

Institute for Communication Technology Management (CTM)

June-July 2019 @ CTM

THE DIRECTOR SPEAKS - Data is a Strategic Asset



I was at a meeting related to smart cities when someone made an interesting observation. The point she was making was specific to the City of Los Angeles, but the observation extends well beyond the city and opens the door for some serious self-reflective thinking. At its core, the concept is that the city looks at data as a strategic asset for the city. If we shift our mindset temporarily and think more broadly about assets in general, a key financial metric is return-on-assets. Return on assets is a ratio that demonstrates the financial benefit a company receives based on the value of its total asset base. To improve corporate financial performance a company strives to increase the benefit from an existing asset base. In a data driven economy, this translates to utilizing the same data to drive multiple outcomes instead of gathering data for a specific purpose.

Applications utilize data to create operational benefit, support customer insight, and aid in corporate planning. These applications are important as they convert the data assets into business/organizational benefits and without such tools, the data has little value. When an organization employs the same collection of data assets to drive multiple applications, the organization has effectively increased their return on the assets performance. A part of the organization's overall strategy must be a plan to increase the utilization of their data assets by bringing on new applications that convert existing data into additional insights that are beneficial to the business. In the end, the organizational strategy is fundamentally inhibited or enabled by the organization's data whereas the applications are the tactical tools that help achieve the desired end result. If the company wants to increase its data driven financial performance, these tools must be expanded, enhanced, or customized in an effort to improve the insights that can be derived from the data. Therefore, it is important that the applications are managed independently of the data since these data assets should outlive the life of any specific application.

When we consider data as an asset, it must be managed like any physical asset and traditional asset management techniques must be utilized to value the data based on its ability to uncover new business insights.

UPCOMING EVENTS

- June 2-5, 2019. PegaWorld Customer Engagement Conference, Las Vegas, NV
- July 10-12, 2019. NIST Smart and Secure Cities Expo, Walter E Washington Convention Center, Washington DC
- Aug 17, 2019. Data Con LA, Los Angeles CA
- Aug 19, 2019. I3 IOT Conference and Workshop, Fertitta Hall, USC Campus, Los Angeles CA
- Sept 10-13, 2019. Global Network for SMART Organization Design, USC Campus, Los Angeles CA
- Sept 16-19, 2019, Oracle Open World, San Francisco, CA

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

IN CONVERSATION WITH Ken Hayashida, Board Certified Pediatrician and Adjunct Professor, Keck School of Medicine

Besides being a Certified Pediatrician and Adjunct Professor at Keck, Ken is also very active in the start-up medTech space as he strives to discover new ways to apply technology to improve healthcare outcomes. Some key interests of Ken include AR/VR technology, IOT, AI and Big Data which are all play key roles in growing roles shaping healthcare outcomes.

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As humans, we have not changed physically but medical practice has seen significant change. How has the practice of medicine changed?

As the LA Metropolitan area transitioned from agriculture to industry across the 20th Century, the practice of medicine has made an analogous leap from anecdotal folk remedies to allopathic diagnostics and treatment. While modern clinical medicine prides itself upon the rigor of scientific validation, clinical examination, and objectivity, the medicolegal liabilities and soaring costs of care suggest gaps in delivery certainly exist.

National polling by the Gallup organization

(https://news.gallup.com/poll/4708/healthcare-system.aspx) over the past decades consistently show negative public opinion regarding the US healthcare delivery process. Results suggest that citizens remain skeptical and cynical regarding affordability and quality.

It is remarkable that the processes used by physicians to obtain information from patients are essentially unchanged in American medical education over the past 100 years. In that same time period, Southern California led innovation has had a global impact in many other fields of commerce, including journalism, sporting, entertainment, communication, transportation, and more.

Radio networks which broadcasted the 1932 Los Angeles Olympic Games became the international TV channels that carried the 1984 Olympics in Los Angeles by satellite. The movie industry went from black and white 35 mm silent films to digital distribution mechanisms with widescreen, high-resolution formats with digital effects. Telephone exchanges staffed by live operators transformed to handheld digital communication assistants with Siri, Cortana, and Alexa. Horse drawn carriages over dirt roads became I-110 with HOV lanes carrying the AI-driven Teslas vehicles powered by solar energy arrays.

We tend to think of physicians as healers. But, are physicians also business people? How does the perspective of business impact on the role of a physician in society?

The confusion between commerce and healthcare is common and dates back several millennia. As an example, let me cite the difference between two common symbols of healthcare in the United States, the rod of Asclepius and the caduceus.

