

April 2019 @ CTM

THE DIRECTOR SPEAKS - When Ecosystems Break



Strategies based on economies of scale push companies to prioritize market expansion programs over other initiatives; a larger market base allows a company to amortize costs over a larger base allowing an aggressive pricing strategy. Strategies based on market fragmentation push companies to market segmentation programs; a series of smaller niche markets with targeted needs can often support higher unit prices and require adaptability that is often not possible in larger markets. The concept behind economies of scope tells us that moving to a platform structure that can be customized with targeted modules, the platform costs can be shared by over a larger market while the targeted modules provide niche specific features. Ecosystem based strategies are somewhat similar to systems based on economy of scope concepts except the idea is enlarged to allow different entities to work cooperatively to achieve results that could not have been easily achieved on their own. While such concepts are often discussed in the context of corporate strategies, the same ideas can also be applied between government entities.

The European Union (EU) was formed when a number of independent countries came together to create a single market that was larger than any individual market. This served to make it easier for countries to trade within the EU and it made it a more attractive market for external trade partners. To make this work, they created a framework that defined a common ecosystem that spanned many countries. That framework allowed a series of disparate markets to function as a consistent, larger market but requires the individual markets to move away from their siloed policies to support the common good.

The Brexit saga serves to illustrate what happens when one party feels, rightly or wrongly, disproportionately impacted by the collaborative environment. What begins as discontent leads to distrust and then to a collapse of the relationship with both parties seeking to break ties. When the relationship has devolved to this point, there might be a better path forward rather than trying to force a continued exchange between untrusting parties. However it must be accepted that this is also a lost opportunity for both parties.

Brexit is clearly in the news making this conversation very topical but there are many other examples of trade relationships that have turned sour between government agencies or companies. When establishing a corporate ecosystem or a public private relationship, it is essential that all participants understand the gives and takes of the relationship from all perspectives. Hidden agendas or a perceived imbalance between the participants quickly leads to a lost opportunity.

UPCOMING EVENTS

- **May 19-21, 2019.** [Common Good Conference](#), USC Campus, Los Angeles CA
- **April 10, 2019.** [Digital Summit](#), Skirball Center, Los Angeles, CA
- **April 12-14, 2019.** [CHLA's Gamifying Pediatrics Hackathon](#), BCG Digital Ventures, Manhattan Beach CA
- **April 16, 2019.** [USC mHealth Collaboratory Symposium](#), USC Davidson Conference Center, Los Angeles CA
- **April 25, 2019.** [Oracle High Performance Cloud for Research](#), USC Campus, Los Angeles CA
- **May 13-16, 2019.** [IOT World](#), Santa Clara Convention Center, Santa Clara CA
- **May 19-21, 2019.** [Common Good Conference](#), USC Campus, Los Angeles CA
- **July 10-12, 2019.** [NIST Smart and Secure Cities Expo](#), Walter E Washington Convention Center, Washington DC
- **Aug 10 or 17, 2019.** [Data Con LA](#), 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 Dirk De Jong, Executive Director of USC Hospitality and USC Hotel



Dirk is the Director of the USC Hospitality and the USC Hotel, a role that includes Restaurants, Special Events, Catering, and Residential/Retail services. In this position, he is leading a transformational effort for Hospitality and the USC Hotel. Since joining USC in 2004, Dirk has opened more than 16 new venues. Dirk has extensive experience in the hospitality industry on three continents with companies such as Holland America Line, InterContinental Hotels Group and The Carlson Rezidor Hotel Group. He firmly believes that there is no other place like USC and wants to capture the Trojan Spirit in the hospitality and culinary experiences that USC creates."

USC recently migrated the Hotel on Figueroa from a Radisson branded hotel to a USC branded hotel. Why the change?

The University has owned the hotel since the year 2000, which was operating under a franchise agreement with the Radisson Hotel Group. As the end of the agreement drew closer, we went through an extensive planning and evaluation process to decide what the best step was for our future. With the vast majority of our guests stay with us due to their affiliation with the University, it became very clear to us that flying the flag of USC at the hotel, was by far the best option versus bringing in a different brand or continuing with the Radisson.

