

## May 2018 @ CTM

### THE DIRECTOR SPEAKS - Turning Failure into Lesson Requires Introspection



A cartoon possum named Pogo first appeared in newspapers in 1941 and was periodically published up until 1993. It was Pogo who said “you have to run your fastest when you do not know where you are going.” That quote held true then and is even more pertinent today; at a time when everything feels like it on hyper-drive. If there is a clear destination, an objective, in mind then the shortest path is obviously a straight line and the mantra simplifies to “Just do it”. However, this strategy does not work well if the objective is uncertain or if the conditions that surround the objective are constantly changing; this is often the status quo in today’s technology-driven marketplace. In an effort to increase agility in a constantly changing environment, the idea of “fail-fast” took hold; a concept where failure is treated as something to be embraced as a learning experience. What is often left unsaid is that failure for failure’s sake might be better characterized as misguided stumblings. For failure to be truly constructive, there has to be learning. This idea might best be encapsulated by the John Powell quote “The only real mistake is the one from which we learn nothing.” However, this leaves open the question of how do we know whether that learning represents something truly constructive or whether it is simply stumbling. The answer lies in the nature of the objective. If the learning process moved you closer to the

objectives, even through it did not meet the objectives, it has to be considered constructive. Alternatively, if the learning process eliminated uncertainties and made the path toward the objectives clearer, it is also constructive. However, if no identifiable progress was made, then the situation suggests some soul searching is in order and this introspection is not something to be taken lightly. Perhaps the effort truly represents a stumble or alternatively, perhaps the objectives are misguided and a complete reset might be in order. In the end, failure might represent a valuable lesson or complete misdirect and we have to be honest with ourselves if we hope to be able to tell the difference.

### UPCOMING EVENTS

- **June 20-22, 2018.** [Global Tech Jam](#), Portland OR
- **July 9-11, 2018.** [IEEE 5G World Forum](#), Santa Clara CA
- **August 18, 2018.** [Big Data Day LA 2018](#), University of Southern California., Los Angeles, CA
- **Sept 12-14, 2018.** [Mobile World Congress Americas](#), Los Angeles, CA
- **Sept 24-26, 2018.** [The MedTech Conference](#), Philadelphia PA
- **Nov 2-18, 2018.** [Innovate LA 2018](#), held throughout the Los Angeles area.
- **Nov 5-9, 2018.** CTMs Fall 2018 [Advanced Management Program \(AMP\)](#), gives your high potential employees the skills they need to anticipate, prepare, and communicate in an increasingly dynamic and technology-driven world. More details can be found in the [course brochure](#). Registration is open and can be found [here](#).
- **Nov 15-17, 2018.** [LA Commotion](#), Los Angeles CA
- **Nov 9-Dec 9, 2018.** [Los Angeles Car Show](#), Los Angeles CA
- **Dec 4-6, 2018.** DataWest 2018 Conference. UCSD San Diego, CA
- **Dec 13-15,** [MedTech Impact](#), Las Vegas, NV

If you have an event that you would like us to include in our newsletter, please send an email to [ctm@marshall.usc.edu](mailto:ctm@marshall.usc.edu)

### IN CONVERSATION WITH Tim Blute, Director of Futures, National Governor's Association (NGA)



Timothy Blute assists and advises governors and state officials on how emerging technologies will impact government and state economies, including identifying the opportunities and challenges associated with ongoing technological innovation. Previously, he served as program director for the NGA Center for Best Practices’ Homeland Security & Public Safety Division. Blute focused on cybersecurity, public safety communications and information sharing.

#### 1) In the popular press, there is a lot being written about smart-cities. How are smart-cities similar and different from smart-states?

The smart city community has been around for some time and has made amazing progress at highlighting the ways in which connected technologies can improve the function of cities, make government more efficient, and enhance citizen engagement. However, the state and the governor play a critical role in scaling smart city initiatives, documenting best practices, and promoting smart communities across a state or region.

The opportunity of technology is so much broader than just cities, there are applications for suburban, exurban and rural areas as well. States and governors are naturally suited to advance the work being done in cities to the entire state. Ultimately, the goals of smart cities and smart states are aligned, to use technology to make a smarter community, regardless of where you live.

#### 2) Government entities are often characterized as reactive organizations. However technology is accelerating and driving changes faster than a reactive organization can absorb. How are states shifting to be more anticipatory and less reactive?

Naturally I’m biased, but I think state government has really stepped up and embraced technology, both in government and as an economic driver. Within government you have states using chatbots to improve customer service, developing Alexa applications for certain services, and even exploring emerging

technology like blockchain. And these aren't just one offs, states are leading on technology adoption in a way that most people would be surprised to learn about.

