eGUIDE
IMPROVING eCOMMERCE PERFORMANCE THROUGH TAXONOMY

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Introduction

In the current pandemic climate of 2020, when almost three quarters of customers have been put off from shopping in physical stores[1], customers are increasingly shopping online. Businesses are going to have to work even harder to replicate the added value that browsing in a physical store can offer.[2]

In this shift to an emphasis on digital shopping channels, there will be more online customers than ever before. It is therefore essential to hone in on the visitor experience: learn how to react to new behaviours and ever-changing demand, utilise the additional sales opportunities and invest resources in customer experience.

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For retailers and eCommerce leaders trying to improve customer experience in this competitive environment, taxonomy is an important consideration. Ultimately, it's your navigation that will encourage visitors to delve deeper into the site beyond the initial store 'window'.

Are you showing them your entire range of products and reflecting what your customers are looking for? Can you optimise this in the same way that a physical store would to draw them in? Is it the right time to look at PIM (Product Information Technologies) to connect your ERP systems with what the end user sees?[3]

Some eCommerce organisations may already have a good understanding of taxonomy but may not know the best way to optimise it for their customers. They may struggle to manage it on a long-term basis. And they may spend too much time looking at quantitative data about what is happening without understanding why.

A multi-channel or omnichannel business (where a newer online store has been incorporated into an existing traditional 'bricks-and-mortar' retail business) faces additional challenges. With organisation structures that have grown organically as digital arrived, there can be internal politics about the 'best' way to manage taxonomy.

Keeping control of your taxonomy with an ever changing and increasing number of SKU's is also an issue. Combine this with a lack of governance and it is easy to see why there is growing concern about taxonomy being too internally focused and that opportunities are being missed.

This guide is for senior executives, predominantly in retail, grappling with these challenges and who are building a platform to exploit the potential opportunities. The following sections describe the benefits and opportunities together with our approach to building user-centric taxonomies that last.

Executive Summary

The taxonomy is at the heart of your online business, so it's essential that it is accurate and provides a strong foundation.

You may recognise that there are issues with your taxonomy but find it difficult to change a root cause or find an effective solution internally. The link between a potential taxonomy problem and negative financial impact may not even be visible or measurable, particularly if the current taxonomy is not effectively ordered for analysis.

Typical problems

Two of the biggest problems retailers face is product prioritisation and too much internal focus. Internally, retailers can have difficulties managing the different priorities of products owners across the business. Frequently this occurs, with little process or evidence in place to create order or governance.

When the taxonomy is created with these conflicting priorities, or centered around an inherited or historic categorisation system (created by internal, non-digital teams such as Buying & Merchandising) it does not reflect customer needs or how they browse online. As digital sales have grown it has often resulted in rapid growth in the number of SKU's retailers need to deal with.

The navigation may have grown over time without a single point of control, resulting in a cumbersome or disorganised categorisation. This can be difficult to manage from a political point of view, where the rest of the business is already comfortable with the existing categorisation. You may also be working with an inflexible ERP system, limiting change or development in taxonomy and making it difficult to meet evolving customer needs.

Even where retailers understand the importance of good taxonomy, they may not have the insight they need to cause positive change. Most retailers rely on their "digital stack" for site measurement that is very good at reporting on what is going on, but not very good at identifying why it is happening. As a result, you may not have an in depth understanding about potential browsing issues or customer frustration points and you may lack the data or analysis to present the case for change to the wider business.

Typical problems

Existing taxonomy problems can result in a variety of negative outcomes, including:

- Low conversion rates: customers who use the navigation may be converting at a lower level than those who use the search function.

- Data gaps: without an effective taxonomy or ordering system, your team may find it difficult to measure data around customer journeys and find gaps in measurement strategy.

