There are countless ways to segment the digital landscape, but for 2018 Sabre Labs has chosen automation, authenticity and blockchain as three threads which, when woven together, give us a way to talk about a broad array of technologies.

In addition to the full Emerging Technology in Travel report, we’ve prepared executive summaries distilling core concepts and content targeted for three key industry segments: airlines, hotels and agencies.

Agencies face an incredibly complex landscape for capturing and maintaining attention, but new technologies and platforms are providing increasingly sophisticated tools to share content and connect with travelers. Agencies are well positioned to leverage emerging technologies to provide personalized engagement before, during and after each trip to minimize traveler friction and maximize memorable experiences.

This executive summary provides agencies recommendations for action now and over the next few years. But the summary and full report are not intended to be the final word on any of these trends; rather, this is a starting point for discussion. Please reach out to the Sabre Labs team to begin a conversation about how new technologies can be used to improve how we enable people to move through and experience the world.

Philip Likens, Sabre Labs Director
and the rest of the Sabre Labs team
ADAPTABILITY IS ESSENTIAL TO THRIVE ALONGSIDE AUTOMATION. Businesses need to shift their focus from jobs and roles to tasks and skills. Studies on the near-term effects of automation (by McKinsey Global Institute and PwC Global, among others) forecast massive change in the tasks that make up present day jobs, predicting half of all current tasks could be automated by 2030. The focus on task automation is important—in most cases, the same set of skills can be applied to accomplish a wide variety of tasks.

- Variable bandwidth jobs are ideal for continuously teaching new skills. Because customer service positions often ebb and flow with demand, agencies are well positioned to encourage continuing education for their staff members. When customer volume is low, build human engagement soft skills among the agents—skills that will not be covered with automation.

- Agencies should hire for adaptability and human connection. The ability to use current skills to complete new tasks and an ability to embrace change are essential to increasing tenure and job satisfaction. Soft skills, such as the ability interact well and build connections with other humans are some of the hardest skills to automate and should be increasingly prioritized in hiring decisions.

- Human intuition works where data is sparse. Since human staff can be trained to provide excellent, personalized service without needing a lot of context ahead of time, put more focus on honing agents’ service skills. This is in contrast with algorithms which rely on having extensive personal data to customize recommendations. Human engagement skills are especially valuable for new customers and for travelers who choose to restrict access to personal data.

EMBRACE THE STRENGTHS AND LIMITATIONS OF ARTIFICIAL INTELLIGENCE. Today, most automation of mental tasks uses an AI technique called “machine learning,” where an algorithm applies a data set or rules to iteratively improve its performance at an explicit task. Data-driven tasks, like image recognition optimizing pricing, are ideal for machine learning. Creative tasks and human engagement tasks are outside the optimal scope of current AI.
Chatbots offer near-term, high-efficiency solutions to augment existing human expertise. Agencies can incorporate chatbots in various ways, as part of a booking tool, for example, or for service and support; the chatbot responds to basic requests and hands the customer over to an agent when higher expertise or customization is required. Sabre is piloting a chatbot for agency customers that is designed to streamline common requests for corporate travelers.

Real-time translation expands the reach of traveler service. Automation can help flatten global access to services. For instance, as real-time text and voice translation improves, knowledgeable support staff can increasingly be located anywhere in the world to help with bookings and guest requests without concern for language barriers.

Make use of existing automated platforms to streamline business processes. Agents don’t necessarily need to build custom AI tools, or even use industry-specific tools. Narrative Science, Automated Insights and other companies are turning data points into stories to help make quantitative trends more accessible. Robotic process automation (RPA) tools, such as UiPath, provide sophisticated scripting to automate common tasks. A host of other AI-driven business tools are available to augment humans to improve decision making and lead to higher customer satisfaction.

EXPLOSIVE GROWTH OF SENSORS AND DATA HAS LONG-TERM OPPORTUNITIES AND CHALLENGES. Agencies know their travelers better than anyone else and have greater contextual understanding of each trip. This depth and breadth of knowledge enables agents to instinctively highlight where human-to-human interaction has the highest value during travel. Automated tools can be used to help ensure that every interaction is optimized to enrich the traveler experience.

Human discretion has increasing value. Societal trends are making travelers from some regions skeptical of how broadly they share personal data. Humans can intuit a lot and fill in the gaps to provide exceptional, discrete service without creating a permanent record. For some travelers, human empathy and discretion in crafting travel and addressing challenges are irreplaceable, especially in an increasingly digital world.

