Smarter technology for all

# A Frictionless Future for ISG e-commerce

UX Audit and Recommendations for lenovo.com/datacenter Audited June 2021 by Rivers Agency

2021 Lenovo Internal. All rights reserved.

#### Table of Contents

## Introduction

- 4 About the Company
- 6 Project Summary
- 9 Business Assumption Summary

#### 11 Key Metrics

- 12 Audience Demographics
- 13 ISG Ecosystem
- 14 Site Traffic
- 15 User Behavior

#### 16 The Marketplace Landscape

- 17 Overview
- 18 Introduction to SMB Personas
- 19 Novice Persona
- 21 Informed Persona
- 23 Expert Persona

## **Competitive Analysis**

- 26 Competitive Analysis Chart
- 27 Competitive Analysis Overview

## **Observations**

- 29 Methodology
- 30 Top 9 Suggestions for Overall Improvement
- 31 Navigation
- 35 Homepage
- 39 Product Landers
- 43 Solutions
- 46 SMB Solutions
- 50 Services
- 54 Product Lists & Filtering
- 58 Product Details Pages
- 62 Configurator
- 65 Cart
- 70 Checkout

## **Good/Better/Best**

- 74 Sorted by Page/Section
- 84 Sorted by Impact

## **Expanded Recommendations**

- 90 Navigation
- 98 Universal
- 113 Homepage
- 115 PC Homepage
- **118** Solutions
- **120** Services
- **122** Success Stories
- 124 Product Landers
- 127 Product Lists & Filtering
- **135** Product Details Pages
- 144 Comparison Tool
- 147 Configurator
- 148 Cart
- 158 Checkout

# Introduction

**Novo** 

2021 Lenovo Internal. All rights reserved.

# About the Company

2021 Lenovo Internal. All rights reserved.

4

### About Lenovo Group

Lenovo is a US \$60 billion revenue Fortune Global 500 company serving customers in 180 markets around the world. Focused on a bold vision to deliver smarter technology for all, the company is focused on developing world-changing technologies that power (through devices and infrastructure) and empower (through solutions, services and software) millions of customers every day and together create a more inclusive, trustworthy and sustainable digital society for everyone, everywhere.

## **About ISG**

Lenovo Infrastructure Solutions Group (ISG), renamed from the Data Center Group (DCG) in 2021, is a smart infrastructure solutions provider to organizations of all sizes. Its technology and insight power the data-centered heart of smarter retail, smarter manufacturing, smarter cities, smarter healthcare, smarter finance, and beyond. Through edge and cloud computing, analytics and artificial intelligence, and Infrastructure-As-a-Service via TruScale, the ISG delivers Smarter Technology for All. Lenovo ISG is the only data center provider with end-to-end manufacturing. Lenovo owns the entire supply chain for everything it builds, delivering a level of security and seamlessness that no one else can, anywhere in the world.



-Lenovo Group: Full Year Financial Results 2020/21

# **Project Summary**

# **Project Summary**

Consumer expectations have never been greater within today's digital commerce landscape. Simply having the right product actively available through the right channels is no longer enough for retailers. Speed and choice are only part of the equation-today's consumers have higher standards for the quality of the experience being offered as well, seeking one-to-one service, expert advice and products that connect them to solutions and broader organizational goals. A successful direct-to-customer strategy for ISG should include a best-in-class UX that not only drives sales, but fosters long-term, one-on-one relationships with consumers.

To provide recommendations for improving ISG's UX, Rivers Agency has evaluated the user experience of lenovo.com/datacenter and reviewed how Lenovo's UX stacks up against 60 of the top grossing US and European e-commerce sites, Lenovo's competitors, HPE and Dell, and best practices from leading UX communities.



# **Project Findings**

All UX findings and associated recommendations will be presented in order of impact to the user (good, better, best) experience based on the following steps in the e-commerce funnel:

<b>1. Initial Reaction</b>	<b>3. Choose</b>
First impressions on product offerings and the	Information concerning the comparison and selection
overall look and feel of key pages throughout the	process of products available for purchase on
website	lenovo.com/datacenter
<b>2. Find</b>	<b>4. Buy</b>
Information on the browsing processes and steps	Information based on the steps and actions required to
involved in finding a product that met users' needs	add an item to a shopping cart or to confirm a purchase
and goals	on lenovo.com/datacenter

Т

# Business Assumption Summary

# **Business Assumption Summary**

### **Assumed Goals**

- Compete in an
   e-commerce market
- e-commerce will target SMB customers (<250 seats)</li>
- Lenovo.com will be used to drive overall brand awareness and top of funnel lead generation

### Main Goals

Organize website structure Make transactions easier Create trust with transparency Simplify the configuration process Guide users with personalized product recommendations Improve consumers' shopping experience Improve overall site experience Increase the credibility of the product and the brand Provide more opportunities to tell Lenovo's unique story Enhance the placement of educational and recommended content

### **KPIs**

Increase revenue (goal = 10% of Non CSP ISG revenue)

Encourage new and returning SMB customer engagement

Improve the conversion rate

Reduce bounce rate globally

Increase average session time

Decrease transfers to sales team online

# **Key Metrics**



2021 Lenovo Internal. All rights reserved.

11

# **Audience Demographics**

#### • Visitors by Company Size

	Unique	/isitors	Visits		Page V	ïews		% of Return Visits		Page Viev	vs / Visits			erage Time Spent on Site econds)	
Audiences Name Page: 1 / 3 > Rows: 5 1-5 of 11	Feb 18	↓ 10,562	Feb 18	59,393	Feb 18	May 18	321,882	Feb 18	1,030.24%	Feb 18	May 18	53.53	⊷ Fet	b 18 May 18 5,	5,932
1. DNB B2B Company Size> Micro: 1 - 4 Employees		<b>3,747</b> 35.5%		21,011 35.4%			128,781 40.0%		93.30%		6.1	3 11.4%		<b>617</b> 10	10.4%
2. DNB B2B Company Size> Large: > 2000 Employees		<b>2,284</b> 21.6%		12,192 20.5%			66,445 20.6%		93.20%		5.4	5 10.2%		564 9	9.5%
3. DNB B2B Company Size> Micro: 5 - 10 Employees		1,717 16.3%		10,003 16.8%			<b>52,332</b> 16.3%		93.81%		5.2	9.8%		575 9	9.7%
4. DNB B2B Company Size> Small: 11 - 20 Employees		<b>649</b> 6.1%		4,010 6.8%			18,872 5.9%		94.46%		4.7	1 8.8%		522 8	8.8%
5. DNB B2B Company Size> Medium: 51 - 100 Employees		<b>459</b> 4.3%		<b>2,552</b> 4.3%			<b>9,941</b> 3.1%		93.30%		3.9	0 7.3%		471 7	7.9%

# Lenovo's small business demographic is driving traffic and revenue:

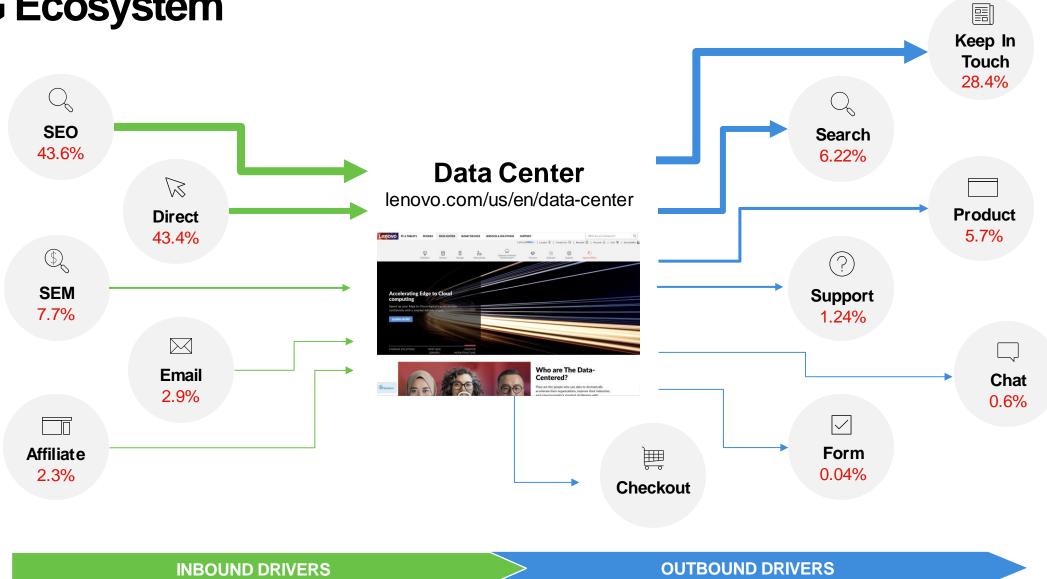
Return users, 93%, from companies with 1-4 employees make up the highest percent of traffic to the Data Center at 35.5% 63.3% of traffic is small to medium business

