

SMART MOBILITY: DON'T LET YOUR CLIENTS GO FASTER THAN YOU »»

There is a 'perfect storm' happening with the maturing of devices, connectivity and data availability.

OVERVIEW

Smart Mobility is a new generation of disruptive 'smart' applications that use information about the user's context (sensor presence, identity, location, etc.) to deliver enriched services that adapt in real time according to the user's situation to mobile devices. Smart Mobility will enable enriched end-user experiences and transform how organizations operate, and how they sell their services and products. It is set to

become business as usual within the next three years. Smart Mobility is about revolutionizing the consumer experience, bringing a new paradigm to the market. It will replace customer loyalty with customer immediacy. Smart Mobility opens up a number of new business opportunities for IT services providers. Atos Origin is well-placed to offer a number of services and indeed already has proven experience in this emerging field.



CHALLENGE

There can be no doubt that the world is a very different place to say ten or even five years ago. The Internet and mobile technologies have revolutionized people's personal and professional lives. Today, individuals have immediate access to more information than ever before simply at the touch of a screen or click of a mouse. They can shop without leaving the house. They can talk to friends and family no matter where they are or where the person they are calling is. They can even speak to multiple people in multiple locations simultaneously. This has become 'normal' life as we know it. But change is not stopping here. The world is seeing another revolution where individuals have immediate access to all information relevant to their current situation – a 360 degree view, as it were, of what is happening in their immediate world that enables them to make more informed decisions and enjoy more enriched experiences.

These services started to emerge with applications such as Google street maps, GPS satellite navigation, location-based weather reports, and so on. However, the volume of data available is exploding and becoming disparate, and is non-personalized, so that often only a partial view can be established. Although a huge amount of information is now available at their fingertips, it has been up to the individual to try and pull it together into something meaningful to them. With Smart Mobility, that is about to change. There is a 'perfect storm' happening with the maturing of devices, connectivity and data availability which will enable a new generation of intelligent applications that adapt to the user's context in real time to enrich the delivered experience.

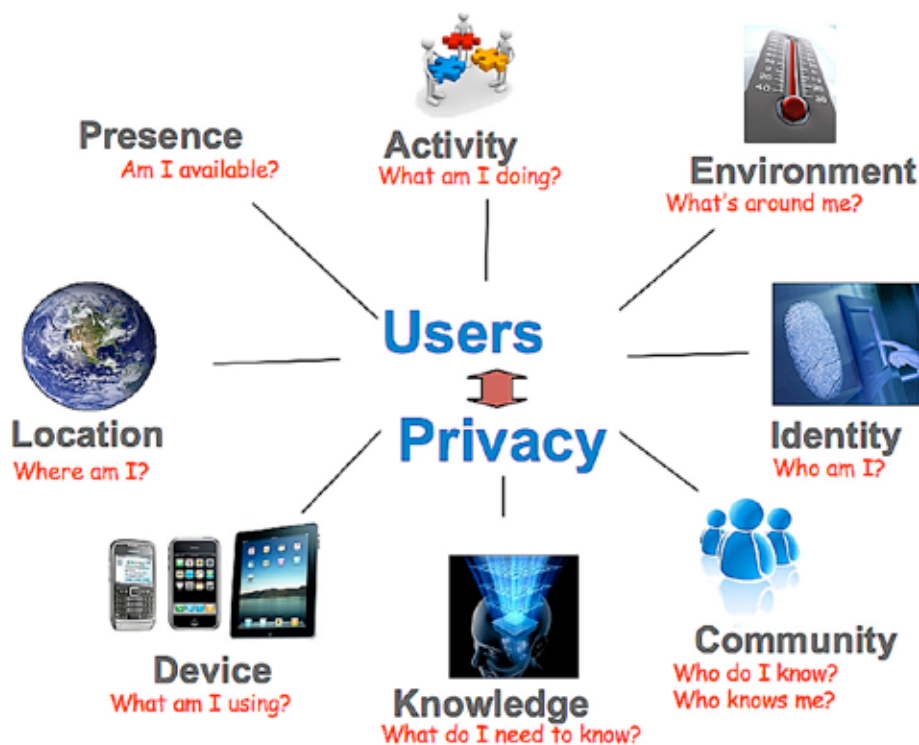


“THERE IS A ‘PERFECT STORM’ HAPPENING WITH THE MATURING OF DEVICES, CONNECTIVITY AND DATA AVAILABILITY.”

