UX workflow example: Using a Generative AI tool to perform competitive analysis

Note: At the time that I lead the UX effort on the Staples Online Invoicing project, Generative AI tools were not yet available. Also, the Staples project team chose not to conduct a formal competitive analysis prior to the actual project kickoff.

I am therefore using this real-world scenario as an opportunity to show how Gen AI **could have been** used as a starting point for positioning this feature as a market differentiator for Staples, and to identify possible requirements.

It is one example of my ability to use generative AI tools within steps of the UX/UI workflow process.

My ChatGPT prompt used:

"Please generate competitor market research using Amazon, W.B. Mason, and Grainger for the UX/UI design of a new Online Invoicing feature for a business to business eCommerce website. If you don't have that information, or information is missing for any evaluation category, say "Data not found" where applicable. List the results, and then format them into a simple chart."

<u>ChatGPT response (begin)</u>:

Competitor Market Research: UX/UI Design for Online Invoicing Feature (B2B eCommerce)

1. Overview of Research

This report analyzes the UX/UI design of invoicing features for three key B2B eCommerce competitors: **Amazon Business, W.B. Mason, and Grainger**. The goal is to identify key trends, strengths, weaknesses, and design practices that can inform the development of a new invoicing feature for a B2B eCommerce website.

2. Competitors to Analyze

- Amazon Business
- W.B. Mason
- Grainger

3. Key Evaluation Criteria

a) User Interface Design (UI)

- **Visual Design**: Layout, color schemes, icons, typography.
- **Simplicity and Cleanliness**: How intuitive and clean the interface is.

- **Consistency:** Whether design elements and workflows are consistent across the invoicing feature.
- Mobile Friendliness: Ease of use on mobile devices.

b) User Experience (UX)

- **Ease of Navigation**: Accessibility and ease of use for the invoicing section.
- **Customization Options**: Ability to add branding, custom fields, and payment options to invoices.
- **Automation Features**: Availability of automated reminders, recurring invoices, and integration with procurement systems.
- Payment Integrations: Support for multiple payment methods.
- **Client Communication**: Automated emails, client portals, and reminders.
- Collaboration Features: Multi-user functionality and approval workflows.

c) Performance

- **Speed and Reliability**: How quickly invoices are generated, tracked, and accessed.
- **Data Security**: Security protocols in place for invoicing and payment information.

d) **Pricing**

- **Transparency**: Pricing models for invoicing and hidden costs.
- Value for Money: Comparison of features and pricing.

4. Competitor Analysis

a) Amazon Business UI/UX:

- Data not found regarding Amazon Business having a dedicated invoicing feature like other competitors in the space. Amazon Business primarily focuses on order placement and management, with features such as bulk order tracking, custom price lists, and analytics.
- For billing, Amazon Business generates invoices post-order, but the interface is not centered around a customizable invoicing tool. Invoices are generated automatically and can be accessed from the order history or via email.
- **Strengths**: Well-organized interface, easy to locate past invoices in the dashboard, good integration with existing business accounts, and the ability to download PDF versions of invoices.
- **Weaknesses**: Lack of deep customization and automation features in the invoicing process compared to specialized tools.
- **Mobile Optimization**: Strong mobile functionality with the ability to access and download invoices directly from the Amazon Business app.

b) W.B. Mason UI/UX:

- Data not found on a standalone invoicing feature within W.B. Mason's online portal. The platform focuses on product ordering and billing processes but does not offer a robust invoicing system akin to accounting software.
- W.B. Mason provides a simple order history with downloadable invoices, but these cannot be deeply customized. Invoice generation is automatic, following the placement and fulfillment of orders.
- **Strengths**: Straightforward layout for order tracking and invoice retrieval, easy access to past orders and invoices.
- **Weaknesses**: No invoicing customization or advanced payment integration features.
- **Mobile Optimization**: Limited mobile functionality for invoicing, primarily focused on product ordering.

c) **Grainger** UI/UX:

- Data not found on a dedicated invoicing feature beyond the standard B2B ordering and billing processes.
- Similar to Amazon Business and W.B. Mason, Grainger offers downloadable invoices post-order, but without extensive customization or automation options.
- **Strengths:** Simple invoice tracking and access through the order history. Grainger's platform provides easy navigation and straightforward access to past invoices, which are automatically generated.
- **Weaknesses:** Lacks a dedicated invoicing tool, limited customization options, and minimal automation for recurring invoicing needs.
- **Mobile Optimization**: Well-optimized for mobile, but with a focus on order management rather than invoicing tools.

5. Key Takeaways for the New Invoicing Feature

Customization: Competitors like Amazon Business, W.B. Mason, and Grainger provide limited invoicing customization options. Offering an invoicing feature with deep customization (branding, multiple currencies, payment options) will be a differentiator.

Automation: None of these platforms offer robust automation for invoicing, such as recurring invoices or automatic reminders. Adding these features could set the new feature apart.