**50%** of traffic has less than 50 employees

5.05 average page views for businesses with 1-99 employees

On average, SMB visitors are spending 9 minutes on the site





# Traffic

# **Top Pages Overall**

1. Servers Bounce Rate	38.0% 28.92%
2. Rack Servers	22.0%
Bounce Rate	48.5%
3. Lenovo Home	19.0%
Bounce Rate	15.25%
4. Data Center Home	17.4%
Bounce Rate	28.39%
5. Tower Servers	14.0%
Bounce Rate	28.04%

## **Top Entry Pages**

1. Lenovo Home	16.2%
2. Servers	12.8%
3. Intel Servers	7.8%
4. Data Center Home	6.8%
5. Rack Servers	6.8%

### 60% of the top ten entry pages include server pages.

#### 2. Rack Servers 12.0% 3. DCSC 7.9%

**Top Exit Pages** 

1. Servers

server pages.

	1.070
4. ThinkSystem SE350	6.3%
5. Tower Servers	5.8%

**50%** of your top ten exit pages include

13.0%

i

Users are interested in server pages but a lack of information and buying process means users are also exiting from these pages.

# **User Behavior**

## New vs. Returning

Returning	86.6%
New	13.4%

## i

The majority of users are returning visitors. We need to create ways to engage first time users, help them create a plan for what they need and complete check-out more easily.

### **Channel Revenue**

1. SEO	\$2,440,228 / 59.0%
2. Affiliate	\$648,080 / 15.7%
3. SEM	\$423,588 / 10.2%
4. Direct	\$346,705 / 8.4%
5. Email	\$232,661 / 5.6%

## i

The top channel for revenue and entry is SEO. Direct Sales is the second ranking entry point but only contributes to 8.4% of revenue. Improving usability, content quality and product selection tools should improve the direct sales numbers.

# The Marketplace Landscape



# **Overview**

### **Market Size**

The US & EMEA market size for servers sold through eCommerce could total **~\$0.6-1Bn**, with the US sales in 2020 *totaling up to ~***\$500mn**- based on data triangulated from expert interviews and Analysis Mason's SMB forecaster data.

### **Lenovo Market Share**

1.4%

### **Key Players**

Main players are Dell and HP, with *Dell accounting for* ~0.3-0.5B and HP ~0.2-0.4B

### **Brand Competitors**

www.delltechnologies.com www.dell.com www.hpe.com



# **Introduction to SMB Personas**

A persona is a way to model, summarize and communicate information about people who have been observed or researched in some way.

The following personas are depicted as specific people, but they are not real individuals. They are a synthesized summary from existing research and observations of many people. By combining, remixing and editing Lenovo's existing knowledge, we've created a set of three characters to sum up the needs of Lenovo's core audiences. Each persona represents a significant portion of potential customers in the real world.



# **Meet Jade**



### "The Novice Buyer"

President, Artisanal Woodworking Company

#### 20 Employees

Buying stage = Awareness/Discovery

Technical Confidence = Low

## "We are growing so quickly and our needs are changing so fast, I am not sure how to support our goals."

### **Jade's Goals**

Jade's organization is a start-up and doesn't yet have a plan in place to address its future data and computing needs. Without a roadmap, Jade is caught in a situation that makes it difficult to respond to changing circumstances or take advantage of unexpected opportunities. Jade is working on hiring a CIO, but the company isn't large enough yet to make that work, so she needs to lead the technology decisions in this early stage. She needs to build out a data center in a way that is affordable now, but allows for maximum growth, and quickly. While IT is not the focus of her organization, it is necessary, and she will make the decisions now to go with a company that will offer maximum value to her organization now and in the future.

# **Meet Jade**



### "The Novice Buyer"

President, Artisanal Woodworking Company

#### 20 Employees

Buying stage = Awareness/Discovery

Technical Confidence = Low

### Questions

I think that I need a basic server, but I need to grow, what is best?

How do I know which server packages are relevant to my needs?

What is software licensing and how does it work?

I need help configuring AD and Exchange, who can I ask?

How quickly can I get my server?

What else do I need to purchase with my server?

What are the total costs?

What is the warranty/service on my server?

How can I pay for my server?

What other products are relevant to me?

I am frustrated, how do I get help?

### **Needs**

To understand the best options for her needs

To find help in making decisions

To understand the value of the product

To understand the advantages of a Lenovo server solution

To understand how to grow the data center in line with business needs

To get the help needed at the right times in the process from investigation through after-purchase support

## **Pain Points**

Determining the right server

Determining workload requirements and translating into a solution

# **Meet Lisa**



### "The Informed Buyer"

CEO, Small Manufacturing Company

50 Employees

Buying stage = Intent/Evaluation

Technical Confidence = Medium

## "We have a server that is reaching its end of life, and need a replacement."

### Lisa's Goals

Lisa's company is doing well, has been established for many years, and has a stable need for servers to run its manufacturing business and track inventory. The company is financially stable, but can only afford to make a large expenditure when required. Value and cost savings are very important, as IT/technology isn't the purpose of the company, but are needed to make everything run. Lisa is very interested in finding the right fit for moving to a new infrastructure, but needs help determining which servers are the appropriate replacements for the existing hardware, and would like to know if there is a better way to do what she is doing. She is comfortable enough with technology where the concepts are familiar, but she is not specifically aware of all of the options available.

# **Meet Lisa**



### "The Informed Buyer"

CEO, Small Manufacturing Company

50 Employees

Buying stage = Intent/Evaluation

Technical Confidence = Medium

### Questions

How fast can I have my hardware delivered?

What is the right replacement for my existing server?

What does Lenovo provide me over the competitors?

I need help migrating my server, who can I ask?

How has software licensing changed?

Can Lenovo help me find someone to help upgrade/migrate my ERP/inventory software?

Can Lenovo suggest new ideas for cost savings and efficiency in my workflow?

For my small order, can Lenovo pre-configure EFI to boot on my kickstart server?

What other Data Center products can Lenovo provide?

What are the total costs?

What is the warranty/service on my server?

How can I pay for my server?

### Needs

To understand the best options for her needs

To find help in migrating her existing workload to a new server

To understand the value of the product

To understand the advantages of a Lenovo Infrastructure solutions

To understand the advantages of the Lenovo after-purchase support

### **Pain Points**

Determining the right server

Provisioning and installing hardware post-purchase in the most efficient way possible

Migrating the existing data/configuration to the new server

# **Meet Dan**



### "The Power Buyer"

CTO, Medium Aerospace Company

90 Employees

Buying stage = Intent/Evaluation

Technical Confidence = High

# "We know our IT needs and are preparing for purchase."

### Dan's Goals

Dan's organization is a small Aerospace firm which subcontractors for Boeing. They are an established business that uses technology heavily and on a daily basis. The company is expanding and needs additional resources. Dan is a capable leader and has already done the needs analysis to determine the specific needs for his servers, some of which fall outside of the traditional Windows server. He is very well informed, and willing to purchase, but needs to understand what Lenovo brings to the table.

# **Meet Dan**



### "The Power Buyer"

CTO, Medium Aerospace Company

90 Employees

Buying stage = Intent/Evaluation

Technical Confidence = High

### Questions

How fast can I have my hardware delivered?

What is the best way to specify the configuration that I need?

What does Lenovo provide me over the competitors?

Can Lenovo provide servers that are configured for non-traditional OS/workloads?

For my small order, can Lenovo preconfigure EFI to boot on my kickstart server?

What other Data Center products can Lenovo provide?

What are the total costs?

What is the warranty/service on my server?

How can I pay for my server?

### **Needs**

To understand the fastest method of getting the equipment he needs

To find help in pre-configuring the hardware for fast deployments

To understand the value of the product

To understand the advantages of a Lenovo Infrastructure solutions

To understand the advantages of the Lenovo after-purchase support

### **Pain Points**

Configuring the set of equipment. Tools need to be able to handle multiple servers/configurations quickly

Provisioning and installing hardware post-purchase in the most efficient way possible

# **Competitive Analysis**

# **Competitive Overview**

Research based e-commerce benchmarks show that Lenovo's UX is not performing as well as it could be. Overall, the scoring indicates that many Lenovo users will struggle with navigation and understanding the information that is presented to them on the Data Center site.

