![Oliver Wyman logo] OLIVER WYMAN

THE NEW IT HORIZON

HOW THREE YEARS FROM NOW CHANGES EVERYTHING YOU DO TODAY

THE NEW IT HORIZON

Tomorrow, IT's business innovations will be a major contributor to a retailer's ongoing success. For some retailers, tomorrow has already arrived, and IT is helping them move at the speed of their digital consumers – simultaneously repositioning IT from an enabler of operations to a creator of business value. The timing of when a CIO moves his or her organization to be a source of business innovation is largely determined by the level of consumer demand for a digitally-enhanced retail experience. We believe this consumer shift has broadly happened, changing the question for every retailer from when to shift the organization to how to shift it. Our discussions with retail CIOs reveal that they concur, but are uncertain as to how to make the move without breaking either the business or the organization.

The arrival of digital enterprises has meant a fundamentally different role for IT: in most of these companies, IT doesn't just enable the business, IT creates the business. For retailers such as Amazon and Instacart (and other online businesses such as Uber and Airbnb), IT is at the very core of how they operate.

Below is our checklist highlighting the top four goals a retail CIO will need to achieve to lead the business through this transformation. The rest of this article explains in depth the way each goal should be approached.

TOP FOUR GOALS FOR THE CIO

Be a creator of value, not a taker of orders

Articulate a clear future operating model

Breed the next generation of technology pentathletes

Focus on where you need to be tomorrow, rather than where you start from today

1. BE A CREATOR OF VALUE, NOT A TAKER OF ORDERS

CIO CHECKLIST

✔ Identify how IT will act as a value creator in your business, and move away from being a function that takes orders

✔ Develop a point of view on how to drive business value by:

    ✔ Winning new customers

    ✔ Running the business more efficiently

    ✔ Driving innovation

WINNING NEW CUSTOMERS

In digital businesses, dedicated teams of IT experts focus on finding new ways to serve customers. They continually develop new products such as applications for healthy eating, or portals for personalized product generation. And just as importantly, they are constantly looking for ways to use information to make the customer experience easier, more engaging, and more consistent across all channels.

This approach is not unique to Silicon Valley start-ups. In supermarkets, augmented reality apps that provide shoppers with additional product or promotion information are now widespread, and for customers who participate in smart loyalty programs this information can easily be personalized. Recently, non-food retailers such as Shiseido, De Beers, Topshop, American Apparel, and IKEA have created offerings for shoppers to interact with products electronically, simplifying and enhancing the shopping experience.

Just as Amazon uses all the information it has on shoppers browsing its website to devise upselling and cross-selling offers, bricks-and-mortar retailers can identify shoppers entering their stores, access their preference data and virtual shopping carts automatically, and create personalized offerings for them.

In today's retail IT environment, these customer-facing technologies can be built rapidly and iteratively, with quick-fire beta versions – a development path that is in many ways the opposite of what traditional IT departments are used to. And since new technologies are always being designed, the IT ecosystem has to be flexible enough to accommodate them. Tools such as SAP HANA for CRM and Business Intelligence applications can be used to process unprecedented amounts of data quickly, in turn feeding additional IT applications to react to this information ("real-time retail").

RUNNING THE BUSINESS MORE EFFECTIVELY

Learning from digital players to develop the customer proposition and create an appealing, reliable multichannel shopping experience is critical, but for mature retailers technology has the potential to deliver much more besides. The low margins and large store estates that typify most sectors make every drop of economic benefit critical. IT can help retailers achieve this in three ways: greater task automation, better operational algorithms, and better business intelligence.

GREATER TASK AUTOMATION

Building apps to support customer self-service and automating repetitive tasks can significantly drive down labor costs. Although there are already many examples in stores, from classic vending to digital signage to checkout automation, untapped potential remains.

Automation can be applied to individual service tasks such as refunds, store navigation, and beyond, to reinvent whole elements of the retail process for further improved efficiency. For example, retailers are already streamlining the checkout process through self-scan and Point of Sale (PoS) applications, and in the future robots may be capable of shelf stacking more cheaply than humans. Even today, retailers such as Nespresso, Best Buy, and The Body Shop are experimenting with the automation of entire shops.

