



Fresh approaches to e-demand management could add significant new value for consumers while boosting e-grocers' profitability. To seize these opportunities, however, we need to move beyond product-centric thinking

What should categories look like on-line?

OVERVIEW

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High-profile e-grocery failures such as Streamline and Webvan – and the fact that most surviving e-grocers continue to operate in the red – underline the challenge would-be e-grocers face in delivering significant value to the consumer at an acceptable cost.

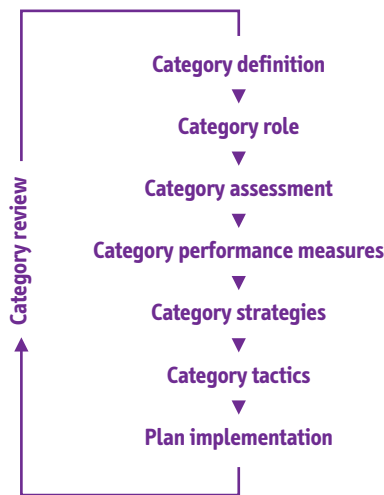
E-grocery shopping certainly appeals to the many customers who do not want to spend time standing in lines at supermarket checkouts or carrying heavy grocery bags. The appeal is diminished, however, by factors such as the high price of home-delivery services and the often uninspiring and confusing electronic shopping environment.

To date, e-grocery development efforts have focused on lowering the cost of order picking and home delivery. UK supermarket chain Tesco has shown how an on-line customer base can be built using

a low-investment store-picking approach. Webvan has demonstrated how specialised facilities can speed up picking (while also illustrating the risk of investing in automation before a sufficient market penetration has been reached).

Other companies, such as Sainsbury's in the UK and S-Kanava in Finland, have investigated how household reception boxes can be used to increase home delivery efficiency and improve customer service. So, although e-grocery's logistical problems are far from solved, we know a lot more today than just a few years ago.

Figure 1: The ECR category management process



Lower costs
are not
enough...

Reducing the cost of e-grocery shopping is not enough, however. Tomorrow's successful e-grocers will also create easy-to-use, efficient, even interesting and entertaining e-shopping environments. Finding and choosing products on-line has to be at least as easy as in a physical store. In addition, grocers need to offer additional services and features – such as planning services and personalised stores – to complement what physical stores offer, if they are to make customers visit repeatedly and stay loyal. To accomplish this, they need a systematic approach to demand management.

ECR demand management

Bricks-and-mortar grocery businesses are already experienced demand managers. Demand management skills, such as efficient use of promotions and effective product assortment, have been part of the Efficient Consumer Response (ECR) movement since its birth in the mid-1990s.

The core of ECR demand management is the category management process (Figure 1). Category management is based on the idea of managing product categories as strategic business units. The category management process defines the categories, gives them business roles, assesses them and sets performance measures. The process also defines

strategies for realising the category's performance objectives, as well as tactics for carrying out the strategies.

Finally, the tactics, ie, the decisions concerning assortments, pricing, shelf presentation and promotions, are implemented and results are reviewed, which starts another development round.

More recently, the ECR movement has expanded its view of demand management beyond this rather product-centric process to include a new element: consumer value creation.

Consumer value creation deals with concepts such as loyalty management and offering integrated solutions to the consumer. The aim is to move from transactions to relationships and from products to complete solutions. To date, however, there are only a few practical applications of these ideas.

A different business needs different solutions

Although most existing ECR demand management ideas are applicable to e-grocery, a few differences between the business models need to be taken into account. Simply copying solutions from the bricks-and-mortar environment to the electronic environment is not enough – a point well illustrated by the rather confusing and impractical electronic shopping environments offered by many e-grocers today.