Use sentiment to improve service. AIs are being used to analyze peoples’ moods based on both spoken and written language. Sentiment analysis can alert a staff member when a traveler is frustrated, upset, excited, pleased, etc., helping provide additional context to anticipate and meet travelers’ needs. Services like Cogito augment emotional intelligence for service interactions, helping agencies to proactively understand potential problems to expedite solutions.

Create business models that work for human-to-human interactions. Maximizing meaningful human interactions in a cost-effective way requires using technology to augment service for basic tasks. Whether this augmentation is app messages, chatbots, reminders pushed to wearable devices, or robotic process automation of back-of-house tasks, increased efficiency gives human agents the time to invest in travelers. Ultimately every traveler will face unexpected circumstances—last minute changes or “acts of god”—and having humans available in real time to help solve problems is only possible when common tasks are automated.
AUTHENTICITY

“Authenticity” has emerged as a buzzword across culture; in travel, it translates to a desire for trusted, reliable experiences and a more personal connection with people and places. In the digital age, the rise of information overload, fake content and intangible assets are increasing the premium placed on simplicity, certainty and trust.

TOP KEY TAKEAWAYS FROM THE FULL REPORT

1 THERE’S NO SHORTCUT TO PHYSICAL PRESENCE. *Travel has a tremendous authenticity advantage over most industries because in the end, it’s all about the physical world—about experiencing places and engaging with people firsthand.*

- Context is essential for personalization to be effective. The same traveler will have different goals and engagement expectations for a one-night business trip vs. a family vacation. Engaging a traveler in a specific context, with the right offer, at the right time, through the right touchpoint is the formula for success—success not just for travelers but also for agencies.

- Physical storefronts create a value add for certain travelers. No agency should be without a robust online presence, but physical storefronts enabling face-to-face interaction help inspire new travel options. Physical locations are also an opportunity to use emerging technologies like virtual reality to provide exceptional curated experiences to help potential travelers connect to new destinations.

- Hire for and train staff to provide personal context. The broadening appeal of boutique travel offerings is a trend embracing diverse neighborhoods, historic architecture, and local cultures. Staff who have a connection with certain regions may be particularly valuable to provide personal experience and localized context for travelers. Every agency has an opportunity to hire well-traveled staff and train them to provide a positive, memorable experience.
Be aware of local experience offerings on new technology platforms. EatWith, Vayable, Triple, and Airbnb Experiences (among many others), are platforms helping connect travelers to locals who are passionate experts in niche areas. The diversity of local offerings goes way beyond what’s in the tour books, often focusing on interests like lifestyle diets, cultural movements, social activism and hobbyist communities. Agencies should familiarize themselves with which platforms are active in specific cities and regions and be aware of how these offerings may offer unique experiences for travelers.

Brands that maintain robust traveler profiles will have an advantage. Algorithmic analysis of travel history, spending, preferences and other background data can consolidate quick insights to empower agents to know how best to relate to each traveler. A fully-integrated, unified view of each traveler, available across all systems and touchpoints, maximizes the opportunity to provide a personalized experience.

Rapid response and transparency are essential. The digital age accelerates the realization of risks and rewards. Especially in the context of business travel, agencies are often in the best place to assist travelers in times of complexity or crisis. Being the trusted person who helps a traveler navigate drama—whether a lost passport or an act of god or anything else—can be an unexpected opportunity to build trust. More broadly, cultivating a public brand presence as open, honest and always ready to change for the better can become self-reinforcing; it will benefit the agency, its employees and its travelers.

Social media influencers are a viable option for authentic visibility. Alongside enabling embedded connections, social platforms enable sharing broadly. Personal experience is the highest commodity in travel, and an increasing use of key influencers on platforms like WeChat, Instagram and Snapchat is a way for agencies to reach key audiences, especially younger travelers. Unfiltered reviews—from both travel celebrities and non-professionals—are the validation of success or failure and a strong driver of brand impressions and future bookings. Small agencies should consider adapting their social media strategy, making agents into influencers. Larger agencies with sufficient advertising budget may wish to partner with well-known influencers with established reach.

NOVELTY CANNOT BE OVERVALUED. The claim “experiences matter more than products” plays out throughout the travel ecosystem, especially for Millennials and Gen Z travelers. We’re seeing a continued growth of exclusive experiences, made more desirable by their scarcity. There’s also a parallel opportunity to embrace local uniqueness.