BETTER OPERATIONAL ALGORITHMS

Retailers already use the vast amount of data they collect to deliver efficiency improvements in real time by building algorithms that can make detailed decisions without intervention by store managers. For example:

- Checkout labor can be managed automatically by using infrared sensors to count the number of shoppers entering a store.
- Replenishment instructions can be generated automatically when sales data tell the retailer stock is low.

However, further optimization opportunities still exist, with one UK retailer reporting $150 MM of supply chain savings in 2014. Further areas of big data interest include weather-driven demand and predicting product returns.

BETTER BUSINESS INTELLIGENCE

In many ways, the biggest opportunity for IT will be in the application of business intelligence: delivering management information systems that allow retail executives to make decisions better and faster. Managers in trading and operations departments need to make hundreds of important decisions every week, and since they are under extreme time pressures, having the right information at the touch of a button in an accessible, user-friendly format can make a huge difference.

Exhibit 1: How IT improved a client's promotions program and unlocked $MM of value

BACKGROUND

A retailer was facing imminent crisis with its prices 25% more expensive than online competition.

A promotions program was needed to generate sustainable funding for price reductions.
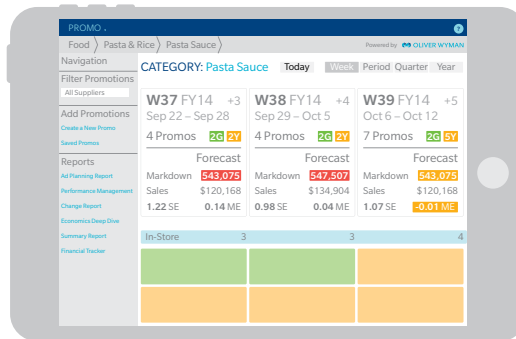
BUSINESS OUTCOMES

- High-quality, analytically based decisions
- Traders in control and accountable for results
- Time-efficient
- Ability to learn and inform strategy
- Cash from IT

IT INTERVENTION

Using an agile approach to IT, Oliver Wyman created an elegant user-friendly app that collated and presented information for better decision-making around promotions and competitive pricing.

The app was successful in integrating industry knowledge and analytical insights and models into the existing commercial processes.

Exhibit 1 provides an example, highlighting how a more advanced approach to business intelligence can transform decision making in trading.

DRIVING INNOVATION

With IT playing an ever more central role in customer proposition development and core business process execution, its overall position in the business will also evolve. In this fast-changing world, the IT department becomes central to the strategy and transformation of the business, and drives innovation. This is very different from the historical role of many retail IT departments, which were focused on making sure things didn't break, or on incremental optimization of existing technology processes to make them 10% better, faster, or cheaper.

All of these changes impact on the role of the CIO more than any other, so much so that there's an argument for splitting the job into two separate positions: Chief Technology Officer and Chief Innovation Officer.

In any case, CIOs need to become strategic partners for the board and the CEO, educating them on the benefits of digital approaches. They need a deep understanding of market dynamics, customer preferences, competitive landscape, opportunities, and threats. Additionally, they need to be able to identify and prepare for seismic changes before they happen and navigate them safely when they do.

Overall, IT and the CIO need to move from being enablers to being creators. To put it another way, although operational efficiency and business as usual are still important, they are irrelevant in isolation. In the evolving world of multichannel retail, it is just as important for a CIO to focus on developing innovative and creative solutions that will confer a real competitive advantage.

This move from enabler to creator implies a revolution in the activity of many IT departments. Thankfully, in parallel, the evolution of the IT industry has opened up new possibilities in how IT can be delivered. Together, these two developments mean the retail IT department of the near future will look very different.