'Recreating'
physical
stores on-line
doesn't work

Figure 1: The ECR category management process

Category definition: to determine the products that make up the category and its segmentation from the consumer’s perspective

Category role: to assign a role for the category based on a cross-category comparison considering consumer, market and retailer information

Category assessment: to conduct an analysis of the category’s subcategories, segments etc., by reviewing consumer, market, retailer and supplier information

Category performance measures: to establish the performance measures and targets

Category strategies: to develop the marketing and product supply strategies

Category tactics: to determine the optimal assortment, pricing, shelf presentation and promotion tactics

Plan implementation: to implement the category business plan through a specific schedule and list of responsibilities

Category review: to measure, monitor and modify the category business plan on a periodic basis

By copying product-defined categories from physical supermarkets, for example, some e-grocers create a familiar shopping environment but one which involves a lot of clicking, searching and browsing through numerous subcategories or long lists of product names. As a result, customers have difficulty finding the information they need on-line. Sometimes, e-grocery shopping can actually take longer than visiting a physical store.

Progressive e-grocers have realised that setting up a working e-grocery environment and increasing the value of e-grocery shopping requires understanding and accepting the differences between the physical and the electronic shopping experience.

A different shopping environment
Moving from a physical to a digital shopping environment brings with it several important changes. First, physical space becomes irrelevant. In the e-grocery store, it is the consumer’s limited attention and willingness to spend time selecting and comparing products, rather than the availability of physical storage space, that dictates what number of products should be put on display and how they should be presented.

Second, products’ physical restrictions become irrelevant. In physical stores, product characteristics, such as size,

weight and preservation temperature, have to be considered when making product placement decisions. E-grocery stores are not bound by these restrictions and products can be placed solely according to their use or purpose.

Third, e-stores can be customised. The physical supermarket always looks the same and contains the same products, regardless of who enters it, but the digital store consisting of bits and bytes is more flexible and can look different to different customers.

Although moving from a physical shopping environment to a digital one presents many opportunities, it also brings with it some new challenges. For example, people often find it easier to orientate in a physical store than to browse electronic product lists. And without the ability to touch and examine goods, finding the right product can be difficult.

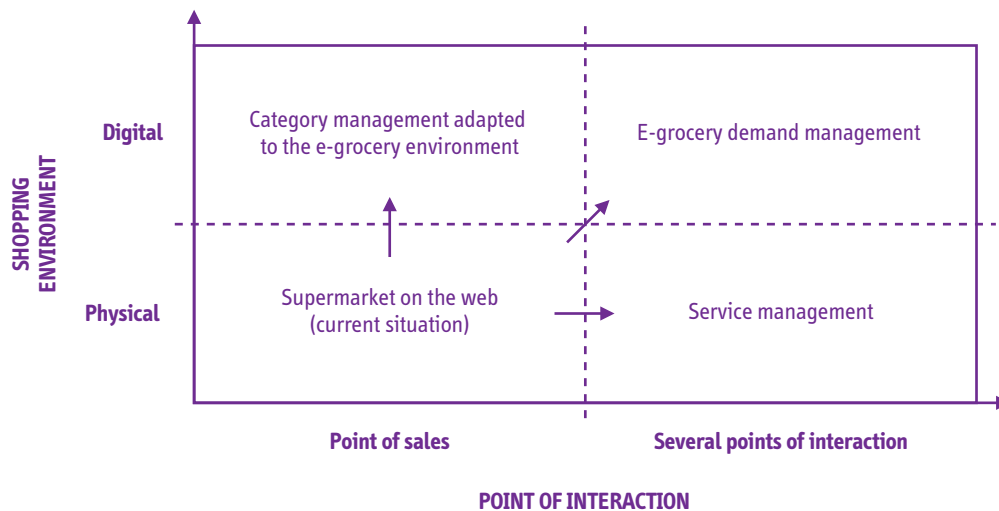
New opportunities to interact
New opportunities to interact also affect how electronic stores should be set up. In bricks-and-mortar grocery businesses, the physical store is the main point of interaction between consumer and store. The interaction, therefore, mainly consists of in-store activities such as product demonstrations and cooking tips given by the employees.

In the electronic business model, an

E-stores transcend many physical limitations...

...but create new problems in the process

Figure 2: **E-grocers need to adapt category management to the electronic environment and to develop service management**



E-grocers can offer valuable new services

electronic communication channel links the e-grocer and the consumer that enables interaction throughout the consumer's shopping process. This means the e-grocer can break out of its old role of provider of products and offer support for activities such as planning, and making sure all regularly needed products are available.