CONTEXT-ENRICHED SERVICES

Gartner describes Context-aware computing or Smart Mobility as, “the concept of leveraging information about the end user to improve the quality of the interaction. Emerging context-enriched services will use location, presence, social attributes, and other environmental information to anticipate an end user’s immediate needs, offering more-sophisticated, situation-aware and usable functions.” In reality, this means that a person would have instant access to all information regarding their current location or situation via a Smartphone, PDA or other mobile device. Smart Mobility enables intelligence across current silos of how a user acts, plans, consults, communicates, interacts, and looks and moves around.

Applications and services would push the information to the end user, adapting the data as their context changes. For example, if Francis is meeting Hans for coffee but has got stuck in a meeting, the smart application becomes ‘aware’ that Francis is running late and asks intelligent questions, such as ‘shall I let Hans know you’ll be late?’ ‘would you like to reschedule the rendezvous?’ Based on the answers given, the smart application could communicate directly with Hans’ Smartphone and let him know Francis is running late or even compare calendars and suggest an alternative date for a future meeting. Another example would be if an individual experienced car trouble. The mobile device could ‘talk’ to the car, discover the fault and suggest the nearest garage that would be able to fix it, and at what price. It could even communicate with the garage to arrange an appointment or send a tow truck.



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THE VIRTUAL PERSONAL ASSISTANT

In a ubiquitously-connected world, smart applications will be able to interact with all objects around them (the 'internet of things') to provide users with all the information they require at the right time to make the right decisions. This will significantly increase people's productivity and provide more enriched experiences. By suggesting alternatives to what is currently on offer, the mobile device becomes a sort of virtual personal assistant (PA). It knows an individual's current context and can propose better solutions or alternative options and it continues to adapt immediately as that individual's circumstances change. Privacy will of course be key. It is crucial that the user is always in control with the risk of their choices not being respected kept to a minimum.

"Although the rudiments of Smart Mobility have been around for some time now, it is a disruptive technology that has the potential to be a real 'game changer' in terms of competitive advantage," according to Gartner. "Initial implementations of context-enriched services are already in play, and early adopters will find it easier to implement more-sophisticated services in the future," Gartner says.

Indeed, although Smart Mobility is just evolving, it is set to be business as usual within three years. In terms of technology, Smartphone evolution allied with high-capacity mobile and Wi-Fi networks allow for a complete user experience rather than a cut down mobile compromise. Within the next five years, 50 percent of Internet usage is forecast to be from Smartphones. There are already more than 200,000 mobile applications available. Most deliver a highly specific service based on a micropayment commercial model. Cloud offers the potential to access massive amounts of data which needs to be 'brokered' according to the user's context and the service offered by the application. The so-called 'Internet of Things' will mean sensors will be everywhere and capable of providing contextual data via GPS and RFID tags for example; about the environment (temperature, rainfall, humidity, etc.), from fridges, TVs, etc. There are already masses of publicly available data sources than only have value when applied to a given need/context.

From a social perspective, choices, preferences and activities today are highly influenced by the user's social network. Customer intimacy increasingly relies more on the quality and immediacy of the service and less on the longevity of relationship between user and provider – as customer stickiness reduces, service providers will need to sell to more people without increasing their costs. Generation Y, a digitally aware generation, is coming into the workforce and will consider Smart Mobility applications 'business as usual'.

Already, the mobile Internet service industry sees 27 percent CAGR growth and the market is predicted to be worth US\$100bn by 2013. Smart Mobility will introduce new commercial models, transforming how organizations operate and revolutionizing how they sell services and products. Consumers will anticipate basic free services, expecting only to pay for higher-value services.

Smart Mobility is about changing the consumer experience, bringing a new paradigm to the market. It will replace customer loyalty with customer immediacy. Smart Mobility opens up a number of new business opportunities for IT services providers, such as Atos Origin, to help their clients take advantage of these emerging services.



A NEW OPPORTUNITY FOR IT SERVICES PROVIDERS

To enable applications to deliver value on a mobile device, information must be aggregated from a variety of different sources that include both static data, (e.g. maps) and dynamic information that relates to the user's current context. The advent of the iPhone and Android application market places are already seeing the first generation of smart applications emerging.

A mass of relevant and timely data must be integrated, most likely in the Cloud, to deliver the enriched end-user experience ensuring the right information is delivered to the right person at the right time. Smart Mobility will result in a substantial increase in the amount of data needed to be stored, managed and accessed, requiring improved network connectivity and increased bandwidth.