2. ARTICULATE A CLEAR FUTURE OPERATING MODEL

CIO CHECKLIST

- ✓ Define your view on becoming a smaller, leaner, better IT department:
    - ✓ Have a clear vision on the future operating model
    - ✓ Identify what will become a commodity and what will be the technology differentiators for the business
    - ✓ Know which processes to keep in house and which can be outsourced
    - ✓ Identify where the layers of intelligence will be
    - ✓ Invest in beating the competition on the differentiators while reducing cost of the commodity elements by at least 20%
- ✓ Collaborate to design a clear map of the transformation you need to truly deliver long-term, value-adding strategic goals
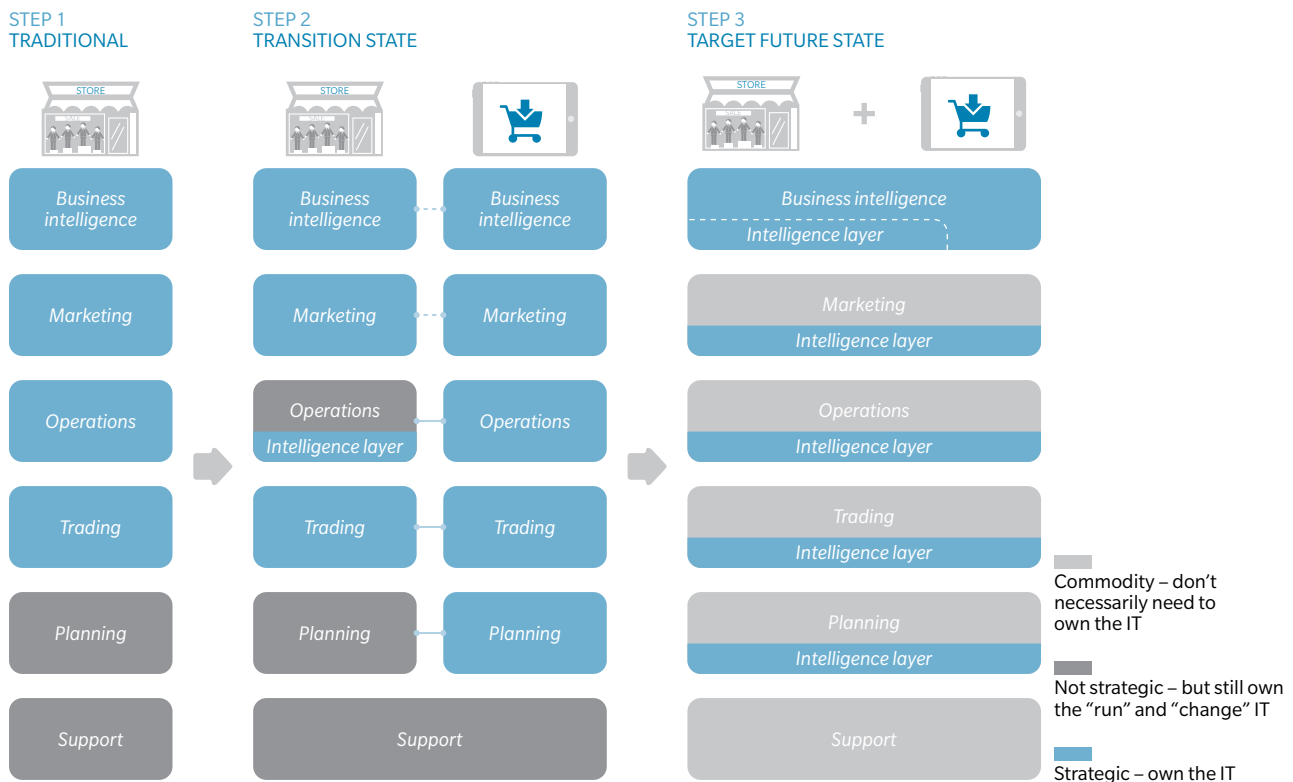
IT no longer needs to be something you own and run. Instead, it can be a service you purchase. In infrastructure, server hardware ownership is obsolete. The browser has become the universal interface, with applications ever more decoupled from infrastructure. Development environments, incorporating backup and recovery, database setup, and web-based code development in the cloud, can all be procured in a single transaction. Meanwhile, production environments can be replaced with platform-as-a-service (PaaS) or vendor hosting, and even software development can be bought as a service, reducing the need for internal hiring and skill development.