- Poor SEO and visibility: some businesses may even find that a bad taxonomy is negatively affecting search performance.
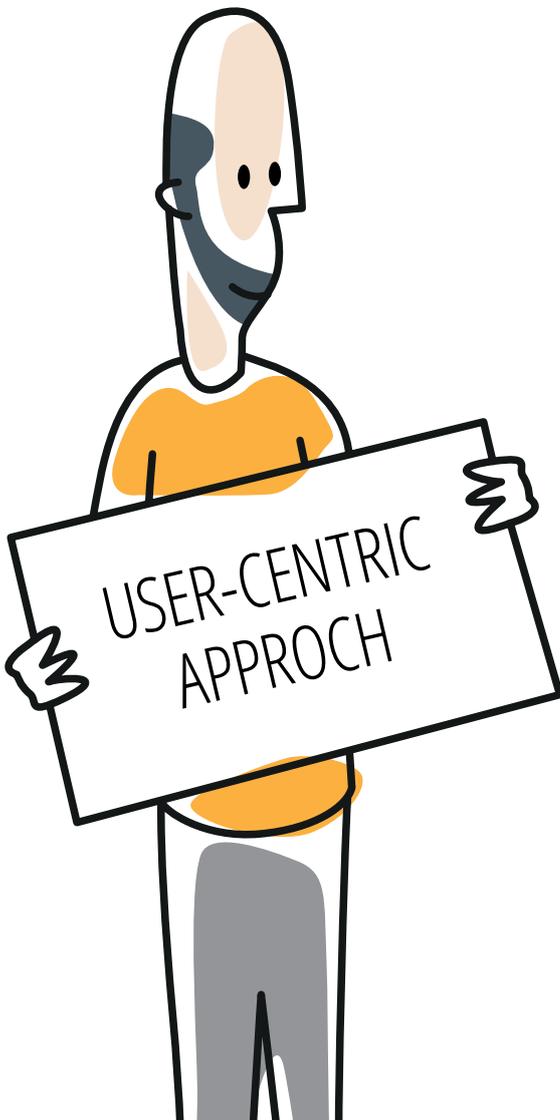
Solutions

A user-centric taxonomy can provide opportunities to rectify negative issues - boosting conversion rates, generating positive experiences and improving SEO - and create clear benefits for both customers and the wider business.

- Benefits for customers – an improved shopping experience which is easier to navigate and more enjoyable to shop, as well as more visible access to the products or suggested content which interests them.

- Benefits for retailers – more opportunities to suggest content or up-sell products for customers once pathways are effectively ordered and linked, an improvement in SEO, an increase in conversion rates and less drop-off in customer journey.

Whether you are dealing with too much internal focus, difficult or inappropriate systems, rapid growth in SKU's, or a lack of internal resources, a user-centered approach to taxonomy can support digital transformation by providing the necessary evidence that gives retailers confidence.

USER-CENTRIC APPROCH

1. What is taxonomy

A taxonomy is a classification system: labelling structured and unstructured content so that it can be rearranged, reused, organized, searched, and distributed. Without taxonomies, content remains trapped in large blocks that are difficult to navigate and adapt.[4]

For visitors to websites, taxonomy is usually in the form of a primary navigation or mega menu. Hierarchical classifications can be pure (each term appears in one and only one place), polyhierarchical (some terms are cross-listed in multiple categories) or facetted (based on combining).

Just as a physical store design team would plan the store layout to optimise sales and create an easy flow for customers to navigate, an online store should provide the same routes and opportunities via navigation. A mega menu that is confusing for customers and difficult to navigate, or a categorisation system which reflects internal priorities rather than customer needs, can result in a poor conversion rate.

Environmental psychologist and author of 'Why We Buy: The Science of Shopping', Paco Underhill, suggests the layout and experience of a store (and therefore an online store), can make a significant difference to the retailer's conversion.[5]

When customers visit physical stores, they expect a certain level of order, logic and categorisation to complete their visit easily and purchase everything they need. While many retailers devote resources to the science of retail store layout, the same approach is not always applied to the online environment. Using a user-centered approach to online layout and taxonomy utilizes science in order to improve an eCommerce website.

Imagine trying out a new recipe, for which you need multiple ingredients from a supermarket. If the flour is with the toiletries, or the sugar is with the vegetables, or you can't find the checkout, you may decide to give up on your purchase and find what you need elsewhere. This aspect of physical shopping can be all-too-easily replicated online, with poor product navigation or disorganisation creating a barrier to stop customers completing their purchases.[6]

A poor taxonomy can also affect a website's SEO performance. If products and content are effectively categorised under intuitive hierarchies, it's easier for customers to find them during their visit. It's also easier for them to find the site's products via search engine: by including consistent metadata that connects the website content to the customer-facing naming conventions, it helps inform users before they've even entered the site. Plus, if your website offers a positive experience and sound structure, this can also be beneficial for link building.

What's more, an effective taxonomy also makes pages easier to be identified and indexed by 'crawlers'. Bots will be able to find the information they need via the organised categories and hierarchy, and they will be able to index all the information about a product or topic from the website successfully.[7]

2. Creating an effective taxonomy

There are three ways to create a taxonomy:
technology driven, internally driven, or via a user-centered approach.

a) Technology-driven

Automatic taxonomy generation is possible via taxonomy management software, but this can come with its own set of difficulties.

