Expert Group

(Re)platforming

Technical Project or Business Transformation Program?

Takeaways

1. Foster engagement and support within your organization.
2. Form a core team consisting of in-house employees with the requisite knowledge and experience. If necessary, supplement this team with external experts.
3. Select an architecture that will meet your requirements today as well as tomorrow.

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Technical Project or Business Transformation Program?

The e-commerce market is developing rapidly: business models are constantly changing and every industry regularly welcomes new entrants. In this bluepaper, the (Re)platforming expert group will show you how to develop a technical platform that will continue to suit your purposes in our ever-changing world. We will answer questions such as:

- Why is a replatforming strategy important and what should e-commerce professionals take into account when drawing up such a strategy?
- What might your team, approach and tools look like?
- What does a platform that will allow an organization to keep updating and finetuning its e-commerce environment look like?

> "Our replatforming strategy led to a shift in our approach to work and collaboration which, in turn, enabled us to learn more, and more quickly, from what we are doing."
> **Sebastiaan Bekker, wehkamp**

Definition

In the context of this bluepaper, a platform is a software solution that allows organizations to carry out online transactions. A crucial feature is that the platform must also be customer-oriented – in other words, we are not referring to back-office applications. The platform generally consists of one or more systems with functionalities such as a Content Management System (CMS), search function, shopping cart and checkout. Replatforming, in turn, involves modifying this kind of platform in order to meet new needs and wishes in a rapidly developing market.

40%

60%

Matches needs

Does not match needs,
or does not match needs
sufficiently
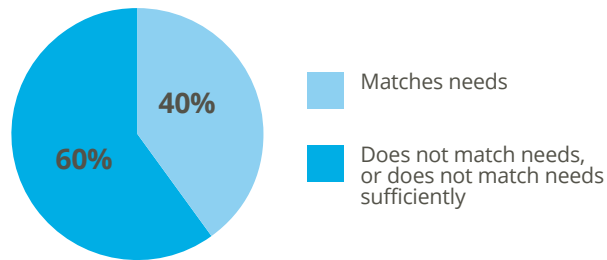
To what extent does the e-commerce platform meet your requirements for today and tomorrow?

In a brief survey (n=41) conducted among the experts affiliated with the ShoppingTomorrow platform, 60% of the respondents indicated that they are not satisfied with how their current e-commerce platform supports their online business.

1. Preparing the Organization

1.1 Why Opt for Replatforming?

Replatforming is not a goal in and of itself, but an answer to changing needs, which can come from various stakeholders in the equation.

1. **Changing customer demands**
   Customers expect higher levels of service, a larger, more diverse product range, and new ways to get in touch with your organization and purchase your products or services.
2. **Changing environment**
   New competitors or business models are entering your market.
3. **Internal needs and wants are changing**
   Your organization may want to respond to market developments more quickly, personalize its products or services on the basis of customer data or expand to new markets.
4. **The need to limit the *total cost of ownership* (TCO) of the online environment.**
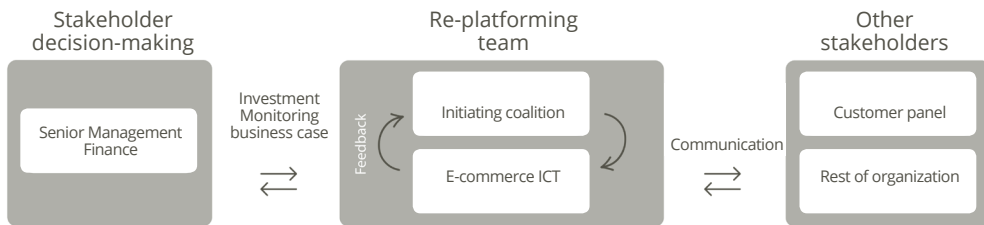
This is why the first step in the replatforming journey is always to clearly define specific goals, which will inform the project from there on out and enable you to evaluate afterwards whether the intended results have been achieved.

1.2 Getting Your Organizational Basics Straight

"Who is in charge?" This question is of vital importance, because replatforming is about more than just technology and IT. That's why a multidisciplinary approach, with a team that brings together various fields of expertise and a clear division of roles and responsibilities, is indispensable.