Routine, non-strategic core and support applications – in areas such as space management, selecting goods, checkouts, and taking goods home – can almost always be outsourced to service providers. Most applications will be available via the cloud, with retailers moving to a Software-as-a-Service (SaaS) model.

It is already possible to purchase whole processes – such as "procure to pay" or "hire to retire" – as services, and this market is only likely to grow. This means lower costs as the investment and operational burden is pooled and utilization of both hardware and software is increased through dynamic capacity alignment. It also enables new levels of flexibility, which is vital in itself. It is only by adopting the PaaS and SaaS approaches that IT can become flexible enough to cope with total mobility and the need for end-to-end connectivity, or to plug in different elements to the ecosystem (such as new customer front-ends) to dynamically add capacity as needed.

However, even in so-called non-strategic areas, retailers may still choose to manage the key micro-processes that comprise the critical "intelligence layer." The intelligence layer is where the information, insights, and orchestration reside.

Exhibit 2: The three stages of retail IT evolution

STEP 1 TRADITIONAL

- Business intelligence
- Marketing
- Operations
- Trading
- Planning
- Support

STEP 2 TRANSITION STATE

- Business intelligence | Business intelligence
- Marketing | Marketing
- Operations / Intelligence layer | Operations
- Trading | Trading
- Planning | Planning
- Support

STEP 3 TARGET FUTURE STATE

- Business intelligence / Intelligence layer
- Marketing / Intelligence layer
- Operations / Intelligence layer
- Trading / Intelligence layer
- Planning / Intelligence layer
- Support

Legend:
- Commodity – don't necessarily need to own the IT
- Not strategic – but still own the "run" and "change" IT
- Strategic – own the IT

With the model evolving from ownership to procurement, the role of IT is moving to one of sophisticated specifier and purchaser of services – with the design of risk and benefit-sharing mechanisms a critical capability. Only strategically important, differentiating applications should remain in-house.

Some such applications – covering areas such as customer management, pricing, promotions, and proposition development – should still be developed, operated, and maintained in the traditional in-house way. But while retailers keep ownership of the mega-processes, they can buy many of the supporting micro-processes, such as market testing, product range planning, and customer analytics. Overall, the new model for IT in retail involves much less in-house development than in the past.

The challenge for the CIO is to know which areas should receive the investment of precious internal resources – and must in turn provide real differentiation – and which can be safely and cheaply outsourced. The key is to understand the relative importance of resilience, innovation, and cost in different parts of the business.

Exhibit 2 gives an example of a migration map showing the desired end-state and migration sequence. In this case, a bricks-and-mortar retailer wanted to migrate to an omnichannel offering over two or three years. In the traditional world, the in-house IT team owned and ran proprietary systems to support all business functions. Here, the CIO understood the need to identify and differentiate between those elements that were strategic (and would require in-house focus) and those that could be outsourced as a commodity.

A learning period was necessary to develop future-state processes and systems for the online world. However, over time, a single set of systems, with many off-the-shelf elements, and differentiating, proprietary intelligence layers were developed across all channels using a portfolio approach.

3. BREED THE NEXT GENERATION OF TECHNOLOGY PENTATHLETES

CIO CHECKLIST

✓ Understand what you don't need in the new world of IT
✓ Ensure your team members each have multiple capabilities to excel in the new world:
    ✓ Architecture and technology delivery
    ✓ Business process know-how
    ✓ Commercial acumen
    ✓ Partner management
    ✓ Strategic thinking

The portfolio approach to IT strategy has clear implications for the work of the IT department: some responsibilities will disappear, while others will become much more important. As a result, the size and shape of the IT department will change.

In the past, routine maintenance and repair has accounted for much of the work of a retailer's IT department. This responsibility will shrink as systems are outsourced and PaaS and SaaS approaches continue to become more prevalent. The new focus will be on developing and managing critical applications, integrating services from a diverse set of suppliers, and managing relationships with these suppliers.

For strategic core applications, the IT department will need to act as in-house demand managers, with excellent functional and business knowledge. Given the need to coordinate numerous external vendors, architecture management will also be kept in-house, with the enterprise architects themselves becoming more business savvy as well as hands-on technical and practical.

