Automotive OEM Order to Delivery: A Contrarian View on Global Implementation Approaches and Benefits

By addressing global OTD implementation through functional and contextual sub-questions related to business value generation, business diversity and maturity, funding sources and strategy, automakers can enhance OTD process implementation, improve customer satisfaction and gain competitive advantage worldwide.

Executive Summary

Many auto OEMs, either proactively or reactively, are required to play in the global markets to generate consistent shareholder return. As auto companies continuously move towards expanding their global presence, achieving customer satisfaction and gaining a leg up on their competitors through robust and innovative global order to delivery (OTD) capabilities, industry captains continue to ponder key conundrums:

- Can there be a strategy or solution that is globally implementable?
- How different is an individual market when compared to others?
- Is the auto world really flat?

While these unanswered issues are hyper-critical to business, we believe the more significant questions regarding global capabilities are actually faced by middle to senior management. Senior managers, both in business and IT, contend daily with challenges around designing and implementing the right global OTD solutions that deliver enterprise scale and standardization benefits without the risk of force-fitting a solution to an individual market. Among their common challenges are:

- **The right solution approach:** A global standard OTD solution, a market-specific, tailored solution, or a hybrid of the two?
- **The right implementation approach:** Solution-driven implementation vs. implementation-driven solution.
- **The right metrics for implementation effectiveness:** Metrics and KPIs to define the success and effectiveness of the global OTD implementation are especially critical given that the time to attain ROI is typically longer than the time in which project success is measured.

It is easy to criticize the absence of an effective blueprint for global OTD solution implementation, even though OTD has been around since the days of the Model T. We believe it would be unfair
to hold thousands of smart middle managers across the OEM space accountable for the challenges because the "global" portion of the global OTD process has evolved significantly, particularly over the last decade. Contrary to commonly cited reasons such as market dynamics, customer diversity, business uniqueness or right product, our experiences indicate that the reasons for a problematic global OTD implementation are much more operational and basic. They include:

- The individual holding the checkbook becoming the final voice in deciding the OTD implementation approach.
- OTD business solution implementation confused with OTD technical package implementation.
- The leader-follower model, rather than a partnership model, between business and IT. (Yes, we are not talking about PowerPoint, but at the operational level.)
- Most market implementations take a push rather than a pull approach.
- Geography, where the default baseline for the OTD solution becomes the location of the primary stakeholder.
- A belief in using the western auto market OTD solution as the basis for global OTD implementation.
- Treating OTD as one common solution.
- Success definitions: KPIs during implementation vs. KPIs after implementation.
- Inability to decide what is critical and strategic.

An additional dimension that OEMs should be cognizant of is the developed and developing world market idiosyncrasies around OTD perceived need and adoption challenges. Global implementation should balance the developed world’s resistance to change and the developing world’s organized chaos.

Against this backdrop, we examined the global OTD implementation question by combining a holistic approach with select deep-dive analyses to develop our point of view. Our view is that instead of approaching the global OTD implementation as a single question for the entire OTD lifecycle, it is more useful to break down the challenge into more functional and contextual sub-questions, such as:

- Which are the individual functional components within the complex OTD lifecycle and to what degree are they critical/effective in each market?
- What is the degree of customer diversity and maturity across the buy cycle?
- What is the funding source and which business unit has P/L responsibility?
- Is the specific market manufacturing-focused, sales-focused, or both?

This white paper provides an objective lens through which automotive industry decision-makers can approach and answer key questions related to global OTD implementation.

A Primer: Global Implementation and Auto OTD

A global implementation is a large-scale program that delivers business solutions across multiple geographies enabled by technology solutions and process changes. It oversees multiple key processes as well as systems spanning multiple enterprise functions. A well-executed program could give an organization a significant competitive advantage that would be hard for others to emulate. Future-ready large-scale implementations typically require time periods of five to ten years to achieve.

Auto OTD: Changing Paradigm

The auto industry is undergoing secular changes from a customer and dealer point of view. Automotive retail and dealerships of the future are expected to look very different from how they appear today. This can be influenced by any of the following scenarios:

- **Change in dealership model: Franchise-free U.S. dealer landscape.** Dealers would lose their legal protection (i.e., their monopoly on car selling), and the market then evolves into a complete meritocracy. In this scenario, OEMs may set up their own distribution networks to control costs but many other companies that are currently in the business of selling could also enter the market, with the car being one part of the product line. Think about Google and Apple, even Costco or Amazon! This may force auto OEMs to adopt OTD capabilities that do not exist today.

