Microsoft Dynamics CRM’s ‘mashable ecosystem’ may change the telecoms customer care market

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Microsoft unveiled its latest strategy for the telecoms market in 2010, based on the cross-industry Microsoft Dynamics CRM system and a growing ecosystem of traditional telecoms billing and customer care vendor products. Now the fruits of the strategy are beginning to be seen. The strategy is built around the ability of service oriented architecture (SOA) systems such as Microsoft Dynamics CRM (and its cloud version Microsoft Dynamics CRM Online) to be quickly interfaced to other SOA-enabled systems. It is combined with Microsoft’s Customer Care Accelerator for desktop integration and other Microsoft technology for application orchestration and master data management. Added to the impressive list of partnerships Microsoft is forging with other telecoms ISVs, this approach can create a ‘mashable ecosystem’ – a set of systems that are preconfigured to work together and can be quickly assembled and re-assembled with automated work flows. This offers CSPs a new option for their customer care solution – one with high functionality provided by multi-vendor integratable component systems in a flexible architecture, with low vendor lock-in.

This Viewpoint supplements Analysys Mason’s profile on Microsoft Dynamics CRM, available to subscribers of Analysys Mason’s Customer Care research programme.¹

Microsoft’s latest telecoms strategy is very practical

Microsoft’s previous attempts to market to CSPs were only partially successful. In the last decade, Microsoft has been reasonably successful in answering the initial scalability and reliability objections to the use of its Windows operating system and SQL Server database in mission-critical CSP applications. But still, only a minority of BSS, OSS and SDP vendor solutions are based on those technologies. In former programmes, adoption of both was a prerequisite for becoming a Microsoft partner for telecoms solutions. This severely hampered the adoption of Microsoft technology and products in the telecoms market.

¹ For more information, see Analysys Mason’s Microsoft: customer care.
Microsoft’s Customer Care Framework standalone product for the telecoms market was only moderately successful. In 31 March 2010, Microsoft announced its new approach – a Customer Care Accelerator for Microsoft Dynamics CRM, which provides:

- reference scenarios for combining data elements from disparate lines of business applications and displaying it in a single unified agent desktop
- process automation and data connectivity across the applications
- a framework CTI architecture
- activity reporting.

Microsoft then began a series of announcements with other telecoms vendor specialists for joint solutions with Microsoft Dynamics CRM:


- Convergys (www.convergys.com, NYSE: CVG) with its billing and subscriber management capability offering a pre-integrated turnkey Convergys Smart Communications Suite powered by Microsoft. Thailand’s TOT is the first announced customer.

- Ericsson (www.ericsson.com, NASDAQ: ERIC) will pre-integrate Microsoft Dynamics CRM with its billing solution.

- MetraTech (www.metratech.com, Private) will combine its charging, billing, settlement and customer care software with Microsoft Dynamics CRM to provide an overall solution.

- Redknee’s (www.redknee.com, TSX: RKN) Turnkey Converged Billing application is offered pre-integrated with Microsoft Dynamics CRM capabilities.

- Tech Mahindra (www.techmahindra.com, NASDAQ: NSE) will offer configuration and integration services for Microsoft Dynamics CRM from its laboratory in Noida, India.

- Tribold (www.tribold.com, Private), with its Enterprise Product Management and master catalogue systems already based on Microsoft .NET, has released a solution based on Microsoft Dynamics CRM with Logica, which will provide product management, order capture and CRM capabilities.

- Other partnership announcements are expected to follow, particularly with speciality vendors that provide targeted CRM capabilities that can be integrated with the basic Microsoft Dynamics CRM system to provide as fully featured a solution as desired.

These partnerships allow vendors, or systems integrators, to offer a much broader solution than they otherwise could. These solutions can now include basic, but highly scalable, CRM functionality with desktop and application integration and inter-application orchestration of multiple vendors’ systems. This moves these vendors from being just niche players to being providers of more-complete solutions. It also allows Microsoft to do what it does best – provide software technology – without requiring a large investment for entering the telecoms space.
Microsoft Dynamics CRM adds a new dimension to CSP customer care

When looking for a CRM solution, a few vendors stand out with their proven, scalable systems: Amdocs, Huawei, Infor, Microsoft, Oracle, salesforce.com and SAP. Figure 1 shows the relative market shares of the vendors’ CRM systems worldwide.

