

QSR Industry Best Practices for Drive-Thru Order Confirmation System Implementation and Support

Introduction

Order Confirmation System (OCS) technology (aka COD, OCB, OCU, OCD) plays a critical role in QSR drive-thru operations today. Over the past 15 years, OCS technology has continued to evolve and is currently installed in the majority of domestic QSR's, with International expansion on the forefront. As OCS technology has developed, many industry best practices have been developed around the successful implementation of OCS technology that leverages both operational efficiency and marketing benefits.

This whitepaper provides a perspective on these practices that insure a successful implementation and ongoing support of drive-thru OCS technology. The best practices presented are taken from the most successful implementations and support models across a large sample set of installations from a varied customer base. These observations and recommendations embody the most successful practices being utilized in the QSR industry today.

In-Store Connectivity

The most reliable, secure and cost efficient connectivity to the OCS utilizes 100Base-T (Fast Ethernet) over standard Category 5 (CAT5) network cabling. Network equipment functionality, as well as CAT5 cable installation and termination, is well understood and has been in wide spread use for over 20 years. However, there are only a limited number of Point of Sale (POS) software products that offer Ethernet connectivity for the OCS (e.g., Compris, Wand, Xpient). Over the next several years, all of the major POS companies will likely migrate to full Ethernet connectivity to remain competitive.

For POS systems that only support legacy serial OCS connectivity, a serial-to-Ethernet conversion device (Serial Server) is recommended. These devices convert RS-232 serial protocol to standard TCP/IP for communication over the in-store local area network (LAN). This allows the use of low cost CAT5 cabling for connection to the LAN as well as the OCS in the drive-thru. If the POS is upgraded to full Ethernet OCS connectivity, the existing CAT5 cabling runs and connection to the OCS can be utilized with no additional on-site installation services required.

Today, three of Delphi's major customers have standardized on full network connectivity solutions both domestic and international. Many of Delphi's other customers have indicated their intention to develop full network connectivity for their OCS installation base. Additionally, several customers have recently upgraded significant portions of their OCS

installation base from legacy serial to network capable devices – further expanding the population of network enabled devices.

Above-Store Connectivity

In order to provide reliable and comprehensive remote diagnostics, monitoring and content management, a broadband connection is recommended to every QSR that utilizes OCS technology. The most common types of broadband connectivity are DSL, Satellite and Cable. Secure and encrypted data connections to the corporate or remote data center are recommended to protect valuable customer data from unauthorized access. For locations without broadband connectivity, there are other options available including cellular based network access for remote monitoring and content

Over the past few years, the majority of Delphi's customers have installed broadband connectivity to their stores. Those who have not yet adopted this technology have announced plans to do so in the near future. As broadband connectivity becomes ubiquitous in QSRs, enterprise wide content management, reporting and monitoring solutions will become possible.

OCS Configuration and Functionality

OCS technology provides value to both QSR operations and marketing. The technology enhances the customer's drive-thru experience by reducing anxiety in the order taking process which results in improved customer satisfaction and loyalty. On the operational side, the OCS has been proven to improve order accuracy, speed of service, bridge language barriers and thwart employee theft. The most successful implementations in the field today involve frequent employee training on how to best utilize the OCS for maximum results. Effective employee training includes:

- Instruction on the purpose and use of OCS technology.
- Stressing the importance of timely entry of drive-thru customer's order into the POS so that errors can be identified and corrected quickly.
- Customer communication scripts that engage the customer to verify that their order is correct by looking at the OCS screen, thereby eliminating the time required to repeat back the entire order to the customer.
- Daily verification by the shift manager that the OCS is working via the manager store check-off list.

QSRs that practice employee training on OCS technology see the highest return on their investment.

By utilizing its marketing and upsell capabilities, the OCS can also function as a powerful digital merchandising tool to help drive sales/profits and awareness of new products, special promotions or limited time offers. For QSR brands that support multiple menu dayparts, the OCS is configured to merchandise products based on daypart, thereby providing more focused messaging. Electronic upsell messages are flawlessly executed 100% of the time and do not detract from normal crew operations. Additionally, the use of on-screen upsell messaging via graphics and animated text provides an opportunity for suggestive selling during the order taking process. The vast majority of QSR brands utilizing OCS technology today employ the use of daypart based messaging and promotions including “slideshow” (full screen images before the order process begins) and “sidebar” (partial screen images during the order) merchandising.

