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- Explaining what Zoom's tools do
- Dissecting the reasons that Zoom grew so quickly
- Understanding Zoom's competitive landscape

Chapter 1

Communicating and Collaborating Better with Zoom

What is Zoom anyway? Where did it come from? Was it the result of long-term planning, a eureka moment, or a happy accident? Is Zoom only for large organizations, or can smaller ones benefit from it? And what business problems does Zoom solve, anyway?

This chapter answers these questions in spades. Further, it provides some background information about Zoom, the technologies behind it, and its main competition.

Introducing Zoom

Zoom provides a suite of simple, affordable, powerful, secure, and interoperable communication and collaboration tools. As of this writing, the company's self-purposed mission is to make video communications frictionless.

As you see in this book, Zoom has accomplished its mission in spades. Zoom's management and investors bet the company on the belief that it could build a better mousetrap. With it, people could accomplish more than they could without it. Again, you can check that box. That gamble has paid off handsomely. It has vastly exceeded its early aspirations.

Discovering Zoom's origins

In August 1997, Eric Yuan began working as a software engineer at Webex — one of the first enterprise-videoconferencing companies. Yuan grew his team from ten engineers to more than 800 across the globe. To paraphrase Ron Burgundy of *Anchorman* fame, Webex became kind of a big deal. On March 15, 2007, Cisco Systems acquired the company in a deal worth $3.2 billion.

At Cisco, Yuan rose to the level of VP of Engineering — a key role at a tech juggernaut. As part of his job, he spent a good chunk of his time talking to Webex enterprise customers about the videoconferencing program. To put it bluntly, many businesses disliked Webex's complexity and general clunkiness. (Apropos of nothing, I felt the same way back then.)

After a few years, Yuan began to doubt whether Cisco would be able to improve Webex as much as its customers were demanding. To boot, other software vendors were starting to catch up. Yuan questioned whether Cisco's management would invest the requisite time and resources required to build a new, better generation of videoconferencing products — one that could easily scale up and down as needed thanks to the rise of cloud computing.

Yuan wasn't guessing; he exactly knew what enterprise customers needed. He envisioned a single, modern app that would seamlessly work on any device: laptop, computer, tablet, and smartphone. Because of his background, Yuan realized that minor tweaks to Webex's legacy code base would not suffice. Rather, undertaking such an endeavor would require a ground-up product rebuild.

Yuan knew that transforming Webex at Cisco would require him to fight many bruising internal battles. After several relatively enjoyable post-acquisition years, the politicking was starting to wear Yuan down. As he told NBC in August 2019, "Every day, when I woke up, I was not very happy. I even did not want to go to the office to work." (Visit `cnb.cx/zfd-123` to read the article.)

Yuan predictably left Cisco in June 2011 and took 40 talented engineers with him. Later that month, he founded Zoom Video Communications, Inc. He wanted to refine a concept that he first conceived during the 1990s as a college student in China. Back then, Yuan had to commute ten hours to his then-girlfriend, now his wife. (Read the entire interview at `bit.ly/zfd-eric`.)

The company launched its flagship Meetings & Chat service in January 2013. Its target customers remained the same from Yuan's Webex and Cisco days: other businesses. By May 2013, more than 1 million people used Zoom products. In March 2019, Zoom officially filed to go public on the NASDAQ. April 18, 2019, marked its first day of trading.

Understanding what Zoom does

Zoom's tools help individuals, formal and informal groups, departments, and even entire organizations communicate and collaborate better. In this way, Zoom falls under the umbrella of technologies often labeled as *Unified Communications* (UC). The term first gained popularity in the mid-1990s. (I'm happy to report that I was there.) In a nutshell, UC describes a collection of integrated, enterprise-grade communication services. Specific examples include

- **Instant messaging (IM):** Also known as *chat*.
- **Presence information:** Status indicators that conveys one's availability to communicate.
- **Voice:** This bucket includes calls or, more precisely, Internet Protocol (IP) telephony.
- **Audio, web, and video conferencing:** The ability to hold different types of calls with large groups of people.
- **Desktop sharing:** The ability to instantly see what your peer is doing.
- **Data sharing:** Interactive whiteboards, annotation, and the like.
- **Unified messaging:** Integrated voicemail, email, and fax.

You may not have heard of UC before now. Again, though, it's not exactly new. In fact, the idea of using the web to do things such as make audio and video calls is almost as old as the web itself.

