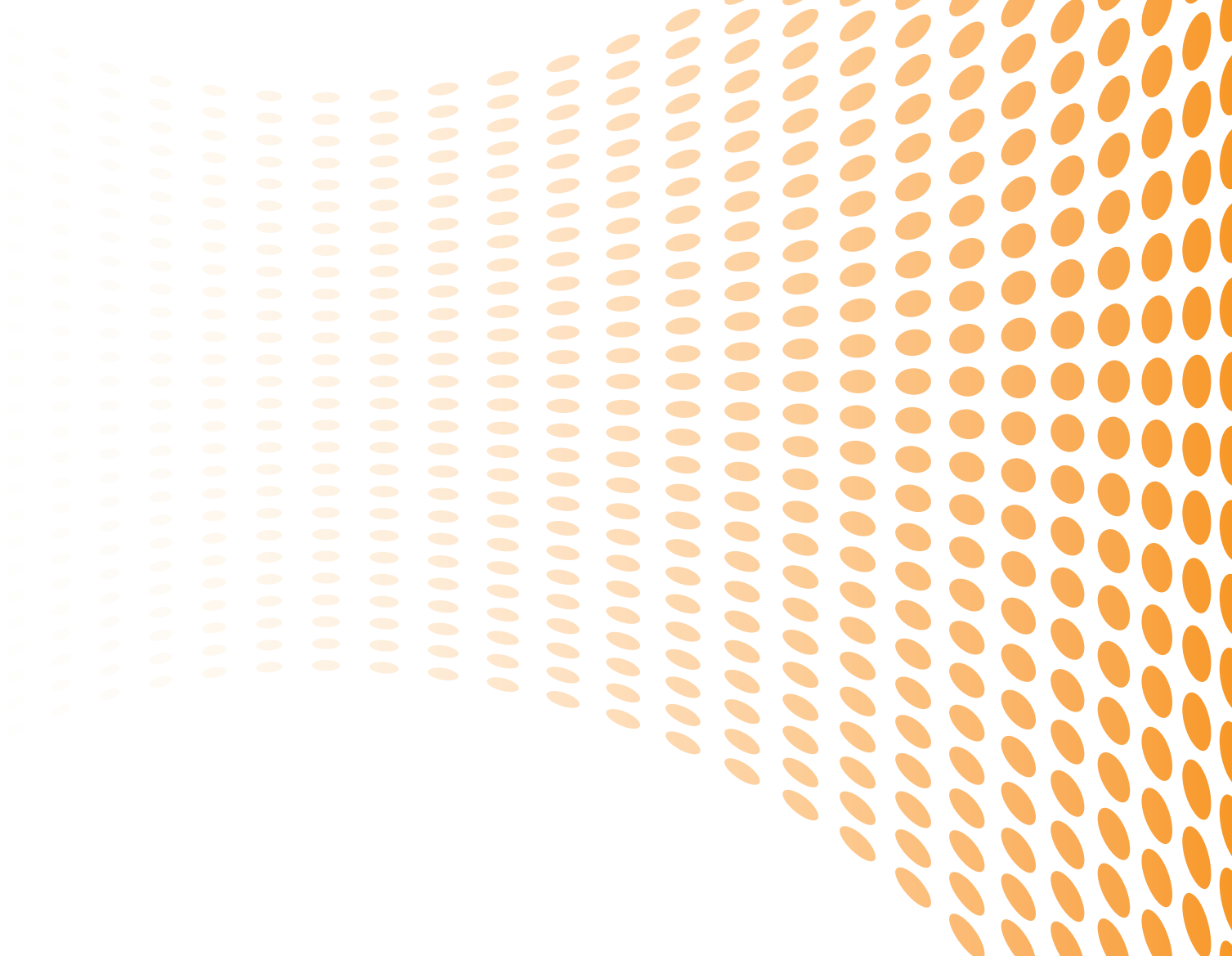# :::fast

The emerging face of enterprise merchandising

In this paper we discuss the rapidly growing Enterprise Merchandising market, its unique characteristics and business drivers, and define the requirements for the next generation of online enterprise merchandising solution.

A FAST white paper

Selling online today

Merchandising is turning a new phase. Just a few years ago, the traditional brick-and-mortar definition of merchandising revolved around management of stock at the sales outlets. Merchandisers did whatever possible to promote in-store sales of their fastest selling items, including shelf layouts, counter cards, point of purchase displays, and events. And they used the brand of one product or service to sell another related product or service.

But then the Internet happened, of course. The online customers started buying products and services in your physical store as well as on your dot com. Most offline stores were quick to cobble together online commerce sites, enticing the Web-savvy customers to their e-tail shops.