As a USC Hotel, there are a lot of opportunities on your horizon that had not been there previously. What are some of the most interesting things on your to-do plate?

As the USC Hotel will have a better opportunity to strengthen the ties to the mission, brand and standards of the University. Some of examples include:

- Creating more customized experiences for every type of guest in our Trojan Family. Whether they are a parent, a visiting faculty member, a sports team or a dignitary, we can create an experience that is in alignment with their expectations and it will be our goal to exceed them. Our staff training is centered on the motto of: "We are Trojans serving Trojans". While everyone is welcome, we are paying special attention to our guests that have an affiliation with USC and strive to create an experience for our guests that is on par with a leading university in the world.

- Finding ways to provide opportunities to USC students for internships so they can gain meaningful work experience in a real-life work environment right here on campus.
- Build up partnerships with the various organizations and entities such as the I3 initiatives to collaborate and work together on

How big is the hospitality industry and what does that include? Would you call it a growth industry?

The total value of the global hotel industry crossed \$500 Billion in 2018, with the USA accounting for \$200 Billion. The hotel industry over the last few years has witnessed tremendous growth with an annual growth rate of 6-7% and no sign of slowing down. The market also has seen a lot of consolidation, with the 3 largest hotel chains (by number of guest rooms), Marriott, Hilton and InterContinental acquiring smaller chains. The hotel chains also continue to create new brands to address the increasingly diverse and sophisticated traveler who is looking for a differentiating experience. This why the conversion of properties into independent and boutique hotels without the cookie cutter corporate hotel approach is expected to continue in the next several years.

If I asked you to describe the hotel of the future, how would you describe it?

Although I believe there is an important role for technology, we are still only at the beginning of the implementation process in the hotel industry. Some of the current technologies out there are still more of a gimmick rather than a real game changer. Successful adoption of new technology will center on the potential issue it solves such as factoring into convenience or speed. However, the central premise behind Hospitality is, that it is not about rendering a service or completing a transaction. Hospitality is all about creating an emotional connection with your guest and how you make them feel about the experience they had in your hotel, restaurant or event. That is not something technology can provide and therefore the human interaction will still be front and center in our industry. The hotel of the future will be successful when technology is implemented where it increases the opportunity for our staff members to interact with our guests in a more meaningful way.

Like any other industry, hospitality companies have to nurture continued customer loyalty and attract new customers. How does the USC Hotel stand out in a competitive industry?

It really is all about creating an experience for our guests that makes them feel like they are part of our family. The moment they arrive in the lobby, we want them to feel like they are in the living room of the campus. We want to be recognized as friendly, authentic and genuine and work really hard on selecting, training and retaining staff members that not only have a heart for Hospitality but also have the Cardinal and Gold spirit. The USC themed elements we have added to our rooms after we became an independent hotel are also a big differentiation, particularly in our Executive Level and Campus View Rooms. Although there are many hotels to choose from in Downtown LA and most of them brand new, our guests prefer to stay with us not only because of our location, but most importantly because of our amazing team.

STEVE SHEPARD: Time is Money and Speed is Profit



Einstein once observed that 'Nobody knows as much as everybody.' In this age of ecosystems, and of the partnerships required to drive those ecosystems, it has never been more apparent that a commitment to knowledge-sharing within the enterprise can mean the difference between a secure competitive position and organization oblivion. At CTM, one of our favorite mantras is that 'Time is money, but speed is profit.' The faster an organization moves, the more rapidly it is able to respond to a competitive threat, opportunity, or directional shift in the market, the more efficiently and effectively it can maintain its position above the white noise of competitive messaging. And, while technology is the great enabler in this scenario, it is the human factors that determine the magnitude of the impact or the severity and the hurdles to be overcome. Time and again, experiences has taught us that it often comes down to a few great leaders, a few people who can nimbly bridge the issues in order to convert a well-intentioned project into an operational success.