The following sidebar explains a bit of history behind some of UC's technical underpinnings. Make no mistake: These pillars remain critical today even if they run seamlessly in the background. Feel free to skip the nearby sidebar, however, if you consider it too much information — or TMI, as the kids say today.

A BRIEF PRIMER ON COMMUNICATING OVER THE INTERNET

You probably have not heard of ARPANET, but you almost certainly use the technology behind it every day.

In the 1960s, the Cold War between the United States and the former Soviet Union was simmering. The two powers nearly destroyed each other during the 1962 Cuban Missile Crisis. Things got very real. In the aftermath of the near debacle, government officials began to wonder how citizens would communicate with each other in the event of a nuclear conflict and tens of millions of deaths.

Against this backdrop, the U.S. Department of Defense launched the Advanced Research Projects Agency. The agency began work on a decentralized network that would, at a high level, address that very question. Launched in 1969, ARPANET represented the first network of its kind. Back then, communication networks were primitive, especially by today's standards. (If Netflix had existed back then, you would not have had any luck streaming 4K videos.)

But how would that network actually work?

Packets

Circuit-based networks are centralized in nature. Examples include traditional telephone systems. In the event of a nuclear war, one strategic missile would render the entire network inoperable. What's more, they involve a great deal of manual intervention. That's why switchboard operators manually patched through calls to recipients beginning in 1878. Brass tacks: The ARPA folks knew that a circuit-based network ultimately wouldn't meet their objectives.

Remember that even the most powerful networks of the time could not transmit even modest amounts of information in one big chunk. To overcome this obstacle, ARPANET engineers and scientists relied upon a concept called *packet switching*. Developed by American computer scientist Paul Baran in the early 1960s, the basic idea involved automatically breaking down data sent over digital networks into their smallest possible components: packets. The network would disseminate these packets without any human intervention. For more on this arcane yet fascinating subject, check out Katie Hafner's 1998 book *Where Wizards Stay Up Late: The Origins of the Internet* (Simon & Schuster).

To this end, APRANET was downright revolutionary. It represented the first wide-area packet-switching network. Ever. Even though today's telecommunications networks are

far more robust than they were 50 years ago, packet switching remains a core tenet of today's Internet. And so are protocols.

Protocols

Think of protocols as common languages that allow devices, networks, computers, and servers to communicate with each other. For example, all websites begin with *http*. That's no coincidence. The acronym stands for *Hypertext Transfer Protocol*. Among other things, http defines how the web formats and transmits messages, images, web pages, and much more. Email also relies upon several essential protocols.

As it relates to some of Zoom's suite of services, two protocols are especially important:

- **H.323** provides multimedia communication standards for equipment, computers, and services across packet-based networks. It specifies precisely how to transmit real-time video, audio, and data. H.323 is popular with IP-based videoconferencing, Voice over Internet Protocol (VoIP), and Internet telephony.
- **Session Initiation Protocol** (SIP) initiates, maintains, and terminates real-time sessions. Typical applications include voice, video, and messaging.

Bottom line: Without packets and protocols, you wouldn't be able to send an email or view a web page, much less make audio or video calls from your devices.

Reviewing the numbers behind Zoom's rapid ascent

Zoom has been a popular enterprise tool since its inception. Case in point: In December 2019, 10 million people regularly used Zoom's tools. Most CEOs only dream about this level of success. Along the way, Zoom has landed many prominent customers, including

- The Nasdaq stock market
- Ridesharing behemoth Uber
- Delta Airlines
- Harvard University
- High-end audio vendor Sonos

Of course, the preceding list consists of large organizations and/or multibillion dollar companies. You may be thinking that Zoom lies outside of the reach of your local law firm, dentist's office, or web-design shop.

And you'd be spectacularly wrong.

For a variety of reasons that I cover later in this chapter, Zoom has long appealed to the smallest of startups and mid-sized businesses. (See the section "Reaping the Benefits of Zoom's Tools.")

Case in point: My friend Andrew Botwin runs a successful executive coaching shop. His company is the very definition of a small business. Like me, he gladly pays a modest annual fee for Zoom's Pro Meetings & Chat plan. (Chapter 2 covers Zoom's specific offerings, plans, and prices, in far more detail.) As Botwin told me, "Zoom allows me to conduct meetings with an in-person type of feel. It also lets me easily share my computer screen with my clients."

Zoom's industry penetration runs the gamut: healthcare, retail, higher education, manufacturing, finance, nonprofit — you name it. As for employer age, companies both young and old have jumped on the Zoom bandwagon. For years, thousands of businesses have regularly used Zoom's tools to communicate and collaborate with their employees, customers, prospects, and partners.