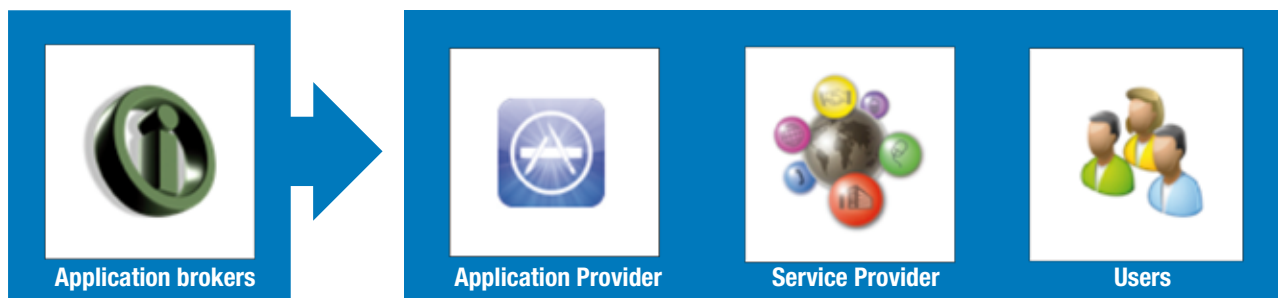
Brokers

Aggregate fixed information sources real time context monitors, making them available as transactional information services at a reasonable price respecting security and compliance



Providers

Integrate the data sources to provide context aware applications which service providers provide as context aware services to end users



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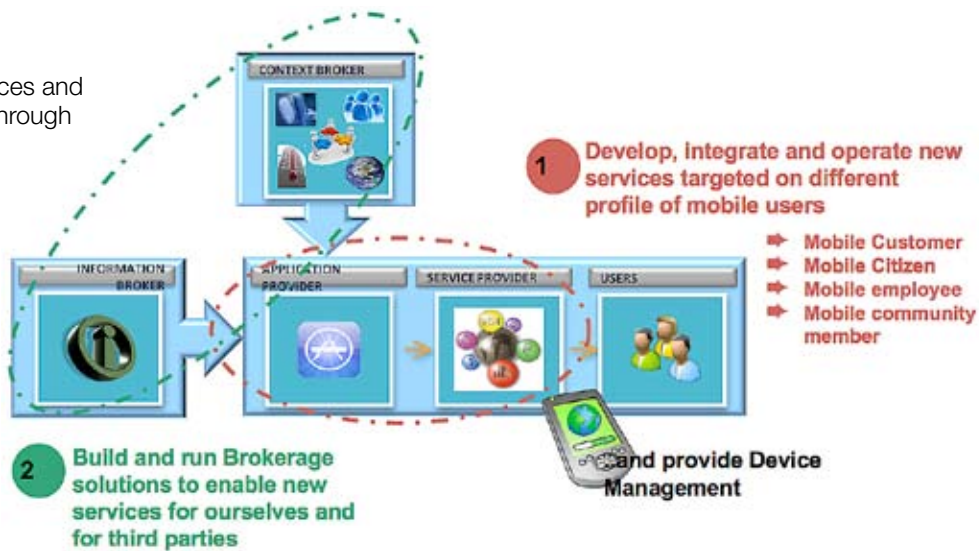
VISION

As a disruptive technology Atos Origin sees Smart Mobility as a real opportunity for future business growth in a number of areas. Atos Origin has

the expertise and relevant experience to play in any part of an emerging Smart Mobility Service Ecosystem depending on client requirements.

Our vision:

be a pioneer in services and support innovation through brokerage solutions



ADDRESSING CLIENT CHALLENGES

Today, companies struggle with not just growing, but maintaining market share in an increasingly challenging economic environment. Part of their challenge lies in finding ways to operate their business more efficiently. Also, as customers become less loyal, they must find ways to evolve the relationship they have with their customers and enhance services and service delivery. Smart Mobility solutions can help organizations address these challenges. By providing customers with the information they need, when and where they require it, they can make informed decisions at the point of purchase. Companies could even anticipate customer needs based on time and their location in order to offer services which would be of value at that time. Smart Mobility solutions can also help transform a business to become more efficient by helping increase people's productivity. And as Smart Mobility provides a wealth of data about when and where consumers purchase goods and services, companies would be better able to identify trends and adapt their sales and marketing campaigns accordingly.

