

## TCxGravity

*Transform the conventional point-of-sale, turning every store into a powerful, flexible and sustainable portal for commerce*

When consumers interact with your brand, they don't see channels or touch-points—they see a retailer. Whether they are shopping in the store, online or on the go with a mobile device, they expect a convenient, seamless and highly personalized experience. When they get it, your entire brand gets the credit—and when they don't, the brand takes the blame.

Consumers have had these expectations for years, but in-store technology has struggled to keep pace. Even when retailers make cross-channel selling work, it's not sustainable. Underlying IT complexity makes change difficult, time-consuming and expensive. When consumer needs evolve and new channels or devices emerge, stores are already behind.

Toshiba is changing the game.

### Empowering the consumer

Toshiba TCxGravity represents a new class of point-of-commerce solution that makes the store a seamless extension of a customer-centric, "omni-channel" experience—an evolution of cross-channel retailing that finally empowers consumers to buy anywhere, get anywhere and return anywhere.

In the world TCxGravity helps retailers create, consumers and associates are free to using the channels and devices of their choice, in the way that works best for them. Consumers today still use the store for 90 percent of transactions. They can order online, pick up in store and pay at a kiosk. Or buy from a sales associate with a tablet and pay in the store aisle. Or buy in store and return online.

No matter what path consumers choose, they enjoy personal recognition, convenient service and access to a consistent selection. Freed from the time-consuming work required to support cross-channel transactions today, associates can give consumers undivided attention. Consumers walk away from the experience fulfilled and confident that they have taken part in a mutually beneficial exchange.

# TOGETHER COMMERCE

### Highlights

- Unifies the retail experience across channels, allowing consumers to choose the touch-points, devices and pathways they prefer to use to shop
- Enables dynamic interactions at the point-of-sale that thrive on the flexibility and simplicity provided by the in-store IT environment
- Creates unmatched business value with common data and services that can be managed once and at the enterprise level

## Solution Brief

TCxGravity makes all of this possible by transforming the store from an isolated sales channel to a connected portal for commerce. It establishes a stable, scalable and sustainable platform that transcends traditional retail technologies, maximizing the value of every consumer interaction and adapting easily as new technologies and touch-points arise.

TCxGravity fundamentally alters the dynamic between retail brands and consumers. It enables retailers to move beyond one-sided selling tactics that force consumers to behave in ways that fit within a store's sometime outdated technology infrastructure. Instead, customers can engage in a more natural, two-way relationship where retailers can tailor offers, promotions and services for the customer who, in turn, can choose what, where and how to buy.

The traditional point-of-sale (POS) is limited, store-centric and leads to a fractured, incomplete picture of the consumer relationship. TCxGravity is open, customer-focused and embraces all the ways consumers engage with your brand. Unifying channels and providing a more consistent shopping experience improves customer and brand satisfaction.

With TCxGravity you can more easily support cross-channel retailing where in-store functions run side-by-side with enterprise commerce activities. The result is omni-channel retailing, a new way of doing business that empowers the consumer, supports the evolution of the store and optimizes your IT investment.

### Elevate the experience

Consumers want and expect a seamless, immersive experience where they can switch channels and devices at a moment's notice.

TCxGravity comes equipped with powerful in-store functionality that enables real-time, enterprise-wide commerce. Its full and flexible feature set enables store associates to execute traditional checkout activities plus a complete suite of store-to-store and cross-channel scenarios at checkout, so consumers and sales staff are free to choose the path that best meets their needs in the moment.

Think about a customer trying to return an item in-store that was purchased online, without a receipt. Today, you can spend significant time retrieving the original order, which means lines get longer. Or you can process the return immediately without validation, which raises the risk of loss.

TCxGravity offers a better way. With easy access to cross-channel data and services, associates can create and manage orders no matter where they originated. Associates don't need to navigate multiple stand-alone systems or intranet sites, which minimizes the appearance of disconnected, inconsistent channels. Instead, associates use a single platform with cross-channel visibility to help consumers buy, pick up and return anywhere. The advantages of this are powerful:

- **Maximizes** the quality of every interaction—as the customer defines it
- **Gives** customers greater control, driving loyalty and repeat sales
- **Helps** associates improve customer service and satisfaction
- **Enables** stores to compete with pure online retailers

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### Redefining retail dynamics

By taking store-level IT up to the enterprise level, TCxGravity by Toshiba enables retailers to:

- Create a unique, brand-defining experience inside and outside the store
  - Deploy consumer devices in the store to give associates more mobility and enhance service
  - Ensure a consistent brand look and feel in the store and across all channels
  - End the cycle of deploying POS software that starts strong but is limited by legacy code
  - Make changes and deploy new functions without disrupting store activity
  - Choose the right technology for your store—and upgrade it when the market changes
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## A game-changing transformation

Mobile consumers have quickly changing needs and technologies. TCxGravity helps stores keep up with the pace of change by enabling faster and less complicated technology updates. With feature-rich POS functionality right out of the box, the extensible design of TCxGravity does not force retailers to commit to one technology configuration for the long haul.

