Vertical Markets and the Digital Revolution

White Paper
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Enterprise communications as a key transformation pillar

Two years ago, ALE decided on a three-pillar strategy based on cloud, services and vertical markets.

This is a company-wide decision – across the Network and Communications Business Divisions through to the sales and marketing organization. ALE is creating a virtual circle and intimacy with selected industries’ customers and partners to provide the best solutions fitting the industries’ strategies, helping them to face digital transformation in their business.

ALE is focusing on five industry sectors: Hospitality, Healthcare, Education, Transport and Government.

Economics, increasingly faster technology improvements and digital native decision makers who are used to new methodologies or new working models cause enterprises to want new solutions that solve their pain points and put the user (customers, the public, staff) back at the center of their objectives in an innovative and co-creative way. With our network of partners, ALE understands the market dynamic of each sector. Their business processes, ecosystems, trends, challenges, risks and opportunities as well as pain points. With real work-life use cases, ALE provides relevant solutions to its customer, which then helps them to address their own customer challenges.
Global market trends in the digitization era

The explosion of the internet and mobility, the spread of communities, social media and sharing economy models, have changed the way people buy or require services. The empowered customer/public can get information from their peers, whom they trust, before contacting a provider or reseller. The purchaser can buy or get a service from anywhere at any time. The perceived value of a reseller has changed. The spread of automation and self-service makes individuals more impatient and have more expectations. And, for better or worse, the customers are now acting on behalf of a company’s digital marketing.

On the other hand, despite all information being exchanged and the (r)evolution of communications and technology like video and IoT (Internet of Things), the world seems less and less secure. Attacks by people and in cyberspace, such as ransomware, are increasing. These attacks impact heavily the economy but also the image of a company or a country. These two factors lead an enterprise or public entity to invest in three areas:

- Enterprises need to attract and retain customers/citizens and the ecosystem of business partners that will help them address a market, provide services and increase their revenues.
- They need to simplify operations and optimize the assets and process, providing an efficient and pleasant working environment while better integrating third-party companies from supply chain to services delivery in the business process evolution and simplification.
- Proactive maintenance and people/assets protection help contain costs and mitigate financial and human risk in case of crisis or emergency.
Attract and retain customers: Digital engagement and customer experience

Attracting and retaining customers is a challenge as competition is harsh. The key, even before a customer becomes a customer, is intimacy and then a customer’s experience needs to be aligned with the customer’s expectation.

- **Attract**: Customer/partner engagement through the best on-line/mobile digital experience, including access to communities of existing customers (peers are more trusted than experts or vendors)
- **On premises**: Customers expect the best experience by the enterprise through a mix of in-person and digital interactions, whether on or off site.
- **Cross-sell**: Detect opportunities and establish a real-time communication between enterprise and customers
- **Retain customers**: Keep the contact through digital marketing and communities
- **Communities**: Enterprise need to take part of these customers’ communities when not animating them

Despite the rise of mobility and applications, one must not forget that voice still matters. Some customers/citizens are more reluctant or have no access new technologies, while others want a highly personalized human relationship.
Simplify operations

There is no digital transformation without a highly resilient, flexible and future-proof infrastructure and phones to facilitate communications and collaborations, whether the teams are mobile or at the desk.

Despite voice still being important, chat/IM (instant message) and email are taking over voice. Whatever media you use, it is more efficient to collaborate without changing context: Click-to-IM, click-to-call, and click-to-video integrated into your business applications are key. The communications enabled business process (CEBP) is even more important with the new technology available and simplicity of integration provided by a cloud CPaaS offer such as Rainbow.

Provide the best business efficient collaboration tools, simplify day-to-day operations in an efficient and pleasant environment, help refocus your employees on their value-added activity and prevent them from losing time searching for the right information or calming down an impatient or dissatisfied customer.
Proactive maintenance and safety

Proactive maintenance is the way to provide smooth and efficient maintenance operations for highest customer and staff satisfaction. It also ensures business continuity while lowering the cost of urgent intervention. Managing any kind of notification coming from connected objects, such as sensors or video surveillance, or information sent by a customer or an employee from a mobile application, from the analysis of the situation to the actions that need to be set up with the best team.

Complementing the situation analysis with chatbots, using natural language processing (NLP), linking with location based services and calendar information makes it even simpler to route messages to the right on-duty team.

This prevents, as much as possible, having to manage crisis situations even though zero risk doesn’t exist. When a crisis event occurs, whether a system failure is detected, an emergency button was pushed or an intrusion in a protected zone is detected, this needs to be orchestrated with crisis conferencing, large notifications services, logs and recording for further analysis.

Analytics, logs and recording will help analyze and enhance processes.
Solutions behind the scene

Mobility/smartphones are widely used by customers, the public or staff who sometimes bring and use their own devices that are neither enterprise grade nor secure to get information quicker or collaborate with enterprise grade applications.

Cloud is now a wave that enterprises needs to ride despite some risks or constraints such as political, financial or technical. In every industry, specific software applications are moving to the cloud (EMR -electronic medical record- for healthcare, PMS -property management system- for hospitality, LMS -learning management system- for education as examples)

Business models

In addition to the technology, the evolution of business models is a key factor of change. We moved from a hardware and licenses model to price per user and then price per use model.

However, we offer a dedicated outcome-based model, measured on business KPIs provided by the business being addressed. It could be a price per occupied room, a price per sales, a priced based on a percentage of revenues linked to rebooking.

CPaaS: Communication Platform as a Service, to connect people to people (people collaboration) but also people to services, people to chatbot, people to machine, machine to services (IoT, Bots, AI).