Taking on the challenge

By understanding the differences between the electronic and the physical business models, it is possible to significantly increase the value of e-grocery shopping. Meeting the challenges and exploiting the opportunities of the electronic sales channel, however, require systematic development.

The existing category management process needs to be adapted to the electronic shopping environment in order to improve product organisation and selection. In addition, service management is needed in order to take advantage of the new opportunities to interact with the customer and make the customer's shopping process more efficient and more enjoyable (Figure 2).

Adapted category management for easier shopping

The existing category management process provides a good starting point for the e-grocery development efforts.

However, adjustments will be needed on all levels of the process to adapt it to the new electronic shopping environment.

Changed category tactics

Many practical steps of the category management process need to be reassessed. Some performance measures, such as those dealing with the space utilisation of products and categories, become obsolete in the electronic environment. Instead, new measures, the resources critical to the e-store, need to be established. Some changes to category strategies, especially to supply strategies, are also needed.

For example, in cases where goods are picked in distribution centres instead of physical stores, the supply of the goods can be arranged for attaining maximum efficiency without having to consider product presentation aspects.

The most visible changes from a consumer point of view will, however, take place in the category tactics part of the category management process. As category tactics are often considered the main driver of results in the grocery business, this is also the part of the category management process which faces the strongest and most acute pressure to change. The changes will affect how assortments are decided, how products are presented and how promotions are conducted.

The separation of physical logistics from digital display makes new formats, different looks and assortments, and better targeting possible

Selecting an assortment that appeals to the target customer is just as important for e-grocers as it is for the bricks-and-mortar grocery business.

In e-grocery, though, two completely new opportunities arise. Since the e-store is digital and the physical logistics are separated from the display and marketing of products, it is possible to create a large range of store formats with different looks and assortments using the same underlying logistical infrastructure. This makes it much easier to create very targeted stores that match highly differentiated customer segments.

Furthermore, assortments can even be customised to suit each individual customer's preferences. E-grocers such as Tesco in the UK, Peapod in the US, and Hemköp in Sweden, have realised that it is not always optimal to present the customer with the full range of products. Instead, they let their customers create lists of their favourite products or automatically compile lists of previous purchases. Tesco even uses the customer's Clubcard (loyalty card) information to create a list of previous purchases when the customer signs up for the service. The customer can then use this personalised list to rapidly locate the products he or she frequently uses – allowing them to significantly speed up the shopping process.

In the electronic store, product

presentation tactics also have to change. Progressive e-grocers have realised that product information becomes immensely important when customers cannot touch or examine the products.

E-grocers such as Peapod and Albertson's in the US offer their customers all available information on products, including ingredients and nutritional information. Peapod also lets the consumer sort products according to a wide range of criteria, such as price, size and different nutritional factors. This opportunity to efficiently compare products offers the customer extra value – they can make a more informed choice more easily.

Unfortunately, not all e-grocers have come as far as Peapod. Incomplete product information and inconsistently organised products are all too common. In countries such as Finland where suppliers only supply retailers with minimal product information, there is, therefore, significant pressure to create systems for automatic communication of complete product information and pictures.

Product presentation tactics are also affected by the logic of displaying products in lists rather than as packages on shelves. Space restrictions – an important factor when displaying products in a physical store – become irrelevant. Other problems emerge, however, such as how to display many

E-stores can be customised segment by segment

Displaying the same product in two categories no longer causes any inventory management problems. Solutions are much easier to construct



products at the same time without confusing the customer and deciding which order to present products in.

Many e-grocers, such as Peapod and Netgrocer in the US, present products in alphabetic order according to brand names. Others, such as Waitrose in the US and Sainsbury's in the UK, present their own brands first. Extensive market research is needed to explore customer preferences. In addition, there is some evidence that the order in which the products are displayed affects sales. Such influences need to be investigated and understood. If product names beginning with A are preferred over product names beginning with Z, there are significant implications for product naming. Furthermore, it is important to examine how products can be displayed in an enticing way.