Mobile Optimization: While all platforms are mobile-friendly, they focus more on ordering than invoicing. Offering a seamless mobile invoicing experience would improve accessibility for users on the go.

Payment Integration: These platforms focus on standard post-order invoices rather than integrating multiple payment options within invoices themselves. A payment gateway integrated into the invoicing feature would enhance the user experience.

6. **Opportunities**

Al-Powered Suggestions: Offering Al-driven features that auto-fill data or suggest past pricing could improve efficiency.

Cross-Platform Data Syncing: Integration with third-party tools such as accounting and ERP systems for syncing invoicing data across platforms.

7. Conclusion

Competitors in the B2B eCommerce space, such as Amazon Business, W.B. Mason, and Grainger, provide only basic invoicing features without deep customization, automation, or advanced payment integrations. This presents an opportunity to develop a more feature-rich, user-friendly invoicing tool tailored to the B2B market.

Here's a chart summarizing the competitor market research for the UX/UI design of online invoicing features for Amazon Business, W.B. Mason, and Grainger:

This chart highlights the key strengths and weaknesses of each competitor in terms of invoicing UX/UI design for B2B eCommerce platforms.

Evaluation Criteria	Amazon Business	W.B. Mason	Grainger
UI/UX	No standalone	No dedicated invoicing	No standalone
	invoicing tool.	tool. Automatic post-	invoicing tool. Basic
	Automatic post-order	order invoices	invoice access via order
	invoice generation via		history
	order history		
Strengths	Organized interface,	Simple order tracking	Simple navigation for
	easy invoice retrieval	and easy access to	invoice access,
	from dashboard, strong	invoices post-purchase.	organized interface
	mobile app support		

Weaknesses Customization	Lacks invoice customization and automation features. Focuses more on order management Data not found. Limited	No customization or advanced invoicing options, limited mobile functionality Data not found. Limited	No customization, no invoicing automation, limited to order tracking. Data not found. Limited
Options	to standard invoice downloads	to basic invoice access	to standard invoice access
Automation Features	Data not found. Lacks invoicing automation	Data not found. No automation for invoicing	Data not found. No automation or recurring invoice features
Payment Integrations	Payment processed via order, but no integration in invoicing.	Payment via order, no integration in invoicing	Payment processing is handled separately from invoicing.
Client Communication	Data not found. Emails invoices post-order	Data not found. Basic invoicing via email.	Data not found. Basic invoicing via email.
Collaboration Features	Data not found. Limited team collaboration for invoicing	Data not found. Not available for multi-user invoicing workflows	Data not found. Basic user access for orders, no collaboration for invoicing
Speed and Reliability	Reliable, invoices quickly accessible from order history	Reliable, fast access to invoices post-order	Reliable access to past invoices, standard performance
Mobile Friendliness	Well-optimized for mobile, full invoice access	Limited mobile optimization for invoices, more for ordering	Optimized for mobile access to orders and invoices
Data Security	Secure access to invoicing via Amazon account, standard data protection	Secure invoice handling, limited invoicing options	Standard security for invoicing data access via the platform
Pricing Transparency	Transparent pricing based on Amazon Business account.	Transparent post-order invoicing, no dedicated cost structure for invoicing features	Transparent post-order invoicing, no invoicing-specific costs
Value for Money	Invoicing features are built into the Amazon Business account, but lacking customization	Basic invoice access at no extra charge, limited advanced features.	Standard invoicing access, lacking advanced features at no additional cost.

ChatGPT response (end)

My key takeaways for the UX process:

- 1. The initial ChatGPT evaluation criteria in the chart provide a good starting point for my own analysis. I might choose to keep these categories, or suggest a few of my own by refining my prompt and running it again, if I wanted to probe about specific attributes of my competitor's sites.
- 2. Staples did not HAVE an online invoicing feature at that time, so it was not included in the Al prompt list. If Staples had had a legacy invoicing feature, it would be useful for the team to see it listed here, alongside the competitor sites.
- 3. I would have liked to get more detailed responses from the AI for the bullets in 3a, 3b, and some of 3c. To see if the ChatGPT could do this, I would write a new, detailed prompt, mentioning these criteria specifically to see what it returns.
- 4. Areas where ChatGPT did generate information are areas where I would validate the accuracy of each response, before relying on them.
- 5. Areas where the Al generated a "Data Not Found" response would be aspects that I would investigate further myself, assuming I had access to the competitor's B2B site features. If not, I would note that fact in the final copy.
- 6. Al is helpful to provide clarity about some competitor features when I may NOT have competitor site access. (Facts that may be public knowledge/known to it, but not directly available to me due to lack of a test account, password, etc.)
- 7. The ChatGPT key takeaways, opportunities, and conclusion sections, (once validated) can provide some innovative and inspiring suggestions for the team to review and consider when refining the list of must-have business requirements for the new feature.