TIP

To read more about how a wide array of companies uses Zoom in innovative ways, go to `bit.ly/zm-cust`.

All of this is to say that, as a company, Zoom was doing extraordinarily well before a global pandemic shook the world to its core.

Assessing how COVID-19 changed Zoom's trajectory

Starting in early February 2020, the company's floodgates began to blow open. In a matter of weeks, oodles of businesses from mom-and-pop stores to large enterprises started getting Zoom religion. Examples of rapid Zoom adoption abounded during this unprecedented time. Here's one of them.

On March 19, 2020, California governor Gavin Newsom issued a stay-at-home order for his state's citizens. As a result, thousands of California-based businesses needed to adapt to a new world — and fast. One such shop was Reeder Music Academy based in Danville, California. Within a week, the 28-employee company migrated roughly 70 percent of its classes online using — you guessed it —Meetings & Chat. Thousands of small businesses in just one state would have immediately shuttered were it not for affordable videoconferencing tools such as Zoom.

A VERY BRIEF HISTORY OF CORONAVIRUS

In late 2019, tens of thousands of Chinese citizens mysteriously contracted a severe respiratory illness and started dying. People with heart disease, diabetes, obesity, and generally weak immune systems were particularly susceptible to contracting it. Ultimately dubbed coronavirus, the outbreak quickly escalated to nightmarish proportions and every country in the world. On March 11, 2020, the World Health Organization did the inevitable and declared COVID-19 a global pandemic.

Since that time and as of this writing, the numbers have been nothing short of grim: According to Johns Hopkins University, more than 500,000 people have died across the globe. More than five million others became infected but have since recovered. Epidemiologists almost unanimously agree that a second wave is coming in the fall of 2020.

When coronavirus hit the United States in earnest, it evoked images of the 1918 Spanish flu. To minimize the carnage and stress on their healthcare systems, state governments — some far more reluctantly than others — issued stay-at-home orders.

COVID-19 did not just leave more than 100,000 dead bodies in its wake. It wrought psychological, social, and economic devastation as well. With respect to the latter, tens of millions of Americans lost their jobs. U.S. unemployment spiked to nearly 15 percent in April 2020. Most workplaces, parks, restaurants, schools, retail stores, and places of worship closed. Musicians postponed concerts, comedians canceled shows, and professional sports as the world knows them ceased to exist.

Against this backdrop, hundreds of millions people needed to find new, virtual ways to work and, more than that, recapture some semblance of normalcy. In each case, Zoom was the most popular choice.

And Zoom adoption quickly spread to decidedly non-corporate environments. As but one example during the height of frenzy, teachers from more than 90,000 schools across 20 countries began educating their students from their homes via Meetings & Chat. Beyond professional reasons, people needed a way to connect with their family and friends. Again, Zoom answered the bell.

To say that Zoom's user numbers exploded over a three-month period would be the acme of understatement. By the end of March 2020, more than 200 million people participated in both free and paid Zoom meetings every day. (Industry types refer to this number as *daily active users*, or DAUs.) By way of comparison,

just four months earlier, Zoom had averaged approximately 10 million DAUs. The 2,000 percent increase was downright stupefying.

And Zoom's user growth didn't stop there.

During its first fiscal quarter of 2020 (ending on April 30), Zoom reported that its DAUs had climbed to 300 million — a 50 percent jump from only a month earlier. Many of those users decided to become proper customers. Company revenue in that quarter grew by an eye-popping 169 percent. Analyst Richard Valera of the asset-management firm Needham called the results "incredible." (Read more about Zoom's most recent financial results at on.wsj.com/2Y0RJjz.)

Fast-forward a few weeks. As of July 1, 2020, Zoom's market capitalization exceeded a staggering $73 billion. If you had bought Zoom stock just a few months earlier, you'd be ecstatic.

It wasn't all puppy dogs and ice cream for Zoom, though. On the flip side, its viral consumer growth has led to some unexpected issues and a slew of bad press. (I cover those legitimate concerns in Chapter 9.) For now, however, rest assured: Zoom's management has taken its unforeseen challenges very seriously.