Key steps:
- Form a multidisciplinary team.
- Identify who is involved and what their roles and responsibilities are.
- Clearly assign sponsorship and ownership to managers.
- Identify and classify internal and external stakeholders based on their roles.
- Get a clear sense of the needs and wants of these stakeholders.
- Regularly involve these stakeholders and keep them informed of your progress and the triumphs and setbacks encountered during the replatforming process.

Stakeholder decision-making		Re-platforming team		Other stakeholders
Senior Management Finance	Investment Monitoring business case → ⇄	Feedback — Initiating coalition / E-commerce ICT	Communication ⇄	Customer panel / Rest of organization

Draw up a clear stakeholder analysis based on roles. Distinguish between stakeholders who are involved in decision-making, actively-involved stakeholders and stakeholders who only need to be informed about developments.

1.3 Support for Replatforming
To make sure that people within the organization will get on board with the replatforming effort, it can be useful to distinguish between two phases.

Creating Support
This phase is all about selling people on the idea and getting them onside. The following underlying thought is key: "How much are we investing and what value will it yield?" Everyone involved will have a different answer to this question.

Retaining Support
Emotion generally plays a major role in retaining support during the replatforming process. This leads to questions such as:
- How will the change affect my job?
- What if things go wrong?
- When will it be finished?
- Will I be able to work with the new platform?

Retaining the support of stakeholders is directly related to the shared goals that are being pursued and to fostering a sense of mutual engagement. Sharing progress and successes during the process, as well as being transparent about any setbacks encountered along the way, will ensure that you keep a healthy relationship with the various parties involved.

It is also important to make sure that your store does not only remain open during the replatforming process, but that there is also scope for modifications and innovations. This will keep stakeholders from feeling a sense of stagnation.

> "Ultimately, getting the organization on board with switching from the Endeca search engine to Elastic Search was relatively easy because of the longer-term potential. During the process, however, we came to realize that it was difficult to predict when the switch would be finalized entirely. For that reason, we set up a short-cycle feedback loop with management – a fan club – that also enabled us to quickly make important decisions and decide together what the minimum level of functionality for the first launch should be."
>
> **Maurice Jongerius, Shopping Platform Manager at bol.com**

1.4 Team

Composition and Responsibilities

A good replatforming process stands or falls on the team. The composition of that team and the extent to which external parties are involved will differ from one organization to another. In all cases, however, *business ownership* must ultimately be with the people within the company. Senior management is responsible for monitoring the investment made in replatforming, drawing on regular feedback. Product owners or project managers in the replatforming team, however, should have the mandate to make interim decisions. Sales, development, digital marketing and architecture form the core of this team.

Approach

The more essential IT, e-commerce and digital are to your organization, the more important it will be to have the right knowledge and skills at your disposal and to keep developing them. An *agile* approach to implementation, based on exchanging feedback, learning and improving, is therefore an ideal solution. However, smaller companies or companies that are undertaking the replatforming process in order to focus more strongly on e-commerce often do not have these skills within their organization. In these cases, it is essential, when enlisting the help of external parties, to explicitly state that the[] transfer of knowledge to the internal organization needs to be part of the process.

If IT, e-commerce and digital are not part of your core business, we recommend opting for a more project-based approach. In that case, you can even have the implementation process be carried out entirely by a third party. When taking a project-based approach, it is even more important to keep closely in touch with the internal steering group than with an agile approach, as this allows you to create and retain support. The transfer of technical knowledge is not quite as essential in this scenario, but paying attention to e-commerce developments in the market is definitely just as important.

In many development processes, agile methods seem to be standard procedure, but a conventional project design, or possibly a hybrid form such as the Dynamic Systems Development Method (DSDM), can lead to better results in some situations. This is the case, for instance, when opting for a *big bang* or channel-specific migration strategy, which we will discuss in greater detail below.

2. Technical Preparations

2.1 Picking an Architecture

The 'architecture' is the blueprint of the platform, describing the various components and systems and the ways in which they are linked. On top of that, it also specifies the information flows between the various components and the locations where all information is stored.

Generally speaking, the architecture will consist of several functional building blocks or layers, including:

- the touchpoints visited by the end user, such as websites and online stores, as well as chatbots, social media, a voice application or an IoT application;
- systems the organization uses to manage information, such as CMS, PIM and DAM;
- back-office systems used for internal processes, such as an ERP, financial-package or order-management system;
- external systems/sources, such as a payment provider or review website;
- integrations between these various components.

