Telco2.0™

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Executive Briefing

The $50bn Enterprise Mobility Opportunity: four steps for telcos to take today

What's stopping telcos from grabbing a slice of the lucrative enterprise mobility market today?

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Excerpt

Enterprises are turning to mobility to transform their operations, creating a c.$50bn 'Enterprise Mobility' opportunity globally. There are four levels of engagement that telcos can adopt to start to capture a share of this market, and upgrade and repurpose their internal capabilities to deliver repeatable, high volume, customer-facing growth initiatives. They need tools, technologies and partnerships to provide the deep industry knowledge and mobile workforce expertise. This will allow them to take a defined proposition to market and evolve from being "just another channel" to originators and owners of intellectual property.

Telco 2.0™ keywords

Mobile enterprise, mobile security, mobility, enterprise mobility, enterprise mobility management, mobile enterprise application platform, MEAP, mobile device management, MDM, mobile application platform, mobile platform, enterprise apps, enterprise app store, mobile development platform, app developer, mobile proposition, employee apps, corporate apps, mobilization, B2E apps, mobile business processes.

Who should read

CMOs, VPs of Sales, CEOs, CFOs, COOs, CTOs, CIOs & IT Directors

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Executive Summary

In pursuit of agility, efficiency, new revenue sources and closer customer relationships, enterprises are turning to mobility to transform the way employees work with engaging mobile apps that harness device-specific functions and capabilities. These apps generally need to connect to and exchange data with back-office systems, many of which pre-date the mobile era. As a result, organisations are looking to partners to provide the tools, technologies and skills to customise and develop apps, do the heavy lifting of deployment and lifecycle management, and accelerate business value. STL Partners estimates the value of this opportunity to be around $50 billion worldwide[1].

As enterprises reduce spend on traditional telecom services, telcos have a timely opening to take an enterprise mobility proposition to market. However, to date, deployments have been niche and opportunistic rather than part of a long-term strategy. STL Partners has identified a four-step structured approach that telcos can embark on today, and gain competence and confidence as they move up the enterprise mobility stack to higher value offerings. The four levels of evolution involve:

- **Level 1** – mobilising their own operations and internal processes
- **Level 2** – offering a managed environment to enterprises for their apps, whether on premise or in the cloud
- **Level 3** – providing hosted mobility together with off-the-shelf enterprise apps, with the option to add "last mile" customisation to the enterprise's specific requirements and provide an enterprise app store
- **Level 4** – providing hosted mobility and developing bespoke, highly differentiated apps that solve customers' unique business challenges

However, building out these capabilities will require substantial commitment and investment – not only in platforms and tools but also in people, via a transfusion of talent from related industries.

STL Partners is inviting telcos to participate in a study to explore their appetite for and inhibitors to establishing a foothold in the enterprise mobility market, the findings of which will be revealed in a forthcoming report.

[1] Enterprise Mobility (EM) - Estimate based on mid-point of published benchmarks for Gartner and IDC (MDM), IDC and TechNavio (MADP), TechNavio and Strategy Analytics (Apps), and IBM and Mobility Share (SIs) 2013/2014

Joining the enterprise mobility revolution

A mobile revolution is sweeping across the enterprise landscape. Fuelled by a combination of consumerisation, big data, analytics, cloud, and machine-to-machine, enterprise mobility is changing how, when and where employees and customers decide, transact and buy.

Mobility is not about superseding paper-based processes or taking what's on the desktop and presenting it on smaller real estate. Neither is it about extending back-office data to the field – that's a fundamental. True mobilisation involves transforming the way people work and interact with machines and one another on the go, in the field and remotely.

This research is the first of a series of publications sponsored by SAP. STL Partners carried out an independent study and the analysis and recommendations represent its independent view. This report explores and proposes a four-step, structured approach that telcos can embark to address the enterprise mobility market – from a short-term approach to a more sustainable, higher-yield strategy.

Best-in-class enterprise apps harness device-specific capabilities, such as built-in cameras, location awareness, accelerometers, gyroscopes, or near field communication, and inter-operate with one another to enable innovative use cases for connected products and processes. Emerging examples of how organisations are exploiting the new generation of device technologies include:

- repurposing a smart phone as a point of sale
- using augmented reality as dressing rooms
- turning tablets into 'electronic flight bags' to replace heavy manuals on board aircraft
- replacing blueprints with interactive 3D schematics to guide equipment repair
- telematics or 'black box' tracking to calculate variable motor insurance premiums based on driver behaviour
- embedded transceivers in pharmaceutical packaging to monitor medication regime compliance.