**Figure 1:** Customer care CRM market shares by revenue, worldwide, 2009 [Source: Analysys Mason, 2011]

Their architectural and business approaches differ significantly, however. Figure 2 depicts the positioning of the solutions, with the relative sizes of the circles proportional to Analysys Mason’s estimates of the vendors’ customer care revenue in the telecoms market. The main messages are that:

- the Microsoft ecosystem offers the possibility of a customer care solution with high functionality provided by multi-vendor integratable component systems in a flexible architecture, with low vendor lock-in

- although Microsoft Dynamics CRM is only beginning in its major growth in the marketplace, the customer care ecosystem that Microsoft has built is already comparable in market presence to the largest players.
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**Figure 2: Competitive positioning of selected customer care vendors, July 2011 [Source: Analysys Mason, 2011]**

![Competitive positioning of selected customer care vendors, July 2011](image)

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Level of vendor lock-in</th>
<th>Architectural flexibility</th>
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<tbody>
<tr>
<td>Microsoft</td>
<td>HIGH</td>
<td>LOW</td>
</tr>
<tr>
<td>Oracle</td>
<td>LOW</td>
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<td>Salesforce.com</td>
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<tr>
<td>Amdocs</td>
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<td>Huawei</td>
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<td>SAP</td>
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**SAP**

SAP’s CRM solution is cross-industry, unspecialised to the telecoms industry. SAP services the telecoms industry as it does others, by requiring substantial customisation and integration with other systems. These integrations are needed to support the BSS/OSS interfaces necessary to support a large, automated telecoms enterprise. Implementing SAP’s solution is a major transformation project for a CSP.

**Amdocs**

Amdocs is at the opposite end of the spectrum from SAP. Its CRM solution is telecoms-specific, with preconfigurations available for many situations. It also is pre-integrated with other Amdocs components to offer a complete solution. To integrate with other OSSs requires custom work, usually performed by systems integrators. CSPs that implement the Amdocs architecture reap the substantial benefits of a large footprint and a pre-integrated solution, but are locked into the Amdocs architecture.

**Huawei**

Huawei’s customer care solution is an integrated package provided by Huawei, with much of its customer care revenue generated from software sold and integrated with its billing system.

**salesforce.com**

salesforce.com offers an industry-agnostic basic CRM system used by some CSPs for specialised applications. It requires substantial customisation for telecoms use.
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Oracle

Oracle’s cross-industry Siebel system literally sits at the centre of its BSS/OSS architecture, preconfigured for CSPs and pre-integrated with other Oracle components. Its BSS and OSS components have come from acquired vendors and therefore have a history of interfacing with the systems of multiple vendors. However, the preferred method of integration is based on Oracle’s proprietary Application Integration Architecture (AIA) and Master Data Management (MDM) solutions. Oracle makes a strong case for integration with other vendors via SOA interfaces and TM Forum-compliant data architecture, but continues to push for as large an Oracle footprint as possible in each account, with increasing benefits as the Oracle footprint of pre-integrated component systems increases.

Microsoft

Microsoft is positioning its Microsoft Dynamics CRM, both on-premises and cloud versions, as a component of an overall telecoms customer care ecosystem. In this approach, the basic CRM capabilities are taken care of by the Microsoft Dynamics CRM system, while the associated advanced features come from other vendors and are integrated with the Microsoft software. It provides tools and framework solutions for the systems integrator or vendor to use in integrating and automating the federated data architecture, the operations workflows that transcend the individual applications, and the desktop of the customer care agents. Its strict rule adherence, documentation of, and commitment to support open, SOA interfaces make it highly integratable with other applications that follow its lead. Its ecosystem of vendors will follow that lead and will provide SOA-compatible interfaces. SOA wrappers can be created for other systems by systems integrators, vendors or Microsoft itself, as recently demonstrated in the TMF Portugal Telecom (SAPO) Service Delivery Broker Catalyst project.

Additional Microsoft technologies can increase the speed of the user interface, provide process automation and a federated data architecture:

- The Customer Care Accelerator provides orchestration and integrated user interface features for the customer care agents.
- Windows Workflow Foundation (part of the .NET Framework) provides process automation.
- Windows Server AppFabric is a software framework for developers for caching and exposing services that help in integration, performance and scalability.
- Microsoft BizTalk, although little adopted within telecoms, can provide master data management functions.

The ecosystem of vendors, all following SOA best practices, supporting their open interfaces in the long term, and providing pre-integrated interfaces to other components when commercially advantageous, form a ‘mashable ecosystem’ of systems that can be combined economically and flexibly. This can provide the advantages of a large, preconfigured single-vendor solution without vendor lock-in. It can also provide a low-cost, low-functionality starting point for an eventually full-featured, large-scale solution, without large, on-going integration or configuration costs.