Which architecture fits best depends entirely on the organization. Every e-commerce platform consists of a large number of functional standard components, but, ultimately, the required architecture will differ from one organization to the next, depending on the number of channels required, the preferred market approach, and the size of the organization.
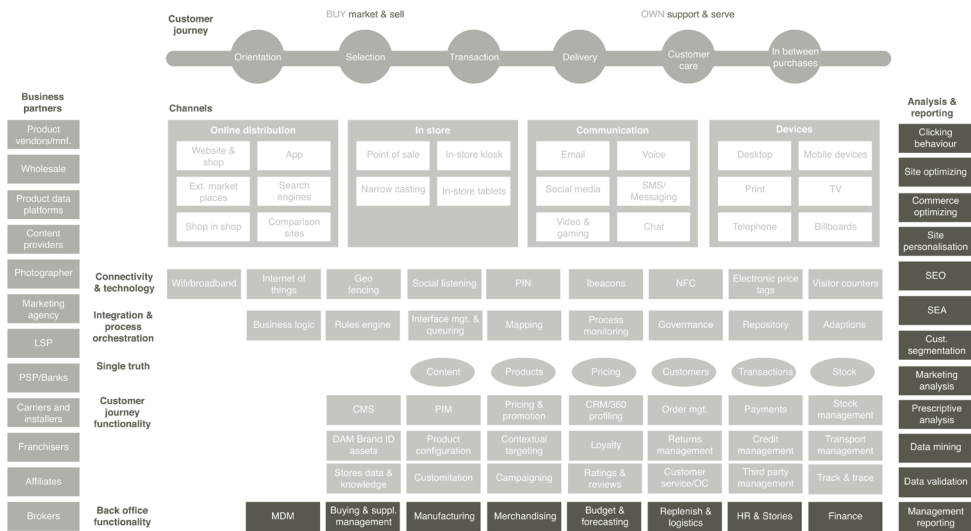
Example of a comprehensive omnichannel e-commerce architecture[1]

A high-level distinction can be made between three types of architecture:

- **Monolithic**
  All or most functionalities are combined in a single package. This has the main advantage of ensuring that all functionalities are optimally aligned, but one of the disadvantages is that there is little room to tailor functionalities to specific wishes and requirements.
- **Best-of-breed**
  A small number of interlinked systems. This approach lets organizations pick systems that closely match their needs and wants. On the other hand, linking these systems (and possibly unlinking them further down the line) can be a time-consuming process.
- **Microservices**
  Several smaller systems and services are combined. Generally speaking, these systems are linked together through APIs, resulting in an architecture that is very flexible (it is relatively easy to add or replace services, for instance), but takes a lot of knowledge and experience to design and manage.

2.2 E-commerce Systems

Determining which e-commerce system best matches the chosen architecture is a key decision. Because each platform has its own strengths and weaknesses, we recommend carefully assessing all factors before making a final decision. Generally speaking, these are multi-year investments, which means it will rarely be easy to switch systems after you make your choice. E-commerce platforms fall into one of four categories:

- **Open source**
  Open-source e-commerce products are available free of charge and are maintained by a community. This means that there are no licensing fees for the use of these platforms, which can be a major advantage. A drawback of these systems is a lack of support and reliance on volunteers to update and upgrade the software.
  Examples: *WooCommerce, PrestaShop* and *KonaKart*
- **Enterprise systems**
  Three major pros to Enterprise platforms are the wide range of out-of-the-box features, the support provided by commercial organizations and *third-party* links.This, however, comes at the price of *vendor lock-in*[2], and often many of the wide range of features available will be superfluous.
  Examples: *SAP Hybris*, *Salesforce Commerce Cloud* and *Episerver*
- **Microservices/API-based**
  With this new type of platform, you decide which platform features you want to use and which features you want to build yourself. These platforms are often *headless*[3], which means you will have to pick your own CMS or build your own presentation layer
  Examples: *commercetools, Skava* and *Moltin*
- **Custom-made**
  These platforms are mainly used by organizations with a unique product or major organizations that use online as their only (or main) channel. These platforms are based on customer-specific, tailor-made functionalities.

