


The background of the slide is a high-angle, night-time photograph of a city skyline, likely Dubai, with numerous skyscrapers illuminated. Overlaid on this image is a complex network of glowing lines in blue, purple, and red, with small circular nodes at various points, suggesting a digital or technological theme.

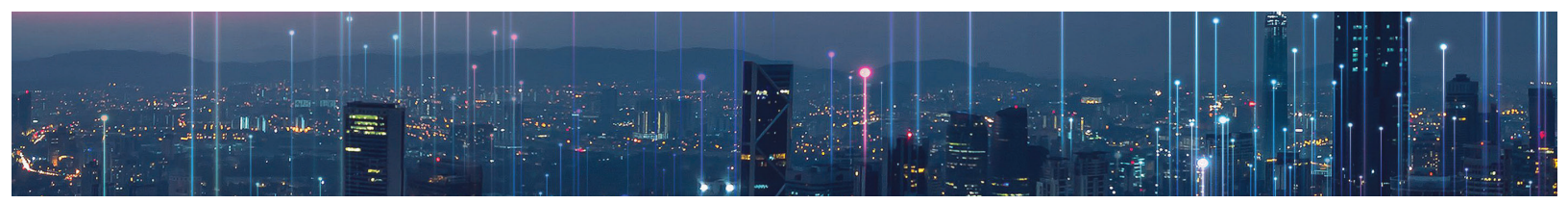
Is Every Company a Tech Company

Technology is driving our economy –
where do you fit in?



Technology is indisputably an economic driver as a sector. Is it also a driver of successful growth in other sectors?

“The technology industry is critical to economic growth in any community today because it not only produces high-wage jobs, but also supports many other industries,” says Eric Miller, principal and co-owner of Phoenix Analysis & Design Technologies and one of the pioneers in applying that groundbreaking 3-D printing to a wide range of industries and business uses 10 years ago. And he cites the Arizona Technology Council’s quarterly Technology Impact Report, which found that for every technology job created, 3.76 non-technology jobs are created.



Technology is “the foundation of modern life and business,” which makes it an important driver of every modern economy, says Chris Camacho, noting Greater Phoenix has seen incredible technology sector growth since “The Great Recession” when GPEC and the region’s public and private leadership made intentional decisions to diversify our economy and bolster the attraction and investment from leading tech firms. As president and CEO of Greater Phoenix Economic Council, Camacho not only has a front-row seat to what’s happening, he’s part of the team that has worked to help Greater Phoenix become a metro area that offers an affordable, high quality of life for workers and more reliable infrastructure, lower operating costs, and fewer regulations for businesses — which has resulted in more than 13,000 technology companies now calling Greater Phoenix home. “We’re a young, rapidly growing tech hub with a vibrant ecosystem of local innovators, founders, incubators, accelerators and investors,” Camacho says, “and we will continue to be a national leader in technology growth and innovation for decades to come.”

In fact, he sees technology as the answer to our economic competitiveness. “Our competitiveness, value proposition, venture

capital ecosystem and maturation of our highly skilled workforce to meet the needs of technology companies is the answer to continue securing investment and driving our modern economy forward. As Greater Phoenix continues to transform into a more modern economy, the global technological and digital evolution is going to propel sector growth leading to tens of thousands of jobs for our residents and further solidifying Greater Phoenix as a U.S. technology hub.”

Miller notes that technology is one of the few industries that has shown exponential growth over the last 10 or more years, while industries like real estate and construction are very cyclical and have frequent highs and lows. But in building our area’s competitiveness, technology does not stand alone. Miller points to other factors of competitiveness to pay attention to, which include infrastructure, cost of living, the regulatory environment and, with an obvious impact on technology growth, education. “I believe we are also doing relatively well in these categories, other than education,” he says. “Education is an area where Arizona has consistently lagged behind. We’ve significantly improved the strength of the higher education in the area, but in K-12 we still have a lot of work to do.”

EVERY BUSINESS IS TECH – OR SHOULD BE

Technology’s importance as an economic driver stems from its impact in fundamentally changing how all of us work and drive the economy. In fact, Aaron Bare, co-founder of the HeroZona Foundation and Entrepreneur-in-Residence at SU Ventures & Singularity University Incubator, makes the case that companies which do not embrace technology are being left behind. “We are heading towards a circular economy, with the aid of technology, that will not only change how we think about work but also how we think about money,” he says. “The future is very different from the present. Some people will not like it, yet others will reap great rewards from the change that is about to happen.”