With the latest version of Display Manager, Delphi has taken this concept a step further by providing “Intelligent Upsell” capability that provides dynamic upsell messaging based on the contents of a customer’s order. For example, if a customer orders a low calorie meal salad, the OCS can be configured to suggest a low calorie drink such as a diet soda or bottled water. On the other hand, if the customer orders a large meal, the OCS can be configured to upsell a large drink, combo or add-on desert item. While not in large scale usage today, this technology will likely become a key part of a focused marketing strategy targeted to the increasingly sophisticated drive-thru customer.

Content & Configuration Management

The most effective content management strategies being employed today utilize broadband connectivity across their Wide Area Network (WAN) from a central location. By leveraging this infrastructure, content updates can be quickly deployed to the field on a local, regional or national basis.

Delphi has developed a set of client based tools to allow the customer to package and distribute OCS content along with system configuration data. Delphi’s latest generation content management tool, *Display Manager*, provides a simple graphical interface for creating and managing OCS content. The software tool creates a configuration package data file that can be distributed directly across the enterprise via the Pro Scheduler tool. Otherwise, the package can be distributed via the customer’s existing data delivery process. To facilitate the OCS content update at the store level, Delphi has created a set of Command Line Utility applications that reside on the back office PC. These utilities check for new content updates and push them to the OCS on a scheduled or as-needed basis. Additionally, these tools

periodically check the OCS and remove unneeded files and obsolete content as a method for disk storage optimization on the OCS.

POS System Uniformity

QSR customers with the most uniformity in their POS systems have fewer configuration and support related issues. While not always practical, the following guidelines can be helpful in reducing support and maintenance costs:

- Upgrade all POS software to the same version.
- Maintain consistent LAN configurations from store to store.
- Enforce testing and certification of any POS upgrade with the existing OCS configuration to prevent “breaking the process” when POS upgrades are rolled out.

To insure smooth rollouts of software updates, all large Delphi customers typically maintain dedicated lab units at their facilities to test and stage software updates prior to distribution to the field.

Site Preparation

To insure a successful installation, it is critical to have all site preparation work conform to strict equipment, safety and regulatory requirements. All General Contractors (GC) for all new builds, remodels and retrofits should be provided with detailed site preparation specifications documentation in advance of any work being done. Once completed, the GC should be required to complete a detailed sign-off form that verifies that all of pre-installation requirements have been satisfied. A completed site prep form helps the installation process run smoothly by reducing surprises (e.g., cable shortage) and additional costs associated with multiple site visits.

Delphi provides both hardcopy and online customer specific documentation that details all site preparation requirements. Sign-off forms are also supplied to insure all of the requirements have been met prior to installation.

Installation

The installation process requires a trained technician capable of IT skills such as cable pulls, CAT5 cable termination, soldering of connector pins, IT network setup and configuration knowledge. Additionally, the technician must be trained on the specifics of the OCS equipment being installed.

To insure high quality standards for its installations, Delphi maintains a national network of installers that are trained and certified by Delphi's in-house installation team. Training can be performed at Delphi's facilities or via on-online web based training to be launched in Q209. Each installer is required to pass an examination in order to be certified to install Delphi equipment. In addition, Delphi manages the entire installation process to coordinate customer schedules with timely ground shipments and the dispatch of certified installers. Delphi certified installers are subject to an audit process and must gain sign-off from person-in-charge and take digital pictures to confirm the installation is complete. When performing regional or national rollouts, it is recommended that installations be performed on a market-by-market basis, utilizing the same installation team(s) if possible. This insures consistency and quality, while reducing costs.

Self installations are not recommended and may result in voided warranties. Large customers that prefer to perform self installations are required to be properly trained through Delphi's certification program. This insures consistency of quality and compliance with all requirements necessary to maintain warranty coverage on the equipment.

