you are not a good cultural fit, consider other M&A opportunities.

8. Set the terms for working capital early

Working capital is one of the top sources of angst in a deal. Naturally, sellers and buyers look at working capital differently. This is further complicated when the seller doesn't have proper inventory cost or WIP reporting. As a buyer, you need to clearly define expectations for working capital and have an out-clause built into the deal if the seller doesn't come through.

9. Appoint a project manager for integration

Integration goes hand in hand with cultural fit, and it's where buyers most frequently stumble. Integrations don't just happen; they take time and resources. How well you integrate an acquisition will determine the success of the deal. One of the best ways to ensure your investment pays off is to hire or appoint a project manager to focus on integration, starting with the moment you decide to buy the business.

10. Do some diligence on yourself

Do you have a good handle on your own operations? Is your shop floor running at capacity? Or are hidden bottlenecks and snags hindering productivity? Are you ready to buy, or would you be better served by investing in a build strategy?

Conducting up-front diligence will help you prepare for questions that sellers, investors and funding sources may ask of you. But it's also a good exercise to ensure your operations are running in top order before you take on another company.

Did you know?

In 2021, the manufacturing industry saw over 10,000 M&A transactions worth more than \$785 billion.

Improving margins in your manufacturing operations

Recognizing that you can get more out of your manufacturing operations is easy. Determining how is more complicated.

Before you retool your sales processes to drive up revenue or scale back on fixed expenses to cut costs, you need to first understand where your best opportunities lie. Here are five areas of opportunity that we most commonly see on the shop floor for how to increase profit margins:

1. Sharpen your product costing expertise

Many manufacturers [struggle to quantify the cost](#) of manufacturing, engineering and delivering products to their customers. Material, payroll and fixed overhead costs are relatively straightforward. Technology has also made it possible to track direct labor on a job.

However, there are other costs that are harder to gauge, such as unplanned downtime and variable overhead.

In addition, higher material costs and extraneous surcharges that arose during the pandemic have not necessarily factored into production costs.

Getting a better handle on true costs will enable you to pinpoint opportunities to increase prices or reduce expenses. From there, you can begin to explore other areas for margin growth, such as inventory control and purchasing patterns.



2. Invest in automation

Automation can improve your top line by enabling you to do more without necessarily expanding your payroll. In this tight labor market, few manufacturers are looking to eliminate staff. But by automating dangerous, repetitive or difficult-to-fill positions, you can extend your existing workforce, produce more parts at a faster rate and increase your profitability.

The key is to [strategically invest in automation](#) as a means to remove effort, improve accuracy and reduce risk.

3. Deploy industrial internet of things (IIoT) capabilities

Sensors and other IIoT technologies provide extremely valuable insights into operational performance, such as equipment status, job progression and per-piece run rates. All of this data can be used for historical comparison across machines, parts, shifts and employees to identify areas for margin management.

From there, you can start to anticipate and eliminate equipment failure, downtime and other sources of waste. The productivity time you reclaim can be converted into more capacity.

The best part? You don't need to invest in a full-scale overhaul of your equipment to [take advantage of IIoT technologies](#). There are still benefits to be gained, even with limited resources.

4. Optimize your workflows

Waste can creep into processes in unexpected ways. People and material bottlenecks, inefficient changeovers, cumbersome setups and other hurdles to productivity can drive up expenses and erode margins.

Taking an end-to-end view of the entire value stream can yield substantial opportunities for margin improvement. This requires a deep dive into every process that supports your operations. How is demand triggered? How effectively

do orders proceed through each step? Can you reduce the time for changeovers or machine cleaning? Are you getting tripped up by inventory availability? Any means to reduce the difference between tact time and lead time will free up more time to add value to your business.

5. Automate information flow

Data is a tremendous — but often overlooked — asset to manufacturers. In combination with IIoT technologies, it can be vital to identifying processes or operations that need to be shored up and to help you prioritize your strategies for doing so. When you have access to data that is timely, actionable and relevant, you have the means to make more informed and strategic decisions about where to adjust your operations to improve margins. Think of it as a means to objectively assess operational and financial performance.

Bringing it all together

Taking a strategic approach to margin improvement is foundational to a successful effort. What are you good at that you can build on? Where do you need to shore up operations to better manage expenses? Answering these questions requires a clear and unbiased understanding of your operations from multiple angles, including operations, finance and IT.

Reviewing the entire value stream from beginning to end will likely reveal many hidden opportunities to eliminate waste or free up capacity. Strategies for margin improvement tend to be closely intertwined, which is why a holistic view of the entire ecosystem is so crucial to success. Moreover, sustained margin growth can't be achieved with a one-and-done exercise. Building an annual review around your operations will go far in keeping your margins healthy and your shop floor running smoothly.



Start planning your next best version

From talent shortages to supply chain disruptions, manufacturers are dealing with unprecedented challenges. A robust response will help you not just manage uncertainty but also take advantage of new openings. Market shifts are occurring too rapidly to grow and expand without a plan in place. So what will the next version of your business look like?

Backed by more than 90 years of experience in the manufacturing sector, Wipfli's manufacturing and technology specialists can help you identify and take advantage of growth and expansion opportunities. We can help guide you through the steps to plan and execute on the next version of your business — and the one after that.

[Learn more](#)

Perspective changes everything.

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