For non-strategic and support applications, the IT department will act as a separate service management organization, overseeing the relationship with external providers to ensure that the business retains ultimate control of IT service delivery and that costs don't creep up over time.

Exhibit 3: "As a service" operating models and role alignment drive IT costs down

IT BUDGET NORMALIZED VERSUS INITIAL SPEND
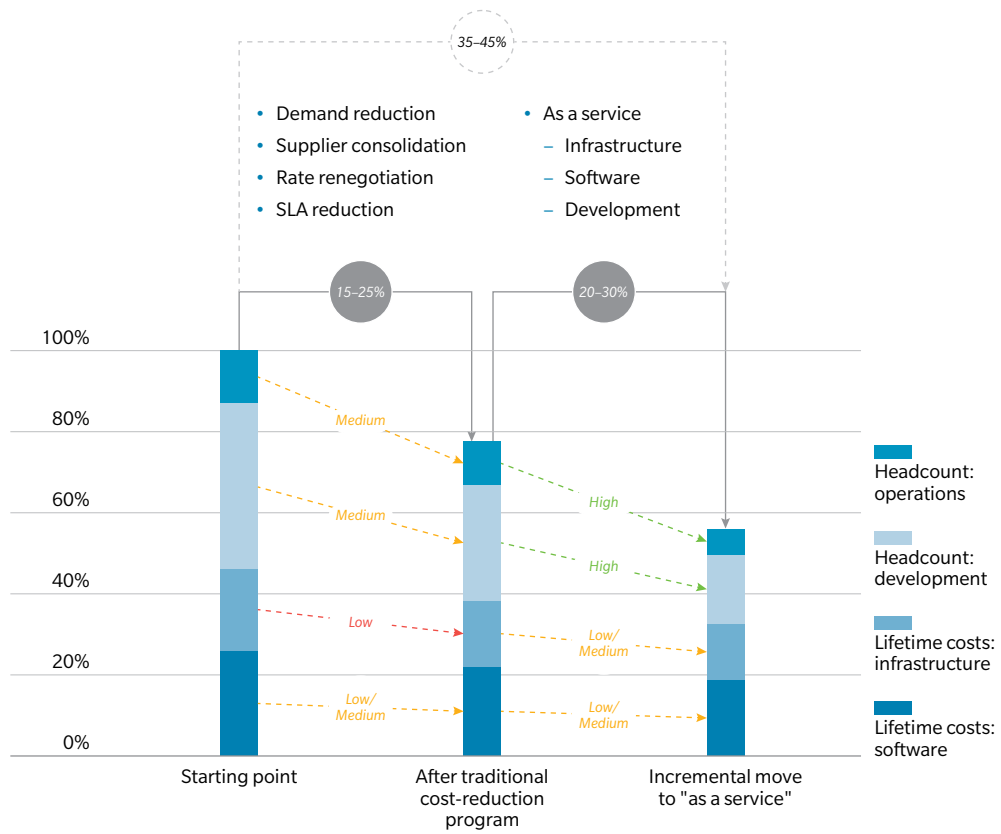
As some roles disappear, others emerge. Increasingly tasked with delivering strategic initiatives that can transform the whole business, IT now needs to become a full partner in business decision-making, and to think and communicate in business terms. This means new positions will be needed, dedicated to looking for new IT-driven business ideas and IT-created business process efficiencies.

Meanwhile, day-to-day ways of working are changing, moving from traditional waterfall to more agile approaches, where the outcome is not necessarily known before work starts and flexibility of thinking and tools will be needed.

All this means that the job description of the internal IT team will change dramatically. In the future, retailers will need a cohort of "IT pentathletes" who can source, procure, and integrate across a broad range of service partners – a more highly skilled but smaller IT department.

The changes in how IT is delivered will transform retailers' IT cost structure. Today, typical cost levels in the sector are around 0.7–1.0% of revenue. Using a mix of traditional cost-reduction techniques and the "as a service" principle, we believe IT cost can be driven down by up to 50% – as Exhibit 3 explains in more detail.