Technical Support

The most efficient technical support processes stem from good communication and integration with the customer support organization. Delphi has established a Trouble-Shooting Guide for many corporate customers. This guide details the coordination and "hand-off" between Delphi's Help Desk and the customer's Help Desk. Delphi also provides an online Tech Support Manual that gets updated periodically based on new configurations and new learning. Delphi recommends that the customer's Help Desk staff is trained in Level-1 support followed by periodic retraining scheduled based on new learning and levels of natural attrition. To facilitate this ongoing training need, Delphi will be launching a comprehensive online OCS training program to provide its customers with the necessary materials to educate their support staff on the best use of OCS technology. In addition to the Level-1 support personnel, it is recommended that the customer identify some number of specific "OCS Champions" who have been trained in Level-2 advanced support if needed. Delphi provides Level 3 support for all of its customers as part of its standard warranty offerings. RMAs can be initiated through Delphi Help Desk (phone) or online via Delphi's website. Delphi customers who have "POS uniformity", or a limited number of POS systems supported, generally have fewer and shorter tech support calls.

Warranty and Service

The vast majority of QSR customers negotiate 3 year warranties on OCS equipment today. To improve turn-around time on warranty service, many customers purchase Advance

Exchange (AE) service programs. In the event of an equipment failure, replacement product is dispatched to the customer site to facilitate rapid replacement of the equipment. This process reduces down time by as much as 2-3 weeks when compared to traditional depot service models.

To further expedite repairs in the field, many QSRs purchase and maintain a population of replacement product on hand based on a percentage of install base. By maintaining this dedicated inventory of replacement product, the customer insures timely replacement by utilizing its internal or 3rd party field service organization.

For those customers without their own field support organization infrastructure, Delphi offers a multi-year on-site support program that provides Advance Exchange service with on-site diagnostics and repair. This service can be bundled with a lease financing program to offer full service for up to 5 years for one low monthly cost.

Maintenance

Contrary to what might be advertized in the QSR industry today, OCS technology should be estimated to have a useful life of approximately 5 years. This is driven by several factors such as backlight life, technology obsolescence, environmental factors, system performance and new technology integration requirements.

To extend the life of OCS technology, it is recommended that periodic preventative maintenance be performed including inspection of cabling and connections, performance of system diagnostics and self tests, upgrade of system software/firmware, factory recommended hardware upgrades, and routine cleaning. Typically, it should be sufficient to perform this type of preventative maintenance an annual basis.

Repair & Upgrade Options

With the exception of a few brands, the vast majority of QSRs do not provide their own depot level repair capability. For those brands that provide this service, the benefits are not necessarily a lower cost, but are more related to legacy support of internally developed equipment.

For those that rely on return to factory for out of warranty repairs, the most successful and streamlined repair processes employ the use of 3rd party service organizations that can facilitate efficient logistics with the factory repair depot. As mentioned earlier, this service can be packaged with Advance Exchange to provide the quickest restoral time possible.

For customers without this service, many have a pre-authorized repair threshold cost to expedite minor repair activity. Additionally, flat-rate repair programs have been offered with large corporate customers whereby all displays at a certain age (36-48 months) receive a standard slate of maintenance repair, upgrade and refurbishment. Also as mentioned above, customers that have executed system-wide upgrades and/or replacement programs will typically purchase an AE population used to “cycle” equipment through stores and eliminate any downtime. Delphi recommends beginning with an AE population that is 10% of the installed population which equates to 10, 3-week cycles for any size customer. Larger populations can be employed to reduce the total system upgrade cycle. At the end of the upgrade cycle, the remaining inventory can be used to support a customer-specific AE program, eliminating some expense to the standard package and ensuring display availability (versus being subject to an “all customer” AE population).

Business Reviews

To insure good communication and improve customer satisfaction, it is recommended that periodic Business Review meetings be held between OCS suppliers and their key corporate customers. Delphi typically conducts quarterly and/or semi-annual Business Review meetings with all corporate customers and with senior management on an annual basis. It is further recommended that the customer form an internal multi-disciplinary “OCS champion” committee made up from representatives from key departments including IT, Operations and Marketing to focus on OCS implementation issues and help drive future product requirements that address brand-specific needs. It is recommended that the IT department take ultimate ownership of the OCS as it interfaces directly with the POS system as well as in-store LAN.

Conclusion

As OCS technology continues to advance in the QSR drive-thru, many different best practices have emerged that leverage the benefits of the technology to provide maximum value to the QSR operator. As a leading provider of OCS technology, Delphi will continue to develop, enhance and communicate industry best practices to the QSR business at large so that corporate and franchise operators alike can attain the full value of their investment. For further information on Delphi’s OCS and outdoor digital signage products, please contact Delphi (sales@delphidisplay.com) with any questions or visit us on the web at: www.DelphiDisplay.com