Lenovo's highest traffic comes from micro-companies (1-4 seats). While it's possible to have expert users who are running those small companies, we can also make an assumption that a typical user's knowledge might not be as high as a larger size company or a company that's been in business longer. How information is presented and what information is presented are crucial tactics to supporting Lenovo Data Center customers along the spectrum of novice to expert.

Additionally, filtering and sorting capabilities are beneficial to product catalogs of any size; Lenovo's lack of functionality in these areas is not in the best interest for sales.

User journey data indicates that Lenovo workflows are not clear to users. Distributed functions (options in the top and bottom, left and right) in the current UX/UI can impact how easily both novice and expert users are able to navigate the site.

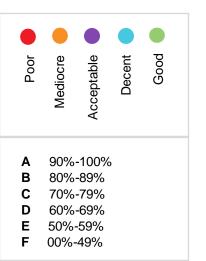
Heavy abandonment on category level pages shows users are not able to find and add a particular product to their cart or complete a purchase. Similarly, product configurator abandonment is quite high, indicating that those users who are ready to buy are not able to effectively allocate their needs and are leaving the site without completing a purchase.

When it comes to overall performance, both Lenovo and Dell score comparatively poor. It should be noted, however, that Dell's sites have a stronger performance than Lenovo when it comes to interface and hit areas. Additionally, Dell's brand recognition may be a factor in why its users continue through purchase paths despite the site's poor performance.

HPE shows the strongest performance among the competitors, with very high marks in how easily users can both scan and compare products. HPE also does a good job of presenting price information and context about how a product fits a user's needs upfront, before they get too deep into the details. It should be noted that HPE is the only site out of the three that offers any filter or sorting functionality, and Lenovo would benefit from looking to HPE for how filters can be implemented.

# **Competitive Analysis**

Company	Lenovo	DØLL	<b>D</b> &LLTechnologies	Hewlett Packard Enterprise
Differentiation		•		
Brand Credibility				٠
Clear Focus and Hierarchy		•		•
Compelling Content and Tools		•		
Intuitive Navigation		•		
Product Lists and Filtering		•	N/A	
Product Comparisons				
Rich Product Pages	•	•		
Clear Purchase Path				•
Featured Deals/Incentives	•	•	N/A	
Upsell/Cross-Sell/Bundle		•	N/A	
Product Configurator	•	•	N/A	•
<u>Checkout</u>	•	•	N/A	•
Customer-Focused				•
Trust and Support				
Overall Grade	F	E	F	С



None of the current sites are meeting the 'Good' standard in any of the categories reviewed. Based on this finding, overall grading is on a sliding scale.

Dell Technologies has many areas that are N/A because functionality is split between this site and Dell.com. If combined, Dell would have the highest grade, a "B", in the group.

# Observations

# Methodology

This audit was conducted as a heuristic evaluation of Lenovo, Dell and HPE based on findings from Baymard Institute's 42,000+ hours of structured large-scale e-commerce usability testing and benchmarking. This means the audit relies on indirect large-scale usability testing with more than 1,200 user sessions, large-scale eye-tracking studies, UX performance benchmarking, and quantitative studies to uncover general user behavior patterns in e-commerce as a whole, that also applies to Lenovo (rather than the traditional direct low-volume usability testing with 10-50 users at Lenovo).

Specifically, the sites have been audited and UX performance scored on the approximately 550 different site elements that Baymard currently has documented to consistently constitute a good e-commerce user experience. Baymard has benchmarked 60 top-grossing US and international e-commerce sites on the exact same 550 weighted parameters to allow for a direct UX performance comparison.

This audit includes identifying usability issues, scoring the site's user experience based on the identified issues, comparing performance and implementations of the competing sites, and lastly presenting suggestions for UX improvement for Lenovo.



# **Top 9 Suggestions for Overall Improvement**

- Utilize clear e-commerce calls to action throughout the site
- 2 Make product listings more visible on category pages and landing pages
- 3 Streamline navigation to make the site more intuitive for users
- 4 Include off-the-shelf products for customers who do not want customization
- 5 Simplify the configuration process for those who need to customize

- 6 Provide ways for users to narrow down the product catalog
- 7 Use context and messaging to tell users how to be successful with DC products
- 8 Provide an interface that encourages learning for levels of users
- 9 Enhance the "Why Lenovo" value proposition by telling more stories, increasing social proof, and including more impactful branding content

# Navigation



# **Navigation: Observations**

LenovoPROv         Locator ®         Contact Us IV         Account A         Cart IV       Account A         Ca	VO PC & TABLETS PHONE	S DATA CENTER SMART D	EVICES SERVICES & S	BOLUTIONS	SUPPORT	www.at are ye	ou looking for?
Solutions       Servers       Storage       Networking       Software-Defined       Services       Software       Support       Special Offers         Explore Servers       Blade Servers       Rack Servers       Options & Accessories       Figh-Density Servers       Options & Accessories       Tower Servers       To		Le	enovo <b>PRO</b>	Ontact Us     Ontact Us     Ontact      Ontact	စာ   Rewards ပို	ら   Account d	S   Cart 🐺 ACC
Explore Servers         Blade Servers       Rack Servers         Edge Servers       Options & Accessories         High-Density Servers       Tower Servers         Mission Critical Servers       View All Servers			Software-Defined	-	<u> </u>		~
Blade Servers     Rack Servers       Edge Servers     Options & Accessories       High-Density Servers     Tower Servers       Mission Critical Servers     View All Servers	Solutions Servers	Storage Networking	Infrastructure	Services	Software	Support	Special Offers
Edge Servers     Options & Accessories       High-Density Servers     Tower Servers       Mission Critical Servers     View All Servers	Explore Servers			A 4-	-		ter en se
High-Density Servers     Tower Servers       Mission Critical Servers     View All Servers   TOWER SERVERS RACK SERVERS	Blade Servers	Rack Servers	<u> </u>		-	A state	
Mission Critical Servers View All Servers TOWER SERVERS RACK SERVERS	Edge Servers	Options & Accessories				¥ 11	
	High-Density Servers	Tower Servers					
Customize and buy Customize and buy	Mission Critical Servers	View All Servers	100	TOWER SERV	'ERS	RA	CK SERVERS
			1. 19	Customize and I	μuy	Cu	stomize and buy

#### **Initial Reaction**

Lenovo's 'Data Center' label on the main navigation bar does not clearly convey the types of product categories offered (e.g., servers)

#### Recommendations

• Rename 'Data-Center' to a more product-focused label

#### Find

Sub-category labels are non-standard and the font is small/lacks visual weight. "Services & Solutions" and "Support" language is duplicated in the link labels of the main nav above, causing confusion about where to click for these important utilities. Search, a critical tool for users who already know what they want, is located too far away from Data Center navigation.

#### Recommendations

- Group sub-category options to make the navigation more intuitive/manageable
- Condense the Lenovo.com main navigation to a hidden nav or universal link once a user has entered the Data Center subsite
- Relocate Search and other key utilities to stand out more to Data Center customers

# **Navigation: Observations**

Solutions Servers Storage Networking	Lenovo <b>PRO √</b>   Locator ②   Contact Us ↔   Rewards ǚ   Account Å   Cart ੇ Acc Software-Defined Infrastructure Services Software Support Special Offers
Blade Servers Rack Servers	
Edge Servers Options & Accessories	
High-Density Servers Tower Servers	
Mission Critical Servers View All Servers	TOWER SERVERS RACK SERVERS
	Customize and buy Customize and buy

#### Choose

Heat mapping data shows users are most often selecting Servers in the Data Center sub navigation. Category landing page links (e.g. Explore Servers") are not interactive, making it impossible to access landing pages from the dropdown menu. Menu items lack hover and active states, making it difficult for users to visualize where they are.