4. FOCUS ON WHERE YOU NEED TO BE TOMORROW, RATHER THAN WHERE YOU START FROM TODAY

CIO CHECKLIST

✓ Get your team and the C-suite to move beyond the three-month horizon and start planning backwards from where you want to be in three years

✓ Be the architect behind a plan that really moves the strategy and innovation for the whole business

✓ Understand the personality of your organization (for example: in denial, business as usual, eager for change) and adapt your plan accordingly

The changes we've described present a huge challenge for a mature retailer: it will be difficult to turn today's IT approach, capabilities, and infrastructure into something that meets the needs of tomorrow's multichannel business.

In our experience, retail CIOs and their organizations are sometimes in denial about the changes required, continuing to play an enabling role without confronting the need for reinvention; or they believe that the transformation can be handled as business as usual, relying on the tried-and-tested approach of incremental cycles of tactical optimization to get them somewhere better.

Even in cases where they understand the need for radical change, it's rare to meet a CIO who feels this can actually be achieved – understandable given day-to-day responsibilities and constant pressure on both operating and capital expenses.

One of the biggest problems is the incrementalism trap: thinking that the way to build an effective IT architecture is through a succession of small steps. Retailers are great at driving incremental execution and delivering on never-ending loops of marginal optimization. Until very recently, this was the key to success in an industry with fierce competition where the impact of technological change tended to be limited. But in the face of the threats posed by e-commerce, incremental changes aren't enough to give the business the support it needs to survive now.

The solution is to focus on where you need to be tomorrow, rather than where you start from today, and insist on bringing perspectives from other industries. This type of thinking begins with the position the retailer needs to be in in three to five years in order to be competitive: working backwards from this target defines the sequence of changes required to achieve it. This deceptively simple approach can be surprisingly effective in forcing the business – and the CIO – to face up to the true scale of the challenge and understand that even perfectly executed incremental change will leave the company fully prepared for the wrong future.

CONCLUDING REMARKS

It's hard to overstate the impact the current changes to the retail industry will have on IT departments. The CIO's role will be transformed from supporting and enabling, to shaping the strategy of the business as a whole, with a focus on innovation and value creation. IT architectures will be unrecognizably different from those of a decade ago, and will be built and supported in different ways. As a result, retail IT departments will need radically different capabilities than they have today – or are currently building.

Success in multichannel retail relies on a radically different IT architecture and a radically different role for the CIO. It requires nothing less than the reinvention of the IT approach: incremental improvements can never deliver the changes required.

ABOUT OLIVER WYMAN

Oliver Wyman is a global leader in management consulting that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation.

In the Retail practice, we draw on unrivalled customer and strategic insight and state-of-the-art analytical techniques to deliver better results for our clients. We understand what it takes to win in retail: an obsession with serving the customer, constant dedication to better execution, and a relentless drive to improve capabilities. We believe our hands-on approach to making change happen is truly unique – and over the last 20 years, we've built our business by helping retailers build theirs.

www.oliverwyman.com

RETAIL CONTACTS

JAMES BACOS

Global Retail Practice Leader
james.bacos@oliverwyman.com

+49 89 939 49 441

PAUL BESWICK

North American Retail Practice Leader
paul.beswick@oliverwyman.com

+1 617 424 3259

BERNARD DEMEURE

French and Iberian Retail Practice Leader
bernard.demeure@oliverwyman.com

+33 1 45023 209

NICK HARRISON

European Retail Practice Co-Leader
nick.harrison@oliverwyman.com

+44 20 7852 7773

SIRKO SIEMSSEN

European Retail Practice Co-Leader
sirko.siemssen@oliverwyman.com

+49 89 939 49 574

STRATEGIC IT AND SERVICE OPERATIONS CONTACT

SUMIT SAHNI

Partner
sumit.sahni@oliverwyman.com

+44 20 7852 7424

OLIVER WYMAN LABS CONTACT

COLIN COBAIN

Partner
colin.cobain@oliverwyman.com

+44 20 7852 7791

OLIVER WYMAN