The staff of Asclepius is the classic symbol of medicine and healthcare. Asclepius is the son of Apollo, had five mythological daughters (including Hygieia and Panacea), and was a hero of Healing in ancient Greek mythology. A healing temple (called asclepion) are said to have had non-venomous snakes that were used in temple healing rituals. The snakes would roam floor around the sick. Hippocrates, the father of medicine, is said to have lived on the Greek isle of Kos where a large asclepion existed. In Greek mythology, Plato wrote (Book 3, 408b) that Asclepius once took payment for healing. Plato then discusses the morality of physicians taking payment.

The caduceus became somewhat confused with the rod of Asclepius about 100 years. The caduceus is the staff carried by Hermes, symbolizes commerce and negotiation, and is associated with Mercury in Roman mythology. The incorrect use of the caduceus in North American healthcare traces to the US Army's adoption of the symbol for its medical corps in 1902.

I've certainly seen and heard opinion in the medical community that physicians should not use the term "customer" to refer to a patient and should not consider themselves "in business" because medicine is a "profession". However, this intellectual divide between good medicine and good business needs a more thoughtful and considered reexamination in the 21st Century.

Today, my friends and colleagues practicing medicine and surgery are certainly impacted by corporate financial interests in healthcare delivery in the Southern California economy. These pressures originate with on-going changes in reimbursement models, claims processing procedures, and contracting legalities. Commercial health insurance, risk management contractors, and government health care agencies like Medicare and Medicaid are constantly altering policies. These administrative changes alter policy and procedure for services being delivered, can negatively impact financial performance, and require much administrative time to address in healthcare enterprises like hospitals, medical groups, and managed care organizations.

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Corporate financial interests can run counter to the Hippocratic Oath, especially in situations where physicians are told to limit diagnostics or treatment based upon cost/benefit analyses on populations of people. It is fallacy to over generalize the patient's individual situation to a larger population where diagnostics and treatment decisions might be predicated upon non-clinical or even demographic considerations.

A corporation and its leadership team can choose to limit offerings of diagnostics, pharmaceutical formularies, and consultations in the context of a person needing care. When corporations base the availability of these options upon economic incentives for the corporation, the care delivery itself is compromised with physicians and surgeons left to follow corporate financial directives instead of fully informing patients of their options.

When a population being serviced has significant health deficits due to social, environmental, or political circumstance, physicians contracted in those geographic areas are placed at financial disadvantage because of circumstances beyond the individual control of the patient and the physician. While being requested to provide care to the ill, these unfortunate physicians unwittingly accept financial risk due to ill-considered governmental policies that actually create an economic disincentive to provide timely care.

Federal and state healthcare policy changes course when the political winds blow. These opinion driven winds have a direct effect on the availability of community-level medical services. Down wind effects include limitations on the availability of patient-centered medical opinion. This is a critical notion for this generation to consider for reform. Regardless of these political winds, the Hippocratic Oath was taken at graduation from medical school and encourages the modern physician to consider the ethics of medical decisions.

An optimal system would value physician and surgeon time, encourage improvement in communication, and build financing methodologies which incentivize higher quality medical services with higher levels of value. Instead, we currently have skyrocketing costs and charges while devaluing the time and thought processes of professionals providing patient care. Our generation of thought leaders need to better align medical economics and finance with delivery of quality of care to the individual.

The practice of medicine is becoming increasingly technology driven. Can you give a few examples to illustrate this point?

Communication technology has clearly impacted information gathering in healthcare in this century. Patients appear in the exam room with smart phones having photos of the ill patient. Health content in broadcast media end up being discussed in the visit. Robotics are in the operating room assisting surgeons today. Artificial intelligence is being implemented in a medical system near you. Electronic medical records, given a significant amount of attention ten years ago, have been widely adopted in hospitals and health systems. Wearable consumer devices and communication tools also are emerging as opportunities to gain insight to health and well being. The question confronting physicians today is how to differentiate messaging from these tools. That same clinician may be passed a 25 year-old alphanumeric pager that is still in use among teams maintaining coverage of essential services in major medical centers in Southern California.

If you had a crystal ball and could look 5 years into the future, what do you think you might see?

If innovation in real-time communication does not get deployed into healthcare, we might see the same healthcare system today with little change.

But, if real-time communication of medical and healthcare data grows, we could see a just-in-time healthcare system which accelerates patient care, improves physician and nurse efficiency, and guarantees efficiency in finding services that are prioritized by clinical need and science.