- It can be costly to set up, and teams may find this cost difficult to justify to key stakeholders if the current categorisation system is already unorganized or the importance of this is misunderstood.

- Automated taxonomy software needs to be merged with existing internal categorisation. Organisations may find difficulties when analysing or reporting on systems which are disparate.

- Automated taxonomy software may still need adjustment after it is put in place and requires long-term management when content or products need to be updated.

b) Internally-driven

Retailers can also build a taxonomy based on existing internal organisation and categorisation. However, this can be based on a wide range of irrelevant product information, such as: historic systems pre-dating transactional websites, supplier information or coding, internal filing systems, or internal team structures. These ordering systems do not usually reflect the needs of customers or the way they shop online.

What's more, many businesses do not categorise their data consistently, because the process is too time-consuming or because more immediate tasks intervene. And even if they can do this, it's difficult to include all the relevant data and consistently categorise across different business areas in a way that is logical and understandable for users.[8]

c) User-centered

As well as the benefits for the consumer when presenting categories in a user-friendly format (such as an improved shopping experience), a user-centered taxonomy will reduce effort and issues for the various technologies that rely on accurate data to attract new customers.

Behavioural targeting, personalisation software and product feeds that drive your traffic rely on this information being accurate and in a format that can be displayed easily on their platforms. More accurate information will help you to be more effective in your marketing channels (Google PLAs, affiliates, SEO) and build a platform using the trading categories that customers navigate through. And getting the right attributes in place will allow the filters in your merchandising and category drop-downs to be even more effective.[9]

3. The UX247 approach to taxonomy

We utilise a user-centered approach to create and improve taxonomy and have completed taxonomy projects on different scales for various retail clients. We co-create the navigation using a mix of our expertise, a review of analytics, input from stakeholders and most importantly, customer research. We also research competitor activity to avoid their errors and learn from their innovations.

Whatever the benefits, changes to the primary navigation carries a risk: our approach enables us to minimise that risk and provide an outcome that everyone is confident will work. Most engagements result in a new recommended taxonomy at menu level 1 at a minimum and typically levels 2 and 3 also. They also involve the provision of a governance framework to ensure the taxonomy is maintained. And they can also involve page filtering.

The outcome of our process is:

- A new customer-centric navigation that is cleaner, more effective and scalable for planned future requirements.

- A governance infrastructure that allows growth and evolution.

- Buy-in to the new taxonomy and approach from stakeholders.

Each stage of our phased approach is overviewed as follows.

Phase 1: Analytics Review

The first step in this user-centered process is to complete an audit of the existing navigation on all platforms. This can typically be hundreds of categories (across multiple levels) so we gather a detailed understanding of what is currently in place and how it works.

Working with the client team we use available analytical data sources to understand: search behaviour, browse behaviour (in the navigational menu), potential risks of removing certain content types and opportunities to remove redundant items.

We will also conduct competitor reviews to identify current classification schemes used and provide an evaluation of the navigation mechanism and interaction. These reviews will enable us to create a scorecard for comparison including factors such as: terminology, number of items, font hierarchy, visual design, perceived ease of use and cross-platform compatibility.

This analysis provides the foundation for the future phases. Often the insight is delivered through a workshop with the client team due to the influence it has over the direction of future phases.
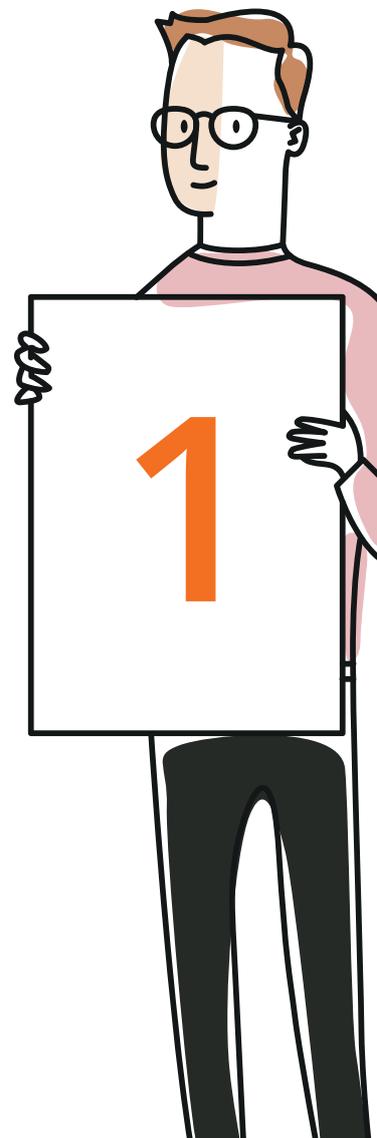
Phase 2: Stakeholder and Customer research

To deliver a recommended taxonomy we involve stakeholders from the client organisation and customers. Two streams of activity generate the "business view" and the "customer view" that are brought together to create the recommended approach.