Mobile apps that successfully combine these device functions and capabilities offer the potential to radically alter the way organisations connect employees with processes, consumers with products, patients with healthcare, passengers with destinations, and public services with communities.

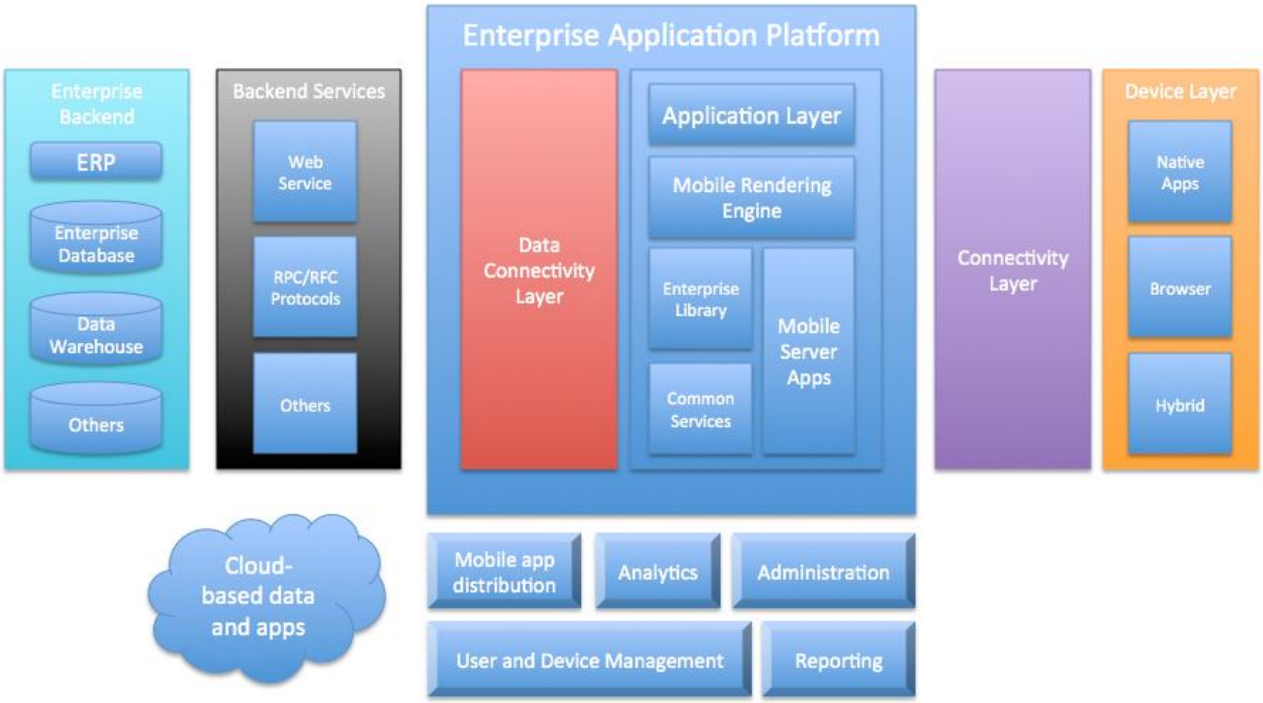
The enterprise opportunity

In pursuit of greater agility, new sources of revenue, improved efficiency and closer customer relationships, organisations are exploring opportunities to mobilise strategic aspects of their business. This extends beyond the usual suspects – field service and sales forces – from internal business-to-employee (B2E) processes such as maintenance, logistics and analytics, to customer-facing (B2B/B2C) marketing and self-service.

However, in order to execute an effective mobility strategy, enterprises must overcome some specific challenges, ranging from multi-device, multi-OS support and ease of use, to scaling and distribution, mobile

security and BYOD strategies. Unlike consumer-grade apps, enterprise mobile apps usually need to connect to and exchange data with back-end systems, and one another, a challenge given that many legacy solutions will pre-date the mobile era.

Figure 1 – The enterprise mobility framework



Source: STL Partners

As a result, organisations are looking to third parties to provide the tools and technologies to do the heavy-lifting of mobile app deployment and lifecycle management, together with the know-how to help them realise business value and return on investment faster.