IN CONVERSATION WITH Chris Sambar, Senior Vice President, FirstNet. AT&T

With more than 15 years of telecommunications experience, Chris Sambar currently serves as Senior Vice President AT&T FirstNet. In this role, Chris is responsible for delivering on AT&T's commitment to successfully deploy the nation's first public safety broadband network. Prior to his current role Chris was part of the Corporate Strategy Team where he assisted with the allocation of AT&T's annual capital spending. Chris holds an MBA from the University of Southern California and a bachelor's degree from The United States Naval Academy.

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Let's start by explaining to people what FirstNet is.

I look at it as the most important network in the country – but one that most people have never heard of. FirstNet is a new, nationwide wireless communications platform dedicated to public safety. It's designed for first responders and those they deem critical to supporting their emergency response. It exists to strengthen communications capabilities of first responders nationwide. The mission of FirstNet is to bring America's public safety community the reliable connectivity and advanced capabilities they need to more efficiently and effectively achieve their mission.

The recommendation for a dedicated, purpose-built solution for first responders was born from the communication challenges public safety experienced on Sept. 11, 2001, terrorist attacks – challenges first responders not on FirstNet may still face when

responding to incidents and emergencies today.

- Public safety uses radio communications for their mission-critical voice needs. But there are over 10,000 radio channels across the country and some channels aren't able to talk to other channels. So, during a mutual-aid situation where you have first responders from across a region or from different jurisdictions, they may have trouble communicating and coordinating their response on their radios.
- Plus, radios don't support data, apps, images or video, limiting the rich information available to public safety to inform their response.
- And since commercial wireless broadband networks are built for a mass audience and not specifically built for first responders, relying on commercial systems during an emergency could be problematic. Think about it, when an emergency happens, what do we all do? We hop on our phones whether to check the news or social media, connect with family and friends, or stream live updates. Well that can congest the network and take critical resources away from the men and women that are actively responding to the incident. I'm sure at one point or another, you've experienced a network congestion issue and so have the first responders using those commercial systems.

FirstNet is solving for these challenges.

- It's being purpose-built with AT&T in a public-private partnership with the First Responder Network Authority (FirstNet Authority) an independent authority within the federal government.
- And it's expanding the definition of public safety communications to include things like IoT sensors, data and video.
 FirstNet brings the power to connect a variety of public safety "things" that will help first responders gain deeper insight into the emergencies unfolding around them whether through connected cameras and drones, biometric sensors, vehicle routing and more.

What is the motivation behind FirstNet?

The recommendation for a dedicated, purpose-built solution for first responders was born from the communication challenges public safety experienced during the Sept. 11 attacks. That recommendation turned into a vision championed by the public safety community. And that vision was advanced by Congress in 2012 when they formed the First Responder Network Authority (FirstNet Authority). This is an independent government authority charged with carrying out public safety's vision for FirstNet, bringing first responders their own, separate, dedicated communications ecosystem. The FirstNet Authority issued an RFP in January 2016 to create a public-private partnership to help bring FirstNet to life. AT&T responded because we believe in the importance of FirstNet for the good of our nation, its citizens and for the brave people who are charged with ensuring our safety. We underwent a rigorous RFP process. And we were selected in March 2017.

Both AT&T and the FirstNet Authority have committed significant resources to build a network platform that will help improve communications among first responders and members of the public safety community.

- FirstNet is for all first responders career and volunteer; urban and rural; and federal, state, local and tribal.
- It's bringing public safety communications into the 21st century with new, innovative capabilities, helping first responders connect to the critical information they need every day and in every emergency.

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Is FirstNet a wireless voice network, a data network, something beyond that?

FirstNet represents a giant leap in communications capabilities for the public safety community. It's giving first responders a modern update to help them evolve the way they communicate, using text and data on top of voice to ensure they are connected to as much information as possible to achieve their mission.

FirstNet is a separate communications platform – inclusive of a physically separate network core that encrypts public safety's sensitive communications; an LTE radio access network that prioritizes public safety communications and gives public safety dedicated access when they need it; an ecosystem of relevant, cutting-edge apps and devices; and more. It's purpose-built to favor the important work first responders do. And it offers the technology, features and functionality designed to properly handle the rigorous, specific and niche demands of first responders – such as no throttling anywhere in the country.

What progress have you made on the deployment of FirstNet?