#### Recommendations

- Make products category the first item in the sub navigation
- Add a hover state to category landing pages in the secondary nav
- Use active states to tell users 'where' the currently visible screen is located within the menu options

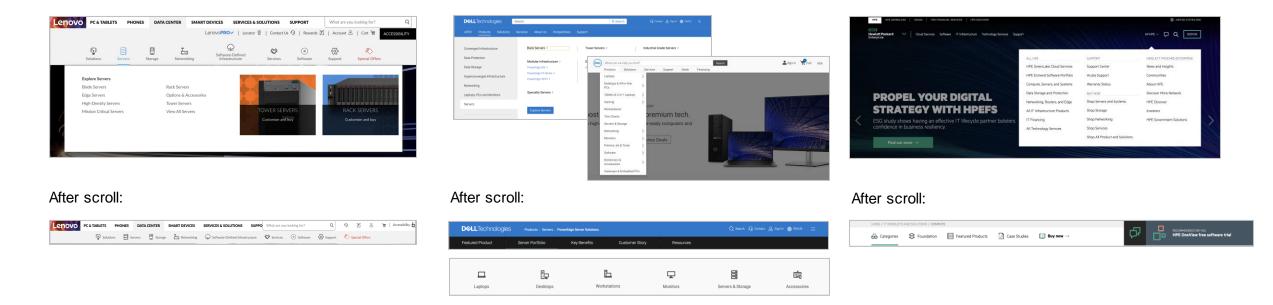
#### Buy

"Special Offers" is the only prompt to purchase in the sub navigation. Lack of contextual information makes it difficult for users to know what to click on. The Cart icon doesn't change to indicate when the user has added products.

#### Recommendations

- Consider replacing Special Offers in the subcategories with a benefits bar underneath the menu, allowing users to explore more than one offer at a time
- Include a product quantity next to the cart icon when items have been added to the cart

# **Navigation: Competitor Comparisons**



#### Lenovo

Lenovo's Data Center label in the main navigation may not be the clearest language compared to competitor sites. Small type and non-categorical labels in the sub navigation make it difficult to scan options quickly. Product category labels in the dropdown do not link and the lack of active states in the navigation make it too easy for users to stray from their intended paths. Lenovo gets the order of nav items wrong (Servers, the most trafficked pages of the site should be at the beginning) and fails to include contextual information to eliminate confusion for users.

### DØLL

Dell Technologies locates servers in "Products" in the top level nav structure. Mega menu shows deeper links for quick access to specific items but only on click which can be missed. Navigation is highly simplified after scroll. Product organization is by popularity (Rack servers first), rather than alphabetical.

Dell.com locates servers under "Products" as well but the two sites have different items listed under that label. Dell.com fails to expand its server options in its navigation for users to easily select a particular server category. After scrolling, the main navigation disappears displaying quick links on the homepage and nothing on interior pages.

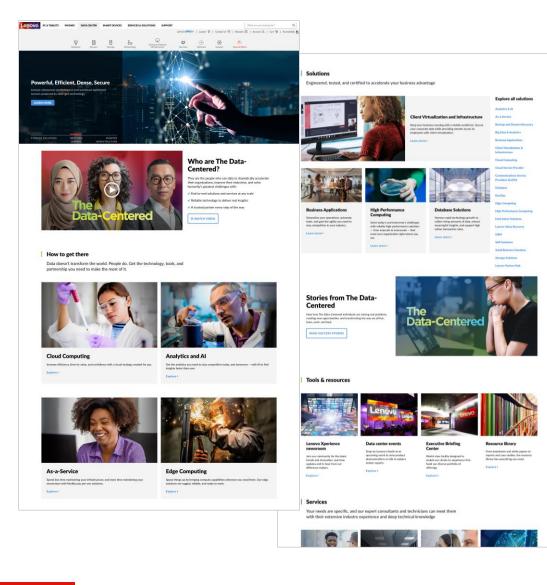


HPE locates servers under "IT Infrastructure." HPE does not include dropdown menus to help users reduce the number of clicks. Call to action language ("Buy Now") is persistent in a sticky subnav after you navigate to the "Servers" category page along with helpful utilities like "Case Studies" and "Sales Support." Main HPE nav disappears on scroll so as not to interfere with IT Infrastructure navigation.

# Homepage



# **Homepage: Observations**



#### **Initial Reaction**

Product finding is key to e-commerce, yet Lenovo's homepage doesn't reflect the site's product range (or any products at all). This leads to lack of awareness of e-commerce and a slower buying process for consumers. Branded content is presented visually like product category portals, instead of a powerful brand message. The homepage is missing the impact of engaging messaging about the company.

#### Recommendations

- Add key products to the homepage
- Include Lenovo value proposition or other explicit brand features to help consumers establish a positive opinion of Lenovo
- Add more bottom funnel content to page (e.g. customer reviews)

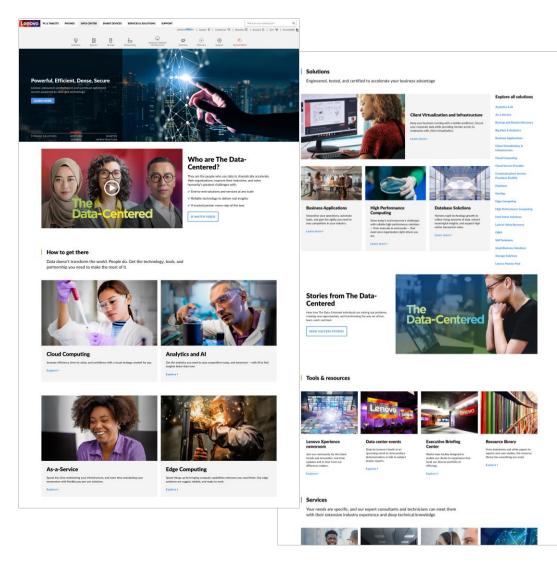
#### Find

Too much top-of-funnel content – content is not catered to multiple audiences. Lack of product on the webpage doesn't cater to site's purpose (e-commerce).

#### Recommendations

- Include main navigation categories directly on the homepage to promote quicker access to the product catalog
- Offer thematic or guided product browsing for novices (e.g. explore by use case, industry, etc.)
- Promote helpful product wizard on the homepage

### **Homepage: Observations**



### Choose

There is no information concerning the comparison and selection process of products available for purchase on the homepage.

### Recommendations

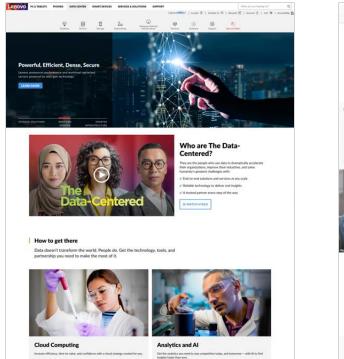
- Add a helpful product recommendation wizard to the homepage
- Showcase logos, star reviews or problem/solutions of clients who use Lenovo's products to make consumers more confident in purchasing products that have positive feedback from similar personas

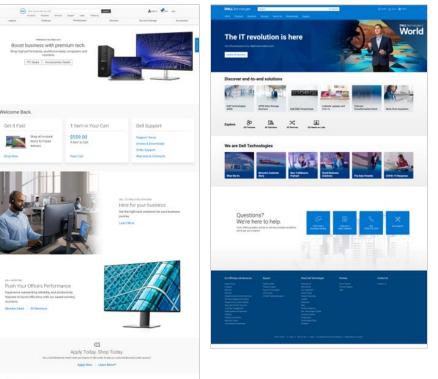
### Buy

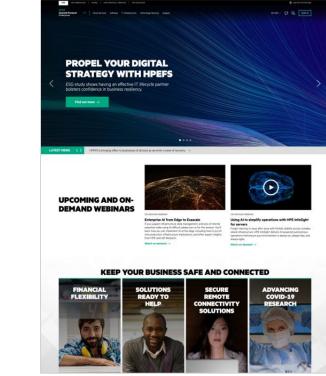
Buying calls to actions are completely missing from the homepage design.

- Add product shortcuts with clear "Buy Now" and "Customize" CTAs
- Feature a broad range of product types on the homepage

# **Homepage: Competitor Comparisons**







### Lenovo

Lenovo shows no evidence of selling online, lacks specific products and product categories and CTAs and utilities that help guide users to the right products. Vague marketing language lacks Lenovo value proposition.

### D¢LL

Dell Technologies' homepage provides slightly better access to products with fewer clicks, although the product catalog is only represented with a small icon versus a prominent place on the page. Help section content offers multiple pathways for novice users. "We are Dell Technologies" brand feature is included prominently on homepage.

The Dell.com homepage serves users content based on what a user has searched. If a user has shown interest in consumer products, servers do not appear on the homepage.

### Hewlett Packard Enterprise

HPE's educational features are more lower-funnel focused than Lenovo's or Dell's. Solutions are presented in problem/solution language to guide users. "How to Buy" CTA is prominent in the footer, but overall the page lacks CTAs to guide users to a specific product category quickly.