This is exactly why AMP was created! This is a need for a program that looks at how business people can use the power of digital technology to create (and defend) opportunities and technologies can modulate their thinking to create synergistic business value. At a time when there are many business programs and technology programs, there nothing that sits between the two that has been

developed for today's busy professional. The AMP program was designed to drive home the importance of functional ecosystems, ecosystems that exist both within and outside of a company. By harnessing the intellectual, cross-functional power of professionals in the collective technology, media and telecommunications industries, as well as in the vertical industries that those three serve, we have created a learning opportunity that is unique—and never more relevant. Initially a program that targeted the telecom industry (the first truly digital industry), today it attracts professionals from telecom, media, IT, aerospace, city and state government, regulatory agencies, and a plethora of others that have transformed themselves or are in the process of transforming themselves for the digital age. It truly is a cross-functional experience—and one that brings value to all attendees.

We look forward to seeing you at the next AMP program which is scheduled for May 6-10, 2019 in Los Angeles. You or a deserving colleague can register via the [CTM web site](#) or via this [Eventbrite link](#).

THE I³ CORNER (I3.usc.edu)

At the March 5 I3 meeting the consortium began laying plans for a summer demonstration of the I3 concept. The engineers at Viterbi are working feverishly to complete a functioning version of the I3 core software by the end of the semester while the I3 consortium members secure needed test bed resources. The consortium members will then integrate I3 compatible applications above and below the I3 core. Once the integration process is complete the consortium will begin testing, documentation, and performance testing this V1.0 system in order to publicly release the software before the end of this year.

Meanwhile momentum behind I3 continues to build as the I3 community expands. People are genuinely excited about USC's efforts to create an opensource, community driven IOT network infrastructure that supports managed participation in the data-driven economy. If any readers are interested in joining the I3 community program, please feel free to review the I3 web site at i3.usc.edu. The next face-to-face I3 meeting is currently scheduled for April 30 at the downtown USC tower.

READER CONTRIBUTION: Real Estate and Technology: The Smart Cities Challenge by Jack Illies

Real estate fundamentals are about return on investment based on risk and reward. In that simple context, technology, to a real estate investor at least, is important only if it adds value to the physical asset. The term "Smart Cities" typically refers to broad ideas for how cities should function with the right application of technology targeted to improve operational efficiencies or citizen quality of life. Rarely does it directly translate into something that impacts real estate asset valuation and so "Smart Cities" remain of marginal interest to the average investor in the sector. New technology innovations applied to physical real estate assets have been rare in the relationship-driven \$217 trillion world of real estate development and operations. Beyond advances in building materials, real estate, as the largest commodity in the world, has mostly ignored the possibilities that advances in technology that have brought to virtually every other aspect of modern life.



Systems for monitoring climate, security, and parking are intriguing applications in real estate management because the data coming from these applications has the potential to increase the usage of the physical plant investment. Increased utilization would help increase the value of real estate assets and their key amenities- public spaces, plazas, garages, lobbies, shops and restaurants. However, to realize these gains, data analytics must be applied to better understand how people use these spaces, and to refine disconnected systems that shape the way people use these environments. There are systems that measure pedestrian traffic but unless the data from those systems can be used to improve parking and traffic patterns, the usage information will have zero impact on real estate valuations.

There is huge potential for advanced data analytic systems to improve real estate management and operational capabilities. This data, once available, will continue to open new opportunities as emerging technologies like Virtual and Augmented Reality begin to impact how real estate is developed, designed, used, purchased and sold. To date, while these advanced systems have been able to demonstrate functional competence, their ability to impact property valuations remains unproven. That could change as both data scientists and the real estate industry better understand data as a means increase real estate utilization and value.

The application of digital technologies to the public realm is the perfect example of this transformative way to think about real estate. By encouraging dwell time in public places, supporting patron/civic engagement, and improving experiential quality, tangible benefits for both users and owner of bricks and mortar real estate are created. The data that comes from these environments open new business opportunities and supports new business models designed around well-defined usage models.