A little more than a year ago, we brought public safety's specialized communications platform to life with the launch of the FirstNet network core. Built from the ground up, this is the only physically separate network core in the country that's dedicated entirely to public safety. That means only public safety's communications traffic rides on this core, bringing them enhanced security. Plus, the FirstNet core is monitored around-the-clock by a dedicated Security Operations Center with a dedicated team of experts to keep public safety's communications protected. The FirstNet core gives public safety access to the intelligence of the communications platform, and it will continue to serve as a springboard for the new capabilities, next-generation functionality and innovative tools that will drive public safety's capabilities forward. And the intelligence of the core can only be accessed by a separate, dedicated FirstNet SIM card. Think of it this way, if you were to switch commercial network providers, you would have to switch out the SIM card in your phone to gain access to the new network. Well that's the same for first responders looking to gain access to the unique capabilities and benefits of FirstNet – the need to switch SIMs is how you know you're on a specialized platform just for public safety.

FirstNet already covers over 99% of the U.S. population to. To continue to better serve public safety, we're actively extending the reach of the FirstNet communications platform, rolling out the high-quality spectrum, known as Band 14, provided by the FirstNet Authority. For reference, think of a spectrum band as a lane on a highway. The more lanes you have, the more traffic can flow through with ease. By adding Band 14 to our communications highway, we're adding in another lane that's dedicated to public safety when they need it. We look at Band 14 as public safety's VIP lane. During an emergency, this band – or lane – can be cleared and locked just for FirstNet subscribers. That means only those on FirstNet will be able to access Band 14 spectrum, further elevating their connected experience and emergency response. We recently entered the second year of our FirstNet Band 14 rollout, and we're tracking well ahead of schedule, covering more than 50% of our total nationwide coverage targets.

Band 14 spectrum has been deployed in more than 600 markets across the country. Reaching rural and remote parts of America with our FirstNet Band 14 rollout is one of our top priorities. And in areas where coverage already exists, we're using Band 14 to help first responders get the capacity they need to get the job done. This gives FirstNet the ability to reach agencies large and small, urban, rural and tribal with the connectivity and modern communications tools they need.

When there's extra room – or capacity – available on Band 14, it can be used to improve the wireless experience for AT&T customers. We also launched innovative solutions to help public safety communicate no matter where their mission takes them. This includes the <u>nationwide fleet</u> of 72 FirstNet dedicated deployable network assets – or portable cell sites – available 24/7 upon request and at no additional charge to public safety agencies subscribing to FirstNet. Stationed across the country, these assets can either be deployed for planned events or called upon in emergencies to help first responders stay connected and operate faster, safer and more effectively when lives are on the line. And 3 Flying Cells on Wings (COWs) were just added to the fleet of deployable network assets available to public safety agencies subscribing to FirstNet. These are ideal for situations like wildfires and mountain rescue missions where the terrain may have previously made it difficult to maintain connectivity.

When we think about emergency services, we think about the police force or the fire fighters but emergency services is more than that – a lot of coordination is required. Can you expand on that?

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FirstNet is first and foremost for our country's first responders. Think law enforcement, EMS, firefighters, 911 telecommunicators and emergency managers. But emergencies are complicated. Depending on the situation, first responders may rely on a broad ecosystem of partners behind the scene to help coordinate their complex response to keep the public safe. So, to help make public safety's coordination and communication as easy and seamless as possible, FirstNet is also available to an extended community of users that could be called on to help support first responders – these are users that would help play a critical role in supporting public safety's emergency response.

- Known as extended primary users, they support the mitigation, remediation, overhaul, clean up, restoration or provisioning of other services required during the time of an emergency or its aftermath.
- Examples include schools, electric or water utilities, hospitals and transportation organizations.

Is the goal of new technologies to make emergency services more efficient (save money) or to improve quality of life for citizens?

Ultimately, the goal of FirstNet is to help equip our first responders with the communications capabilities that will help them more efficiently and effectively respond to incidents, so they can help keep themselves and our communities safer. With FirstNet, we're focused on solving the long-standing communication challenges that the public safety community has experienced and help ensure wherever public safety goes to respond to an emergency, they have the connectivity and communications they need. One first responder we talked to summed up this challenge perfectly, "If you look at every major after action report that's come out since communications have existed, communications have been the number one issue. In order for us to be better, we have to do better with communications." FirstNet is helping solve those communications challenges – and when you can help alleviate one of the top issues on every major after action report, that's a big deal.

What differences has FirstNet made?

The early impacts of FirstNet have been real, tangible and, at times, lifesaving. It's been bringing public safety a level of connectivity and advanced capability that's helping to transform the role communications plays in their emergency response. We've seen subscribers use FirstNet during:

- Active shooter situations, explosions and plane crashes
- Hurricanes, flooding events and mudslides
- Tornadoes
- Wildfires across the western states
- Search and recovery missions in remote locations
- And large events, such as this year's Big Game in Atlanta and Boston Marathon

FirstNet is being purpose-built to favor the important work first responders do. This is challenging and time consuming. It's also necessary. For example, keeping FirstNet subscribers connected during Hurricanes Florence and Michael didn't happen by luck. It happened because we were prepared to meet public safety's needs. We were the first to roll in, bringing the right assets and taking the right steps to satisfy the FirstNet mission, helping public safety achieve their mission. We're proud of how FirstNet has been delivering for first responders and the communities they serve when help is most needed. And we're honored to see public safety embrace FirstNet.