Other speciality vendors of customer care solutions can be added to the ecosystem

Other speciality customer care vendors that provide functionality to supplement the CRM capabilities of the basic Microsoft Dynamics CRM system may find that they can develop interfaces not only with Microsoft, but with the other systems in the ecosystem. These additional systems can extend the ecosystem into all of the expanding areas of customer care and even beyond, while providing an open marketplace for smaller, innovative vendors.
Weaknesses in the Microsoft ecosystem

The Microsoft strategy is currently weak in three major areas.

- Although Microsoft Windows and .NET Framework technology have been applied to many industries, and major CSPs such as AT&T have accepted them into the user interface and BSS architecture, the technology base still is a barrier to sales for mission-critical applications for many CSPs that have not yet accepted the Microsoft technology as a part of their standard operating environment for mission-critical applications.

- Despite the ecosystem having a strong product and service management catalogue component in Tribold (or Telcordia’s Dynamic Service Catalog, as recently demonstrated in a TM Forum Catalyst group), it does not have a telecoms-preferred data management architecture to synchronise the various versions of the data needed by the component systems. Such data management architecture is necessary to support the CSP’s rapid introduction of new services. Of course, ITIL master data management techniques can be implemented – but they would not be standard nor preconfigured.

- The Customer Care Accelerator has a process orchestration capability aimed at the customer care agent user interface to the CRM and associated customer care systems. Also needed is a catalogue-driven customer order orchestration function that can be easily adapted to new services to drive the complex order orchestration and fulfilment process of the increasingly complex service bundles. Again, other ISVs can provide such components, but they are so basic to the architecture that some level of standardisation is desirable.

The promise of the approach

So what does this mean to CSPs and to the customer care market? It may change the game.

The promise of the Microsoft strategy is an ecosystem of specialised systems that take advantage of modern SOA techniques and can create an overall, comprehensive solution for both small and large CSPs. The solution component systems can be easily integrated, can start small and grow large, can start with basic features and grow more sophisticated and can provide automated processes, all while avoiding vendor lock-in. It would be a ‘mashable ecosystem’ of component systems.

Near-term effects

Microsoft’s strategy has implications for nearly all CSPs and customer care vendors:

- Most CSPs that have built their own customer care infrastructure (or infrastructures, in many cases, for the different parts of its business) have done so without a strong architecture. They have been reluctant to rationalise their architecture by engaging in a large transformation project to implement a major new piece of software from a vendor such as Siebel or SAP. Microsoft’s Dynamics CRM solution gives them the ability to bring in a highly integratable CRM system, integrate it with some of their legacy components and extend its functionality with components from its ecosystem. This strategy reduces the risk and cost of implementation and may well energise the COTS CRM market.

- For new CSPs, or those in emerging markets that have minimal CRM capabilities, Microsoft’s Dynamics CRM software provides a strong customer care architecture that can start with features and costs and grow in size and complexity as their needs grow, with minimal lock-in to a particular vendor that was a prerequisite in the past.
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- For vendors that are part of the Microsoft ecosystem, Microsoft’s strategy provides market visibility, credibility and increased access to CSPs. In addition, the ‘out-of-the-box’ integration capability reduces the deployment risks.

- For SIs, Microsoft Dynamics CRM provides a new set of more integratable components, potentially shifting more customer care business their way as they are able to compete more effectively with the vendors that sell their own pre-integrated system suites.

- For other ISVs that are in the Microsoft ecosystem, but not in the telecoms market, Microsoft Dynamics CRM provides new market opportunities.

Longer-term effects

Open software architecture and vendor ecosystems built around major technology providers, such as Apple, Google, Facebook or Microsoft, are proving to be formidable forces in fast-moving, competitive marketplaces. CSPs, whose business in the past moved more slowly and could afford consolidation and transformation projects, are changing as they add new services and new businesses to their portfolio at an unprecedented rate. As they do so, they will need to add major new functionalities to their BSS/OSS infrastructure. Vendors that attempt to provide these functions by acquiring and integrating them into their vendor-proprietary architectures will have a hard time keeping up – and so will their CSP customers. CSPs that adopt more open architectures that can quickly integrate new functionality will find themselves more business-agile.

- Differentiated services offered to differentiated customers who are treated in differentiated ways will require customer care systems to collect and process unprecedented volumes and depth of information about the customers, their service mix, usage, service quality and user experience. New systems and functions to do so will need to be acquired, integrated and tuned.

- New business services, especially cloud and M2M services, will require major extensions to existing customer care (and other) systems, and new and enhanced functions such as security, remote inventory and user control.

- SaaS, IaaS, and PaaS will require whole new systems, to handle the specific needs of these new offerings. But they will need to be integrated into the overall customer care infrastructure.

Reliability and scalability have always been paramount in CSPs. Now, agility is being added to those requirements – and a vibrant vendor ecosystem excels at that.