The telco opportunity

Telcos need to identify alternative ways to grow revenues from enterprise customers as described extensively by the Telco 2.0 Initiative. These include:

- monetising the growth in data creation and consumption to offset the inevitable decline in voice services
- pursuing new service offerings such as Machine-to-Machine (M2M), Cloud Services, and real-time insight from the cellular network
- providing infrastructure and technology services that offer flexibility and economies of scale, allowing enterprises to focus on exploring new technologies instead of maintaining and managing existing ones.

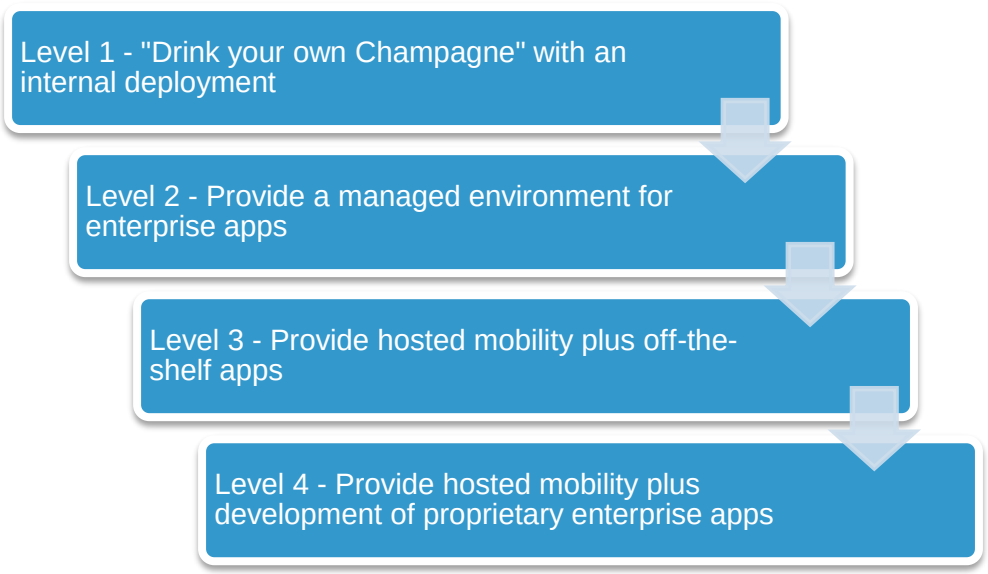
The enterprise mobility market – encompassing tools and practices for the development, deployment and ongoing management of enterprise-grade mobile apps – is evolving rapidly. This presents some specific challenges for telcos, prompting a rethink of traditional offerings predicated on a 'mobile-first' approach to information and communications technologies.

Enterprises have started to reduce spend on traditional telecoms services, redirecting investment towards enterprise mobility initiatives. Many are looking to consolidate an increasingly fragmented, multi-vendor communications model to simplify management, centralise visibility and concentrate their purchasing power. In parallel, organisations are also looking to outsource IT infrastructure and technology services to renew their focus on core business.

A number of telcos have successfully deployed point solutions in enterprise mobility to mobilise paper-based workflows and approvals processes, while others have partnered tactically with specialists to create ad hoc, industry-specific apps. Some have invested in mobile application development (MAD) platforms and enterprise mobility management (EMM) tools, and have spotted opportunities to take these to market, with varying degrees of success. However, the absence of a cohesive enterprise mobility strategy means these deployments remain niche, leaving telcos without a defined and profitable longer-term proposition.

STL Partners propose a four-level, structured approach that telcos can embark on now and ultimately progress as far as they wish to. However those that move further up the enterprise mobility stack are more likely to succeed and survive over the long term by creating greater business value for enterprise customers and securing market authority.

Figure 2 – The four levels of enterprise mobility evolution



Source: STL Partners

Level 1 – 'Drink your own Champagne'

The first level of the evolutionary process is for telcos to mobilise their own operations if they have not done so already. This is an opportunity to gain confidence and competence through the deployment of their own enterprise mobility initiatives, and ramp up their capability and reputation as systems integrators. Innovating from the inside out can enable telcos to develop an intimate understanding of the requisite tools and technologies in a familiar, risk-mitigated context, and gain a direct appreciation of the value of mobile processes and practices to the business. Key opportunities include:

Figure 3 – Key opportunities for internal applications of mobility

B2E	B2C
▪ Network maintenance and operations	▪ Usage analysis
▪ Outage response	▪ Billing and payment
▪ Network construction	▪ Purchases, activations and upgrades
▪ Provisioning (connect and disconnect)	▪ Personalised (1-2-1) marketing
▪ Commercial sales	▪ Mobile app stores
▪ Retail sales	▪ Device management
▪ Logistics	▪ Technical support

Source: STL Partners

By mimicking an external implementation, internal adoption can help telcos to understand a typical deployment from a customer's eye view, and identify any opportunities for fine-tuning. Further along the line, when telcos are ready to launch their own offerings, this first-hand experience can cement their position as compelling and credible in front of prospective enterprise customers.