- **Car ownership model radically shifting: The car sharing model takeover.** Think of the time-sharing business model in the hospitality segment. This could affect ownership of the vehicle and could alter car sales as well as...
affect order fulfillment. Such a scenario could result in much more on-demand car subscription, instead of sales, and sales may become more of a fleet sales rather than a retail sales model. How could this model alter car sales and order fulfillment?

- **Increased OEM traction on “build anywhere and sell anywhere.”** OEMs offering an ability to schedule and deliver the vehicle, geo-agnostic, to the customer with the acceptable estimated time of arrival.

- **Connected world driving sales through virtual experience, virtual showroom, etc.** Customer needs are continuously evolving with connected world capabilities, making the virtual experience the de facto new normal for lead and sales management. What other tools/enablers are needed to carry out sales and to provide customer experience? Who is best suited to do that – dealers, OEMs or some other group?

In a recent study of auto supply chain executives, 57% of respondents viewed increasing customer demands as one of their top five challenges. Customers do not want to compromise on their exact vehicle of choice. On the other hand, traditional models of dealership are in steady decline. Just 53% say that conventional retailing is a key approach for future success, down from 61% in 2013. Moreover, 85% of U.S. customers shop online first, where they can easily compare prices and vehicle models. Dealers must transform their business models to cope with this new digital behavior.

GM’s Shop-Click-Drive is a website that allows customers to buy cars from around 100 dealers across the U.S. Interested buyers can browse new cars, get quotes, select additional features and apply for financing, with dealers even prepared to deliver the new cars anywhere in the country.
OEMs, therefore, must provide a compelling experience across all touchpoints of the customer decision-making journey. Their OTD value chain must play a strong role to first get the dealer the car, and deliver the right vehicle the end customer wants, at the right time, anywhere on the globe.

Challenges of a Global OTD
While the flattened and connected world has opened up many positive opportunities for a global OTD, it has also created an equal amount of challenges on multiple fronts. These include:

- The informed customer.
- An uncertain world.
- Internal organizational challenges.

Informed Customer
The connected customer is clearly in the driver’s seat. In every phase of the ownership cycle - research, buy and drive - customers expect an easy and efficient user experience, end to end. They want to be able to buy the vehicle they want and get it when and where they want it. This means they expect a simple ordering process, fast order fulfillment, reliable delivery promise commitments and real-time order status visibility. Customers are indifferent to who, OEMs or dealers, provides this engaging user experience as long as they get it.

The dealer, on the other hand, is under pressure from this demanding customer. All told, dealers are at least a few steps behind, from technology to organization, in terms of preparedness to serve connected customers. For example: Dealers still focus heavily on face-to-face interaction, based on a sales person’s character and charm, to influence sales even though conventional wisdom suggests that 70% of today’s customers are doing their pre-sales digitally.

Uncertain World
The global supply chain is a core ingredient of global OTD. Political unrest, natural disasters and economic turbulence are constants, interrupting a smooth and efficient global supply chain, which, in turn, negatively impacts global OTD.

Internal Organizational Challenges
Companies often trip in achieving their OTD transformation journey aspirations due to a plethora of IT systems such as multiple order entry languages and systems, no common order bank, different regional constraint systems and other legacy systems.

The absence of common processes and system alignment impedes the company’s ability to apply their global operations to better support dealers and customers, regardless of where products are built or sold. In our view, a global OTD solution is therefore essential.

Challenges of Global Implementation in the OTD Context
It is likely that numerous challenges will be faced in a large-scale effort. A good grasp of these challenges gives the organization a chance to be well prepared for them. Figure 2 (next page) illustrates the key challenges.

Macro Implementation Challenges

- **Project scope:** Timeline and effort estimates are based on a clear mandated scope; hence, scope creep can affect delivery as well as the sequence of multiple deliveries. Project scope must have identified dimensions, such as:
  - Geographies, business units, systems, partners and business groups that are part of the project.
  - Processes and subprocesses that are part of the scope and provide an informed understanding of the to-be processes as well as envisaged organization design.
  - Integration of existing technologies and adjacent solutions or programs.
- **Implementation plan:** Once an organization’s resources are mobilized, a forced change in direction for the program can be crippling. A comprehensive implementation plan signed off by all key stakeholders and adhered to by the rollout team is imperative. As these programs are typically multiyear and cover multiple geographies, the methodology as well as sequence of the implementation must be mapped out.
- **Project teams:** Specialized project teams must be assembled and brought up to speed on the implementation effort. Typical options include a centralized project hub with local project
Global Implementation Challenges

Macro Implementation Challenges
• Managing project scope.
• Developing a rollout plan.
• Large project teams.
• Multitiered governance structure.
• Standardization vs. localization.
• Complexity in data management.
• Multi-shore models.
• Data management.
• Change management.