LBS will enhance the Rainbow relation machine that will enable integration within customer web or mobile applications or in specific industry software.

Rainbow relation machine and its set of APIs/SDK makes it possible to integrate communications not only in the business applications of enterprises but also in the whole business process (CEBP).

IoT: Thanks to Ethernet technology and Bluetooth Low Energy (BLE) the number of connected objects is exploding. We move from CEBP to IoT-enabled business process.

BOTS/AI: Simple Bot, such as Chatbot, simplifies interactions with people or machines by answering simple questions and refocusing human skills on more valuable services, while artificial intelligence complements with industry-specific analysis, thanks to in-depth data analytics and identification of specific patterns. Our partnership with IBM helps by integrating natural language processing (NLP) and artificial intelligence within Rainbow.

Analytics: Analytics are key to increasing business efficiency in operations and digital marketing.

LBS: While GPS is widely used for wayfinding across the territory, it is of no use on a private campus or within a building. BLE and Beacon technology makes it possible to create on-premises / in-building location based services such as geofencing, wayfinding, asset or people tracking.
Technology partnership ecosystem

As a business enabler for different industries, ALE is building a strong partnership program and ecosystem to be relevant in the five industries we have prioritized.

This ecosystem will be based on simple interworking with ALE solutions for deeper integration by using system APIs or Rainbow CPaaS.

Transport

Amongst rail, air (air transport industry), road (intelligent transport systems) or ports, there is a common goal to increase capacity, safety and comfort while decreasing risks and costs.

Mobile by nature, the passenger expects autonomy in his passenger experience. From greetings to innovative value-added digital services, transportation companies provide self-service applications, passenger centric services and real-time information leveraging Rainbow CPaaS.

Mission-critical architecture complemented by emergency management for incident or terrorist attacks, effective monitoring and notification are key elements of safety and security. Whether a passenger notifies authorities about lost or left luggage, or a hostess presses an emergency button or a sensor detects a luggage delivery failure, the operational command center must be informed and be able to manage the incident and provide the best priority calls. Mass notifications are key to informing passengers, a travel team or security staff.

Key to efficient operations is having an effective team across the different subsystems and subcontractors. A team that collaborates on the move or at a desk, able to reduce headaches from dissatisfied passengers due to service disruption, able to adapt to increases in traffic with the best-sized teams, and able to manage station or airport extensions easily.

Hospitality

With a lot of new competitors in the Hospitality space, such as booking engines or online community marketplaces like Airbnb, hotels need to constantly innovate to attract and retain customers by providing a memorable guest experience encouraging increased loyalty. ALE makes it possible to provide new services to hotel teams (back and front office, guest care, operations and facility management) for smart operations that will bring customer satisfaction as well as new business models, such as an occupancy-based model, to remain competitive.

Guests will remember their stay because of the large eco-system of in-room technology and e-concierge services accessible on their high-end guestroom phones, personal computers or smartphones. A full range of telephones and native hospitality features will perfectly complement PMS integration and simplify operations.

From a smart room to a smart hotel, connected sensors will enable preventive maintenance for easier facility management and better security within the hotels.
Healthcare
ALE address not only hospitals and hospital groups, but also the continuum of care across the territory, with all healthcare providers: Doctors, pharmacies, laboratories to nursing homes -rehabilitation, long term care unit or retirement homes.

The focus on the care pathway provides a superior digitized experience to patients, visitors, and helpers while assisting caregivers in providing 24/7 efficient and quality care delivery, from standard or anti-bacterial sets or smartphones or via specific healthcare applications.

Operations such as supply chain and facility management are also simplified by Rainbow CPaaS while communications and connections are crucial to managing mass casualty incidents within the hospital and between the hospital and public safety entities.

Education
Student success is the core of education by providing enhanced student learning experiences within a safe and efficient learning environment.

Whether you address K12 or higher education, the security against attacks provided by a safe campus is a key concern.

Higher education with a focus on campus management and security, providing mobility and self-service are key to students who merge personal and student life easily and who are, more than any population, used to digital experiences through wide use of such things as community collaboration and social media.

Also, key is integrating communications within student information systems to facilitate administration and in-learning management systems for a better collaboration experience pre, during and post learning. Project based campus applications will use Rainbow and CPaaS. This project can be developed by students as part of their study project.

Government
A public government or administration needs to provide services to a very diversified population while keeping costs under control. Government services covers such a broad area that they often delegate the services to private companies. They also need to create intimacy with the citizen based on open, transparent and trust-based relationships like e-democracy.

Providing a prosperous and safe environment to the citizens by attracting business and having a wide area of public services such as transportation, education and health is key. New technologies, like IoT, brought the emergence of smart cities and safe cities where public safety is a key element and communications and notifications are mission critical.
Conclusion

ALE’s objective is to be the leader in IoT-enabled networks, leader in CPaaS and leader in hybrid communications. With an end-to-end organization dedicated to verticals, ALE has not only the means to understand its customers’ needs in very specific sectors to build the best solutions, but also has the right means to leverage a full ecosystem of partners relevant in each specific domain.

Not every country or enterprise is the same, each with its own opportunities and risks.

ALE, long known to protect its customers’ and partners’ investment, promotes flexibility and updates along a customer’s path, making it possible to move from analog to IP, CPE (on premises to cloud), OPEX to CAPEX, and from voice collaboration and CEBP, from notifications to IoT-EBP (IoT-enabled business process).

ALE sells innovation and co-construction improving customers’ engagement and customers’ experience while accelerating our customers’ decision-making process.