Bare believes every company in the future will be a tech company. “If you don’t think your company is a tech company in 2021, you’re not growing and likely dying.” He cites as examples Domino’s Pizza and Starbucks Coffee. “These are not pizza or coffee companies. These are tech companies that just so happen to sell pizza and coffee. I challenge anybody to find a company that is growing that isn’t a tech company.”

The experience of Jad Chalhoub, Ph.D., director of business analytics for electrical contracting firm Rosendin, support Bare’s position. “Not every company is a tech company, but every successful company should become a tech company,” he says. Observing that in the past couple of decades, technology has shown an unmatched capability of pervasiveness, infiltrating and changing everything around us, he points out that in recent years, another level of infiltration became more noticeable: tech digitization vs tech digitalization. He explains the significance of that difference: “While almost every company is digitized, meaning its data has moved from paper to the digital world, some companies have started to change their processes entirely to leverage the new medium — and that is technological digitalization.”

Dr. Chalhoub notes this shift in process requires, almost by default, a shift in the internal functioning of any company: It requires new hardware and software, internally built or externally bought. It

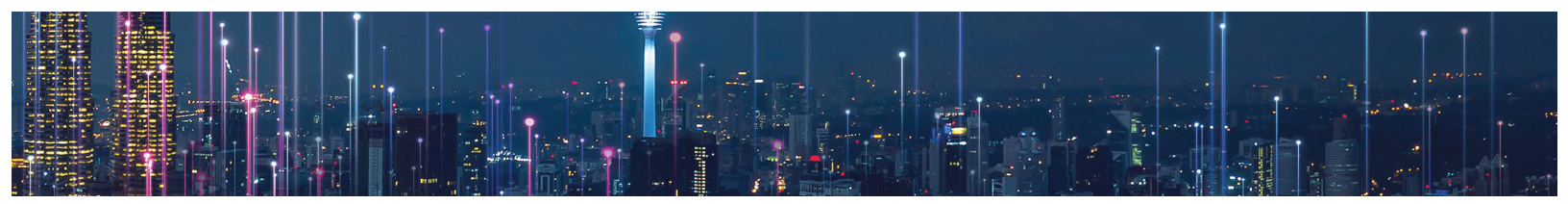
requires new personnel, with change agents and out-of-the-box thinkers to take on traditionally accepted norms. It takes a decision and support at every level of the company to move towards a future that seems alien. “For those reasons and more,” he says, “many companies are content with digitizing, and are unwilling or incapable of moving towards a fully digitalized world.”

However, Dr. Chalhoub cautions that digitizing may inherently carry more risk than a complete digitalization. He points out that technology has proven capable of augmenting all aspects of any given process: It may make a good process even more efficient, and it will either relatively or substantially highlight the inefficiencies of a less robust process. “To turn your company into a tech company, you first must find the bottlenecks in your current processes, identify areas of highest risk, and apply new, technology-enabled processes to these areas.

“The effects of applying technology, if done properly, will give you leverage to tackle more bottlenecks, and uncover more inefficiencies,” he continues. “It will give your company leverage over competitors, but, maybe more importantly, inspire others in your industry to do the same, with competition pushing everyone towards a more efficient future — a rising tide really does lift all boats.”

Emphasizing that it’s an ongoing process, Dr. Chalhoub says, “The move from a ‘traditional’ company to a ‘tech’ company is really an endless cycle as opposed to a one-time transition.”

Another view from someone well outside the technology sector, James Goodnow, managing partner of law firm Fennemore, acknowledges technology can be daunting, but believes it doesn’t need to be — particularly for companies wanting to grow and adapt to change. “If company leaders look at their competition, I’ll bet they’ll see examples of how technology is the growth catalyst” he says. “Although some within a business may be intimidated by anything more than switching between apps on their phone, chances are the company is already paying for rich, productive technology that can drive efficiency and growth. You just may not be using what you’ve



got to its full potential. So, before you shell out big bucks for the latest and greatest tech, make sure you're maximizing what you already have. Once you've done that, focus on cloud-based tools that allow your teammates to better collaborate and share information across offices and locations. Don't just go for the "razzle-dazzle" tech—find or create technology that helps you address specific customer or employee pain points. Targeting those needs will give you the best return and move your business forward."

So, is every company a tech company? "Yes," Miller says, "because technology plays a very important role in nearly every industry's success."

However, Miller separates companies into two roles: companies that use tech and companies that innovate and create tech. "Both can certainly be considered tech companies," he says, "but for Arizona's growth, we'd like to attract companies that create and innovate. This is because innovators are the tech companies that create high-paying jobs and improve overall growth."