Auto-Industry-Specific Challenges
• Auto market differences.
• Company’s local business model.
• Uniqueness of auto domain.
• Numerous distributors & suppliers.
• Diverse local regulations.
• Large legacy applications.

OTD-Specific Challenges
• Enabling global strategies.
• Cross system integration.
• Ensuring dealer participation.
• Managing adjacent solutions.
• Sensitivity to accurate forecasting.
• Challenges due to existing infrastructure (manufacturing & distribution).

Figure 2

teams and a central project management office (PMO). Team- and resource-related factors such as attrition, training and carrying over knowledge coming from completed implementations need to be factored into planning and execution.

• Governance structure: As with all programs, a strong multitiered governance structure must be set up at different levels to review, guide and gain leadership support for the program. Strong and empowered leadership must ensure that risks are identified in advance, mitigated and managed.

• Standardization vs. localization: Headquarters (HQ) typically likes to maintain control, ensure standardization and enforce certain best practices at all locations. At the same time, local ways of conducting business, local statutes and regulations must also be incorporated into the solution. A high degree of localization involves customization efforts and undermines HQ’s standardization directive. Managing conflict between HQ and local business requirements can be a huge challenge that needs to be diligently and consistently handled.

• Data management: Data management, data quality issues and centralized databases together are a key component of a large program implementation as well as the basis for envisaged future benefits. Data challenges typically cover global data design, project data management, master data management, data profiling, data cleansing and data migration. Data management requires that a robust methodology, proper tools and a strong governance model are in place.

• Multi-shore models: Organizations are typically at varying levels of operational maturity in working with multi-shore IT service delivery and managed service providers. This means organizational acceptance and role clarity varies by OEM, which can undermine effective service provision.
• **Change management:** People issues are usually the most significant factor that makes or breaks a large implementation. Vendors, partners, business, IT and leadership need to buy into the vision and execution of a large-scale program, and do their best to maintain program momentum. The organization is inevitably going to feel the pain of managing business continuity as well as learning new systems to ensure program success. Managing change is something that a successful implementation must nail down.

**Auto-Industry-Specific Challenges**

• **Auto market differences:** Significant differences exist between the markets in which auto makers operate. This can be due to differences in buying power, buying behavior, local competition, infrastructure, etc. which often entail significant need for localization of IT service delivery.

• **An auto company’s local business model:** Due to market differences, business processes can vary largely from market to market. An auto company’s way of doing business – including its need to maintain a large number of variants, sizable inventory, large lead times, distributor-based business, local manufacturer or not, unique logistical requirements, etc. – can create challenges, especially in the OTD space.

• **Unique auto domain:** IT implementations typically require project teams to be well versed in the unique attributes of the automotive domain; this is often a significant challenge.

• **Legacy systems:** Given the longevity of many major auto companies, it comes as no surprise that their IT landscape is filled with legacy systems that differ across geographies, due, in part, to M&A activity, joint ventures and different in-country instances and support requirements. This makes for exceptionally messy and complex data management.

• **Distributors and suppliers:** Auto companies typically work with a large number of vendors that can change according to geography, which can complicate large-scale implementation programs. Distributor-based business models bring their own complexity as well as a need to engage with multiple small entities across different regions.

• **Local regulations:** Each country/geography typically has its own environmental/statutory regulations that require auto makers to fine-tune products and business process to suit local requirements.

**OTD-Specific Challenges**

• **Global supply chain and product strategy:** Every global auto company has an overarching product (i.e., build global models, build local models specific to local requirements and regulations, etc.) and supply chain strategy. The global OTD system needs to enable this overarching strategy.

• **Cross-system integration:** Automotive companies typically have multiple systems handling different pieces of OTD. These need to be well integrated and allow free data exchange.

• **Dealer participation:** Auto companies’ OTD systems take key inputs from the dealer ecosystem. They need to be trained to handle the new systems and/or to diligently enter key inputs since these inputs inform numerous upstream analyses and decisions. In some geographies dealers work only in their local language, which can be a significant challenge to the implementation and resources participating in the implementation.

• **Adjacent systems:** Large auto companies typically have multiple programs and initiatives running side by side. Synchronizing an OTD implementation with these multiple programs – which could be internal to OTD (within the OTD system modules or processes) or external to OTD – can be a significant challenge. For example, an OTD implementation can be heavily dependent on a program running in the product development or the purchasing department.

• **Sensitivity to forecasting:** Given automotive industry challenges such as long lead times and the need to maintain a large inventory, an efficient OTD program is often heavily reliant on accurate forecasting methodology. Its absence could mean the OTD program needs to make allowances for non-ideal scenarios and processes.
• **Manufacturing and distribution methodology:** The location of manufacturing plants across regions, distribution networks and distribution logistics can also pose unique challenges to a new OTD program.