STEVE SHEPARD: Reflections on 2019 Spring AMP

Now that the spring AMP program has come to a close, I want to reflect briefly on the week—with most of my focus on the week-long case that the participants addressed.

Every time we run the program, we prepare a new case. Participants are asked to analyze the company in the case from multiple points of view, and then, at the end of the week, deliver their findings to the company's leadership team. The company that each case addresses is real; their challenges are real; and the results of the case, in every program, yield insights that are implemented by the company after the fact. One company executive told us, "I just spent a quarter-of-amillion dollars with [Well-known consulting firm], and I've learned more from you in the last hour than I've learned after six months of analysis by our consultants. Well done."

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In this most recent AMP session, the company we "unleashed the class upon" was Kiana (Kiana.io), a firm that specializes in the use of third-wave technologies to deliver physical security, better business performance, and improved resource utilization, by tracking the movement of people throughout a facility and analyzing patterns of behavior.

The company has two key product areas: Kiana Secure, and Kiana Engage. Kiana Secure provides a range of services, including Presence Analytics and Operational Optimization, Intelligent Video Surveillance, Enhanced Visitor Management, and Crowd Safety Analytics and Communications. Kiana Engage offers Presence and Positioning Analytics, Social WiFi Engagement, and Heat Map and Traffic Flows. Kiana technology solutions have been implemented at airports, campuses and large public venues where location-based services, image device association, forensic analytics, and pattern

tracking are used to augment physical security. By analyzing foot traffic, Kiana helps organizations improve the experience that customers have when moving throughout a retail space. And by autonomously studying queue wait times and visitor behaviors, they can improve the use of available resources.

By immediately giving the AMP participants a real-world problem they can apply the skills developed through the AMP program, their learnings become firmly rooted as an experiential process that is easily reapplied when they return to their "day-job".

THE I³ CORNER (I3.usc.edu)

On May 23 the I3 Consortium held a face-to-face working meeting. This particular meeting was especially monumental in that the Viterbi engineers had just completed V0 of the software and as such the meeting marked the kickoff of the I3 summer demonstration program. The 2019 I3 Summer Demonstration Program will run for 10 weeks and has been designed to give the I3 Consortium members to integrate their applications above the I3 software or to integrate their IOT devices beneath the I3 software. When the program comes to a close in mid-August, we will have a demonstration system that demonstrates the power of an opensource multi-party IOT network.

Given that this is the first time the I3 software will get a taste of the real world by exposure outside of a university laboratory environment, we all expect to learn a lot from the program. This will feed into the creation of a V1 version of the I3 sofware which is planned for public release later in 2019. This is a very exciting time for the first movers involved in the Consortium.

A part of the 5/23 agenda focused on the progress made to date and the process for I3 members to participate in the summer program (with so many participants, we need a process to ensure we are not tripping over one another). Time was also set aside for the I3 Consortium members who have committed to participating in the process to describe their integration plans. It was an extremely stimulating portion of the program in that once one participant presented their plans, other consortium members initiated a dialog about how their application could benefit from the data being exposed by another. Through the day excitement began to build as the idea of leveraging data and application components began to crystalize as real opportunities – something much more than an evangelized concept.

At the end of the I3 Summer Demo, we will hold the second I3 workshop/conference. Like our last event, there is room for conference style presentations, hands on technical conversations, and workshops where attendees can discuss I3 Use Cases and future feature requirements for I3. The event will be held all day on August 19, 2019 in the lower level of Fertitta Hall. Be sure to mark your calendar and it should be added that we are currently looking for speaker proposals, workshop leaders, and financial sponsors. If you or you company want to play a larger role in shaping the future of the IOT environment, please send the I3 Consortium an email at jerry.power@marshall.usc.edu.

READER CONTRIBUTION: How Does Marketing Automation Best Support Content Marketing by George Stenitzer

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George Stenitzer has worked as a newspaper editor, marketer and communicator in Fortune 500 companies including AT&T and Tellabs. In 2014, George launched Crystal Clear Communications to help people create better content and more powerful messages. He consults with clients and leads workshops for clients and members of the Association of National Advertisers (ANA).