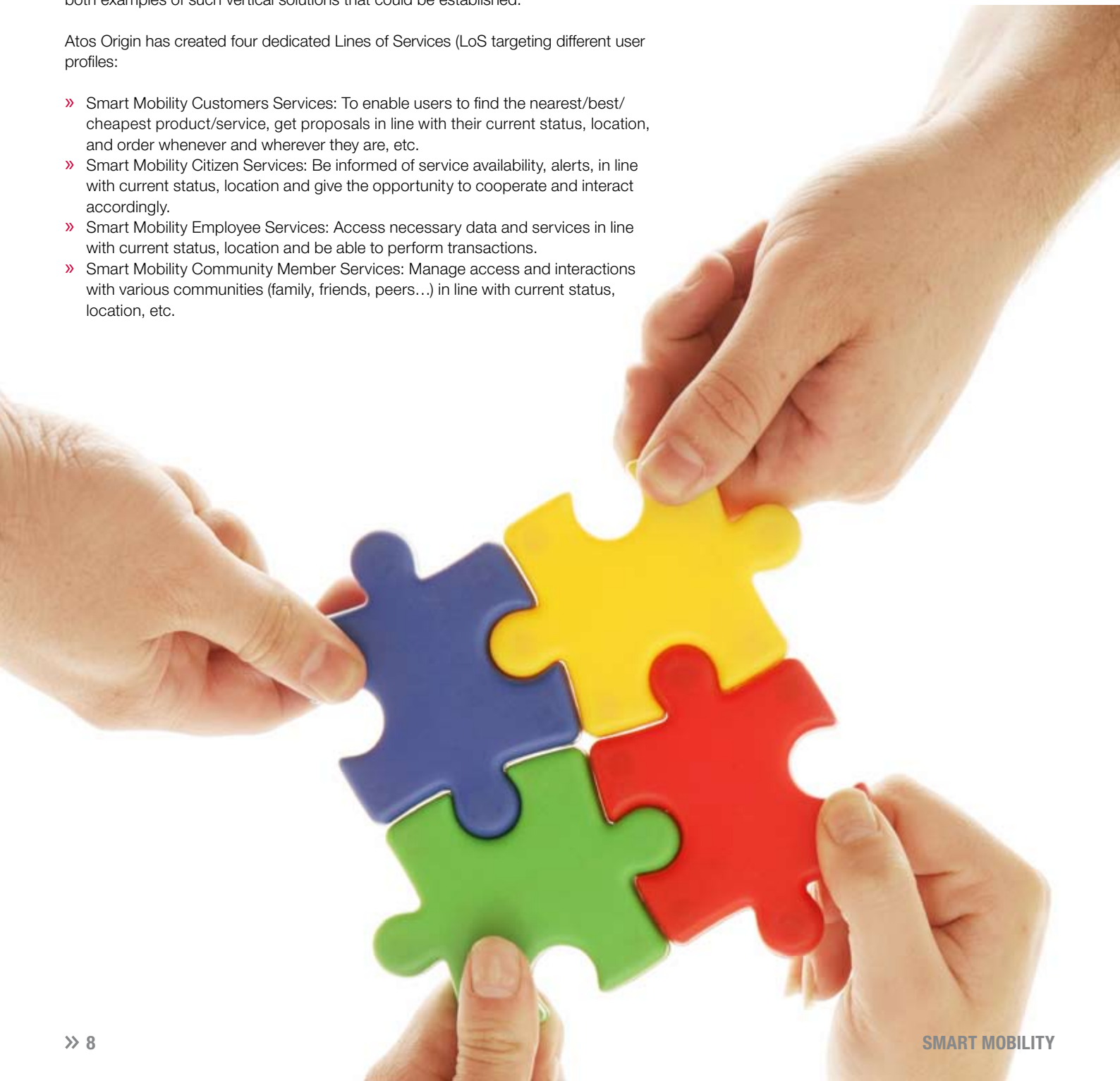
As its role with the Olympic Games and a number of other reference cases demonstrates, Atos Origin has the experience and expertise to make heterogeneous data accessible and usable, making it an effective Data Publisher for its clients. As a global Systems Integrator, it also has the skills, knowledge and capability to manage IT complexity. It designs, builds, operates and hosts applications on its platform at a fair price using a cloud-based (HTTS) or non-cloud model. As a Context Broker, Atos Origin can aggregate real-time context information about the end user delivered with static information for a smart application to adapt and enrich the end-user experience. Indeed, Atos Origin is in the process of developing the proof concept for a Context Broker Platform on which its clients would be able to access context data to be able to build their own context-aware smart applications.

With in-depth understanding of the vertical markets in which it operates and the challenge clients in these markets face, Atos Origin can offer innovative ideas of services that could add real value to the end-user

experience and help its customers develop their own context-aware applications that will help them grow with different business models and differentiate themselves for the future. Atos Origin can provide end-2-end solutions that comprise the whole ecosystem, but are dedicated to a single client or market-oriented service. Rather than providing a platform for other developers and service providers, Atos Origin would integrate the information, context, application, and service provision within a single end-2-end service wrapper. Its investment in Onboard Services and ehealth are both examples of such vertical solutions that could be established.