Level 2 – Offer a managed environment for enterprise apps

Having established internal momentum, telcos can now embark on the second phase to help enterprise customers deliver secure and compliant mobile apps with centralised administration, management and security.

The key is to provide a mobile application development platform that is equally suitable for employee- and customer-facing apps: one that offers the "it just works" experience demanded by corporate users and consumers alike, while incorporating the unique smart device capabilities that enable truly game-changing apps. Such a platform should also alleviate the complexity of integrating disparate legacy systems, which otherwise stifles agile and experimental app development.

Similarly, telcos can provide enterprise mobility management (EMM) capability as a managed service, enabling enterprises to simplify the deployment, security and maintenance of mobile devices, whether corporately provided or Bring Your Own Device (BYOD), regardless of type or operating system. Centralised EMM enables over-the-air distribution of apps, data and configuration settings, without users having to perform a manual upgrade, as well as testing and monitoring functionality. This enables the enterprise to

remotely configure settings, whether for a single device or an entire fleet, carry out troubleshooting or perform a remote lock-and-wipe in the event a device is lost or stolen. Further functionality should include analytics which, accessed programmatically, can enable developers to monitor app usage and user behaviours, and inform continuous improvement and future app strategy.

On premise

Initially, telcos may be challenged to lay the foundations of a managed mobility environment quickly enough. So those that are impatient to generate revenue from their investment in a mobile application development platform should consider the interim approach of selling traditional on-premise solutions into a few key strategic enterprise accounts with whom they have solid, established relationships. This tentative first step will allow them to develop their ability to market, sell and deploy enterprise mobility solutions.

In the cloud

Eventually, however, on-premise mobility solutions may constrain scalability and enterprise customers may prefer to concentrate resources on innovation rather than maintenance and management. Building for success – measured in terms of speed, simplicity and user experience – is therefore increasingly skewed toward building in the cloud. By offering a managed environment, telcos can enable enterprise customers to develop and deploy apps for a lower-up front cost and at a faster pace by:

- eliminating the burden of server-side deployment, allowing mobile app developers to focus on what they do best
- flattening and modularising the traditional technology stack, reducing the enterprise resources needed for server-side coding, server configuration, performance optimisation and scaling
- evolving a new model for how mobile apps store, secure, push and synchronise data, as well as allowing off-device processing
- supporting rapid scalability in response to user uptake – crucially, without compromising availability and performance
- reducing the Total Cost of Ownership (TCO) and business risk associated with mobility initiatives.

The SMB challenge

Perhaps counter-intuitively, it is easier for telcos to cut their teeth on enterprise customers rather than small and medium businesses who require a more comprehensive approach. SMBs typically lack the back-office systems they need to underpin their mobility ambitions. While this presents an incremental opportunity for telcos, through hosting and managing these solutions to provide a packaged SMB offering, this level of integration will necessarily add complexity. Telcos should therefore look to establish their capability in the enterprise space before targeting smaller organisations whose mobility ecosystem needs will differ substantially in terms of IT requirements, resources and challenges.

Level 3 – Provide hosted mobility plus off-the-shelf apps

Enterprise mobility has progressed way beyond the confines of productivity apps, such as time and expense management, requests, notifications and approvals. Nor are apps aimed exclusively at the traditional user base of sales reps and field service technicians; role-based apps are emerging for professionals across all conceivable lines of business and industries who need to take decisions and actions on the go.

Off-the-shelf enterprise apps

This is giving rise to a whole new generation of mission-critical, high value, off-the-shelf apps, developed by enterprise software vendors. These are powered by workflow approvals, information look-ups and self-service tasks, and examples of use cases include:

Figure 4 – Example Use Cases of Off-the-shelf enterprise apps

B2E	B2C
▪ Network outage response	▪ Self-service/technical support
▪ Logistics	▪ Product information
▪ Patient care	▪ Showroom / dressing room
▪ Plant and equipment maintenance	▪ Shopping cart
▪ Emergency response	▪ Payments
▪ Retail merchandising	▪ Personalised (1-2-1) marketing
▪ Supplier support	▪ Mobile app stores

Source: STL Partners

These apps generally are industry-specific, and have a tight focus on defined mission-critical processes which typically are complex in nature. To succeed they must be inherently intuitive to use, requiring no training which might otherwise hinder adoption. And they must be designed to deliver rapid value through baked-in best practices and preconfigured options, enabling shorter implementations with fewer resources.