As the idea of eBusiness began to evolve into a mainstream reality, merchandising carried over the same traditional notions of product promotions, buyer conversion, AOV, and loyalty to this new world. No doubt these were excellent indicators to start with, but they only replicated the old ways in the context of the new world.

A number of online search and merchandising tools also perpetuated the notion that opening an online sales counter was good enough. To date they have failed to broaden the vision that could exploit the next generation of possibilities. These traditional solutions try to box merchandising into certain functions in terms of user interfaces and features.

Retailers today are wondering why they need to use the old gear when the game has completely changed. This paper examines what the next generation of online merchandising entails for the enterprise retailer, how it enables you to achieve the greater potential of enterprise eCommerce, and what tools are available to navigate this new world.

The new customer

Today's online consumer is in the driver's seat. She knows your products, your competitors and she knows you. Her loyalty can be created and destroyed in a single click. And your competition is well aware of that. The term "window shopping" means doing price comparison online and then buying it offline.

Channel hopper

The term channel hopping now has an entirely different meaning. It is not just about who hogs the remote control. Today's savvy customers zigzag through clicks and bricks effortlessly and use anything from mobile devices to kiosks to get to what they need. The traditional boundaries of where the online business ends and where offline business starts are dissolving. You have to be both at the same time.

Marketing Cynic

Today's online consumers have little attention span and a general disregard for carefully constructed marketing messages and product reviews. They more likely get their information from their peers, user-generated blogs, and community Web sites. Their brand affinity is now influenced as much through social networks such as myspace and friendster as well as the jazzy ads in traditional media. The self-appointed brand advocates dominate customer perception.

The New Market

Customer behavior is not the only thing that is evolving rapidly. The merchandising market is itself broadening, redefining, and refining. Let us examine two basic ideas of product and online merchandising.

New Products

How does one define a product in today's blurred world that is part online and part offline? New services are getting productized, old products from perishables to perpetual digital products are getting converted into services, and information itself is now productized (e.g. credit reports, customer lists, premium content). No wonder online businesses are trying to sell anything they can in this redefined world, as long as someone is willing to buy them.

As novel products give rise to novel business models though, vendors still require the same level of merchandising, promotions, distribution, and inventory controls to be profitable in the digital world.

Online merchandising

A similar broadening intuition of the merchandising solution is that it can no longer succeed in isolation. Rather, it must tightly integrate with other operations in the enterprise to create synergies that contribute to competitive edge. The market intelligence that defines the right product, the CRM systems that understand the customer behind the clicks, the inventory and distribution systems that bridge channels, and marketing that drives percep-

tion and programs, all become an inter-connected part of the greater eCommerce design. So where does merchandising begin and end? Nowhere and everywhere.

There are of course nuances specific to a particular segment of merchandising. A retailer controls its own inventory and logistics whereas an auction site empowers the buyers and sellers to work things out themselves. A pure-play online career site, travel site, or news provider may offer minutely different modalities of search, browsing, and promotions, but such minor nuances fade into insignificance compared to the more salient similarities of purpose: they all sell products online, manage supply chains, adapt their quick-changing product catalog, optimize pricing, and hope for higher conversion rates and AOV.

Semantic arguments aside, every enterprise that transacts business on line is a merchandising, eCommerce, and e-tailing business. The traditional merchandising definitions are expanded in this new world. And if everything around us is inexorably moving towards groundbreaking change, should we stay with traditional merchandising ideas and solutions?

Enterprise Merchandising

The next generation of enterprise merchandiser must do more than search, browse, and promote online. Their competitive and operational landscapes are different than the smaller, "one-shop" online merchandisers that proliferate and disappear at a rapid rate. The following should also be considered:

Flexibility
Unlike the smaller niche player who can differentiate by product and market ownership, the enterprise merchandiser differentiates online by providing the best experience for its browsers and customers. The means optimizing the environment to optimize the experience.

Simplicity
The experience must be easy to manage from end to end. This means a clear and simple workflow model for continuous improvement and an easy-to-use central management center designed specifically for the non-technical business user to manage, monitor and control the merchandising environment.

Personalization
There must be a more personal connection between merchandiser and consumer so that customers can shop on their own terms.

Performance
Unlike smaller players, the enterprise merchandiser manages large catalogs, product updates that vary widely in frequency and promotions that must be adjusted in real time to accommodate the ever-shifting realities of supply chains, inventories, customer profiles, and physical location.

Multi-Channel Integration
The desktop is no longer the only point of entry. There is also the PDA, the kiosk in the physical store, and more. Loyalty is built by engaging with the customer at every touch point.

