July 2018 @ CTM

THE DIRECTOR SPEAKS - The World is Changing Faster than our Ability to Regulate it

AT&T completed its merger with Time Warner on Jun 15. Verizon has announced Hans Vestberg (CTM and formerly from Ericsson) will become the new CEO effective August 1 with Lowell McAdam's retirement. Jeff Story stepped up from Level 3 to replace Glen Post as Century Link's CEO. What started out in 1984 as seven independent companies, all with similar business models and network strategies running in different geographic areas has evolved to become 3 very different companies; each with significant service differences and significant geographic overlap. While these companies are all competing on some level, they have all followed their own personal drummer to evolve their companies in very different directions as they each seek to serve the needs of their targeted markets.

These diverging paths are driving these companies to compete with competitors that have a very different pedigrees than themselves. The rate at which these companies are being pushed into new competitors varies significantly depending on the specifics of the market they are targeting and their strategic approach. Continuing to categorize these companies as a cluster of service providers is now a reflection of historic lineage and less as less as a representation of current market conditions.

Perhaps we should even look beyond our definition of "carrier" and "service provider" to consider a complete overhaul of all markets? We are moving toward an era when cars are no longer considered a transportation product and toward an era when transportation becomes an on-demand service that produces data about where people want to go. We are also moving from an era when entertainment is something we watch toward an era when entertainment is part of a much larger customer experience that includes merchandise, dining, and both pre- and post-fan engagement experiences.

Perhaps it is finally time to move away from the idea that markets sell categorized products to customers and embrace the idea that customers are choosing partners that help them solve problems and fill needs. For example, in our legacy world, we used structures like NAICS to provide a framework to understand how entities interact with each other. Maybe we should start thinking about using the data we exchange with our partners/customers as a means of delineating economic activity. Adopting such an alternate way of defining markets could change the way we segment and target markets. It could even change the way we think about serving customer needs. It even changes the way we think about regulating and managing businesses. Such thinking could even result in the redefinition of the fundamental business we are in.

UPCOMING EVENTS

- August 2-3, 2018.  **Global Supply Chain Summit**, University of Southern California, Los Angeles, 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
- 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
- Jan 29-Feb 1, 2019.  **IOT Evolution**, Caesars Palace, 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*

IN CONVERSATION WITH Heidi Taylor, Managing Director, Heidi Taylor Marketing

Heidi Taylor is the Director of a boutique marketing consultancy that works with professional services and other B2B organisations to develop their marketing strategy and tactics to tailor their approach and integrate programs so they engage customers in new ways, creating impact, and differentiate from the competition. Heidi Taylor is the author of ‘B2B Marketing Strategy: differentiate, develop and deliver lasting customer engagement’, published by Kogan Page in December 2017, and multi award-winning senior marketing strategist. She has been a B2B marketer for more than 25 years working in multiple industries, spanning from IT hardware and software, to telecommunications and professional services. I’m a consultant, speaker and prolific blogger with a passion for working with the next generation of marketers to ensure they have the perspective and tools to achieve their goals and maximize their abilities in a continually changing business landscape.

In your book B2B Marketing Strategy, you advocate how marketing needs to lead (not follow) and align with both sales and wider business needs. Can you elaborate?
In many B2B organizations the marketing function exists in a silo, with little or no interaction with other parts of the business or directly with customers. Often, it’s perceived solely as a service function, one that serves sales. I recently had quite a lively discussion with a very successful marketing director in a good size B2B who categorically stated that – and I’m quoting verbatim – ‘marketing serves one core purpose, to feed sales’. They went on to say that it’s only through this lead generation activity that marketing can gain the respect of the business and be in a position to influence wider strategy.

Yet marketing will never be able to provide this wider value without getting out of their silo and engaging meaningfully with both the wider business and with customers. Until marketers understand the drivers for and wider goals of their business - and align their activity to both short- and long-term needs – they will never be able to demonstrate the kind of strategic thinking or execution that’s both valued and delivers meaningful results.