TECH JOBS IN EVERY INDUSTRY

As Miller noted earlier, tech jobs are important to businesses in non-tech industries. The Arizona Technology Council's report breaks down employment by sector and shows growth of technology jobs in almost all. Some are minimal, to be sure — retail and entertainment are each less than 1%; but it's instructive to see that it exists in realms from healthcare to real estate, from education to warehousing.

Miller describes some of the key technology jobs:

- IT/Cybersecurity Professionals: This is the tech industry and individual that is most important to non-technology industries because these professionals keep every industry online and safe.
- Data Center Architects: These professionals enable everyone to have access to the computing power and storage they need,

from anywhere. As an example, using Microsoft Office used to require a high-end computer, but now all that power is hosted in the cloud.

- Advanced Manufacturing Professionals: Industries are using advanced manufacturing techniques to create better materials and safer/more efficient structures. Construction is a good example of an industry that has benefitted greatly from advanced manufacturing.
- Automotive Engineers: The engineers making electric and autonomous vehicles are improving nearly every industry, but especially supply chain/logistics and transportation. For instance, Nikola is creating more efficient trucks that create better jobs for truck drivers while driving fuel costs down, improving safety and creating a more sustainable world.

TRANSFORMING WITH TECH

Bare says the biggest mistake he sees, as a consultant, is businesses simply throwing money at technology thinking it will make them a tech company. While that may, indeed, increase their technology capabilities, he believes all such innovation needs to start and end with the customer. "We don't start with the technology; we look at the customer experience that we want to create and then ask ourselves, 'What is the technology that will get us there and improve our customers experience with us?'"

Similarly, Miller emphasizes that tech is about creating tools for

other people and believes that businesses are using technology correctly when they create a tool that drastically changes the way people do things for the better or improves the outcome drastically. And he shares, "One of my favorite local startups, Qwick, took an industry about getting foodservice professionals to events from a highly manual process involving phone calls, email, and back and forth communication to an online application that allows the people needing workers and the workers themselves to find each other with a few clicks and with more money in both pockets."

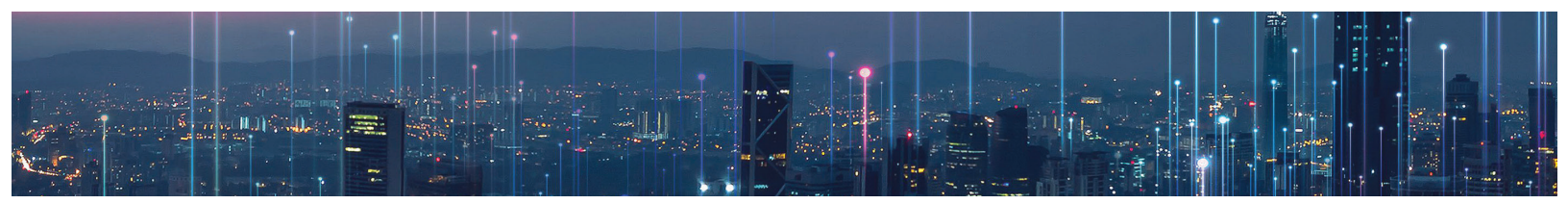
TECH AS DISRUPTOR

Tech also creates the opportunity for businesses to be disruptors in their industry, which Bare believes is a significant fact. In fact, he says, "If you look at everyone else in your industry, you see that they are using technology to accomplish the same goal: wins for the customer. Unfortunately, if you focus only on your industry and your known competitors, another industry will swallow your industry whole." Exponential companies, he explains, are growing and gobbling up adjacent industries with better solutions for their customers. He notes, for instance, that Mercedes Benz is no longer just competing with BMW; they both realized a shared concern and started collaborating. "They are competing with Uber and Tesla in industries they would have never considered if they focused on each other."

Karla Jo Helms, CEO of JoTo PR, observes that the challenge for businesses is how to be seen as a "goodwill equalizer" in the eyes of the industry's audiences and influencers, noting that, while people dislike change, it is the very essence of innovation. "In the 25 years since the Harvard Business Review coined the term disruptive innovation, one common denominator has been abundantly clear: Research. It goes without saying that lack of preparation is a sure path to failure."

Helms shares five ways disruptors "get it right":

1. Doing market research into the key target audiences to find their actual acceptance or defiance to adoption. These key target audiences should include one's competition; knowing



their insight beforehand has given many disruptors the advantage of *prediction*.