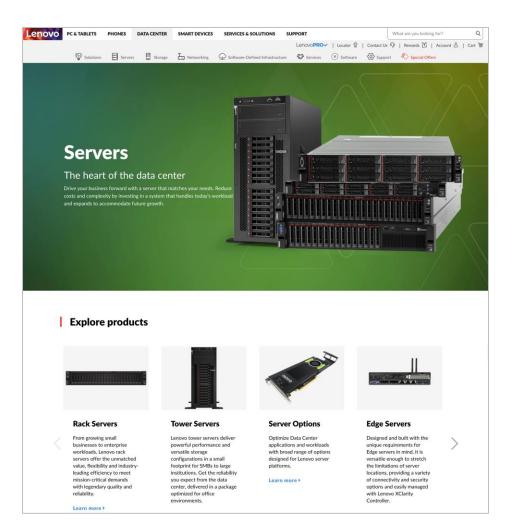
# **Product Landers**

2021 Lenovo Internal. All rights reserved.

39

### **Product Landers: Observations**

Servers, Storage, SDI, Software share same layout



### **Initial Reaction**

Highlighting product subcategories at top is good, however best practices say product landing pages need to also include individual product listings to help reduce the number of clicks. Top banner lacks call to action and takes up too much space. Learn content is good, but not easily accessible in accordions.

#### Recommendations

- · Shorten the hero so that users can get to the products more quickly
- Add featured product listings below the category highlights
- Show Learn information by default

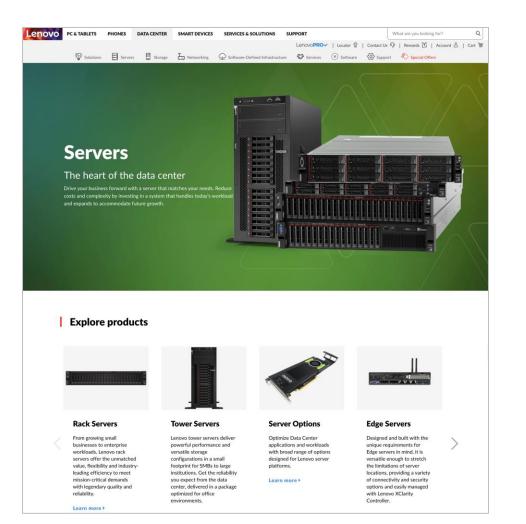
### Find

Users are overlooking the product subcategories hidden in the carousel. Crossselling is limited to Services and should include other product lines for users to navigate around within the Data Center.

- Display all product subcategories instead of using a carousel to reduce search time and number of clicks
- Include product wizard on the page to help users find which subcategories are relevant to them.

### **Product Landers: Observations**

Servers, Storage, SDI, Software share same layout



### Choose

Beyond the product listing in the carousel, there is little to no content or tools that helps a user make a choice on what product they need or is right for them. Content is not written in a user friendly way that helps guide the user.

### Recommendations

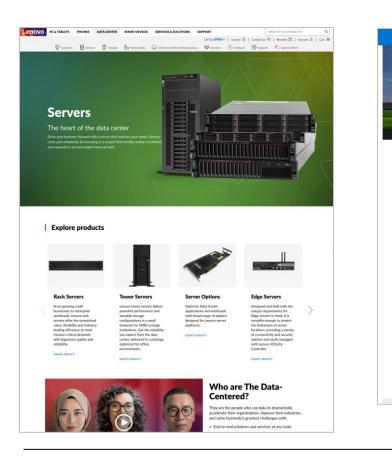
- Remove industry jargon and include language that guides the novice user to the correct product category
- Add product tags to products for quick scanning: performance, speed, memory, storage
- Display featured success studies directly on the page
- Create a path for users to access comparison tools

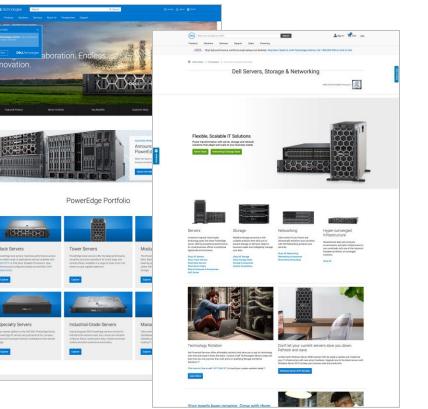
### Buy

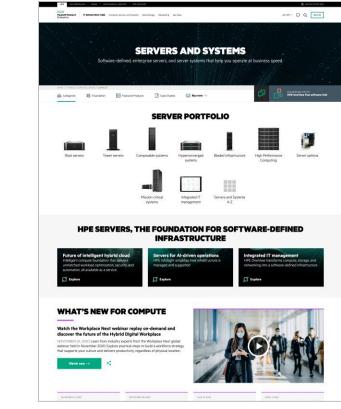
In Explore Products, only the linked content is a small, easy-to-miss CTA. There are no clear purchase CTAs on the page. Learn more links are too vague, leaving users to guess at where they might go next.

- Make entire card clickable
- Make server differences clear through content and different font
   weights so the user is confident in subcategory choice
- Update product CTA's to clear purchasing language, "Shop"
- Include new How to Buy content

### **Product Lander: Competitor Comparisons**







### Lenovo

Overall, the product is not featured enough on the Lenovo lander. Subcategories are represented, but the tall page hero blocks users from getting to them quicky. Carousel treatment of categories requires too much effort by the user, and content areas of those categories are not clickable. CTAs lack ecommerce "Shop" language and the page overall lacks information and tools to help users decide on what is best for them.

### D¢LL

In general, Dell Technologies tells a more complete subcategory story for users. Although they also have a tall hero, the sticky sub-navigation helps move users quickly down the page to featured products, all products, benefits and stories. Product category cards are more engaging but still lack direct buying CTAs. Conversely, Dell.com combines Servers and Storage onto one lander but does include "Shop" CTAs and buying guidance to help users better self-select.

### Hewlett Packard Enterprise

HPE's lander uses a short hero with a compelling value proposition to get users to subcategories quickly-however product subcategories lack any ecommerce CTAs. A single "Buy Now" CTA does appear in the page's sub-navigation, but it forces users go to a second landing page before they can reach a single-product page. The main lander does contain helpful content, product callouts and resources, but lacks organization making it confusing for users.

# Solutions



2021 Lenovo Internal. All rights reserved.

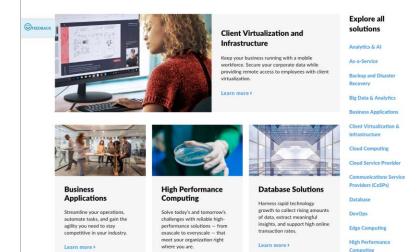
43

### **Solutions Lander: Observations**



### Accelerate your business advantage with solutions from Lenovo

We work closely with our software partners to provide you engineered, tested, and certified IT solutions that are high performance, scalable, and cost-effective.



### **Initial Reaction**

On entrance, the Solutions Lander appears to be a repeat of the data center homepage. There is no immediate call to action or way for users to easily scan to find the solution they need.

### Recommendations

- Add a sticky navigation so that users can jump to the category section they need to find their solution
- Show all solutions in product cards

### Find

If a user landed here from an organic search, there is good information but lacks categorization of solutions to guide the user.

#### Recommendations

 Recategorize solutions into type, use case, and industry so that users can self-identify

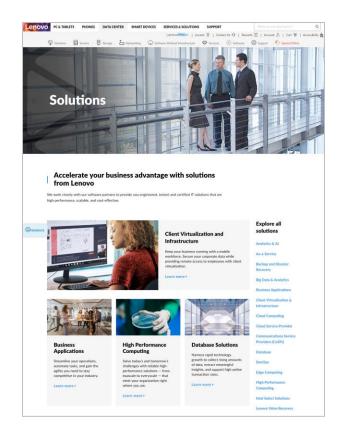
### Choose

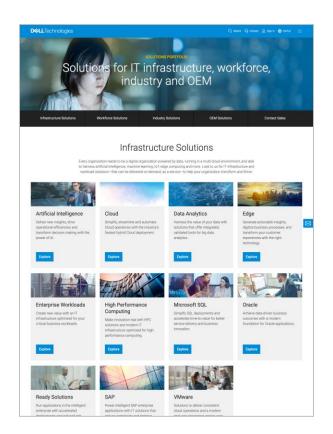
There is no evidence on the performance of the solutions offered by Lenovo; Internal survey results indicate this would be a huge gain in increasing trust.<sup>1</sup>

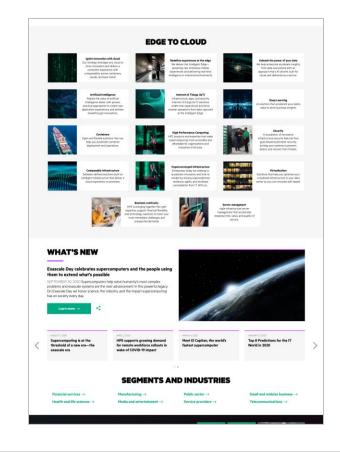
#### Recommendations

 Include testimonials that discuss the process, success and ease of working with Lenovo

## **Solutions Lander: Competitor Comparisons**







### Lenovo

Lenovos' content repeats from the Data Center homepage and it is unclear how the 4 large blocks of content differ from the list of solutions. A lack of categorization makes if difficult for the users to find what solution applies to them quickly.