**How to Address OTD-Related Global Implementation Challenges**

The challenge most auto makers are seeking to resolve is the ability to roll out various OTD functions in multiple markets worldwide, and establishing the rationale for doing so.

**Getting Started**

At the core of our strategy is the idea that, in a scenario where there are multiple geos with different maturity and capability needs, rather than focusing on geographies, functionalities or technology grouping to decide the implementation sequence, it is more effective to apply a business value framework to arrive at the sequence that will generate the greatest value for the company.

In our experience, the following execution strategy facilitates the delivery of business solutions globally with minimal business disruption. The bedrock of the execution strategy is an analysis framework which we used to assess various implementation alternatives and to drive decisions. The framework is comprised of the following key parameters:

- Functional capability assessment (i.e., assessment of business needs by key functional work streams).
- Business value assessment (i.e., the business value that the capability delivers).
- Organizational readiness assessment (i.e., determining how ready the business unit is for change).
- Technical capability identification and availability assessment (i.e., an understanding of when the capability is ready).

In step 1 (see Figure 3), we undertake a relative scoring of all the markets based on their functional capability assessment, factoring in key criteria including criticality and maturity. This functional assessment is then “tempered” by the business value that the implemented functional capabilities can bring to each market. There are no prizes for guessing that a business value parameter would override the functional assessment. Organization readiness in each market is then added as a third dimension to further fine-tune the step 1 results.

**Implementation Strategy Decision-Making Framework**

**Initial Prioritization | Business-Value Driven**

**Step 1**

**Assessment by Key Workstream** – Dealer-/Nondealer-Facing

- Functional Capability Assessment
- Business Value Assessment
- Organizational Readiness Assessment

Rollout prioritization of market groups by key work stream

**Baseline Prioritization | Tech-Availability Driven**

**Step 2**

**Technical Evaluation for Rollout Sequence**

- Tech. Capability Identification
- Tech. Capability Availability Assessment

Baseline rollout sequence by market groups by key work stream

**Optimum Rollout Sequence**

**Step 3**

**Option Evaluation – “What if”** (Change baseline sequencing)

Realigned optimum rollout sequence by key work stream

Figure 3
Functional criteria:
- Criticality and maturity of markets.
- Business value criteria:
  - Increased contribution of margin/retail sold orders.
  - Increased cross-business unit sales.
  - Reduced warranty/inventory/premium freight.
  - Reduced systems and administration costs.
- Organization readiness assessment criteria:
  - Assessment of capabilities of/for each market resource group.
  - Level of preparation for new functional releases.
  - Assessment level of skills and size of gap/difference of each functional release.
  - Training mode, frequency and ease of use.

In step 2, we then identify the technology necessary and the amount of time and effort it would take to deliver that technology.

At the end of step 2, we have a baseline strategy regarding how to go about the rollout. This takes us to step 3 where the baseline is subjected to a series of “what ifs” along with the OEM’s business leadership to both unearth as well as consider unique intricacies in the OEM’s way of functioning that may hinder or enable a certain strategy option. Numerous rounds of what-if discussion enables us to finalize our implementation sequence.

Critical Success Factors
Before embarking on such a crucial journey, we believe companies will increase their odds of success if they consider and focus on the following:
- Clear business vision with the potential business benefits highlighted.
- Comprehensive global implementation strategy.
- Strong global business leadership with visibility right at the senior-most executive level; this is especially important when regional and global priorities conflict.
- Key business processes must be aligned in order to fully leverage the positive impacts of a global solution.
- Implementation resource staffing and project funding should be well planned and budgeted for, enabling a smoother and effective implementation.
- A well-defined governance structure involving all markets in scope.
- Business commitment at all levels and regions/markets across the organization.
- Work on a proof of concept (POC) prior to actually rolling the solution out globally. This has multiple benefits:
  - Gives the team a validation as to their approach and methodology as well as revealing execution challenges that can be considered before going all out.
  - Offers a working demonstration that helps leaders sign off on the global implementation from a resource, effort and budget perspective.
  - Provides a success story that positively influences the organization and helps make people receptive to change.