Promotional tactics are also affected by the e-shopping environment. E-grocers can, for example, target their offerings according to customer purchase patterns or demographic information. This, however, requires the ability to gather and analyse large amounts of data. Also, it can be more difficult to display and draw attention to promotions in the e-grocery environment.

Finally, it is easier to implement changed category tactics, such as assortment or layout changes, in the e-grocery environment. Modifications

based on the results of category reviews can be made more rapidly.

Changed category definitions

In the long run, we can also expect changes in the higher levels of the category management process. The most important of these is in category definition step, ie, the first step of the category management process.

The goal of category definition is to identify products which cater to the same customer need, and to manage these product categories as business units. Many products, however, respond to different needs, so the classification of products into categories is not always straightforward, especially when having the same product in several places in the store complicates the store's inventory management.

In e-grocery, however, displaying the same product in two categories no longer causes any inventory management problems. It is therefore much easier to create solution-based rather than product group-based categories. Although this kind of product organisation is still uncommon, some e-grocers have already created new types of categories. Peapod, for example, has introduced a category consisting of "Lite choices" as well as a "Party planning" category. However, thorough testing and market research is needed to evaluate which type of product organisation suits the customer best.

...category definitions

...and display

E-grocers need to rethink promotions...

Making shopping easier, more interesting and more enjoyable boosts e-grocers' profitability by encouraging customers to buy more

Towards e-grocery category management
Successful implementation of category management is of great importance to the e-grocery business. Category management is needed for making shopping easier by organising products and categories in a meaningful way and by providing the information necessary for making informed purchase decisions.

In addition, good category management can make shopping more interesting and enjoyable, enticing customers to try something new and to make impulse purchases.

Category management is also important for the profitability of the e-grocer. By making it easy for the consumer to do his or her shopping and by displaying products in an attractive way, it encourages the customer to buy more, and to buy high-margin impulse items. Furthermore, by personalising the store, it helps the e-grocer to improve customer loyalty, which is of crucial importance to profitability.

Although the existing bricks-and-mortar category management process offers a good starting point, adjusting the process to the e-grocery environment requires a significant effort from both retailers and suppliers.

For example, providing the consumer with high-quality product information is only possible through retailer and supplier co-operation. Moreover, both

retailer and supplier resources are needed to carry out the extensive market research which is needed for developing new ways to display and organise products and to define new categories. The ECR movement's interest in e-grocery could therefore provide a good platform for the necessary retailer-supplier collaboration.

Services that support the consumer's shopping process

In bricks-and-mortar grocery businesses, the main point of interaction between customer and grocer is the physical store. This limits the opportunities to offer different kinds of value-added services. Typically, the only additional services offered by grocers are in-store product presentations, information given by employees, free recipes and store magazines. In e-grocery, however, the grocer and the consumer are linked by an electronic communication channel that enables interaction throughout the consumer's shopping process, ie, also during the phases that precede the final product selection step.

Progressive grocers have understood that by offering different kinds of services they can make shopping easier, more efficient and more enjoyable for the consumer. Instead of offering only one standard way of e-shopping – clicking through categories and sub-categories and

In e-tailing extra information adds value

E-shopping changes each step in the shopping process: planning, inventory management and purchasing. Here's where new services kick in

browsing product lists – they enable several, complementing ways of shopping.

Different ways of shopping

The consumer's shopping process looks different in different situations.

Simplistically speaking, the purchasing process usually consists of all or some of three basic steps – planning, inventory management and purchasing.

In the simplest case – impulse purchasing – no planning is involved, and the shopping process only consists of one step – purchasing. A typical example is a shopper suddenly deciding to buy a candy bar just because they happen to see it in the store.

The shopping process can also include some kind of inventory management, ie, the customer checks what she has in store before deciding she needs to replenish. For example, she checks how much milk or juice is left in the refrigerator before going to the store and then decides whether to buy some more.

The shopping process can also include all three activities – planning, inventory management and purchasing. For instance, the customer first plans what the family will eat during the weekend, then checks what ingredients are already in store, and then purchases the missing products.