### D¢LL

Dell Technologies showcases a lot of solutions which could be overwhelming for a first-time user, but information is well categorized and easy to consume. Users can easily use the sticky nav to jump to the section they identify with. Users coming from dell.com are redirected to the Dell Technologies page.



HPE does not have a separate Solutions page and instead includes this content combined with products directly on the homepage. It is easy to navigate service types and they allow users to self-select by industry.

# **SMB Solutions**



## **SMB Solutions: Observations**

#### LENOVO PC & TABLETS PHONES DATA CENTER SMART DEVICES SERVICES & SOLUTIONS SUPPORT Q Q X & W | Accession 🖗 Salasan 🗐 Serveri 🚦 Sanaya 🦾 herandang 📿 Salhane Defined Intestructure 🖤 Servers 🛞 Salhane 🛞 Salasert 🥀 Sanada Office Your business is built on its data Our technology enables small and medium-sized businesses to utilize and protect the data that drives growth. Small and midsized business Database managemen Data backup and recovery solutions Virtualized desktops Improve your small or medium-sized business's operational efficiency with virtual desktop solutions (VDI). Lenovo VDI solutions take the complexity out of making sure your business runs seamlessly Overview regardless of wherever your workforce may be located **Cutting-edge IT solutions for your** Citrix on ThinkAgile HX business Today's small to medium businesses demand a dynamic and efficient IT infrastructur We offer an open server, storage, networking and system management portfolio that lessly integrates with your environment to reduce your costs, protect the integrity of your vital data, and focus on the growth of your business. | Servers Benefits Tackle demanding workloads with cost-effective foundational server Providing for your business needs, whatever the size today - and solutions for your small business transformation. tomorrow red by Intel<sup>®</sup> Xeon<sup>®</sup> Scalab Empower and protect Focus on growth ThinkSystem ST250 Solutions that power any workload provides the perfor and reliability you o from the data certs **Business essentials** You need infrastructure solutions that can tackle anything you throw at it. From basic filing and printing, accounting applications and resource planning, to making sure your email can handle a mistaken "reply all" with a massive presentation file. Business productivity Email Software-Defined Infrastructure

business with Microsoft Exchange. Lenovo Thinklystem and Thinkligh servers provide a variety of platforms which allow easy scalability alen with high performance and lauded system reliability. rovide the robust base for highly reliable ness One, version for SAP HANA and

VMware Horizon on ThinkAgile VX

Simplify your IT environment to streamline your business operation

Ins is an attortuble, ingle-socket 1U rack erver for small and endourn businesses to end optimized enformance and ex06/ity for future rowth, along with steamting close social

### **Initial Reaction**

The language is written for a specific SMB audience, but the page aesthetic feels like Information overload for a novice or new audiences.

### Recommendations

- Add images to keep the user engaged and make content sections easier to scan
- Remove or condense content that isn't receiving clicks. Highlight product categories higher on the page and use accordions for secondary content
- Add better defined CTAs so users know what content is actionable •
- Add SMB customer success stories, testimonials to show that Lenovo is informed and committed to SMB customers and to add credibility and trustworthiness to the page
- Locate this page under new Learn navigation vs Solutions .

### Find

While helpful, the SMB overview and auxiliary information is improperly placed above sub-category content, distracting users from the primary goal (finding and choosing small business products). Without visible subcategories, users have a harder time gaining an overview of what is available and cannot as easily navigate to deeper content.

- Add clear subcategories
- Include filter-based paths below sub-categories
- Include product suggestions or bundles for SMB personas

## **SMB Solutions: Observations**

#### LETOVO PC & TABLETS PHONES DATA CENTER SMART DEVICES SERVICES & SOLUTIONS SUPPORT Q Q X & W | Accession 🖗 talatara 🗐 Savan 🚦 Savan 👗 Nanarding 💭 Saturar Defined integrature 🖤 Savans 🛞 Sature 🛞 Savant 🥀 Savant 📣 Savant Offen Your business is built on its data Our technology enables small and medium-sized businesses to utilize and protect the data that drives growth. Small and midsized business Database managemen solutions Virtualized desktops Overview regardless of wherever your workforce may be located **Cutting-edge IT solutions for your** Citrix on ThinkAgile HX business Today's small to medium businesses demand a dwamic and efficient IT infrastructur We offer an open server, storage, networking and system management portfolio that essly integrates with your environment to reduce your costs, protect the integrity of your vital data, and focus on the growth of your business. Servers Benefits Providing for your business needs, whatever the size today - and solutions for your small business transformation. tomorrow wered by Intel<sup>®</sup> Xeon<sup>®</sup> Scalabl Empower and protect Focus on growth ThinkSystem ThinkSysten ST50 ST250 Solutions that power any workload or small bosinesses, onse offices, retail, ack server. It is ideal for **Business essentials** You need infrastructure solutions that can tackle anything you throw

Data backup and recovery Improve your small or medium-sized business's operational efficiency with virtual desktop solutions (VDI). Lenovo VDI solutions take the complexity out of making sure your business runs seamlessly VMware Horizon on ThinkAgile VX Tackle demanding workloads with cost-effective foundational server A 40 lower server th provides the perform and reliability you exp from the data conter, delivered in a package optimized for office environments. this y an attordate, ingle-socket 1U rack enver for small and tedium businesses th veriformance and fexibility for future prooth, along with interprise-class reliabil

Software-Defined Infrastructure

Simplify your IT environment to streamline your business operations

### Choose

While the SMB page has a lot of content, it doesn't tell SMB users which products to buy for SMB needs.

### Recommendations

- Add descriptive product names vs. marketing labels for products
- Include suggested products alongside helpful use case content
- Allow customers to compare SMB products

### **Buy**

٠

SMB users are getting the impression that there are only a handful of products available. "Explore All" text links are not visually strong enough.

#### Recommendations

- Emphasize 'view all products' links by placing in a button
- Make it clear what product information and links go with which . product by designing clearer frames around product cards and linking the entire card to the product page
- Remove product carousels to reduce search time and number of . clicks
- Add clear e-commerce call-to-actions to the page ٠

Email

Bring state-of-the-art email and

business with Microsoft Exchange. Lenovo ThinkSystem and ThinkJagle servers provide a variety of platforms which allow easy scalability along with high performance and lauded system reliability.

at it. From basic filing and printing, accounting applications and

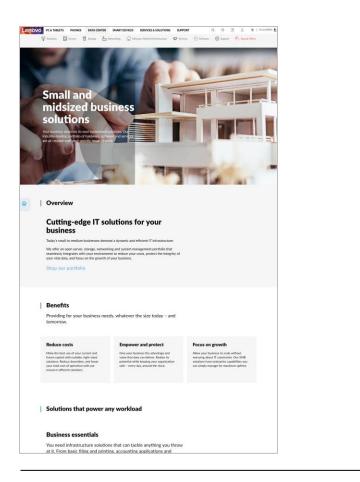
"reply all" with a massive presentation file.