2. Doing Key Opinion Leader market research that find the influencers of the key target audiences. Adopting the new media approach today — of communicating through influencers and key opinion leaders — allows adoption to occur 10 times faster.
3. Taking the two instruments and data above to mathematically calculate the size — and potential hindrance to adoption — of the target audiences, to come up with the estimation of effort (time, money, marketing) it will take to convince a segment of the population to change their minds or to think in a new manner.
4. Preparing early for legal suits, such as from competitors and anyone in those economic networks that will get cut out due

to the innovation — and include crisis communication strategy plans in that preparation.

5. Utilizing the news media as a broad-stroke education tool to drown out ill-intended naysayers before they speak up.

“When you become a disruptor, you are putting a target on your back, so you must be prepared,” Helms cautions. “Know your tools. Research, education via PR and publicity, and preparation for crises will help companies leverage the court of public opinion for the fastest adoption. That enables disruptors to gain positive exposure, which in turn will lead to bigger influence — and in many cases retard the liability of being attacked.”

NON-TECH AS TECH

Tech has pervaded the financial industry so much that it has given rise to a new industry subsector: fintech.

“Fintech startups played a significant role in the global financial industry during the pandemic,” Frank Breuss shared in a recent article for *In Business Magazine*. The CEO and co-founder of fintech company Nikulipe noted that payments companies, especially, have brought rapid solutions to aid the transition in commerce, which shifted from physical to digital in a matter of months. “Payments industry experts expect the increase of fintech solutions to continue driving the growth of e-commerce for the foreseeable future, citing the change in user behavior,” he continues. “In fact, we believe some challenges that have undermined e-commerce before remain unsolved and so the need for fintech solutions will remain for the foreseeable future.”

Connie Carter, VP of business development at eMONEco, which works with financial institutions to create fintech-driven payments solutions, sees mass adoption of real-time funding systems around the globe as contributing to an environment in which many consumers, merchants, and financial institutions expect to be able to pay friends and customers, settle bills, and transfer money at the drop of a hat. “While the concept of ‘paying now’ is not a new one — cash is an immediate payment transaction instrument, after all — the growth of ‘real-time payment’ options has helped build a new standard among consumers. This new standard is driving change for traditional payment types — checks, credit, debit, prepaid, and the like — as consumers have generally come to expect faster settlement periods, notifications, and consolidated reporting.”

Carter believes this consumer expectation and the COVID 19 pandemic have brought these issues to the forefront and banks will need to transform their models to compete with the likes of Google, Apple, Facebook and Amazon (collectively referred to as GAFA). “They’ll have to become digital services businesses that are able to monetize data and build products and services around predictive insights into their customers, such as how they earn money today versus how they will earn money tomorrow,” she says.

While COVID brought added attention to this issue, many banks had already begun adopting fintech solutions. For an article specifically

exploring fintech in banking, Don Garner, CEO of Alliance Bank of Arizona, told *In Business Magazine* a year ago that Alliance Bank had begun seeing a “marked shift” in how businesses are doing business and responded by implementing such 24/7 tools as online business banking, secure mobile business banking apps, fraud protection, remote deposit resources and more to serve businesses. Crediting fintech with helping the financial industry make incredible strides in enhancing the speed, accuracy and responsiveness of banks, Garner says, “We see that trend continuing, especially as the FinTech community continues to push the envelope building increasingly efficient financial platforms and more enhanced tailored banking solutions.”

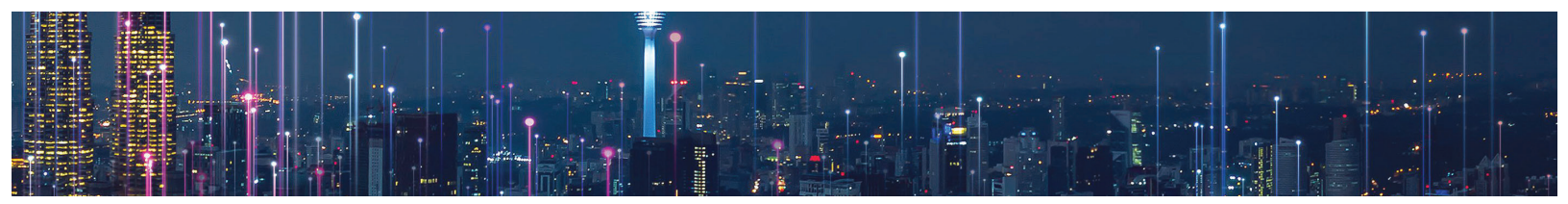
Carter cites a report from PricewaterhouseCoopers, “PwC Financial Services Technology 2020 and Beyond, whose research found that technology is affecting financial services in a multitude of ways. Its conclusions include the predictions that fintech will drive the new business model, digital will become mainstream, “Customer intelligence” will be the most important predictor of revenue growth and profitability and regulators, too, will turn to technology.