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TRUSTED BRANDS ARE MORE IMPORTANT THAN EVER. Gartner predicts that by 2022, “the majority of individuals in mature economies will consume more false information than true information.” To combat this rise, personal filters must be increasingly rigorous. Trusted brands and safe spaces provide people the luxury of mental rest and time off from constant skepticism.

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SABRE LABS EXPLAINS BLOCKCHAIN. Blockchains are a way of storing a record of any kind of value—a monetary unit, a deed, a vote, an image, an airline ticket, a hotel room, a biometric identity, etc. And for those values, blockchains create digital scarcity, allow shared oversight, and instill permanence.

TOP KEY TAKEAWAYS FROM THE FULL REPORT

1. Invest the time necessary to understand why blockchain may be important. There's a lot of hype and misinformation around blockchain, but the best antidote to being caught up in hype is knowledge and experience. Understanding blockchain can be a steep learning curve, so it's important for agencies to start now. Being informed is being prepared to make wise strategic decisions. If you need a solid, accessible primer the blockchain section of the Emerging Technology in Travel is worth reading.

2. Be thinking now about use cases where your business could benefit from data that should be scarce, shared and permanent. Blockchain isn't magic, it's just a new tool to put in the toolbox of transaction and data storage solutions. That said, as a tool, it's distinct from other tools, so it makes new kinds of solutions possible. Once you understand the core features of blockchain it's possible to start to strategize about how it might be useful in the future for your business.
**BLOCKCHAIN IS VERY EARLY IN ITS DEVELOPMENT,** but regulation is beginning to ramp up. It’s widely agreed blockchain is in its infancy; community support for blockchain protocols is not as robust as it is in more traditional areas of programming (limited developer support, content libraries, FAQs, etc.) It’s also unclear which protocols will have lasting viability. However, blockchain is at a turning point where it’s moving into the mainstream and receiving heightened visibility, including by governments. Prediction: in 2018, the hype and headlines will remain dominated by cryptocurrencies but the discussion will shift to focus on regulation and its role in long-term growth and adoption.

- Assign a specific person in your organization to follow blockchain-related news. The environment around blockchain is fast-moving and volatile, so rather than piecemeal headlines from many sources, it may be worth tasking one or two specific, tech-savvy individuals in your organization to follow blockchain and think about its potential effects. Over the last year, government regulation has been almost as volatile as the cryptocurrency market itself, with governments taking very different positions on cryptocurrencies in particular (some banning cryptocurrencies entirely, some embracing blockchain development in all forms, and many in the middle). Governments are changing their positions daily as the technology evolves. Sabre Labs makes specific predictions for 2018 regulatory trends in our full report.

- Be wise in where and how and with whom you partner and share data. If you choose to experiment or participate in a blockchain project, do due diligence on the partner organizations. Blockchain doesn’t eliminate the need to trust people; it just shifts where trust is placed. In many cases, the permanence of blockchain records and the difficulty in changing underlying structures once implemented could be a challenge and a liability, especially until we have a deeper understanding of how regulatory issues will evolve.

**BLOCKCHAIN IS NOT A ONE-SIZE-FITS ALL TECHNOLOGY:** public, permissioned and private blockchains each have their uses. Appropriately scoping a problem to be solved by blockchain requires an understanding of the various options. Within those broad structures, the need to trust and collaborate with humans remains essential.

- Ethereum and Hyperledger are the most viable platforms for experimentation. There are many different blockchain platforms, each with different underlying features. And any blockchain is only as useful as the community that supports it. Right now, **Ethereum** and **Hyperledger** are the two open platforms with the highest community investment of people, time, ideas and resources. Many of the world’s largest businesses across many industries are supporting and experimenting with both. Any business wanting to experiment with blockchain should look into these two platforms as a starting point for exploration. Even just learning the differences between these two platforms is an education in the breadth of how blockchains can be structured. Sabre Labs has experimented with both Ethereum and Hyperledger and continues to explore these and other blockchain platforms.

- Understand the differences in how blockchains can be structured. Public blockchain solutions have shared infrastructure open to all participants: anyone who wants to can run a node (hosting a copy of the blockchain and validating transactions), anyone can use the blockchain, and anyone can read values from it. But there are real-world challenges to using public blockchains for enterprise solutions. Permissioned and private blockchains retain many of the core features of public blockchains but can be applied to enterprise level solutions while avoiding many of the current drawbacks of public blockchains.