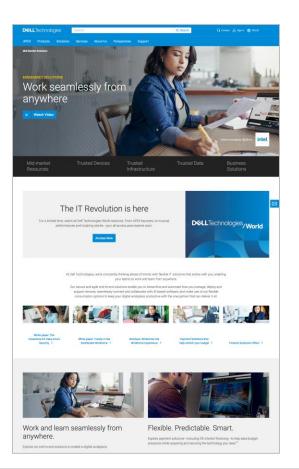
Business productivity

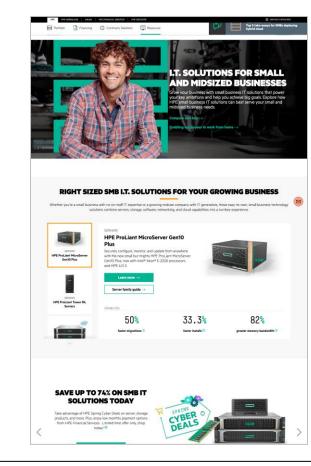
resource planning, to making sure your email can handle a mistaken

provide the robust base for highly reliable iness One, version for SAP HANA and

## **SMB Solutions: Competitor Comparisons**







### Lenovo

SMB Solutions doesn't feel inviting for users and overall lacks visual appeal. Extra-tall hero should be functional with CTA language. Page lacks bespoke imagery, particularly in an SMB context. Content areas are not well-defined and hard to scan and language on the page is too technical overall for SMB audience



Page content areas are broken up well, making the content easy for users to scan and keeping the user scrolling. Overall, Dell content is more engaging, showcases SMB products in use, and includes contextual imagery along with SMB learning resources.



HPE includes good e-commerce CTAs in the top hero. Helpful Sales Chat pop up anticipates high-touch needs for novice SMB customers. Interactive product selector helps guide SMB users to the right products. Robust product descriptions and problem/solution language help customers compare SMB options. 49

# Services



2021 Lenovo Internal. All rights reserved.

### **Services Lander: Observations**



#### Services

Explore +

Your needs are specific, and our expert consultants and technicians can meet them with their extensive industry experience and deep technical knowledge

Explore









TruScale

Services

Infrastructure

Enhance your ability to scale

Solution Services Implementation Design the best strategy for your enterprise. We'll work with you to find the right solution for your unique business needs. Implementation on revertence of the solution of the solution of the solution of your unique of the solution of the solution of the solution of your unique of the solution of th

Accelerate your time to productivity. Well help you streamline implementation of new technologies you can focus on your business. Safety and the dock - 24/7/365.

**Support Services** 



### **Initial Reaction**

"Solutions" and "Support" language for Services categories is duplicated in the link labels of the main nav above, yet the content associated with the labels is totally different.

#### Recommendations

Rename Services buckets to avoid confusion with Solutions categories

### Find

Page does have clear direction with the goal of helping customers seek out categories of services but it could benefit from additional content and more support tools.

#### Recommendations

- Use different font weights/sizes to highlight the self-identifying content in service cards
- Provide links to articles, guides and resources in the learn section that guides users and places Lenovo as a thought-leader in the IT Infrastructure space

Need more information?

Fill out this form so a Lenovo representative can contact you

### **Services Lander: Observations**



#### Services

Explore +

Your needs are specific, and our expert consultants and technicians can meet them with their extensive industry experience and deep technical knowledge

focus on your business.

Explore









TruScale

Services

Infrastructure

Enhance your ability to scale

Solution Services Implementation Design the best strategy for your enterprise. We'll work with you to find the right solution for your unique business needs. Services Implementation of productivity. We'll help you streamline implementation of new technologies so you can

Safeguard your IT investment. Our experts are standing by to help, around the world and around the clock - 24/7/365. can Explore >



Need more information?

Fill out this form so a Lenovo representative can contact you.

### Choose

Content on the page doesn't explain why a potential client should be using Lenovo.

#### Recommendations

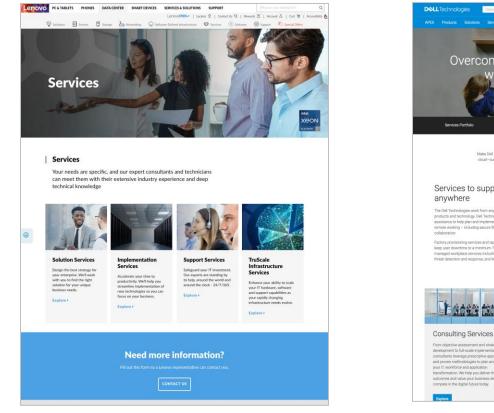
- Include testimonials that discuss the process, success and ease of working with Lenovo
- Add logos, awards and stats that differentiate Lenovo from competitors

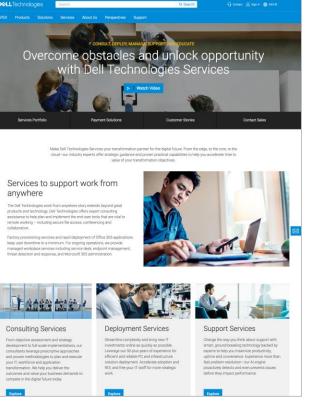
### Buy

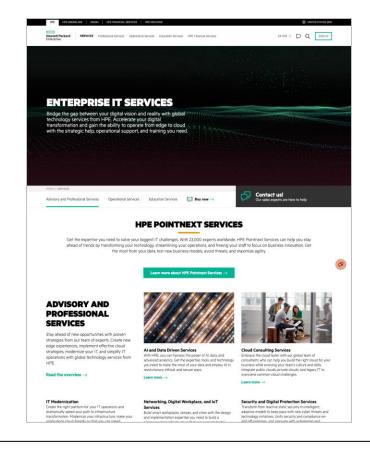
It's not directly clear what users next step should be if they would like to employ a service.

- Add content that is transparent about the process of signing up, what the user can expect to happen and when
- Make it easier for customers to inquire about services by providing multiple ways to connect or learn more

### **Services Lander: Competitor Comparisons**







### Lenovo

Lenovo has a clean page with clear direction to their service subcategories, however, the large hero slows users from getting to these subcategories quickly. It's not directly clear how a user gets or purchases these services from Lenovo.

### D¢LL

Dell Technologies engages users from the top of their page with interactive video content. Although there is a taller hero, the sticky sub-navigation above the fold allows uses to jump to the section they need. Clear content describes payment options and social proof of using their services through testimonials, awards and reviews.

### Hewlett Packard

HPE's sub-navigation provides clear directives, but too much content that may overwhelm a novice user. The page hero is too tall and delays users from relevant content. Ample resources are provided to help users learn more about HPE as a company. A "Buy Now" option is available in the navigation but can be confusing because all services are not available for purchase on the following page.

# **Product Lists & Filtering**

### **Product Lists: Observations**

101				~			~	~	-	
5	Solutions Server	rs 🖳 Storage	b Networking	GD Software-De	fined Infrastructure	Services	Software	🐼 Support	Special Offer	15
	Edge					11111				
	Mission-Critical	and the second second								
	Flex System Blades	Leno	VOPRO Small Busine	Call a Sm colution		ecialist for help n extra 5%off. (			in for free	
	High-Density	FO	Small Busine	:55 30101	ona, pius get a	nexua 3760n. C	.aii 000 420 0.		I Louis	
Ŧ	Storage	BEST	SELLER	BEST	SELLER	BEST	SELLER	BEST	SELLER	Ľ
Œ	Networking					-				
Ŧ	Software Defined In frastructure		States of the second							
ŧ	Software	ThinkSyst	tem SR250	ThinkSyste	m SR635	ThinkSyst	em SR650	ThinkSyst	tem SR665	
Ŧ	Solutions		1 SR250 is a single-	ThinkSystem SR63		Lenovo ThinkSyst		A 2P/2U rack set	rver powered by	
Ŧ	Services	socket compact to offers the power flexibility for the		rack server tuned database and scale defined storage		socket rack serve speed and expan- storage and I/O, a reliability for busi workloads.	sion, with flexible and industry #1	dual AMD EPYC CPUs.	<sup>™</sup> 7003 Series	
		Datasheet		Datasheet		Datasheet		Datasheet		
		Product Guid	le	Product Guide		Product Guide	1	Product Guid	le.	
		Starting at: After Inst	\$1,902.00 ant Savings:	Starting at: After Instar	\$5.134.00 nt Savings:	Starting at: After Insta	\$3,920.00	Starting at: After Inst	\$5,352.0 ant Savings:	0
		\$1.2	36.30	\$3.33	37.10	\$2.5	48.00	\$3.4	78.80	
		,	Coupon:	After eC			Coupon:	1 - 1 -	Coupon:	
		\$1,0	50.86	\$2,33	5.97	\$2,3	69.64	\$2,4	35.16	
		Savings:	\$851.14	Savings:	\$2,798.03	Savings:	\$1,550.36	Savings:	\$2,916.8	4
			Coupon: TION15	Use eCo SOLUTI			oupon: TION7		Coupon: TION30	
		View or	customize	View or c	ustomize	View or	customize	View or	customize	
		• Latest Intel® X		One AMD EPYC		• Up to 2 second		• Two AMD EPY	°C™ 7003 Series	
		<ul> <li>Up to 128GB T</li> </ul>	o 8 cores at 95W IruDDR4 memory	Series processor frequency tradin		Intel® Xeon® I processor		Up to 32x 128		
		at 2666MHz		mone		<ul> <li>Supports Intel®</li> </ul>	optane" DC.	3200MHz mer	nory	

### **Initial Reaction**

There is a lack of filtering, sorting, and comparison functionality. Final prices are hard to discern, making it difficult to efficiently scan cards. Cards are very long and scannability could be improved.