Reviewing Zoom's industry awards and recognition

Beyond Zoom's outrageous growth, the company has garnered plenty of recognition and even won some prestigious industry awards. Highlights include

- **Leader in Gartner 2019 Magic Quadrant for Meeting Solutions:** You may not be familiar with the world of enterprise software. Trust me, though, vendors expend an enormous amount of energy trying to land in the vaunted Magic Quadrant.
- **2019 Inc. 5000 list of America's fastest-growing private companies:** Employers that make this list are doing something right.
- **Glassdoor Second Best Place to Work in 2019:** Employees tend to like working at Zoom. This accolade and its attendant publicity help the company attract, retain, and motivate highly skilled workers.

MY ZOOM BONA FIDES

As a reader, it's fair to ask about my experience using the tool about which I am writing.

By way of background, I've been using videoconferencing tools for two decades. (I'm no spring chicken anymore.) Over the years and in no particular order, I've played with Skype, Webex, Join.me, and Adobe Connect. Thanks to Zoom, though, I have largely said *adios* to those applications. (I return to them later in this chapter in the section "Main competitors.")

For the last few years, I've used Zoom primarily for individual and group videoconferencing, screen-sharing, and webinars. What's more, because I wear a number of different hats, I've become a convert on a several levels. First, as an independent writer, speaker, trainer, and advisor, I frequently hold Zoom meetings with my clients and prospects when in-person meetings just aren't possible. Second, during my days as a college professor, I engaged with my students on a near-daily basis via Zoom — and Slack as well, to be fair. (If you're not familiar with Slack, check out my book *Slack For Dummies*.)

That's not to say that I don't enjoy real-world interactions. I most certainly do. Again, though, physical meetings aren't always possible, especially with online students halfway across the globe.

Analyzing Zoom's competitive landscape

When it comes to videoconferencing apps right now, Zoom is unequivocally the prettiest girl at the ball. To be fair, though, it's hardly the only one.

Before continuing, a disclaimer is in order: Contending that one tool is inherently and objectively "better" than another is silly. (Try telling a long-time Samsung user that she's missing out on the far cooler iPhone. See how that goes.) So much hinges on personal preferences. For example, say that you're a die-hard fan of BlueJeans. In this case, no one will convince you that you ought to use Zoom — and that includes yours truly.

Still, consider the following two types of software vendors:

- **Group A:** Large companies that dabble in many fields. Examples here include Microsoft, Oracle, Adobe, SAP, and Amazon.
- **Group B:** Smaller outfits that specialize in one specific type of application. Examples here include Zoom, Slack, and BlueJeans.

Generally speaking, the Davids in Group B have historically tended to more quickly innovate and respond to their customers than the Goliaths in Group A. This claim is especially valid over the past 15 years. Precisely because of their laser focus, boutique firms often produce better wares than their larger brethren do. Scrappy upstarts are almost always better at keeping their eyes on the prize.

Main competitors

Table 1-1 provides a list of Zoom's main contemporary rivals.

TABLE 1-1 Mainstream Videoconferencing Tools

Name	Description
Cisco Webex	Born in early 1995, Webex was one of the first web-based videoconferencing tools. Fast-forward to March 2007. Cisco acquired it for $3.2 billion. Over the years, plenty of products have surpassed Webex in terms of popularity and functionality. At the risk of being a bit harsh, asking sometime to join you via Webex today is tantamount to sending an email from an America Online (AOL) address. It may still technically work, but you probably won't score many points with others by suggesting that they use it for your upcoming videoconference.
Vonage	Founded by Jeff Pulver in 1998, the company was one of the pioneers of Voice over Internet Protocol (VoIP) and exceptionally popular back in the days of landlines. Fun fact: I worked on a consulting project at its headquarters in the mid-2000s.
RingCentral	Born in 1999, the company remains among the UC leaders in terms of revenue and subscriber seats. Now publicly traded, its market capitalization is roughly $24 billion as of early June 2020.
Skype (consumer version)	Initially released way back in August 2003, at one point nearly 700 million people used the service. After acquisitions first by eBay and then by Microsoft, Skype has lost some steam. Plenty of observers and former employees say that the company squandered its opportunities. (For more on this subject, see `cnb.cx/zoom2-ps`.)
Skype for Business	Formerly known as Lync, Microsoft rebranded it as *Skype as Business*. (Yes, the regular consumer-grade version of Skype is alive and well.) Much like Google, Microsoft supports a bevy of related collaboration tools.
Amazon Chime	Amazon launched its foray into the crowded space in July 2017. Chime lets users meet, chat, and place business calls inside and outside your organization.
BlueJeans Meetings	BlueJeans started in 2009 and offers similar services to Zoom. Remarkably, in its first 75 days, the company landed 4,000 subscribers from 500 firms. Not too shabby.
GoToMeeting	Initially released in July 2004, the tool has evolved over the years and still sports a loyal user base. At one point, I paid for it.