In addition, many enterprise solutions such as business intelligence, collaboration tools and risk management software are now extensible to mobile as standard, and feature information retrieval and analytical capabilities such as data exploration, visualisation, KPI dashboards and alerts.

Last mile application development and customisation

While all enterprises share hundreds or even thousands of common functions and information requirements, typically between 10% and 30% of business processes are mission-critical and highly bespoke to their operations. While some of these processes may be covered by packaged apps, the Pareto Principle typically applies: the app will meet 80% of the enterprise's requirements, but still requires a degree of customisation to deliver the remaining 20%. Apps for niche purposes or proprietary processes cannot be bought off the peg. In both cases, enterprises would have to develop or customise apps internally (which is costly and requires specialist skills) or partner with an app developer. Telcos therefore have an opportunity to help bridge the gap between off-the-shelf capabilities and specific mission-critical requirements by providing "last mile" application development.

In any event, enterprise apps still need to connect to and exchange data with legacy applications and systems of record, which reside with the customer, and therefore require back-end integration. Ultimately, it is technically feasible for telcos to extend their capability to providing those back-office applications as a managed service, creating a brand new revenue opportunity in the process. However, the added complexity this would create may be a step too far at this early level of telcos' maturity as managed IT providers and systems integrators.

Enterprise app stores

If telcos can move up the stack by selling through proven apps (especially those designed to extend the value of existing back-office systems) as well as managed deployment and delivery, they can penetrate and deepen their relationships with enterprise customers. However, unless they manage to achieve considerable economies of scale through bulk licensing, telcos could be perceived as just another channel or layer of cost.

This value perception could be addressed if telcos were to incrementally provide enterprise app stores, to allow organisations to:

- Increase control over app usage and reduce the risks of unsupported apps
- Enable greater control over software expenditure and reduce administration expenses
- Increase the value delivered by the app portfolio through a business-grade storefront

As well as developing enterprise specific app stores as a bespoke offering, telcos should also consider deploying modular 'white-label' enterprise app stores, based on industry type and company size, and offering specific apps and relevant solution bundles, to secure the greatest measurable value and ROI.

A flexible choice of go-to-market models

By this level, having invested in a completely managed environment powered by a platform, telcos have the option to take apps to market in any of the following ways:

- **Traditional enterprise model** – the telco sells the mobile platform, apps and services to the customer, installed behind the enterprise firewall
- **Enterprise managed mobility model** – the telco undertakes app customisation and back-office integration for the enterprise customer, and provides the enhanced apps as a service on the mobile platform
- **Hybrid enterprise model** – the telco provides any permutation of services between the traditional and managed mobility model
- **SMB "complete" managed mobility model** – as well as providing managed hosting of the entire mobility stack, the telco additionally hosts and manages the customer's back-end systems.

The key to success is starting out with simple services and modest involvement, and building out capability in tandem with experience. Attempting to bring a full suite of managed mobility services to market on day one will inevitably take too long, cost too much and expose telcos to unpalatable levels of risk.

Level 4 – Hosted mobility plus development of proprietary enterprise apps

Telcos can achieve the greatest value for their customers (and ultimately themselves) through the development of bespoke, highly differentiated apps from scratch, rather than simply providing third party apps out of the box or with last mile customisation. This presents the opportunity for telcos to infuse their app development with industry knowledge and best practices accumulated through exposure to a vast number of enterprise customers in diverse vertical markets. This approach, combined with telcos' established ecosystem and billing capabilities, will combine to offer enterprises the convenience of a "one stop shop" – reducing the demands of managing a fragmented vendor landscape.

The increased value will become apparent as growing numbers of enterprises gain the confidence to move from lightweight, tactical apps to more involved, mission-critical and strategic use cases. Consumerisation is already prompting IT functions to rethink enterprise software development based on the speed, simplicity and user-friendliness of mobile apps. Therefore, as telcos increasingly look to solve customers' business challenges, rather than simply provide communications services, they can potentially elevate their status beyond systems integrators to "Keepers of the Intellectual Property". The potential pathways to this destination echo those outlined in Level 3.