Without a doubt, marketing automation is one of the most useful tools to support marketing. It gets 4 key jobs done for you:

- 1. Track users' interests to recommend relevant content streams.
- 2. Assign scores to users to decide which are ready to contact and qualify.
- 3. Offer content that helps buyers qualify themselves.
- 4. Enable reverse engineering of successful content-to-customer conversions.

Each of these functions is so important that they are worthy of a deeper dive.

Track users' content interests

Once buyers give you permission to track them with a cookie, you can track exactly which content each buyer is most interested in and use that information to personalize the users' ongoing interactions. The marketing automation platform tracks use of multiple touchpoints such as your social media, email and website, so you see a more complete picture of how buyers interact with content. This tracking data reveals the following valuable information:

- The topics are most relevant to a buyer.
- Media forms a buyer prefers text, infographics, videos, podcasts?
- Serving size a buyer prefers short-form, medium or long-form content?

Companies that offer a broad array of products or services especially benefit from early identification of topics that a given buyer finds relevant. For example, in financial services, there are lots of different reasons why a customer might turn to a bank. On Bank of America's (BofA's) website to improve financial literacy, BetterMoneyHabits.com, the company brilliantly asks 2 key questions up front:

- 1. Which topic are you interested in: credit, debit, saving and budgeting, home ownership, auto, retirement, college, privacy and security, personal banking, taxes and income?
- 2. Which stage of life are you in: just starting out, working and growing, nearing retirement, or living in retirement?

By giving 2 answers, buyers tell BofA which topic streams are relevant to them. All that work gets done in 2 clicks! You can apply this concept to your own digital marketing efforts by always asking: *How does your website steer users to relevant content?*

Assign scores to content users

Marketing automation gives you visibility into what people do on your website. At first, most users nibble at a piece of content here or there. They might or might not come back. But a few website users consume a ton of content quickly. When people are in a hurry, you need to flag them quickly for a follow-up call.

The DemandGen 2018 B2B Content Preferences Survey showed how much content buyers consume before talking to a salesperson:

- 1 out of 5 buyers (22%) consumes 1 or 2 pieces of content.
- 2 out of 5 buyers (40%) consume 3 to 5 pieces of content.
- 1 out of 5 buyers (21%) consumes 5 to 7 pieces of content.
- 1 out of 6 buyers (17%) consumes more than 7 pieces of content!

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In marketing automation, you set a threshold to trigger marketing responses to users based on how much content is consumed, how fast. Set marketing automation to flag buyers who consume more than 7 pieces of content over a short time. People who exhibit this behavior are probably motivated buyers. It's worth picking up the phone to qualify such buyers, either through inside sales or a marketing manager. Find out each buyer's:

- Intent to purchase?
- Budget available?
- Authority to buy?
- Need that fits your offering?
- Timing plans to buy now or later?
- How they found you in the first place?

After you call the buyers who consume 7 pieces of content quickly, next flag buyers who consume 7 pieces of content gradually. Add these buyers into a nurturing campaign to keep them engaged. If you have the resources to do so, pick up the phone and call them. For the buyers who consume 5 to 7 pieces of content, automatically offer more content about their chosen topic(s).

For all buyers, suggest new pieces of content on the same topic. Keep creating new content so that most interested buyers have reasons to return to your website again and again. When applying these concepts, one should keep two key questions on top-of-mind (1) How can you keep buyers engaged with streams of relevant content over time? and (2) How can you refresh content continuously to keep it relevant?

Qualify buyers with content

Author and marketer Marcus Sheridan qualified buyers with content at River Pools and Spas. For years, if you called on Marcus's company for a proposal, Marcus would visit you at home and provide you with the content you needed to make a buying decision. But after he created what he considered the industry's best content on swimming pools, Marcus changed the game and decided to go the extra mile. When a prospect called for a quote, Marcus would first sent them an email, inviting them to:

- Watch a 3-minute video.
- Read a 35-page E-book about swimming pools.

What happened next? Buyers who did not consume the qualifying content, on average, bought a pool 5% of the time – an average rate based on industry norms. Buyers who did consume the qualifying content bought a pool 80% of the time! That's a 16X improvement in close rates! Why? After consuming lots of content, each buyer either loves or hates the company. Haters never call back, saving valuable Sales time otherwise wasted on fruitless follow-up calls. Buyers who love the content are far more likely to sign contracts. That's why it's better to give Sales a small number of highly qualified