Name	Description
Zoho Meeting	The company released its offering in 2017. It serves as part of its suite of productivity tools.
Join.Me	Now owned by parent company LogMeIn, Join.Me still sports some prominent customers. I used it for a long time before switching to Zoom.
Fuze	Formerly known as ThinkingPhones, the videoconferencing company also focuses on enterprise customers.
Google Meet	To paraphrase the iconic *Simpsons*' character Troy McClure, you may remember this tool as an original feature of Google's ill-fated social network Google+. Hangouts became a standalone product in 2013. At that time, Google also started integrating features from Google+ Messenger and Google Talk into Hangouts. If all of these related products seem to overlap and strike you as a tad confusing, trust your judgment. In this way, Google resembles its rival Microsoft.
UberConference	Founded in 2012, the tool sports a clean, elegant design.
Facebook Messenger Rooms	Launched in May 2020, Messenger Rooms lets people join Facebook group video calls even if they abstain from using the social network, as I do.
Intermedia AnyMeeting	AnyMeeting launched in 2011 and survived as an independent entity until September 2017 when Intermedia gobbled it up and rebranded it.
Adobe Connect	Adobe Connect is the umbrella term for former Macromedia products that the company acquired and rebranded. The linages of these products trace back to the early 2000s.

TIP

For a useful chart that compares many of these tools, visit `bit.ly/vc-compare`.

TIP

Say that your organization suddenly adopts Zoom. If you've used any of the tools listed in Table 1-1, odds are that most employees will pick up Zoom relatively quickly.

Slack and Microsoft Teams

Table 1-1 intentionally omits two prominent collaboration tools: Slack and Microsoft Teams. To be sure, both applications allow users to hold video calls. I should know because I regularly use them. Still, it's misleading to call Slack and Microsoft Teams videoconferencing tools.

Sure, Slack and Teams both let users hold multiperson videoconferences and share their screens. If you think that that's the sum total of what those programs can do, though, then you're sorely mistaken. You're severely underestimating what they can do. It's like using your smartphone only to make phone calls or your Lexus convertible for the sole purpose of holding your coffee flask, to paraphrase one of my favorite jokes by the erudite comedian Gary Gulman.

Why today's breed of videoconferencing tools crushes its ancestors

It's important to remember that many popular, first-generation VoIP and videoconferencing tools have disappeared. (For an interesting read on the history of the technology, see `bit.ly/vcz-hist`.) Today's major players benefit from many advantages that their predecessors lacked:

- **Better broadband availability:** Not that long ago, most people dialed up via modems and were lucky to connect to the Internet at 56k per second. In large part, you can thank better pipes in the form of fiber-optic cables.
- **More robust networks:** Cellular network technology is a far cry today from 20 years ago. This trend will only intensify as carriers, such as AT&T and Verizon, start rolling out 5G.
- **Far cheaper data-storage costs:** Companies such as Zoom can store a virtually unlimited number of 400-megabyte (MB) customer videos because it's inexpensive to do so. It wasn't always that way.
- **Smartphones:** iPhones and Androids destroy BlackBerrys. There. I said it.
- **Application programming interface (APIs):** These powerful tools allow developers to easily stitch together different applications. I explain more about this concept in Chapter 7.
- **The widespread availability of cloud computing:** Companies can spin up new services in a fraction of the time required during the late 1990s.
- **Machine learning and artificial intelligence:** Software is constantly improving its speech-recognition and transcription capabilities. Yeah, Siri remains pretty dumb, but it's getting smarter all the time.
- **Powerful repositories of open-source software:** Code repositories help developers build all sorts of cool things — including videoconferencing. For some free alternatives, check out `https://red.ht/2Jqyjxz`.

For these reasons, contemporary videoconferencing applications such as Zoom represent a quantum leap over first-generation ones. It's not even close.

It's no coincidence that Zoom's suite of tools works so well and reliably. In large part, Zoom's rock-solid performance stems from how its bright founder and engineers deliberately chose to build it. In other words, Zoom embraced powerful and contemporary technologies from the get-go — not as an afterthought. Because of its greenfield approach and intelligent design, Zoom's offerings remarkably support a raft of concurrent users without a degradation in quality. For more information on this subject, see the nearby sidebar "Looking under Zoom's hood."