Traditionally, supermarkets have focused on the purchasing part of the

shopping process by trying to have the right products available and nicely displayed, keeping prices at a suitable level, and trying to make the customer's shopping experience as pleasant as possible. However, electronic grocery shopping opens up new opportunities to get involved in the earlier steps of the process.

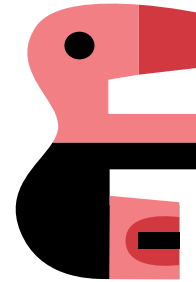
New service opportunities

When the consumer is shopping for replenishing staples, finding the products fast and effortlessly is important. For this purpose, e-grocers such as Tesco, Peapod, and Hemköp offer their customers personalised lists of previously purchased items. This narrows down the product selection and reduces the number of clicks needed to access the products.

Some companies have taken the replenishment idea even further. Netgrocer, for example, lets its customers place automatic recurring orders for regularly needed staples. The service is not very sophisticated – the customer can choose products that he or she wants to have automatically replenished every week or, for example, every month. Streamline, too, offered its customers a similar service, which became popular. The average Streamline household was reported to use the replenishment service called Don't Run Out for more than 10 items.

E-grocers can help shoppers streamline shopping

Personalised lists, 'don't run out' services, planning aids, recipe databases, fast location of products – there are many ways for e-grocers to add value



The e-grocer can also support planned purchasing. Both Peapod and Tesco have recognised that many consumers are comfortable using shopping lists as support for shopping, and offer their customers a similar opportunity on-line. The Express Shop service allows the customer to tap in a list of products, eg, orange juice, chocolate ice-cream and Kellogg's cereal, and then presents them with only the applicable choices for each product, significantly speeding up the shopping process for planned purchases.

Some e-grocers, such as Tesco and Hemköp, also offer their customers planning aids in the form of recipe databases. When the customer has found a recipe he or she likes, they can get the necessary ingredients automatically added to their shopping basket. Naturally, they might want to leave some ingredients out or replace them, but they are saved the trouble of going through each ingredient separately.

Of course, in some cases, the customer just wants to browse the aisles and look for impulses, new products or special offers. Therefore, it is also important to pay attention to how products are organised and presented, which gets us back to the category management issues discussed earlier.

However, product lists on a PC screen are not the only way of offering products to consumers. Exciting technological

advances in the area of interactive digital TV and web TV, for example, make it possible for consumers to learn more about the products they see on TV and even to order products instantly – all while watching their favourite shows.

Systematic service management needed

As these examples show, progressive e-grocers have managed to move on from what used to be the standard way of shopping for groceries on-line – clicking through category hierarchies and product lists.

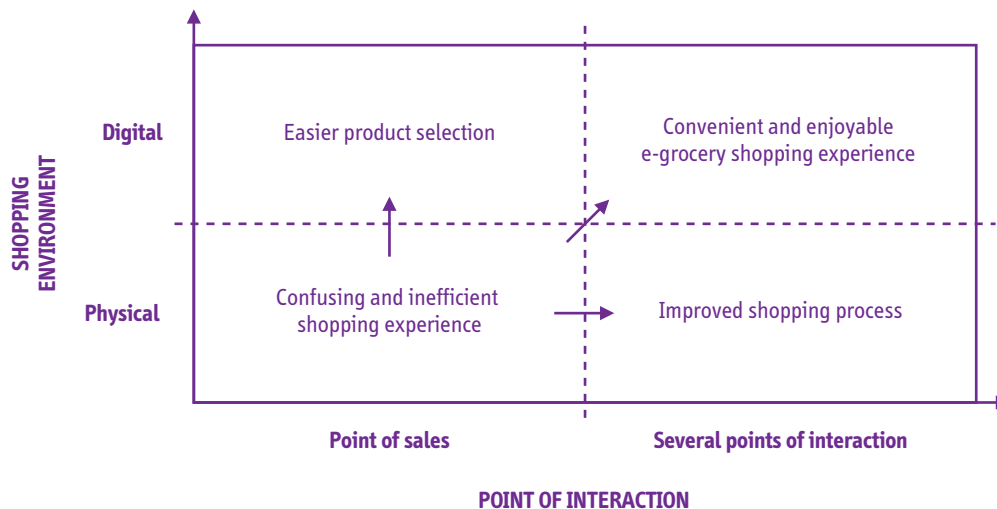
By offering personalised lists, replenishment services, fast location of products based on shopping lists, as well as planning aids in the form of recipe databases, these e-grocers have managed to speed up their customers' shopping process and make it more efficient and more enjoyable.