An enterprise merchandising solution

Flexibility: Stand apart
Using search, navigation, promotions, and spotlighting to target trends and push cross-sells is the usual approach for increasing average order value today, and all merchandising solutions support this capability. The problem with the more traditional solutions, however, is their propensity to lock you in with fairly restrictive technologies and interfaces. No wonder a large percentage of the eCommerce sites today look, act, and feel pretty much the same. How does the enterprise player stand out from the crowd?

The answer is to select a merchandising solution that allows you to differentiate by providing a unique and special user experience – your own look-and-feel and user interaction model. This includes functionality like out-of-the-box templates and an ability to quickly create new templates. You should demand total freedom to create whatever you want, whether the interface is the traditional browser, in-store kiosk, or mobile device.

The differentiated user interface is a great start, but online customers demand much more. They want to get to the product they want with the least amount of clicks. The best way to increase your conversion rate is to decrease the number of clicks to destination. The con-

ventional approaches are to recognize synonyms in the search, eliminate zero results, and present the properties of your products as navigators the user can select to either refine their search or find unanticipated new products. These are all basic requirements for any serious merchandising solution.

But what if the facet content is absent or inaccurate? How often have you seen a perfectly clean product database? The enterprise merchandising solution should provide facet enrichment capabilities, for example, mining descriptive content to fill in missing facet values, or including custom logic to correct or "clean" the data to make it accurate. This ensures you avoid making offensive or obsolete cross-connections on the fly because of bad data.

Finally, how many clicks does it really take to get the browser to her destination? Minimizing the number is always accomplished best through intelligent and responsive relevancy and rank tuning of the results. The enterprise merchandising solution must provide an efficient mechanism for optimizing the manipulation of results – including injecting optional promotional and paid-for-inclusion logic if desired – without leaving the browser with the feeling she is being manipulated.

There are many approaches, but the ones that work best are those that are developed over long experience in the enterprise search industry and are tunable for particular content and user profiles. Whichever is selected, a basic requirement is consistency of results, not just from the search bar, but from all interfaces; navigators for instance. Search bars and navigators are simply visual paradigms for rendering a search request. They should never be treated as separate technologies.

Simplicity: Manage easily
The incredible power at your fingertips is useful only if you can wield it. A good enterprise merchandising solution will provide a central management center designed for the non-technical user where the complete application can be managed and realized throughout the life of the merchandising implementation. However, this does not succeed if to do so requires the sacrifice of flexibility, optimization, and good governance. A good system will provide both ease-of-use and power.

The center must include role management to restrict activities to those so assigned, stepwise workflow that

reflects the natural feedback loop of the monitor-optimize-deploy continuous improvement model, ample monitoring and reporting to get an accurate assessment of browser behavior, and taxonomy management that reflects the dynamism of changing organizational realities. In a truly enterprise environment, it should even allow you to manage multiple implementations from the same console.

In the fast world of multi-channel merchandising, a mistake can prove costly. The center should provide full site previews so you can see a promotion before it is published, and show future promotions, previewing the site as it will appear at a future date. In fact the center should provide previewing for all changes before they are published, including, for example, dictionary updates.

Armed with ease of management, previewing, and secure workflow, your non-technical managers can make rapid decisions, test them, approve them, and launch them to the live site.

Personalization: Connection with customers
Getting customers to return to your site is often the most elusive process to nail down. The prevailing approach is to create a sense of community or family. Often this translates to simple approaches such as, "those who bought your product, also but these products".

Personalization is the next stage – promoting and spotlighting not just based on market trends but on the user's personal profile, context, and location. The enterprise merchandising solution should understand your customer's environment and what you might know about their patterns. It should leverage demographic awareness and geographic location to create personalized experiences (for example, when the customer is connecting through a mobile device). Imagine showcasing only the relevant products that are available at outlets within the same-day shipping distance of the customer's current location.

Performance: Business in real time
If the enterprise merchandising solution incorporates your back-office system data in real time, it opens up tremendous possibilities. You can rotate inventory-based promotions to improve economic yield, change pricing variables based on competitive threats or opportunities, monitor and report on current or historic browsing patterns of your customers, and adjust your promotions and results accordingly. Real time integration capabilities

also allow you to incorporate third-party information on the fly, from competitive pricing, blogs or partner sites, to create a more trustworthy and holistic experience for your customers.

Such ability to connect your online merchandising with internal, external, and dynamic sources of information offers a more informed, tailored, and relevant experience to the end user. Sources might include your supply chain, CRM and BI systems, user reviews, and multimedia content.

Multi-Channel: Consistency across channels

Every online business wants to know how to create consistent and profitable customer relationships across multiple channels. The enterprise merchandising solution should allow all your Internet sites, kiosks, and mobile devices to draw from the same common index, while preserving their own particular search, navigation, and promotional characteristics. This enables unprecedented channel transparency.