LOOKING UNDER ZOOM'S HOOD

Zoom works so well because it made intelligent choices about specific technologies and design:

- **A distributed architecture:** Early videoconferencing vendors built their wares in a relatively centralized and resource-intensive manner. For example, say that you were in New York in 2005 calling a coworker in the same building with one of those legacy tools. Your app may have to route the call through a data center all the way in Ireland. By contrast and like many newer tech companies today, Zoom has embraced a distributed configuration. This deliberate design choice means that the app automatically directs users to the nearest of the 13 data centers in its vast network. (The company continually invests in its data centers.) As a result, Zoom provides its customers with greater reliability and reduced call latency.
- **Multimedia routing:** Early videoconferencing systems tended to use Multipoint Control Unit (MCU), a resource-intensive streaming method that restricts call quality and scalability. For its part, Zoom uses a more contemporary and efficient streaming method called *multimedia routing*.
- **Multi-bitrate encoding:** Zoom recognizes that one size doesn't fit all. Calling your friends from home via your laptop and your ultra-high-speed Internet connection is a far cry from using your smartphone on your carrier's data plan. Zoom automatically adjusts your call quality based on the capabilities of your hardware devices and Internet Service Provider (ISP).
- **Application-layer service quality:** Zoom wisely built a layer into its technology stack specifically to optimize video, audio, and screen-sharing. At a high level and similar to multi-bitrate encoding, this layer accounts for users' different devices and bandwidth levels.
- **Intelligent use of data and metadata:** Zoom is able to route data on its network more efficiently than legacy videoconferencing tools could. There's plenty to unpack here, but a key point is that Zoom makes extensive use of call metadata. (*Metadata* is simply data about data.) For example, Zoom knows the device and location of all call participants.
- **Cloud computing:** Zoom relies heavily on cloud computing to deliver the goods. For hosting, Zoom engages industry leader Amazon Web Services (AWS). More than 1 million AWS customers know that they can easily and automatically scale up in the face of rapid and unexpected spikes in demand — in other words, precisely during events such as COVID-19.

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Consider the following two scenarios:

- **Scenario A:** You're making a videocall to your friend on your Android phone with your AT&T data plan in a remote area.
- **Scenario B:** An executive hosts a multiperson videoconference via her laptop in corporate headquarters with extensive bandwidth through its ISP.

In those scenarios, Zoom will automatically allocate more resources to the call in scenario B.

TECHNICAL STUFF

Visit `bit.ly/zm-stack` for more on the specific technologies that Zoom uses to make the magic happen.

Zoom's current market share

Where does Zoom rank in comparison to its competitors?

It's a fair question to ask. After all, you don't want to invest in a niche tool that may quickly disappear.

The answer is a little complicated.

In April 2019, Tom Eagle of the respected firm Gartner Research told the website CIO Dive that Zoom is "displacing some of these other giant vendors." Zoom's rise has carved out market share from Microsoft, Cisco, and some of the other established behemoths listed earlier in this chapter in Table 1-1. (Visit `bit.ly/ciodive-z` to read the piece.) Back then, estimates of Zoom's market share ranged from about 15 to 20 percent.

Of course, answering that question amid the rapid adoption taking place is now virtually impossible. Blame COVID-19 for that difficulty, among many others. Still, it's inarguable that Zoom's market share has grown over the past year. How much is anyone's guess, but the increase is probably substantial.

Exhibit A: In March 2020, Academy Award-winning actress Reese Witherspoon of *Legally Blonde* fame conducted a highly unscientific Twitter poll on individuals' preferred work-from-home (WFH) tool. Figure 1-1 displays the results.

It doesn't take a survey expert to poke holes in Witherspoon's informal methodology — not that she's a scientist. The results, however, offer additional evidence that Zoom's ascension is sudden and real. The natural question is why.

FIGURE 1-1: Reese Witherspoon's informal Twitter poll on video-conferencing usage.

TIP

Every year, videoconferencing hardware maker Owl Labs creates a slick and informative report on the state of the industry. The 2019 version of the survey includes responses from more than 1,000 U.S.-based professionals. (You can access it by visiting `bit.ly/zoomowl`.) Short version: The vast majority of Zoom's customers love using it.

Reaping the Benefits of Zoom's Tools

Zoom's suite of tools isn't hurting for powerful features. In other words, it allows both employers and their employees to communicate and collaborate better in a number of ways.