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buyers than a big number of unevenly qualified buyers. If Sales is ignoring your marketing-qualified leads, choke the bottom of the funnel. Give Sales only one-fourth to one-half as many leads as before. Once you hear positive feedback from Sales about the lead quality and close rates, ease up on the throttle to further emphasize quality over quantity. Throughout the process, you should always be asking *How can you use content to better qualify buyers before handing them over to Sales? What content can you create specifically to help Sales increase close rates?*

Reverse-engineer conversions

After a year working with marketing automation, you will have gathered enough sales tracked from start to finish to find ideas on how to improve your marketing. Match up your marketing automation metrics with Google Analytics and heatmapping to learn:

- Which topics do buyers want more content about?
- Which pages are the best to offer to buyers first?
- How to smooth buyers' path by recommending the next pieces of content?
- Where do buyers get stuck?
- How to attain soft conversions a small ask that precedes a bigger ask?
- How to get more buyers to subscribe to your blogs or content feed?
- Which paths are the likeliest routes to conversion for buyers?

Do this deep work with marketing automation analytics. Map the conversion paths that serve to continually move buyers forward to purchase.

Concluding Thoughts

To be sure, marketing automation offers many other benefits. It:

- Simplifies retargeting of users
- Helps build a content calendar
- Makes A/B email tests easier
- Automatically updates other software systems such as sales automation
- Enables personalization
- Generates reports to help you measure and prove content marketing success.

Use marketing automation to get 4 key jobs done:

- 1. Track users' interests to recommend relevant content streams.
- 2. Assign scores to users to decide which are ready to contact and qualify.
- 3. Offer content that helps buyers qualify themselves.
- 4. Enable reverse engineering of successful content-to-customer conversions.

Strategically the objective is to turn content users into customers. That's what content marketing is all about! How does marketing automation best support content marketing?" is one of marketers' Top 100 Questions about #contentmarketing. Here are the <u>answers</u>. (How does marketing automation best support content marketing?" <u>originally appeared</u> on the Crystal Clear Communications <u>website</u>.)

READER CONTRIBUTION: The Real-Time Revolution and What You Can Do by Tom Ferratt

Tom Ferratt is professor emeritus at the University of Dayton where he focused his research on leadership and management issues associated with the information, data, and technology sectors.

A new reality is driving a revolution in business: time is becoming the dominant customer currency. This new reality requires a revolutionary shift in how your organization operates for it to survive and you to maintain your livelihood. Let's examine this revolution, which Jerry Power and I call the "Real-Time Revolution," [1] and what you can do in your organization.

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Under the new reality, we, as customers, want to spend our scarce time well. Ideally, when we place orders or seek to address problems we are having with organizations, we want our interactions with these organizations to occur instantaneously. Of course, we also want the interaction to be completed effectively. Thus, we want the order to be completed correctly or the problem to be solved completely so that we do not need to spend more time correcting errors or incomplete orders or having to wait or search for further answers to problems.

For many products and services, minimizing the expenditure of customer time while assuring that customer experiences are effective should be the goal. However, there are also examples of customer experiences that are enjoyable, productive, or otherwise satisfying because of what the customer obtains. Improving the quality of time spent

should be the goal of the organization for these customer experiences. Minimizing customer time in a movie theater is not the goal of a movie maker; rather, it is to enhance the entertainment value of the customer's time spent. For the customer who wants a higher quality dining establishment, the main dining experience creates the most customer value. The quality of that experience needs to be maintained and improved. Nevertheless, the customer may perceive that faster subsidiary activities, such as making a reservation, getting seated, and paying the bill, enhance the main dining experience.

The essential implication arising from the new reality regarding time as our dominant currency is that we will patronize organizations that demonstrate they value our time better than other organizations, and we will avoid those that do not value our time as well. A fundamental shift is occurring in organizations that embrace this new reality. Not only are they following traditional business practices, such as seeking to use their resources efficiently, thereby valuing the time of their employees and other productive assets, but they are also valuing customer time. Indeed, valuing customer time is becoming a central focus of their decision making, their operations, and their interactions with their customers. This fundamental shift is the essence of the real-time revolution.

Consider this example from Dyson [2]. Before leaving home for the day, people often groom themselves. When rushing to make a scheduled appointment, time can become a critical concern. Dyson created an innovative hair dryer that has been engineered to protect hair from extreme heat damage, with fast drying and controlled styling. When asked to evaluate Dyson's hair dryer, one customer reported, "I've been using Dyson's Supersonic hair dryer for a year, and I swear by it . . . I have thick hair, but it only takes me 10 minutes to get it completely dry with this dryer—it's a major time-saver in the morning." The Dyson hair dryer demonstrates a respect for customer time by allowing for rapid grooming while at the same time reducing the risk associated with a rushed grooming process; a rushed process can cause damage that needs to be repaired, resulting in a missed appointment. Alternatively, it could cause a bad impression, undermining the quality of the appointment time.