TCxGravity ensures a consistent and highly intuitive experience for store associates, who need very little training to achieve high productivity. In fact, the user interface is designed to improve efficiency and ease of use through human factors design elements.

Because it is browser-based, TCxGravity is simple to enhance and customize. Although it is optimized for Toshiba hardware, TCxGravity runs on most other store platforms (including current store systems in many cases) as well as a wide range of tablets and smartphones. No one knows what devices will hit the market in the coming years, which is why TCxGravity is designed to accelerate the adoption of new touch-points and devices in the store.

It is also architected for flexible deployment. Optimized for “thin-store” implementations that require very little IT support. In addition to the thin deployment, TCxGravity offers not one, but two in-store server options to better align with retailer’s business needs. Benefits of the flexibility TCxGravity provides are significant:

- **Maintains** the ability to run on many in-store devices, today and tomorrow
- **Aligns** in-store technology with changing business needs, not vendor specifications
- **Optimizes** the mix of labor and IT infrastructure in different stores
- **Minimizes** the hardware on the floor and in the back-office

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### What is “omni-channel” retailing?

TCxGravity by Toshiba is the first step toward a truly omni-channel experience, enabling associates and consumers to:

- View and act on inventory with visibility across the enterprise, including other stores, directly from POS
- Buy online or in a non-store channel—return/exchange at the store
- Buy online or in a non-store channel—modify order at the store (i.e. change delivery address)
- Buy online or in a non-store channel—pick up at the store—pay upon purchase (i.e. online)
- Buy at store—pick up at alternate store—pay at original store
- Buy at store—ship to home—pay at the store

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## Extending your investment

TCxGravity is an innovative point-of-commerce solution that creates unmatched business value for retailers in a lasting, sustainable way.

It does this by enabling retailers to elevate the management of commerce, pushing it beyond the confines of any single store. Built on IBM Sterling Order Management, the industry-leading cross-channel commerce platform, TCxGravity uses common data—for customer profiles, orders, inventory, and more—that resides at the enterprise level. The data is populated across all channels and accessed by each store. Common services, or business logic, also live at the enterprise level. This gives retailers the power to make changes one time, in one place, instead of burdening stores with the day-to-day management of data and services.

## Solution Brief

Retailers can implement TCxGravity stand-alone to get all the benefits of a modern POS for in-store and store-to-store functions—or extend for full omni-channel functions with IBM Sterling Order Management at any time. Other advantages of the software's unique architecture include:

- **Protects** the value of current IT investments
- **Enables** faster speed-to-market for new functions in the store
- **Aligns** technology with rapidly changing business models
- **Improves** differentiation and competitive advantage

## Rewrite the rules

Managing, changing and integrating multiple systems is expensive and time-consuming. TCxGravity addresses this challenge, providing one commerce platform that can be deployed in any store, on any device, and updated centrally at any time.

Unlike stand-alone POS applications TCxGravity optimizes your enterprise investments, offering unmatched flexibility and the mission-critical availability global retailers have come to expect from the team that is the number one supplier of retail solutions worldwide.

## Introducing TCxGravity LINK

At Toshiba, we realize that addressing the demands of today's consumer can be challenging.

To this day, many Retailers' transaction systems have been separated into silos because they were introduced one at a time as technologies matured. Retailer's mobile applications were introduced long after their websites were created and many years after their actual stores were established. Delivering on a seamless experience across all channels suddenly becomes a daunting transformation task as Retailers look for ways to create harmony across number of disparate elements.

Staying true to our commitment on Innovation, our dedication to our customers and our leadership in the industry, Toshiba meets this challenge head on. In its latest version, the TCxGravity platform has been aligned with **TCxGravity LINK**. This alignment affords retailers with the flexibility to take an evolutionary approach to omni-channel capabilities while preserving their investments on existing Toshiba applications.

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## Together Commerce

TCxGravity sits at the heart of Toshiba's Together Commerce vision. Together Commerce brings together every possible pathway of the retail journey, enabling customers to engage with retailers on their own terms. This fundamental shift eliminates the need to control every customer action, favoring instead a collaborative approach in which retailers and customers create mutually rewarding commerce—together.

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TCxGravity LINK can be thought of as an implementation strategy designed to help our existing customers benefit from the TCxGravity solution. It is based around a flexible toolbox of upgrades to existing systems, new technology components and consulting services that will enable retailers to begin to see the benefits of TCxGravity without having to overhaul their entire point-of-sale estate.

## Toshiba TCxGravity 2.1 – Specified Operating Environment

Toshiba TCxGravity is the set of functionality that facilitates completing Point-of-Sale (POS) transactions, and placing, modifying, or fulfilling orders that are contained in a single store or cross many stores.