The company sells a number of related, but distinct, offerings. (See Chapter 2 for more on this topic.) In this section, though, I focus on the overall benefits of Zoom's products and services. As such, the following benefits don't apply universally to all of Zoom's solutions, much less equally. For example, you can't call others via Zoom Video Webinars. For its part, Zoom Phone does not let you hold webinars. On a general level, though, the advantages that I list hold up reasonably well when viewing the entire Zoom suite.

Zoom solves some of today's key communications problems

I'll start with the elephant in the room: Zoom helps people communicate and collaborate far better than when they rely upon text-based messages alone. Specifically,

Zoom and its ilk provide key context to everyday communications, thus minimizing the chance for misunderstandings and outright blunders.

That statement may seem obvious and impersonal. It may even invoke a "Duh!" I'll bet, though, that at some point you sent a colleague, manager, or friend an email or text message that confused her. I'll also wager that someone has befuddled you with a vexing email as well. As I wrote in my 2015 book *Message Not Received: Why Business Communication Is Broken and How to Fix It* (Wiley), stripping out essential context is a fundamental limitation of text-based communication. Put differently, when it comes sending to asynchronous messages to others, the fleas come with the dog.

When people actually engage in real-world conversations, they dramatically increase the odds that they are truly communicating. They allow others to immediately ask questions — and vice versa. Remember, the word *communicate* means "to make common." It is often hard to achieve that elusive goal exclusively via text messages.

Zoom makes people more productive

Say that you're experiencing a problem on your computer. For example, a program or your operating system is acting funky, to use a technical term. You write a long email to the vendor's technical support team detailing the problem. Maybe you even include all the relevant information.

Still, the support rep doesn't seem to get it. He responds, and the two of you go back and forth over the course of days or, heaven forbid, weeks. Your frustration level rises. Drink in hand, you start venting on social media.

Odds are that the rep isn't incompetent or evil. He's just not picking up what you're putting down. If only you had a way to show him exactly what's happening in a synchronous manner, then he could try to solve your problem.

Again, thanks to Zoom, you most certainly do. I have used it and its predecessors hundreds of times to share my screen and quickly diagnose technical issues. Other times, I have simply wanted to get someone's real-time input on a book chapter, blog post, or slide for one of my presentations.

NONVERBAL CUES MATTER . . . JUST NOT AS MUCH AS YOU MAY THINK

You may have heard the oft-cited statistic that roughly 90 percent of communication is nonverbal.

The infamous number stems from *Silent Messages*, a 1971 book by Albert Mehrabian (Wadsworth Pub. Co). The text represented the culmination of Mehrabian's research into human communication patterns with his colleagues at the University of California, Los Angeles. Mehrabian looked at the language that salespeople used and whether prospects understood them. At a high level, he found two things.

- People often communicate in inconsistent or contradictory ways. (No shocker there.)
- In one study, Mehrabian asked his subjects to quantify how much of the salespersons' credibility stemmed from their use of single, spoken words. In the aggregate, that number was a mere 7 percent.

This statistic begs the question: What about the other 93 percent?

The answers are gestures and tonality. Collectively and in certain contexts, these two attributes can accurately convey meaning and emotions far more than the words themselves.

As it often happens, however, the mass media widely circulated that 7 percent figure without the requisite context. Many people started taking that number as gospel. (I have been guilty of it as well.)

A good deal of subsequent research has debunked the 7 percent myth. For example, in 2007, David Lapakko of Augsburg College published a study called "Communication is 93% Nonverbal: An Urban Legend Proliferates."

Tone of voice and body and facial expressions certainly matter, but probably not to the extent that most people think.

Zoom just works

Zoom's Meetings & Chat and Video Webinars services are especially easy to set up, use, and manage. If you know how to operate a computer, tablet, or smartphone, then you can be up and running in minutes. For their part, Zoom Rooms and Zoom Phone require some assembly to proceed. In all cases, though, you don't need to be a coder, a techie, or a hardware expert to use Zoom's most popular services.

Zoom's tools work well on computers, tablets, and smartphones. That's not to say that you can perform every task on every type of device. For example, Meetings & Chat allows up to 49 people to concurrently their video feeds in a 7-x-7 grid. (See bit.ly/zm-ag for a cool animated gif of this grid in action.) If you think that you'll be able to clearly see those 49 images on your smartphone, think again. Also, showing all those individuals' screens will tax your laptop's central processing unit (CPU) and slow down your machine. Put simply, your computer and its operating system may not be up to the task. Ditto if you're concurrently running ten demanding software programs in the background.