Another non-tech industry that has been high-profile in its embrace of technology is real estate — and HomeSmart International is arguably in the vanguard with its nearly three dozen technology products and services and use of more than four dozen technologies for its website.

While conventional brokerages tend to stick to tradition, HomeSmart has not only adopted technological advances but has developed its own solutions aimed at revolutionizing the real estate industry to provide an integrated system of excellent service at the hands of the latest technology.

The technology-powered real estate franchisor made its RealSmart Agent Mobile application available in the iTunes app store and on Google Play. As is the case with all other HomeSmart proprietary technology, the application was written entirely in-house and integrated directly into HomeSmart’s extensive technology platform.

In fact, the foundation of the HomeSmart business model is built on an ecosystem of proprietary technology that streamlines the homebuying process from listing to closing. There exists no third-



party vendors or outside systems within HomeSmart, allowing less redundancies and complications for the end user. Founder and CEO Matt Widdows created the company to run on end-to-end technology, providing centralized services to all brokers and agents. This strategy to real estate, in turn, allows for consistency throughout all HomeSmart locations nationwide.

Law, says Goodnow, is one of the most traditional professions that exists — it prides itself on bucking trends and not following along with what other businesses are doing; it's literally an industry that's built on precedent, where it's necessary to look backward to determine how to go forward.

Acknowledging that the legal industry has been slow to adopt technology, Goodnow says, "We view that, in our mind, as a great chance for us to outpace our competitors." Goodnow says Fennemore has a lot of different software offerings integrated into the firm in all types of areas. Some are off the shelf, some the firm has been involved in helping to create, and some

"Technology is — or should be — at the heart of even the most traditional companies," Goodnow says. "Even if your business isn't building search engines or smartphones, technology drives efficiency and collaboration at the best businesses across industries. This is especially true in an emerging post-pandemic world with a workforce inside and outside of the office. At our law firm, we're implementing automation and AI-based technology that eliminates repetitive processes so our lawyers can better serve our clients and provide more value. For example, we've invested in new AI-based software that helps us break down client work into rational, structured units so we can understand the constituent parts of a case and utilize flat rates with clients when it makes sense."

Additionally, he says, "Our needs have certainly changed as a result of the pandemic, and now with a distributed workforce, many of whom are in different locations in their homes, we've got to make sure that we can move seamlessly, so we've been working to integrate some new work distribution software, and that allows us to get assignments across offices and to people with the right skill set and the right availability.

With that as a high priority, Fennemore collaborated with an AI company to create software that helps the firm understand how much time it takes to handle a particular kind of case. "That helps clients when it comes to budgeting, giving them the opportunity to have flat-rate pricing. But it also helps us internally, to better understand how to allocate resources. We've invested in automation software, to streamline processes where we can."

In fact, Goodnow says technology is at the heart of Fennemore's strategic plan. And he emphasizes that such plans should not be static. "I think any business, in any industry, needs to reevaluate their plan post-pandemic. Anything you have, even if it's from February 2020, you can probably toss it out the window now because the world has changed so much." He sees technology as a key part of Fennemore's adaptation for the future and helping the firm stay ahead of competitors. "So, it's a big play for us, and we're seeing results coming from it, and it's something that we think's going to give us a competitive advantage going forward."

So, while Fennemore is clearly not in the technology industry, Goodnow says, "We have a very robust information system team at the firm, and included in that we have software developers and web developers that are with us on staff."

BECOMING TECH

"My advice for becoming a tech company," says Miller, "is to look at how technology can improve your productivity and/or the value of the product or services you deliver." A mortgage company, for example, can use or create technology to turn the process of getting a mortgage more valuable, easier, and more efficiently, while also lowering the cost of supplying the mortgage. "This represents taking an age-old process and using technology to stand out and add value, thus using innovation to stand out from the competition and, effectively, become a tech company."

Bare sees tech at the heart of the massive transformative disruption happening right now to competition. "Once something is digital, it is able to go exponential. Companies that compete linearly have no chance against a company that grows exponentially. For example, digital companies compete for a long time just moving along deceptively until one day ... you find they've disrupted your customer. From there, exponential companies seek to dematerialize,

demonetize and democratize," he says, briefly describing the concept of his book *Exponential Theory*.

Says Bare, "Nearly every industry is in a transition — whether they know it or not."

Aaron Bare aaronbare.com/exponential-theory

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