In an industry focused on maximizing return on investment in physical assets, tools that identify building user behaviors and patron preferences based on vast amounts of usefully synthesized data will be appealing when they are successfully translated for real estate asset managers.

- Imagine if a retail and entertainment center could identify where its customers came from and what they bought, and what they like to do. Customers could easily be engaged with tailored offerings that maximized convenience and extended length of stay through an enhanced guest experience to drive visitation and sales.
- Office towers could manage their parking garages to better manage usage, access and traffic flow, reducing commuter congestion and optimizing parking capacity.
- Cities and business districts could manage pedestrian and vehicular flows and optimize city services and physical assets to reduce costs and foster economic development.

Identifying successful case studies is essential in the real estate industry to get beyond the challenge of market penetration in the clubby real estate industry. Another challenge lies in how real estate is viewed- capital expenditures are normally amortized over five and ten-year horizons- well past the obsolescence date of most tech devices. Early experiments in interactive kiosks and digital displays demonstrated that the complexity associated with programming, maintenance, content, and sponsor acquisition are beyond the typical property management business model.

New proactive public-private partnerships that are based on collaboration are essential. This next generation of ecosystem relationships must be endorsed by all the involved stakeholders, including the variety of regulatory agencies involved in real estate assets, before these new operational models can reach their full potential. Navigating these multiple ecosystems requires ongoing dialogue and mutual understanding between the involved parties – a process that will need an investment in financial and human resources before the partnerships can realize their true potential.

The private sector will necessarily need to lead the way-in the effort to create large scale urban mixed-use development and districts. Technology companies need to understand these unique ecosystems and approach the business from the real estate investor's perspective. Technology is not the driver but the support tool that allows developers and property owners to identify areas that where technology can be applied to increase property valuations.

The recent opening of Hudson Yards in New York City might be the case study to show how to push these concepts forward. The \$20 billion project spanning seven city blocks will add 17 million square feet of commercial, residential, and civic space when it is complete. It is the product of a rare confluence of a data-savvy civic official in Michael Bloomberg, and a rock star urbanist, Daniel Doctoroff, the man who gave Hudson Yards its name. The two pushed development at the site as "probably the single most important economic project that New York City has undertaken in decades." They joined forces with the partners who now control the site, Related Companies and Oxford Properties, two of the most sophisticated developers in North America. Hudson Yards is remarkable for its merging of civic infrastructures, political-economic interests, operational logistics, urban visionaries, and the various publics drawn by the High Line extension and the "shawarma-shaped" public art piece at its center.

Ultimately, Smart Cities must be more than an automated version of legacy systems. These newly connected cities must be understood as a collection of mixed-use urban districts- comprised of individually controlled real estate assets- that collectively are the logical place for investment in new technology. These districts within cities need to serve as scalable test cases that can then rapidly scale across the city as innovative business cases begin to emerge. Such an enlightened view toward investment returns- and the barriers to new construction- mean that thoughtful investment in technology could yield substantial dividends if it is encouraged and allowed to grow. This will require real estate investors and managers, and the local stakeholders and government teams- to understand the capabilities of the technology for deployment, and its capacity for benefits to their context. It is critical for real estate asset owners, aspiring "Smart City" communities and pathfinding technology companies, to partner to create public policy and implementation strategies that covers both private and public properties. The private and public sectors must partner to direct the application of technology in places and in ways that work for public good- no matter who owns, regulates or manages the technologies being deployed.