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2   THE RISK THAT A CUSTOMER BECOMES DEPENDENT ON A PRODUCT & SERVICE PROVIDER BECAUSE CHANGING PROVIDERS WILL GIVE RISE TO SIGNIFICANT COSTS OR INCONVENIENCE
3   A HEADLESS PLATFORM IS A *BACK-END-ONLY COMMERCE PLATFORM*

Start your selection process by drawing up a concise overview of your wishes and requirements. Above all, take into consideration the specific characteristics of the products or services that you will be selling. If you will you be working with product bundles, customer-specific pricing (especially where b2b sales are concerned) or specific promotional rules, for instance, it is best to let these factors inform your decision. You can use the following questions to help map out your wishes and requirements:

- What are the critical functionalities, what would be *nice to have* and which platforms provide these functionalities?
- What are your technical requirements for the platform in terms of hosting, security, access and performance?
- Which integrations will be necessary in the environment? To what extent does your chosen platform support these integrations? Think of accounting, fulfillment, ERP and CRM.
- Which touchpoints will the system include? Think of a website, app, point of sale and voice interface, for instance.
- What are your marketing and branding requirements? How much freedom does your organization want where this is concerned?
- How does the end user work or think?

For more complex e-commerce applications, you can visit the Modern Commerce RFP website for inspiration. This website contains a large number of questions that you could include in a *request for proposal* (RFP) or use to evaluate systems.

Modern Commerce RFP

3. Technical Execution: Migration

After all the decisions regarding architecture, platform, team composition and implementation have been made, there is one more choice to make: the migration strategy. While the migration process may seem simple at first sight, a number of different options can be identified. We have distinguished three main scenarios, each of which has its own variations.

- **Big bang**
  The new platform is built in its entirety as the existing one continues to run, with migration taking place in a single instance. Often, these platforms are based on a purchased package or solution. This will generally be the only option for more monolithic applications.
- **Per channel**
  The platform is built up for one specific channel at a time. With this approach, the platform will first be implemented for the mobile, app, or in-store channel, for instance, before it is rolled out for the other channels as well.
- *Gradual* or *'pacman'*
  The functionalities of the existing platform are replaced piece by piece. The front-end of the platform, for instance, may combine the functionalities of the old and new platform, or the user may get to see the new site during selected moments in the customer journey, such as at check-out or when using the self-service option.

When it comes to migration, too, what is the best approach depends on the organization and its specific situation. How easy will it be to replace the current platform in one fell swoop and how complex will it be to integrate it with other systems, such as ERP and CRM?

4. Other Recommendations

- **Keep it compact**
  Prevent a well-organized project from mushrooming out on the grounds that "while we're at it, we might as well do this too."
- **Avoid thinking too far ahead**
  Do not expect that you will be able to make the e-commerce platform fully future-proof. Instead, make smart decisions based on realistic expectations and the knowledge that replatforming is a recurring task for many organizations. Smart entrepreneurs make decisions that make sense now and meet the organization's current needs and wants. When the business's needs and performance change in the future, evaluating the platform will be a logical step to take.
- **To measure is to know**
  Specifying relevant KPIs in advance will enable you to evaluate whether the platform modifications have had the desired effect or whether other steps will be needed.
- **Do not underestimate the amount of work involved**
  Replatforming can be more complicated than you might expect at first. You might find that your existing systems are more technically complicated than was generally thought; you might have to do a lot of work to get everyone within the organization onside and to make sure everyone takes action at the right time.

5. Conclusion

It is clear that this is a market characterized by rapid technological innovation and development. As such, a competitive attitude is essential. The question is not whether organizations need a strategy to keep their e-commerce platforms up-to-date – by now it is *common knowledge* that they do. How organizations can successfully design and implement this strategy, however, is what it's all about.

To make sure your organization weathers this challenge, you should cover the following bases:
- Foster engagement and support within your organization.
- Form a core team consisting of in-house employees with the requisite knowledge and experience. If necessary, supplement the team with external experts.
- Select an architecture that will meet your requirements today as well as tomorrow.

Close cooperation between business and IT stakeholders is required. The choices you make will bring both units to a new level of commerce.

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