Barriers and inhibitors

Assuming partial or complete ownership of the enterprise mobility stack requires telcos to take a strategic approach. This should involve as a minimum:

- Carefully segmenting and prioritising target markets
- Developing a roadmap for evolving each vertical market through the above levels
- Defining the long-term enterprise mobility strategy and aligning resources accordingly
- Producing a clear enterprise mobility proposition to support their go-to-market plan
- Deploying the infrastructure, platforms and services needed for turnkey delivery
- Consolidating depth and breadth of expertise in enterprise mobility to better educate and sell to prospects
- Acquiring the professional services skill-sets to deliver and maintain enterprise mobility initiatives

This “shopping list” requires substantial commitment and investment – not only in platforms and tools but also in people. Many telcos will need a transfusion of skilled and experienced talent from related industries to resource key functions, such as:

- A dedicated professional services leadership function to evangelise enterprise mobility among prospects
- Dedicated sales operations with clear, structured incentives
- A dedicated service delivery team with the appropriate skills and governance frameworks

Even those telcos that already have some form of systems integration capability tend to run it at arm’s length from their core operations. However, they will find themselves needing to take a more integrated approach to succeed against established systems integrators.

In summary, telcos looking to infiltrate the lucrative and exciting enterprise mobility market should take the phased approach outlined, by:

1. Initially relying exclusively on partnerships
2. Leveraging those partnerships to assimilate and internalise enterprise mobility knowledge and expertise
3. Eventually establishing independent capability
4. Ultimately originating and owning the IP, without which they will remain “just another channel”.

What next?

The purpose of this paper is to stimulate telcos' thinking around the development of a structured, short-term approach to enterprise mobility opportunities that can be transitioned to a more sustainable, higher-yield strategy.

Having highlighted the stark choices available, STL Partners are inviting telcos to participate in a research study which will delve deeper into telcos' appetite for, and the practical considerations of, establishing a foothold in the enterprise mobility market. Among the big questions for exploration will be:

- Why are telcos arriving relatively late to the enterprise mobility party?
- What do they need to keep pace with enterprise mobility trends?
- What successes have telcos achieved to date – but at what cost and effort, and what could be done differently or better to create a repeatable framework and reusable approach?
- What are the shortest, most effective routes into specific markets and segments and what use cases should telcos be targeting?
- What are the barriers to success in the app market and how can they be overcome?
- Where, along the four-stage evolution, do telcos want to end up and why?
- What can and should mobility vendors be doing to support telcos' efforts to commercialise their enterprise mobility propositions?

Our forthcoming paper will reveal the findings and outline the "recipe" for advancing through each of the four levels of enterprise mobility maturity.

About SAP

SAP is the world's leading provider of enterprise application software, delivering mobile products and services that help accelerate business innovation for more than 250,000 customers in more than 120 countries. SAP is the only vendor to provide complete, end-to-end software solutions that mobilize an entire organization.

Visit sap.com/mobile for more.

About STL Partners

STL Partners has been at the forefront of the field of business model innovation and analysis in telecoms, media and technology (TMT) since 2006. In particular, the Telco 2.0 Initiative has focused on the opportunities for growth through new telecoms business models, and through its New Digital Economics Executive Brainstorms it has been working on cross-TMT business model opportunities in Telco 2.0, Digital Entertainment, M2M and the Internet of Things, Cloud 2.0 and Digital Commerce 2.0.

To get involved

STL Partners have developed a number of different tools, techniques and resources to help clients identify and solve business model problems, and develop and support business model innovation initiatives. Clients work with STL Partners in one or all of the following ways.

- New Digital Economics Senior Executive Brainstorms. These are carefully facilitated, intensive and interactive events using STL Partners' unique 'Mindshare' methodology that bring together c.200 top innovators and decision makers to discuss and progress key issues twice a year in EMEA, Americas, and APAC.
- Telco 2.0 Research, which includes groundbreaking Strategy Reports and the Telco 2.0 Executive Briefing Service, comprising a searchable database of analytical reports, c.30 premium new briefing reports on key business model innovation topics per year, and ongoing analyst support.
- Bespoke Consulting and analytical services, typically helping clients evaluate opportunities, develop new propositions and business models, and develop 'go to market' strategies.
- The widely read Telco 2.0 industry blog and newsletter, plus its Partners' Programme and a range of communications services for clients.

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