The **TCxGravity Client/Register** is defined as any device which utilizes significant POS services to create or modify an order. This includes devices intended for associate use such as stationary POS, kiosks, mobile tablets, smartphones or similar devices. Select this feature to purchase a license for each client device that the Client software application will be loaded and running on.

The **TCxGravity In-Store Offline Server** software is the set of functionality that enables completion of in-store transactions on a backup, emergency or pass-through basis only if network connectivity to the enterprise is disrupted. In a pass-through configuration, the in-store order capture is immediately passed through from the store server to the enterprise server and is not a substitute for processing by the enterprise server other than on an emergency basis. Select this optional orderable feature to purchase a license for each installation of this server software.

## Specifications

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### Hardware requirements:

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- TCxGravity Client/Register
    - Windows operating system running the Google Chrome Browser and a Java 6 JVM.
    - Toshiba recommends: SurePOS 300, SurePOS 500, SurePOS 700, Toshiba TCxFlight, Toshiba TCxWave or hardware with similar capabilities.
  - TCxGravity In-Store Offline Server
    - The optional offline server hardware required depends on the expected transaction volumes in a given store. In general, an entry level server will be adequate for small store environments.
  - TCxGravity In-Store Primary Server
    - The optional primary server hardware required depends on the expected transaction volumes in a given store. In general, an entry-level to mid-level server will be adequate for small store environments.
  - Enterprise Server
    - The enterprise server hardware required depends on the expected transaction volumes across all of your stores. It also depends on the high availability configurations selected.
    - Detailed hardware requirements can be found here once the solution is generally available: [www.toshibacommerce.com/products](http://www.toshibacommerce.com/products)
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### Software requirements:

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- TCxGravity Client/Register
    - Operating System: Microsoft Windows POSReady 2009; Microsoft Windows 7, Microsoft Windows POSReady 7, Microsoft Windows 8.1 (Tablet)
    - Browser: Google Chrome
    - JavaPOS and Java support: These components are provided with the solution. Additional software may be required for non- Toshiba hardware and peripherals.
  - TCxGravity In-store Offline Server
    - Operating System: Microsoft Windows Server 2012
    - Included TCxGravity components - the following components are packaged and licensed for use as part of the in-store offline server:
      - Toshiba TCxGravity software
      - IBM Sterling Order Management
      - IBM WebSphere Application Server - Express - Processor Value Unit (PVU) License
      - IBM DB2 Workgroup Server Edition - Processor Value Unit (PVU) License
  - TCxGravity In-store Primary Server
    - Operating System: Microsoft Windows Server 2012
    - Included TCxGravity components - the following components are packaged and licensed for use as part of the in-store offline server:
      - Toshiba TCxGravity software
      - IBM Sterling Order Management
  - Enterprise server
    - The enterprise server software prerequisites for database, application server, and operating systems are defined by IBM Sterling Order Management. <http://www-01.ibm.com/support/docview.wss?uid=swg27027082>
  - Systems management
    - The solution is designed to use IBM Director with Toshiba Remote Management Agent (RMA) for the management of stores. RMA is provided with the solution. The customer or integrator must separately order IBM Director. For more information on IBM Director, refer to: [ibm.com/systems/management/director](http://ibm.com/systems/management/director)
    - Note that Software Maintenance Support for IBM Director needs to be obtained separately.
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### Limitations:

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Included with TCxGravity are the license rights to use IBM Sterling Order Management and related components (i.e. IBM Sterling Store) in the store channel.

The IBM WebSphere Application Server and IBM DB2 Workgroup Server for Offline Server use are provided for the TCxGravity solution only; no rights for other uses.

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### Notes:

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The program's specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a README file, or other information published by Toshiba, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

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# TOSHIBA

Leading Innovation >>>

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Please Recycle

The **TCxGravity In-Store Primary Server** software is the set of functionality that enables completion of in-store transactions on a localized implementation of the enterprise server. In this configuration, the in-store order capture is a substitute for the processing that is done on the enterprise server. All transactional data is synchronized with the enterprise server in regular intervals to ensure consistency. In the case the in-store server exhibits a failure, the enterprise server is used as the backup. Select this optional orderable feature to purchase a license for license for each installation of this server software.

## Why Toshiba?

As the world's leading provider of integrated in-store solutions and retail insights, Toshiba Global Commerce Solutions delivers end-to-end solutions for checkout, consumer interactions and retail operations that unlock amazing new possibilities for our clients and shoppers everywhere. In partnership with the Together Commerce Alliance, our global business partner program, we help bring innovation and value to every retailing experience so that you can delight your customers every day, everywhere.

## For more information

To see how TCxGravity can transform your stores and enable a truly omni-channel consumer experience, please visit:

[toshibacommerce.com](http://toshibacommerce.com)

Additionally, Toshiba Global Commerce Solutions can help credit-qualified clients acquire the IT solutions that your business needs in the most cost-effective and strategic way possible through our global financing partner.