Toolkit and Accelerators
Toolkits help us accelerate and standardize the solutions rollout. Key toolkits which should be part of any implementation include:
- The rollout strategy decision-making framework.
- Individual assessment workbooks:
  - Functional.
  - Business value.
  - Organization readiness assessment.
- Market t-shirt sizing framework that helps group numerous individual markets into manageable subgroups with coherent themes.
- Detailed list of market-level activities across various phases including pre-implementation, post-implementation and mid-implementation.
- Level of effort (LOE) and resource planning framework; key framework guidelines include:
  - Finalize implementation activities.
  - Develop approach/strategy for implementation activities.
  - Create effort frameworks (e.g., testing effort framework, integration activities framework, etc.).
  - Estimate base LOE, by region.
  - Finalize base LOE with critical path.
  - Estimate LOE for all markets.
- Market blueprint.
Team Options

**Centrally Driven - Regionally Supported**
Typical Scenarios:
- Global business solution with minimum regional/market variations.
- COTS package rollout with global blueprint.

**Regionally Driven - Centrally Supported**
Typical Scenarios:
- Regional solution with future vision to extend globally.
- COTS package with regional blueprint.

**Market Driven**
Typical Scenario:
- Market-specific solution.

Figure 4

Team Structure: Various Options
Multiple team options should be considered to successfully execute a global implementation effort. Figure 4 lists the options and the relevant scenarios in which they are applicable.

Key Benefits of a Successful OTD Global Implementation
Tangible benefits include:
- Increased retail sold orders.
- Increased cross business unit sales.
- Improved utilization of existing assets.
- Improved ability to move high-margin products.
- Improved quality of dealer inventory.
- Improved schedule stability and execution.
- Lower-cost process and systems.

Key Learnings Along the OTD Global Implementation Journey
- **Business value that a specific OTD functional capability delivers to a particular market is the main factor used to evaluate markets that would first receive available capabilities.** This is important to state: Although the business need for that capability may be higher in a different market, it makes eminent sense from an organizational value realization viewpoint to implement that capability in markets that deliver quicker and higher business returns. Global implementations do not come cheap, and the sooner the return on investment is realized, the better it is for the success of the program.
- **Business need is clearly paramount when it comes to a market/region accepting or deferring the OTD functional capabilities.** We observed in certain evaluation cases that an OTD capability (e.g., order management) was available for implementation but the markets were keen to get the order generation and constraint capabilities, which was their primary business need. In this case, the markets were willing to wait for a couple of years until their primary capabilities were available, to accept the order management capabilities.
- **Effectiveness of certain capability implementations is dependent on the presence of other capabilities within the OTD value chain.** Generating order recommendations would be a lot more credible to dealers if it factors in constraints at all levels. Full value will not be generated if a capability is partly released, ignoring such dependencies.
- **Multiple implementation teams can be an effective approach to deliver results faster.** We considered two core implementation teams, one focusing on the Americas and the other focusing on Europe/Asia Pacific, to support parallel implementation efforts, essential to
collapse the overall timeline and push benefits forward.

- **Implementation success probability can be increased manifold if important local business events are considered in the master implementation plan.** In order to minimize disruptions to the core business, we considered important cycle plan dates when finalizing implementations for a certain market.

**Looking Ahead**

Increased car sharing, car clubs and other secular trends do not mean fewer auto sales. On the contrary, it only means OEMs need to work harder to satisfy demanding end customers. A global OTD solution assumes even more strategic importance in the face of intense globalization and demands that auto businesses are experiencing. An efficient and agile OTD solution can play a very important role in achieving the customer-centric objectives of successful OEMs.

Businesses need a fresh approach and newer thinking on devising an OTD implementation strategy that works globally. While there is no secret recipe for success, we suggest the following to guide business and IT leaders towards successful OTD implementations:

- **Plan for success.** Understand the various challenges involved and the challenges critical to the organization. Create an organization-specific implementation plan as well as a strong governance process and program sponsorship to propagate and manage the plan.
- **Let business value drive the implementation framework.** Make implementation a pull from the customer rather than a push from the program sponsor.
- **Scope to succeed.** Since it is difficult to define a clear boundary around OTD, the implementation scope can bound out of control very quickly and subtly without the team’s realization. Business and IT leaders need to exercise extreme caution to keep the scope focused on core requirements and avoid the urge to run multiple functional tracks.
- **Decide what constitutes success and define how to measure it.** Don’t confuse perceived business values achieved with realized business value. At the end of the day, business value is generated not by implementing a technical solution but by having users adopting the solution.
- **Seek external support as required.** An experienced third party can provide invaluable assistance, not only in developing a strategy and roadmap but also in areas such as information-gathering and sharing, and in implementing specific initiatives.

**Footnotes**

2. KPMG’s Global Automotive Executive Survey 2014, an IBM study.
4. KPMG’s Global Automotive Executive Survey 2014, an IBM study.
About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 100 development and delivery centers worldwide and approximately 219,300 employees as of September 30, 2015, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.

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