Outside of government we've seen states embracing new technology to grow their economies. You see examples of that with autonomous systems, where states across the country are working with the private sector to safely test autonomous vehicle technology on state roads. It's also happening in the skies, just a few weeks ago the US Department of Transportation announced that a number of states, in partnership with the private sector, will be new testing sights for package carrying drones.

More broadly, there is welcoming attitude and a strong interest in technology among governors and state policymakers. At recent NGA meetings we've had discussion around transportation and energy innovation, financial technologies like crypto assets, the future of work, and artificial intelligence. Governors as the CEOs of their states recognize that the world is changing and state government isn't immune from the disruptions around us.

### 3) As a group, what might the states say would be the most significant challenges they will be facing in the future?

I think there are three primary challenges. First, keeping up with the pace of technology is increasingly difficult. Not only is the speed of innovation hard to track, but there are entrepreneurs and companies actively looking to disrupt every sector of the economy. Keeping apprised of the latest developments and separating the signal from the noise is a tall order for state government. This is one area where NGA really helps governors, through NGA Future we assist governors in identifying the trends most likely to change their economy and society in the next 3-5 years.

Second, ensuring that technology's benefits aren't narrowly accrued to only those in the technology sector is a key challenge. The disruption I mentioned above is scary to anybody working in an industry facing it. Policymakers have to work with their citizens, universities, and the private sector to make sure that new technology not only improves lives in Silicon Valley, but that it improves people's livelihoods across the country.

Finally, the future of work is a major challenge we're all going to face in the future. By this, I don't mean that robots are taking all of our jobs, but I think it's clear that we're going to be able to automate more and more processes and skills as time goes on. This means there in some sectors we may need less workers and jobs will change. Government is going to play a key role in preparing the workforce of the future to be flexible and prepared for what may come and for helping the displaced workers get back on their feet.

That being said, I remain optimistic that we're on the cusp of a great technological convergence that will increase productively and grow our economy. The world will continue to change and technology will drive a great deal of that change, but on balance there will be a great deal of benefits for society.

### 4) NGA brings the states together so they can work together to face common problems together. What are some examples of where the states have been able to achieve results by working together that they might not have been able to as standalone entities?

I think the best example is in the ways in which states, via NGA, are constantly sharing best practices, particularly on emerging issues around technology. The most obvious occurrence of this is our twice-annual meetings with all the governors, but NGA is bringing together senior policymakers on a near daily basis on a whole range of topics.

It's during these conversations that states are learning from each other, sharing challenging, and modeling best practices. We have a unique organization where our members are always competing with each other to be the top state in x or y industry, but there also always willing to share and learn from each other. There is a great willingness to document promising policies, discuss how they were created, identify the challenges faced during implementation, and share this experience widely.

### THINKING AMP: A Platform for New Business



There's a new business model in town, and it's taking the world by storm. It's called a platform company, and it's changing everything you know about retail (and other things).

Let's be clear: The concept of a platform company is not new. In fact, it goes back to the Greek agora, which was an open marketplace with lots of vendors—picture a flea market. Today, we still have those open markets: they're brick-and-mortar shopping malls, auction houses, even department stores. Think about the last time you walked into a JC Penney, for example: not only could you buy JC Penney-branded products, you could also wander into the Sephora, Brighton, and Origin stores.

This model is indeed a platform, and today, they rely on decentralized networks of individuals to facilitate exchanges at a massive, often global scale.

The business model for these companies is interesting. They create value by facilitating exchanges between two or more groups, usually consumers of a product or service and its producers. They create communities and markets using network effects that allow users to interact. This 'network effect' is based on a well-understood phenomenon called Metcalfe's Law: *The power of a connected network increases as a function of the square of the number of nodes in the network.* In other words, the more users there are in the network, and the more products and services, the resulting influence goes exponential.

So, what do these platform companies look like? All Platforms are asset and employee-light, have very low liability, and focus on value creation as opposed to value capture. They create their own markets: eBay connects buyers and sellers, Airbnb connects property owners to people looking for short-term accommodations, Fiverr and TaskRabbit connect contractors to people who need their services, and Facebook and Google connect advertisers to users, users to users, and software developers to users.

To be clear, platform companies are business models, not technologies. They are not mobile apps or Web sites; they're all-encompassing business models that create value by bridging the gap between consumers and producers. And lest you think this is a passing fad, Google, Apple, and Facebook are the most successful platform companies to-date, but they're not alone. In 2016, four of the top five members of Forbes's list of most valuable brands were platform companies, and in early 2017: Top five companies in the world by market cap were platforms.