TECHNICAL STUFF

Your device's CPU is its main processor. It is the electronic circuitry that executes instructions of computer programs. Without a CPU, your computer is effectively a useless, expensive, and heavy paperweight.

These disclaimers aside, though, Zoom's tools generally just work. If you're of a certain age, then you may remember when mainstream videoconferencing applications were downright janky.

Zoom is affordable

Say that you're excited to start using Zoom, but the accountant in you wonders how much it costs.

The answer depends on the specific plan that you choose. (Chapter 2 covers Zoom's different plans and products in far more detail.) Enterprises with tens of thousands of employees will certainly pony up more than your indie record store owner will.

Not sure about what Zoom can do for you? Fine. Give it a spin for free. For now, suffice it to say that your employer need not spend tens of thousands of dollars on Zoom. What's more, it doesn't need to lock itself into expensive and rigid multi-year deals. Upgrade, downgrade, leave, and return whenever you like. In terms of contracts, think Netflix, not AT&T or Verizon.

Zoom is flexible and interoperable

In the past, videoconferencing and collaboration tools didn't always play nicely with one another. For example, Webex may have worked well for Walter, a Windows 7 user running Internet Explorer. His colleague Donnie, however, wasn't so lucky using his Mac to run the Mojave operating system and Safari as his web browser. In the past, many conference calls and webinars reverted to a comedy of errors not unlike the one portrayed in this classic YouTube video: bit.ly/cc2-zoom. Half an hour after the scheduled start time, a dozen people were still restarting their computers and finagling with their devices' audio and video settings.

Fortunately, and as Zoom users know, those days are gone.

Zoom runs on anything. The company has built a flexible and interoperable solution for meetings, phone, webinars, and chat. Say that you're holding a webinar from your desktop application. Fifty people attend, but they connect in different ways and on different types of devices. Some want to watch via their web browser. Others are on different smartphones and tablets. The attendees also run the gamut: Windows, Android, iOS, MacOS, and even Linux.

It gets even better.

Zoom works seamlessly with more than 200 other third-party apps. (I cover this subject in Chapter 7.) Here are a few examples:

- You use Microsoft Outlook and want to easily add a Zoom meeting to an existing event. You also want to prevent people from calling you when you're busy. Check.
- Like millions of progressive-minded folks, you're a passionate fan of the collaboration tool Slack. As such, you want to automatically launch Zoom calls from the Slack desktop client. Check.
- Your company uses Salesforce as its customer-relationship management (CRM) system. You want to start an instant Zoom meeting from a Salesforce event, lead, or contact page. Check.
- A college professor wants to hold virtual office hours with her students in Canvas, her university's learning management system (LMS). Check.

I could go on for hours. Brass tacks: Zoom plays nicely with the other arrows in your quiver.

Zoom stays in its lane

A man's got to know his limitations.

— Clint Eastwood as "Dirty" Harry Callahan, *Magnum Force*

On a related note, Zoom doesn't attempt to replace essential productivity tools that billions of people have used for years. Zoom enhances other applications and systems; it does not supplant them.

Even Zoom power users continue to rely upon email and other communication tools on a daily basis. Because of Zoom, though, they don't use those tools quite as much as they did before. For example, you may decide to chat with a colleague

via text or voice over Zoom rather than exchange a series of emails in Outlook or Gmail. (Kudos for seeing the light.) Slack users can call each other without Zoom. Those who want to grant others control of their screens, however, will have to use Zoom or another tool. (Slack does not include this functionality.)

Zoom doesn't try to be all things to all people. It won't act as your spreadsheet, word-processing program, or CRM system. Zoom will, however, augment these applications. (I revisit this subject in Chapter 12.)

Zoom lets people rediscover their humanity

To state the obvious, Zoom's customers realize significant benefits from using it. Why else would they pony up for monthly and annual subscriptions? Fair enough, but foolish is the soul who believes that Zoom is a suite of apps that only businessfolks can use. In fact, untold numbers of people frequently use Zoom products for decidedly nonprofessional purposes. (Chapter 17 includes some of them.)

I'm a perfect example.

In early March 2020, I was practicing social distancing like billions people across the globe. I enjoy my space and downtime as much as the next guy. Still, after a few weeks, I craved some human interaction. I held a few virtual happy hours via Meetings & Chat with five of my college friends. No, it wasn't the same as getting beers with them in person and playing hoops, but it was certainly more fun than our normal, audio-only call.