Although the actual time to dry hair, e.g., 10 minutes in the Dyson example, is the real time it takes to use the hair dryer, "real time" has come to mean instantaneous. Given customers' desire to spend as little of their scarce time as possible on many of their customer experiences, they have come to expect such customer experiences to be instantaneous and effective. Organizations that are striving to meet these expectations or, at least, provide experiences that are better than the competition provides, are driving the real-time revolution.

To ensure survival, organizational leaders and members must innovate to value customer time more effectively than competitors do. When they succeed, they can celebrate. However, they must be wary of their competition outdoing them. Such is the nature of the real-time revolution.

The basis for competitive success and failure is changing. Organizations that fail to focus on the importance of customer time are in real-time denial. They risk having their customers abandon them for real-time competitors. Compare the differing fortunes of Netflix and Blockbuster Video.

So, what can you do to help your organization focus on valuing customer time? To adapt to this new focus, your organization must be able to monitor and respond to changing customer time expectations. Monitoring includes collecting data on the time and effectiveness of customer experiences over the life of a product or service. Besides how well you are doing with your customers, you also want to monitor how well your competitors are doing. Responding to customer expectations and what competitors are doing includes looking for innovations. Various levers provide places to look. Levers include changes in the design of products or services as in the Dyson example, changes in processes (e.g.,

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ordering, producing, servicing), changes in the data used to complete steps or monitor customer experiences, and changes in the people involved.

What happens if your organization develops an ability to monitor and respond to changing customer time expectations, including innovating to value customer time better? Your organization is more likely to survive and thrive. If your organization does not develop this ability, its survival is threatened.

The challenge to you is to help your organization focus on valuing customer time. Becoming a more real-time organization involves an ongoing cycle of monitoring and innovating. It is not a one-time action. You must engage others in your organization, as well as those in your supply chain and other stakeholders, in adopting this revolutionary focus on the new reality that time is becoming the dominant customer currency. Avoid real-time denial. Join the real-time revolution!

References

[1] Jerry Power and Tom Ferratt, *The Real-Time Revolution – Transforming Your Organization to Value Customer Time*, Oakland, CA: Berrett-Koehler Publishers, forthcoming September 2019.

[2] "Dyson Supersonic™ Hair Dryer," Dyson, 2018. Accessed August 27, 2018 at https://www.dyson.com/hair-care/dyson-supersonic-overview.html. Also, Kelsey Mulvey, "11 Things That Help Us Get Ready in the Morning Faster," Insider Picks, Business Insider, July 17, 2017. Accessed August 27, 2018 at https://www.businessinsider.com/how-to-get-ready-faster-in-the-morning-2017-5#a-powerful-hair-dryer-4.

READINGS FROM THE EDITOR'S DESK

- <u>Understanding Fake Agile.</u> At its core, Agile philosophies require a relentless focus on the customer, the use of small task-teams, and a collaborative structure that allows teams to interact with one another (and a means to manage the composite outcome). You need all 3 to succeed.
- <u>Convergence Ushers in a New Era of Competition Regulation But Are Changes Needed?</u> Regulatory regimes that are
 organized by industry sector or by service/data usage will increasingly fail to meet their desired goals. Increasingly
 companies cut across traditional sector boundaries and usage based philosophies cannot account for multipurposed data. Challenges will continue to mount until we reconsider our approach and consider moving beyond
 in order to consider intent as the underlying issue.
- <u>The Decline of Customer Service in America</u>. Companies dependent on repeat business know the importance of customer service but the relationship goes past that. The relationship value is critical to subscription based business models and drives what is posted about your company on social networks.
- <u>Galaxy S10 5G's insane Verizon data speeds are only the first step to real 5G</u>. 5G is moving quickly to become a new reality; it is not driven by a 'killer app' but by the fact that people hate to be kept waiting faster is always better than slower. And, once 5G is more ubiquitously deployed, it will only then begin enable new applications that cannot even be imagined today.
- <u>Apple's Supreme Court loss Sends Antitrust Shockwaves Through Silicon Valley.</u> The Supreme Court decision to allow a class action lawsuit against Apple does not render judgement in the specific case but allows the case to be heard in court. The case revolves around whether Apple's app store represents a monopolistic practice or not. The results will enable or inhibit some business models that support pay-as-you-consume funding models.
- Marketing Operations as the Agent of Change. Successful change agents have to possess expertise with technology, data, marketing, operations, business, and processes.

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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 if you would like to start a conversation.

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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.

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