A continuing focus solely on the technical marketing skills that deliver tactical activity will never create marketing leaders. If marketing is to lead within organizations, B2B marketers need to ask themselves some tough questions in order to better align marketing activity with both their business and customers:

- Why does our marketing activity matter? To our business? To our customers?
- What are we trying to achieve? Do we know the outcomes our wider business wants and needs from us? Have we ever asked?
- Do we understand what drives our business growth?
- How well do we really know our customers? Do we understand the issues and challenges our customers are facing? How do these align to what we sell?
- Are we developing our marketing activity from an inside-out or outside-in perspective?

2. **Technology is driving change to market behaviors (customers) and to the way we do marketing.** Can you give an example to illustrate the depth of these changes?

The explosion in technology over the past decade in particular has given us new ways of communicating with each other, enabling us as organisations and our customers to access and consume information in new ways. It’s also given marketers and businesses new strategic and tactical opportunities.

In my view, the continuing development of the smartphone is one of the most profound changes for both customers and businesses. It has fundamentally freed us from the ‘place’ to the ‘person’. The rise of voice technology is set to further change behavior, perhaps ultimately freeing us from the device.

To appreciate the magnitude of technological change in only one aspect of ‘doing’ marketing, we only have to take a look at Scott Brinker’s MarTech landscape, which he has been tracking since 2011 when there were about 150 martech solutions. In April 2018 there were 6,829 marketing technology solutions from 6,242 unique marketing technology vendors!

3. **If you think forward, we know our markets will continue to change, what might marketing look like 5 or 10 years from now?**

The pace of technological change just keeps getting faster and faster. And as marketers there will continue to be an endless procession of new tools that we will need to understand and consider. For example, though I believe broad adoption within B2B is still a decade away, AI will change how we interact with, interpret and use company and customer data.

But there will always be new technology. As marketers we evolve and adapt so that we can take advantage of the tools and technology to better do our jobs.

But no matter the external environment, the fundamental role of marketing does not change. And I hope that marketing moves away from its current obsession with all the shiny new things and returns to a reliance on the marketing fundamentals.
THINKING AMP: Of Service and Experience

I joined the telecom industry in 1981 when I went to work for AT&T (later Pacific Bell) in California. I started my career as a network analyst, later went on to manage data centers, and other technology resources that were ultimately centric to the delivery of revenue-generating capabilities. In those days, and indeed, even today, we carefully and granularly measure a vast array of arcane Quality-of-Service indicators: Mean Time Between Failures (MTBF), Mean Time to Repair (MTTR), Percentage of Packets Lost, Delay, Jitter, Peak-to-Average ratio, Average Call Setup Time, Calls Dropped, Unsuccessful Connect Ratio, and perhaps the best known of all, Five Nines of Reliability, proudly announcing that the network equipment is available 99.999% of the time that it’s in service. That’s impressive: Out of a total annual measure of 31,536,000 possible minutes, ‘Five Nines’ means that the equipment is down for a paltry five minutes and change.

There’s only one problem with this measure: it’s entirely inward-looking. It looks exclusively at the network, at its many components, at the flows of data that it manages, stores, and moves, at the behavior of that data as it makes its way through the telecom and IT infrastructure, at the ability of the network to ensure that the amount of data going into the technology tunnel matches the amount that emerges. There’s only one thing missing from these vaunted indicators: the customer—the ultimate owner and user of all that carefully measured and monitored data.

Please understand: I don’t intend to suggest that these measures are unimportant or lack relevance—far from it. Without them, there’s no way to deliver on the contractual promises that services providers enter into with their customers. But how do we measure the quality of that promise?

The answer is to turn out attention outward—to add a new measure to our pursuit of high levels of Quality of Service: Quality of Experience.

Quality of Experience (QoE) can be terrifying to companies that elect to measure and monitor it, for a variety of reasons. First, it is typically a dimensionless measurement. How do you quantitatively capture ‘was it good for me?’ Second, it places customer opinions of delivered service squarely in the harsh light of public view—and if the quality is deemed to be inferior, this can go ugly early.