Your customer can buy "it" online and pick it up at the store two miles away because the system told her "it" is 10% off at the outlet today. Or she can just click to order something through her PDA when the product is out of stock at her local store. And what is more, such functionalities do not require any additional applications. A common, extended platform for all channels reduces operating cost considerably.

The bottom line: Scale, ROI, TCO

As wonderful as a technology can be, it is useless if it costs too much to purchase, implement, manage, or change. Return on investment is very much an important reality in any enterprise software investment, and total cost of ownership is a major contributing factor.

There is operating cost to consider. How expensive is it to run? What will the hardware cost? It is not enough for the enterprise merchandising solution to be scalable, it must be scalable efficiently, with the most efficient use of hardware. The entire solution should be architected and optimized to distribute operations across commodity hardware.

Having such scale does not mean you should compromise on performance. A slow response is a sure-fire way of losing a potential customer. The solution should perform

regardless of the traffic volume at your site. No matter how many users hit your site simultaneously, and no matter how much processing is churned out on the production system, there should be no delayed response. As an enterprise merchandising company, you should expect this to hold true at levels over a 1000 queries per second.

There is also the cost associated with change – change in data, environment, workflow, or capabilities. The enterprise merchandising solution to should allow you to add or edit facets, promotions, boosts and blocks, synonyms and redirects in real time while the system is running with no downtime or operational impacts of any kind.

Equally important is the system's ability to auto-detect new attributes and add them to the site on the fly as new facets without the need to re-index the entire catalog. More traditional systems require that you stop the site, code in the changes, and then re-index the data from the beginning. If you have millions of SKUs, this could take the whole night. And if your site cannot be stopped, then you must establish a parallel site to provide a means of switching over. The technology ought to be more sophisticated than batch jobs and you should demand that it is.

Beyond Merchandising

Growth and synergy

It has become fashionable within the software vendor community to proclaim every point solution is in fact a platform. A few common code snippets across disparate products do not make a platform. A truly enterprise merchandising solution will realize that there is synergy in sharing content, logic, infrastructure, and centralized governance with other applications within in your organization, for example, Market Intelligence or your Intranet site.

A good architecture would suggest, then, a more general search platform lies beneath the merchandising solution that can extend to other areas of the enterprise, effectively providing a 360 degree of view of your corporate content. Imagine being able to tune your promotional policies based on information from your market intelligence monitoring application, or have closer ties with your inventory control system, or broadcasting merchandising performance reports to your corporate Intranet.

Easy integration with IT environment

Any high-performance technology is only as good as its ability to connect with your corporate environment, and enterprise data is often heterogeneous, distributed, and organized in silos. The enterprise merchandising solution should support all major platforms, operating systems, development languages, and storage configurations. It should integrate with and enforce all enterprise security protocols. It should recognize content from the widest breadth of content source types – structured and unstructured – with equal ease and speed. Such incredible flexibility means that you can integrate quickly, cause less disruption, and capitalize on your investments at lower cost.

Geographical expansion is also important for retailers, and why not? In many markets, retailing growth in the US has been tapped and retailers are looking to expand into faster-growing markets in other regions. In the next four years, EU retail growth is estimated to be more than double that of the US. The enterprise merchandising solution should natively support all major languages (there is around 75 of them) on the same platform so you can quickly embrace new opportunities anywhere.

Summary

Online enterprise merchandising is at its inflection point. During its infancy, searching, browsing, and contextual promotions created traction. However, today's retailers are anxious for the next generation of merchandising solutions that help them address the new customer needs and broader market opportunities. They need to equip themselves with a new set of tools that can help them change their game. This is survival, because if they do not build the intimate bond with their customer base, their competition will.

About FAST

FAST is the leading developer of enterprise search technologies and solutions that are behind the scenes at the world's best known companies with the most demanding search problems. FAST's solutions are installed in more than 3,500 locations.

FAST is headquartered in Norway and is publicly traded under the ticker symbol 'FAST' on the Oslo Stock Exchange. The FAST Group operates globally with presence in Europe, the United States, Asia Pacific, Australia, South America, and the Middle East. For further information about FAST, please visit www.fastsearch.com.

For any feedback or questions related to this paper, please contact us at feedback@fastsearch.com.

FAST
www.fastsearch.com
info@fastsearch.com

Regional Headquarters

The Americas
+1 781 304 2400

**Europe, Middle East
& Africa (EMEA)**
+47 23 01 12 00

Japan
+81 3 5511 4343

Asia Pacific
+612 9929 7725

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