Customer Research

We use two methodologies for the customer research, quantitative open card sort and qualitative open and closed card sort. They are used together to generate each level of the navigation and will be used again and again for multiple layers of navigation.

The quantitative research method identifies naming and grouping priorities with a high degree of reliability. The qualitative method is used to confirm key groupings and unravel any ambiguity. They are described as follows:

a) Customer research, using quantitative online open card sorting to identify how users group and name different items.

Working with a large number of users, we use an 'Optimal Sort' online tool to discover the preferred methods for naming, grouping and categorising content. By analysing this data we are able to create models for the navigation groupings, identify associations between groups and discover opportunities to cross-reference items where there are relationships.[10]

b) Customer qualitative research, using open then closed card sorting to evaluate the quantitative research findings and provide greater insight and options.

We run qualitative research sessions either remotely or in a research facility to view customer behaviour. This will mirror the quantitative card sort, to allow us to understand why the users group and name content in the way they do and help us to sense check the online results.

c) Consolidated customer view: We will complete these stages by analysing and comparing the findings from the quantitative and qualitative research and creating the customer centric taxonomy. We will also document the analysis and rationale behind the recommendations.

Stakeholder Research

Stakeholder research also involves two stages. The first is an in depth interview and the second involves a card sort exercise. They are described as follows:

a) Stakeholder workshops to understand business needs, political landscape, risks, opportunities, appetite for change and to evangelise change.

The workshops consist of interviews, sharing our findings from the customer research for feedback and input, plus showing what competitors are doing.

b) Stakeholder research using quantitative online open card sorting to identify how stakeholders group and name groups of items.

Stakeholders will be invited to complete the online open card sort, identical to the one which users have completed, to identify similarities and differences. We can analyse this data and generate a consolidated stakeholder view.

c) Consolidated stakeholder view: The final step is to compare and consolidate the findings from the user research and the stakeholder activities.

Initial taxonomy recommendation

When both the customer and stakeholder research is complete we provide our recommended taxonomy. There may be more than one at this stage and the final decision will be made after the next phase – the recommended taxonomy will be evaluated as a navigation container with real users.

To wrap this phase up, we create a final deliverable drawing on the insight from both users and stakeholders and applying best practice, knowledge and experience to recommend navigation containers.

Card Sorting

Card sorting (created by Optimal Sort) involves creating a set of cards that each represent a concept or item, and asking people to group the cards in a way that makes sense to them. We can run an open, a closed, or a hybrid card sort, depending on what we want to find out.

Open card sort
Participants sort cards into categories that make sense to them, and label each category themselves

Closed card sort
Participants sort cards into categories we give them

Hybrid card sort
Participants sort cards into categories we give them, and can create their own categories as well

Phase 3: Evaluation

The recommended taxonomy is evaluated with users to ensure that it works and that clients feel confident about the proposed changes. Even after this phase we recommend clients complete an A/B test of the proposed navigation to carry out final tweaks and be sure of the improvement. In most cases an immediate conversion uplift is experienced in the A/B test.

This evaluation process ahead of customer A/B testing uses qualitative research which complements the A/B test that follows by making it more effective. Running live A/B tests with alternative versions, too early means you don't know why you get certain results. This is not the case with user research where you are observing the users and learning about their needs. While you may gain statistics to support changes, A/B tests don't help future decision making or reasoning. Qualitative observation of user behavior is faster and generates deeper insights.[11]

The deliverable from the final evaluation stage is a recommended taxonomy that is strongly user centered and also reflects the needs of the business.

Phase 4: Governance Framework

Finally, so that all the knowledge generated during the engagement isn't lost, we provide clients with documentation that ensures the decisions taken and agreed are recorded for future projects.