READINGS FROM THE EDITOR'S DESK

- [Why Walmart Is Replacing Its Greeters With Problem Solvers.](#) The use of Walmart greeters was a good strategy when other retailers were not welcoming customers to their stores. Walmart is now trying to take this strategy to the next level in an effort to fight back against on-line retailers by having customer hosts become problem-solvers that do more than offer a friendly greeting. By having hosts offer a helping hand to customers, they are building customer relationships which improves the overall customer experience.
- [Kohl's Was Dying a Slow Death. Then It Did Something Brilliant.](#) Kohl's, like Best Buy, has learned that to be successful in the Internet age, they cannot fight against Amazon and other on-line retailers by going head-to-head. They must find ways to provide their customers with complimentary value propositions that the on-line retailers cannot easily match. It is a lot tougher to fight a giant head-to-head based on price than it is to out-flank them. One of the things Kohls is doing is allowing people to buy on line and then return the merchandise at their local store; this is more convenient for the customer and it leads to additional on premises sales.
- [How to build a digital transformation culture in your organization leveraging data.](#) An organizational transformation is not a single project, it is a process that requires the adoption of a continuous improvement mindset. The technology involved is an important component to any transformational project but the technology is simply the enabler that allows the transformation to occur. The transformation will not be complete until these changes are adopted by the

organization's culture. This organizational adoption is often the most difficult part of a transformation and the reason so many projects fail to meet expectations.

- [Why Every Company Needs A Data Strategy For 2019](#). Strategically, what a company can and cannot do is determined by the data the company has and how it flows through the organization. Transformation programs develop new data sources or use existing data sources in new ways. Trying to implement a transformation program without a data strategy is like trying to navigate your way through a dark room.
- [There are four competing visions of the internet. How should they be governed?](#) Different people look at the Internet from varying perspectives and their perspective impacts how they look at regulation. Some envision want to see the Internet evolve as an open and unmanaged exchange, a network with little to no regulatory oversight. Others prefer to think about the Internet as a societal resource that must be managed for the benefit of society. Many see the internet as a commercial tool, a way to provide goods and services to a global marketplace. Of course, there are hybrids that sit between all these different views of the Internet. This is why the Internet has become so complicated – these differing perceptions of the internet are often at odds with one another.
- [Sorry Thomas Edison, but It's Ecosystems, Not Inventions that Truly Change the World](#). Technology in and of itself is not a disruptor but it enables disruption. The ecosystems that emerge after a technology breakthrough is achieved determines winners and losers. Don't focus on the technology as much as what it lets you achieve on the behalf of the customer.
- [Amazon Almost Killed Best Buy, Then, Best Buy Did Something Completely Brilliant](#). Online companies often feel as though they are invincible because it is so hard to fight against them with traditional retail weapons. Best Buy successfully competes against the on-line stores by 1) focusing on people (employees and customers), 2) price-matching to level the field, and 3) building long term customer relationships.

CTM RESOURCES

CTM has a history of making topical and thoughtful information available to the CTM community. In support of our community, the following may be of interest to our readers. See marshall.usc.edu/ctm for a complete list of resources.

- [The Need for a Fourth Industrial Revolution Operating System \(free\)](#). The application of Fourth Industrial Revolution thinking to our data-centric world requires that we rethink the macro systems that govern the way that humans relate to the data that surrounds them.
- [How AI Could Tackle City Problems Like Graffiti, Trash, and Fires \(free\)](#). Cities operate fleets of diverse vehicles to serve their citizens. By equipping these vehicles with video cameras and using video analytics to self-identify issues requiring attention, cities can be made more efficient.
- [I3: An IoT Marketplace for Smart Communities \(free\)](#). I3 (The Intelligent IOT Integrator) is a data governance system that manages IOT data flows for independent device owners. It allows users to self-manage their data streams and allows them to determine when/how their data streams are used by applications.
- [The Evolving Internet of Healthcare Things \(free\)](#). IOT infrastructures will reshape IOT application paradigms as healthcare networks emerge to support a fluid and gracefully evolving healthcare data environment.
- [The Fan Multiplier Effect \(free\)](#). Marketing programs should be driven by behavioral objectives and measured by metrics that are focus on driving increased fan engagement
- [Internet of Things \(IOT\) Model](#). CTM has developed an Internet of Things (IOT) model that allows users characterize IOT market behaviors and test what-if paradigm shifts in demand.

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.