Pay attention: This is a game-changer.

### THE I<sup>3</sup> CORNER:

This month we presented I<sup>3</sup>, CTM, and Viterbi at the RevTechX Conference in Sacramento (Future Technologies for a Better Government) and at the Summit on Government, Performance and Innovation 2018 in Los Angeles. Advances on display at these conferences suggest we are beginning to push past the era when the goal was to connect a few devices to an application in order to automate legacy business processes and headed into an era where we should fundamentally rethink the way we interact with our environment and our customers (or citizens). And, while, IOT is an enabling technology, it is part of a larger suite of technologies like Big Data and Advanced Analytics which, when orchestrated together, can 1) change the way we detect and drive actions across the organization, 2) increase the satisfaction from customers and partners and 3) improve agility and business sustainability. The last point, the need for business sustainability and agility, is sometimes underappreciated but a critical component to the equation. The concept of business agility accepts the fact that business models and business processes will change over time and these systems must be able to adapt to changing needs; a system that does not anticipate change will not be able to survive long term. The concept of business sustainability accepts the fact that available resources are in limited supply; any life-time costs must be offset with demonstrable saving or new funding opportunities.

### READER CONTRIBUTIONS - Power of Customer Referrals by Tyler Emery



*Tyler is Founder and CEO of Reign Media, creative agency focused on using Social Media to turn customers into loyal Mr. Ludovisi is a strategy and marketing executive with 20+ years of experience in senior roles at Disney ABC Television Group, NBC Universal, IMAX, Amgen, Warner Bros, IMAX, Booz Allen & Hamilton, and Saatchi & Saatchi.*

Brilliant marketing is at the core of turning prospective customers into loyal brand advocates with huge customer lifetime and referral value while minimizing customer acquisition and development costs. You must successfully connect the right message to the right consumer by utilizing the right media and methods in a way that is effective, efficient, and profitable. When startups compete with large corporations it often feels like David vs. Goliath, however startups and larger brands alike can use behavioral targeting to feed off of a competitor's customer engagement on Instagram. You do this by liking, commenting on, and following commenters of your competitors. A startup in Beverly Hills Brick Betty who sells premium leggings to women successfully hired a Los Angeles marketing agency Reign Media to engage with the commenters of their biggest competitor LuluLemon. By engaging with the female commenters of LuluLemon they were able to increase their engagement by 1,550%+, 280%+ in website traffic, and a 560%+ increase in sales within 6 weeks. Regardless of your industry or if you're a personal or business brand this extremely granular behavioral targeting strategy works incredibly well for start ups and even larger companies who want to supplement their social media marketing strategy. The reason you prioritize going for the commenters instead of the people that like and follow is because there is higher probability a commenter is a customer. A specialized company that offers this agency service can be found at <http://reignmedia.co/instagram-engagement-service/>.

### READINGS FROM THE EDITOR'S DESK

- It is interesting to think forward as GDPR laws begin to take effect in Europe. The fact that a regional regulator is driving change across the Internet, it may be worth considering whether a global Internet regulator is needed. It might be worthwhile to consider whether GDPR's effort will repress the freemium business model or reduce the spam we have become accustomed to. "[Who Will be the Main Loser from Europe's New Data-Privacy Law](#)"
- We should not just be thinking about Artificial Intelligence (AI) as a job killer/creator issue. We need to expect that AI will change the overall corporate culture and change the skills needed to lead next-generation companies. "[Skill Shift: Automation and the Future of the Workforce](#)"
- The role of marketing continues to change as the data sources expand. New technology and customer behaviors have made cook-book marketing impossible; marketers have had to experiment to be successful. Marketing exercises should be based on the scientific method (hypothesis, experiment, analyze, communicate). "[How Data is Changing The Role OF Marketers](#)"
- Location based applications can place you in a geography but as sensor-based technology continues to improve we will want to be placed in a 3D world so we do not only know our location but also know about the things around us "[The Planet is the Platform: Toward a Decentralized Infrastructure for 3D Spatial Maps](#)"
- New ways to interface with technology continue to emerge. AR/VR impacts visual interactions, virtual voice assistants, and motion controllers continue to change the ways we control our technology. We are moving away from keyboard-centric interactions to as the means to control our technology enhanced lives. "[Snag a deal on this sensor that lets you control your devices with gestures](#)"
- There are reports of drone swarms having been used to harass FBI agents during a hostage surveillance situation. This demonstrates that technology is a tool that can be used for good or bad. We have to make sure the value of the good outweighs the risks of the bad and we have to have tools to combat the technology-savvy evil-doers. "[Criminals' drone Swarm Used to Obstruct FBI Hostage Raid](#)"
- The DevOps movement integrates product/service development with operations so customer use data flows directly back to the development team in order to support product improvement efforts. Cross-functional teams with access to this data can drive a myriad of changes through an organizational structure that is agile and looking at the innovation process as a holistic means of managing the company. "[The Rise of the Experimentation Team](#)"
- The US spends much more per person on healthcare but the increased spending is not translating to longer life expectancy. The healthcare industry appears to suffer from the same pressures as GDP which is also stagnating without a boost to employee productivity. Many offer suggestions for the malaise impacting both metrics with no clear path to improvement. "[Medical Mystery: Something Happened to US Health Spending after 1980](#)"
- Video entertainment viewing times are not decreasing but they are shifting away from traditional/linear TV and that is shaking up the advertising funded TV model. At the core of any industry, business models have to evolve as the market behaviors evolve. "[Why Traditional TV Is in Trouble](#)"