But here’s the other side of that argument. Some companies, like Canadian service provider TELUS, have developed key performance indicators that include measures of QoE. At TELUS, it’s called L2R: Likelihood to Recommend. Internally, it’s one of the most important guidelines of organizational performance, and it’s taken extremely seriously. Externally, it’s used as a way to engage with customers and as a measure of transparency—a message that says, ‘Customers First’—if our service doesn’t meet their expectations, then the public deserves to know that.

What this and other measures like it translate to is a measure of customer experience, which is the ultimate goal, isn’t it? Everyone knows the statistics; people will tell far more people about a bad experience than they will a good one. So why not tip the scale toward the positive? That’s good business, and it’s a reason to manage technology infrastructure as if QoE is the only measure of its operational performance.

THE I3 CORNER:

The I3 Founders are continuing to make progress as we ready the I3 consortium for general admission. The hope is that we will be ready to open our door to others (beyond the Founders) in the August time frame. At that point in time we should have a membership structure that supports a big-tent with many different contributors, a membership agreement that allows each member to participate in a way that supports their corporate strategy inside an IOT market acceleration platform, and even a solid R1.0 architecture and development plan. With these key elements in hand, we will rapidly shift I3 from its current proof-of-concept stage into active open-source development. As a part of the plan, the Founders are working to put together a strawman structure that will enable the on-boarding of volunteers, individual developers, and corporate members who believe in the importance of an open IOT network that is managed with the active involvement of communities of IOT device owners. In doing so, instead of seeking to justify deployment of IOT devices based on a single killer-application, IOT devices will be deployed based on the entirety of the applications that can support. This change in the economic basis that underlies the IOT market will allow many new applications to suddenly become viable.

READER CONTRIBUTIONS - The Customer’s View of Time by Tomas Ferratt

Thomas Ferratt is a Professor Emeritus at the University of Dayton. He has written extensively on the Managing Information Systems. In 2016, Tom won the SIGMIS best paper award for The Data Base for Advances in Information Systems.

Time matters today, and it matters even more in the onrushing future. This is true for companies but perhaps even more so for a company’s customers. If a company can save their customers time, it demonstrates that the company respects the fact that their customers place value on their time. In serving customers it is important to focus relentlessly on time in improving customer experiences. That relentless focus on time applies to everyone and everything that contribute to competing successfully in serving customers, starting with the first time the customer is introduced to the company and continuing as long as the customer remains a customer.

Historically, a focus on time translated to reducing a company’s operational time. Less time translated to higher operational efficiencies, lower costs, and higher profits. In today’s world, the internet has made businesses global and that has increased the competition as more businesses are chasing the same opportunities. With more competitors to choose from, customers have become more sophisticated in their selection process. They are looking for suppliers that can not only reduce costs through greater time efficiencies in their internal processes, but they are also looking for suppliers that can save them time. Customers truly value efforts to improve their experience via recognition of the
value of their time, especially in a world where customers are increasingly multi-tasking and running their personal lives on internet-time. Examples of such recognition are seen in ease of ordering, rapid response of customer support, quality products that do not fail or have to be returned, instructions that allow ease of use, etc.

This new perspective on the value of time emanates from the customer. From the customer’s perspective their personal time is precious; it is a non-renewable resource. Improving the customer’s experience vis-à-vis time is an end-to-end issue from the customer’s perspective. More specifically, a company wanting to improve the customer’s time experience must assume that the customer starts an “experience clock” when the customer first learns about or contributes to the design of a product or service. This experience clock continues to run through the time the customer acquires the product, uses it, services it, achieves some level of satisfaction, and eventually disposes of or replaces it. Reducing the time customers spend on some aspects of this product or service life cycle, such as ordering the product, configuring it for use, or disposing of the product is one way to improve the customer’s time experience; however, improving the quality of time spent on other aspects, such as use and preview of the product or service, is another way to improve the customer’s time experience.