We create a guidelines document that forms part of the client's website governance framework. This includes the principles and rules agreed, together with important decisions taken during the programme. It provides a checklist for future decisions, as well as a framework and approach to navigation scalability.
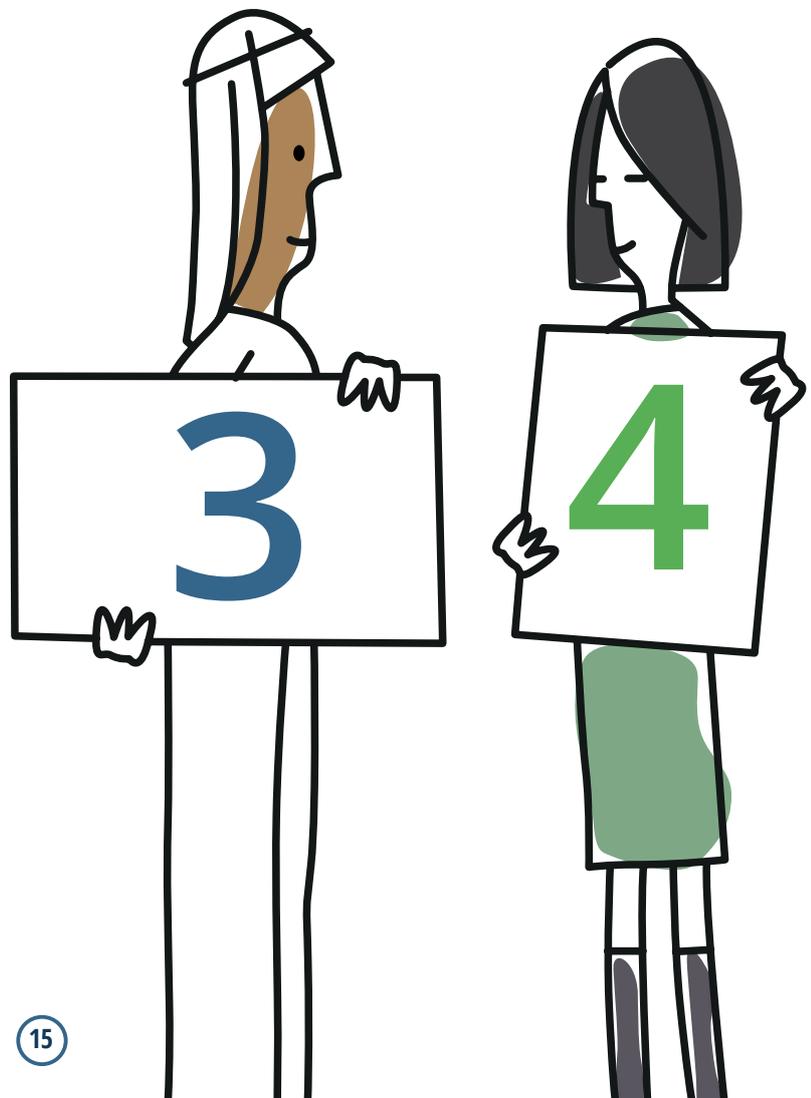
4. International considerations

We work with global eCommerce organisations who run multiple websites and need them to work consistently across different international markets. Often using the same technology platform.

There are many reasons why an organisation might need to adopt a consistent approach, such as:

- Using or moving to a single ecommerce platform and wanting to reduce management overhead of running separate taxonomies in every market

- Wanting to discover where the similarities are between markets

- Needing to establish what **must** be different to support local market needs.

There are specific consideration involved with running multi-market taxonomy projects, not least different languages and different terms for the same thing. In previous projects we found that even getting started was a problem because of poor localisation – terms had been translated but not localised, so were not meaningful to the moderator as a proxy for the users. This had to be changed ahead of research.

When looking into taxonomy for international websites, there is also the challenge of combining different data sets from different markets in different languages to provide a consolidated view. This is less of a challenge for us because we have an international team – all our consultants work for us, not via other agencies or partners.

For most multi-country studies we carry out a consolidation activity between the quantitative and the qualitative research. This allows us to take an overview of the entire data set. We can then use the qualitative card sort, not only for validating a specific market's quantitative results, but also to consider issues that may not have surfaced in that specific market.[12]

Conclusion

Website taxonomy and metadata are essential to making content adaptable, customisable, and easy to distribute, giving enriched content power over other static and inflexible content which can only reach a limited audience. Taxonomy and metadata are both needed to help content compete and perform better in the rapidly expanding, ever-more-intelligent digital ecosystem.'[13]

Unfortunately, there are many businesses still using inflexible systems, inconsistent naming conventions or internal terminology online, which are not customer centric. With continued expansion of eCommerce capabilities and an increasing reliance on virtual shopping experience, retailers need to make a concerted effort to improve this.[14]

By focusing on a user-centered approach to taxonomy, your website will have an intuitive feel and respond to real customer needs. If you can dedicate time and resources to customer needs (and input flexible solutions to adapt to new needs as and when they develop in the future), it will create a more positive experience for your customers, improve the site's capabilities and generate higher conversion rates.

End notes

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