### CTM RESOURCES

CTM has a history of making topical and thoughtful information available to the CTM community. The CTM community is made up of a diverse set of individuals who are interested in topics related to how technology and business intersect so they can capitalize on nuanced opportunities brought about by these disruptive influences. In support of this community, CTM has made the following available for those interested.

- **[The Fan Multiplier Effect \(free\)](#)**. Marketing Programs should be driven by objectives and measured by metrics. When marketing campaigns are discussed, the focus is usually on revenue driven marketing where the objective is to directly drive revenue. But there are other types of marketing campaigns that focus on product/brand awareness and those that focus on fan engagement. This paper considers the later where the objective is to drive fans to advocate for a product or service so that they become your revenue drivers.
- **[Platforms, Real-Time & Partner Management, and Collaborative Innovation](#)**. CTM has developed a database that characterizes companies are growing much faster than their competitors. This report investigates five areas that are associated with accelerated business growth; 1) use of digital platforms to support internal communications, 2) evolution to a real-time company, 3) interactions with partners, 4) collaboration, and 5) how open innovation.
- **[Privacy, Security, Analytics, Supply Chain & Teamwork in Modern Ecosystems](#)**. This report covers six specific business areas which are associated with accelerated revenue growth: 1) managing tradeoffs between speed and accuracy, 2) dealing with customer privacy, security, and trust, 3) application of data analytics, 4) managing geographically distributed teams, 5) evolving supply chains as a competitive advantage.
- **[Future of Media Program: Evolving Revenue Models](#)**. The media industry is witnessing significant changes in the way consumers view filmed entertainment and how the industry makes money. This report examines the evolving business models for media monetization from advertising to subscription and transaction. Special attention is paid to Millennial consumers which will drive further change to business models going forward.
- **[Internet of Things \(IOT\) Model](#)**. CTM has developed an IOT modeling tool to study changes in market demand based on price elasticity and how these changes alter bandwidth and profitability outcomes. The modeling tool allow users to adjust the parameters that drive the IOT market so they can develop a personal view of market evolution as an aid in determining possible IOT strategies.

## SUPPORT CTM

Please feel free to forward this email to your friends and colleagues who you believe would benefit from participation in the CTM community. For those of you who wish to be included in the CTM family of people who believe that technology is a tool and that business success is achieved by skilled wielding of the tools available to us, you can join the CTM family by registering [on our home page](#). A voluntary subscription would be appreciated for those that want to give back and help grow the CTM community ([click here to contribute](#)). If you have suggestions, topics you want to see included in future newsletter updates, or other general inquiries, feel free to email us at [ctm@marshall.usc.edu](mailto:ctm@marshall.usc.edu). For physical mail correspondence: USC-Marshall-CTM, 1149 S Hill Street, 9th floor, Los Angeles CA 90015.

The idea expressed in this newsletter are intended to stimulate conversation and dialog that will lead to a better understanding of our collective future. The opinions may not necessarily reflect the opinions of USC, Marshall, CTM or the wider CTM community.

## GOT A BUSINESS, TECHNOLOGY, STRATEGY ISSUE?

The CTM team is dedicated to working with its member companies to better understand the increasingly dynamic business world in which we live. We believe that companies must lead in order to prosper in a world where the threats and opportunities facing us are constantly evolving. Feel free to reach out to the CTM team via email at [ctm@marshall.usc.edu](mailto:ctm@marshall.usc.edu) if you would like to start a conversation.

## ABOUT CTM

*Founded in 1985, the Institute for Communication Technology Management (CTM) is the world's foremost institute at the intersection of technology and content and represents a powerful network of industry leaders involved in every facet of the digital media value chain. For more about CTM go to [marshall.usc.edu/ctm](http://marshall.usc.edu/ctm).*