READINGS FROM THE EDITOR’S DESK

- Pay TV (cable, etc) declines are driving wireline carriers to internet services but, before that transformation can complete, 5G will have become a reality and put those same services are under threat. This is driving cable toward content companies while content companies are consolidating to justify their own carrier independent direct-to-consumer services. “Deloitte Digital Media Trends Survey”
- McKinsey report provides a taxonomy for artificial intelligence applications (#AI). A detailed classification system makes it easier to get people on the same page given the diversity of AI efforts. Maybe we need something like this for blockchain? “Notes from the AI Frontier”
- Citizen experience, design thinking, and agile techniques will increase government innovation but success requires committed leadership, clear purpose/priorities, delivery coordination/cadence, compelling communications, and a capacity for change. “Delivering for Citizens”
- Ericsson released their June mobility report. They are forecasting there will be 8.9B mobile subscribers worldwide in 2023 with each device consuming 25GB. These smartphones will be complimented by an additional 318 IoT devices in 2023. “Ericsson Mobility Report”
- Deloitte examined digital transformation processes and concluded that success requires “Digital Leaders” that have vision, purpose, creates conditions to experiment, empowers different thinking, and encourage multidisciplinary thinking. “Coming of Age Digitally”
- CRM (Customer Resource Managers) have served us well in the sales, marketing, and in some cases customer service areas. However, once CRM is combined with data lakes, AI, and IoT systems the opportunities for advancement begin to compound themselves. “The Future of CRM”
- Issues with data ownership abound. The person who generates the data or owns the device that generates the data, owns the originating data. That person can sell, lease, or rent their data to another entity and different T&Cs could be attached to each such transaction. “The Great IOT Ownership Debate”
- Legislating in a tech driven world is hard; correcting the wrongs after they have happened puts the government focus on legacy issues that rapidly become outdated. Perhaps it would be better if government were to look ahead, close loopholes, and create environments where good has a higher reward than evil. Maybe making a spill proof bottle is better than always cleaning up the milk after it has spilled. “How Congress is Struggling to get Smart on Tech”
- The Deloitte millennial survey shows that the younger generation understand that immediate profit for profit’s sake often undermines long term opportunities. Better progress can be made by working together as team (customers and suppliers as a team), thinking long term, and by understanding we win or lose together. “The Deloitte Millennial Survey”
- Technology is not a problem or a solution; it is a tool that can aid to create a solution or, if misapplied, it can cause problems as well. When mayors talk about civic problems, technology can provide a path forward but it’s not a solution in itself. “What Mayors are Talking About”
- The key questions that should be asked after a cyber-attack include: 1) what preventative measures should be shared among professionals, 2) what should be disclosed to those effected, and 3) what should be shared to restore/maintain the public trust. “After a Major Cyber Attack”

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.

- How AI Could Tackle City Problems Like Graffiti, Trash, and Fires (free) Cities maintain and operate fleets of diverse vehicles necessary to maintain and serve their citizens. Some of these vehicles includes sanitation trucks, repair vehicles, buses, and emergency services vehicles. If these vehicles were equipped with video cameras, the captured images could be used by video analytic programs to self-detect many city operational issues in need of attention so appropriate crews could be dispatched without waiting for citizen complaints to be registered.

- I3: An IoT Marketplace for Smart Communities (free) I3 (The Intelligent IOT Integrator) is a data governance vehicle that managed IOT device flows on behalf of the IOT device owners. It’s origins are rooted in CTM market research focused on the user’s need to have the ability to self-manage their own IOT data streams if they are expected to participate in the larger data ecosystem. This incentive driven managed data exchange effectively creates a free and open IOT data marketplace which serves to accelerate IOT market evolution on the user’s terms.

- The Evolving Internet of Healthcare Things (free) Healthcare IOT applications can generally be divided into hospital, doctor, and consumer applications. However, over time these isolated worlds will begin to merge and as that happens there will no longer be a single administrator that makes device and application selection; the healthcare data network infrastructure will be an open and fluid environment. New systems to manage vendor neutral data repositories and to govern data flows at the device owners bequest will need to emerge.

- 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 characterized companies are growing much faster than their competitors to reveal 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 allows 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. 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 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.*