Atos Origin has created four dedicated Lines of Services (LoS targeting different user profiles:

- » Smart Mobility Customers Services: To enable users to find the nearest/best/cheapest product/service, get proposals in line with their current status, location, and order whenever and wherever they are, etc.
- » Smart Mobility Citizen Services: Be informed of service availability, alerts, in line with current status, location and give the opportunity to cooperate and interact accordingly.
- » Smart Mobility Employee Services: Access necessary data and services in line with current status, location and be able to perform transactions.
- » Smart Mobility Community Member Services: Manage access and interactions with various communities (family, friends, peers...) in line with current status, location, etc.



WHY ATOS ORIGIN?

Atos Origin already has more than 235 full-time employees working on on Mobile & Context Competencies in its IT development centers. It is already a key player in the high-tech transactional services (HTTS) domain with proven technologies driving Smart Mobility services. Atos Worldline's unique HTTS provide vast experience in the design and building of platforms to host high volumes of data and applications for multinational organizations. It has particular expertise in the e-commerce arena. Its 20 years of experience provides Atos Origin with deep knowledge of vertical markets, finance, retail and telecom specifically. It is able to call on this knowledge to link industries, such as telecom and retails in order to build Smart Mobility solutions. And it enjoys exceptional and long-term B2B relationships with large multinational clients, furthering underscoring its vertical market expertise.

Atos Origin has proven experience in handling secure massive data and data storage, as well as publishing data, as its position as Worldwide IT Partner of the International Olympic Committee underscores. Its strong consulting capabilities ensure that Atos Origin is best placed to advice and work with clients to take advantage of emerging business models. In addition, Atos Origin has in-depth understanding of and expertise in identity and security management and the requirements of its customers, and it can meet those needs. Overall, Atos Origin has the knowledge and skills required across the board to publish data, integrate data and offer end-2-end BPO solutions.



BRAND IN POCKET

Atos Worldline's 'Brand in Pocket' (BIP) offers a concrete example of one dedicated concept for Smart Mobility that enables a brand to offer its customer new services allowing 'anywhere/anytime' communication, thereby reinforcing the relationship. Via BIP, users can check their loyalty account, change personal data and receive and spend electronic vouchers. They can also directly contact the call center, search for the nearest store and so on.

Atos Origin is already present within the context of connected users and its Smart Mobility portfolio is divided along the Smart Mobility equation:

OUR SMART MOBILITY REFERENCES

End-users interactions



- » access to contextual POIs (points of interest) whilst driving, ecodriving services to help evaluate the car's consumption and usage and potentially find an alternative insurance provider that would offer the best deal based on usage, workspace continuity, access to the home universe in terms of multimedia content, etc., as well as vagaries control, such as traffic, weather, parking opportunities, etc.
- » A smart application to assist in the care of the elderly and dependant people allowing falls to be detected and managed, detecting wandering, and more. Such a service could help to maintain the independence and autonomy of elderly people and reduce the demand on public sector care services.

Data collection and distribution



Atos Origin is also making major investment in a number of pioneering concepts and ideas in this arena, including:

- » A smart application that allows anyone who sees a pothole in a road or graffiti on a wall, for example, to take a photograph of the problem using their Smartphone and send it to the local authorities with a request to solve the issue.
- » A smart application that allows individuals to share tips and favorite places with others.
- » A smart application that filters rewards based on proximity, user profile, reward availability, etc. This sort of application could help decrease churn and permit discount vouchers to encourage local sales.
- » A smart application that takes the internet shopping experience to the high street by allowing an individual in a store to scan the barcode of a product and get information about which other stores within a set radius sell that product and at what price. This allows the individual to get products at the best price. Unlike similar applications, this concept is also looking at adding value to the retailer by enabling them to counter offers from their competitors with a better price to encourage the shopper to stay in their store.
- » Onboard services: Atos Origin is working with a major automotive manufacturer to see what kind of experience-enriching services it could offer its customers. These could include on-board telemetry to book services at a local garage, for example,

SMART MOBILITY – IN BRIEF

The only IT services provider with real systems integration skills to cover the complete value chain and all business critical processes, Atos Origin is uniquely placed to ensure Utilities companies are able to face the challenges revolution in the industry is creating. It has a number of exclusive references that underpin its proven approach and a comprehensive portfolio of secure solutions for Smart Meters, Smart Grid, electricity storage, distributed generation, home area network and demand side management, etc. Its multi-delivery models make Atos Origin the partner of choice for Utilities companies looking to take the lead in the new post-crisis world.

For more information:
www.atosorigin.com