The e-grocers also benefit from these services. For example, by introducing new cooking ideas through readily available recipes or menu suggestions, e-grocers can increase their share of the consumer's wallet at the expense of fast-food companies.

Leading e-grocers also do more than just offer their customers new services – they encourage and teach their customers to use the services as effectively as possible. Tesco, for example, recommends that its customers start out with their personal

E-grocery services can add value for both sides

Figure 3: By investing in demand management, the attractiveness of electronic grocery shopping can be radically improved



Most potential is not yet realised

shopping lists, then check out the special offers, and then use the express shop feature to rapidly locate additional products they want to buy. Finally, departments, ie, the categories and product lists, can be used for browsing the aisles of the digital store.

Despite such positive developments, there still remains much to do. Most of the new services seem to have been developed in a more or less ad hoc fashion, and there is a significant gap between the most progressive e-grocers and the followers. Also, services that go beyond what happens in store are a new area for the grocery business, and ECR. There is a clear need for a more systematic approach to discovering new service opportunities, and developing, managing and evaluating the service portfolio.

The ECR movement has worked hard to create guidelines for the product development process. Similar guidelines could be of much help in this area of services as well. However, services pose a significant challenge to the rather product-centric ECR mindset and amendments to the ECR scorecard footprint are needed.

So far, ECR has been of little or no help in the development of e-grocery services. In fact, ECR's focus on products may make it more difficult to identify the opportunities.

Conclusions

E-grocers can significantly increase the value of their offering to the consumer by responding to the many new opportunities and challenges that electronic grocery shopping presents (Figure 3). By taking the new digital shopping environment into account and designing the e-grocery stores according to it, e-grocers can make the consumer's product selection process much easier and faster.

On the other hand, by taking advantage of the new opportunities to interact with the customer, e-grocers can support the consumer's whole purchasing process and make every step of it more efficient or convenient.

To attain these benefits, important changes in the way demand management is conducted are needed. In order to have the desired effect, the changes need to be based on thorough market research and testing. This requires significant investment. Such investments are, however, likely to pay off in the form of increased customer loyalty, increased profitability and increased share of wallet.

Moreover, e-grocery development efforts will not only benefit the electronic sales channel but also the bricks-and-mortar side of the business. Electronic grocery shopping offers an opportunity to think outside the box and rejuvenate the grocery business by introducing new ideas

Electronic grocery shopping could rejuvenate the business by introducing new ideas, new services and innovative ways of shopping

E-grocery offers new opportunities to work together

such as service management and innovative ways of shopping.

The electronic environment also enables grocery companies to gather new information on, for example, consumer shopping behaviour and product selection criteria that can be used to create new products and categories.

The ECR movement is the natural candidate to support and co-ordinate these demand management development efforts. It can provide a platform for the necessary retailer-supplier collaboration, as well as provide a channel for disseminating important knowledge in the form of best practice improvement concepts. However, ECR needs to be flexible enough to incorporate new themes such as multi-channel operations and services.

Hopefully, the emergence of the new electronic sales channel could help practitioners turn talk about value creation and services into action, bringing forth a fresher and more open-minded ECR movement than before.

Useful reading

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Notes

The research presented in this article is part of the ECOMLOG research program at Helsinki University of Technology. The ECOMLOG research programme is a three-year e-business initiative funded by the National Technology Agency in Finland and leading Finnish and international companies in packaged consumer goods, retailing, logistics, and telecommunications. For more information see <http://www.tuta.hut.fi/ecomlog/>.