#### Recommendations

- Add a Compare check box to product cards to make it easier to highlight/distinguish differences between two or three product offerings
- · Adjust card layout to minimize white space and extra height
- Ensure the final purchase price is easy to discern by styling the price to be more prominent than discounts, old prices, etc.
- Add and stylize contextual guidance in product cards

### Find

Lenovo only allows for category filtering on the product list, which are not inclusive, resulting in the user only ever being able to see one category at a single time, with no ability to highlight items by other appropriate parameters.

- Include all list item attributes (bulleted specs) as filters on the left-hand column. Modify the current categories list into one sortable filter
- Add visual tags to products to indicate critical comparison data (e.g. Performance, Speed, Memory and Storage tags)

### **Product Lists: Observations**

ov		AND 10 10 10 10 10 10 10 10 10 10 10 10 10								
	Solutions Server	s 📱 Storage	🍐 Networking	♀ Software-De	efine-d Infrastructure	Services 🌣	Software	🐼 Support	Special Off	fers
	options & Accessories					11111				
N	Mission-Critical									
	Tex System Blades	Leno	VOPRO	Call a Sm		ecialist for help			in for free	
H	ligh-Density	For	Small Busine	soluti	ions, plus get a	n extra 5%off. (	.all 800-420-0	/11.		
<u>+</u> ۹	Storage	BEST	SELLER	BEST	SELLER	BEST	SELLER	BEST	SELLER	
•	Networking					1			-	
	oftware Defined In frastructure		States of the local division of the local di							
÷ 5	Software	ThinkSyst	tem SR250	ThinkSyste	em SR635	ThinkSyst	em SR650	ThinkSyst	em SR665	5
<u>ب</u>	Solutions		SR250 is a single-	ThinkSystem SR60		Lenovo ThinkSyst		A 2P/2U rack ser	ver powered by	
÷ 9	Services	offers the power		rack server tuned database and scale			sion, with flexible	dual AMD EPYC* CPUs.	* 7003 Series	
		flexibility for the	hybrid cloud.	defined storage		storage and I/O, a reliability for busi workloads.				
		Datasheet		Datasheet		Datasheet		Datasheet		
		Product Guid	e	Product Guide		Product Guide	e .	Product Guid	B.)	
		Starting at: After Inst	\$1,902.00 ant Savings:	Starting at: After insta	\$5.134.00 nt Savings:	Starting at: After Insta	\$3,920.00 ant Savings:	Starting at: After Insta	\$5,352. ant Savings:	00
		\$1.2	36.30	\$3.33	37.10	\$2.5	48.00	\$3.4	78.80	
			Coupon:	After et	Coupion:	After e	Coupon:		Coupon:	
		\$1,0	50.86	\$2,33	35.97	\$2,3	69.64	\$2,43	35.16	
		Savings:	\$851.14	Savings:	\$2,798.03	Savings:	\$1,550.36	Savings:	\$2,916.	.84
			Coupon: TION15	Use eC SOLUT			Coupon: TION7		Coupon: NON30	
		View or	customize	View or c	ustomize	View or	customize	View or	customize	
		• Latest Intel® X	(eon® E-2200	• One AMD EPYC	™ 7002 / 7003	• Up to 2 second	generation	• Two AMD EPY	C™ 7003 Series	
			o 8 cores at 95W	Series processor		Intel® Xeon® I	Platinum	processors		
		<ul> <li>Up to 128GB T at 2666MHz</li> </ul>	ruDDR4 memory	frequency tradir more	ig, analytics and	processor • Supports Intel®	ontana≌ DC	<ul> <li>Up to 32x 128/ 3200MHz men</li> </ul>		
		<ul> <li>Storage flexibil</li> </ul>		THUE		<ul> <li>antitious autero</li> </ul>	s optimile the	azuumni men	DALL L	

### Choose

Specs are presented inconsistently across bulleted list items, so users may have a difficult time comparing them.

### Recommendations

• Listing specs in bulleted lists is easy to scan, but the lists don't all follow the same pattern. Make the order consistent to assist with comparison

### Buy

The View or customize button makes the step to purchase vague.

### Recommendations

• Change the button to read "Buy"

## **Product Lists: Competitor Comparisons**

OVO PC & TABLETS	PHONES DATA CENTER SP	MART DEVICES SERVICES & SOL	UTIONS SUPPORT	y v b b
Solutions Serv	ers 🗄 Storage 🚡 Networking	Q Software-Defined Infrastructure	Services (i) Software	Support 🔊 Special Offers
Edge			1111111111	
Mission-Critical	STATISTICS IN CONTRACTOR		I have a local part of the second sec	
Flex System Blades	LenovoPRO	Call a Small Business Sp	pecialist for help with your data	
High-Density	For Small Busin	ess solutions, plus get a	n extra 5%off. Call 866-426-0	911.
	and the second states	and a second second second	and the second se	and the second sec
💽 Storage	BEST SELLER	BEST SELLER	BEST SELLER	BEST SELLER
Networking				
Software Defined In frastructure	No. of Concession, Name of	THE OWNER AND ADDRESS OF TAXABLE PARTY.		
🛨 Software	ThinkSystem SR250	ThinkSystem SR635	ThinkSystem SR650	ThinkSystem SR665
E Solutions	The ThinkSystem SR250 is a single-	ThinkSystem SR635 is a 1U/1P	Lenovo ThinkSystem SR650 is a 2-	A 2P/2U rack server powered by
+ Services	socket compact 1U rack server that offers the power, reliability, and	rack server tuned for virtualization, database and scale-out software-	socket rack server designed for speed and expansion, with flexible	dual AMD EPYC** 7003 Series CPUs.
C Services	flexibility for the hybrid cloud.	defined storage	storage and I/O, and industry #1	CI ON
			reliability for business-critical workloads.	
	Datashort	Datasheet	Datasheet	Dotasheet
	Product Guide	Product Guide	Product Guide	Product Guide
	Starting at: \$1,902.00 After Instant Savings:	Starting at: \$5.134.00 After Instant Savings:	Starting at: \$3,920.00 After Instant Savings:	Starting at: \$5,332.00 After Instant Savings:
	\$1,236.30	\$3.337.10	\$2,548.00	\$3,478,80
	After eCoupon:	After eCoupon:	After eCoupon:	After eCoupon:
	\$1,050.86	\$2,335.97	\$2,369.64	\$2,435.16
	Savings: \$851.14	Savings: \$2,798.03	Savings: \$1,550.36	Savings: \$2,916.84
	Use eCoupon:	Use eCouppr:	Use eCoupon:	Use eCoupon:
	SOLUTION15	SOLUTION30	SOLUTION7	SOLUTION30
	View or customize	View or customize	View or customize	View or customize
				Accession of the second s
	Latest Intel® Xeon® E-2200	One AMD EPYC™ 7002 / 7003	Up to 2 second-generation	Two AMD EPYC** 7003 Series
	processor up to 8 cores at 95W	Series processors ideal for high	Intel® Xeon® Platinum	processors
	<ul> <li>Up to 128GB TruDDR4 memory at 2666MHz</li> </ul>	frequency trading, analytics and more	processor Supports Intel® Optane** DC	<ul> <li>Up to 32x 128GB TruDDR4 3200MHz memory</li> </ul>
	Storage flexibility support for	Up to 16x 128G8 TruDDR4	Persistent Memory	Up to Bx PCle 4.0 slots for I/O

1-Socket (Supports 1 F			
One socket server portfolio providing balance	d performance and storage capacity for future	growth.	
i totalista		1 Set Made to Survey to 1	া কাক্সজনকাত
PowerEdge R240 Starting at \$599.00	PowerEdge R340 Starting at \$789.00	PowerEdge R6515 Starting at \$1,649.00	PowerEdge R7515
Starting at \$599.00	Starting at \$789.00	Starting at \$1,649.00	Starting at \$1,669.00
Increase performance, ability to scale, and simplify your IT with an entry-level 1U rack server designed for web hosting	Increase performance, ability to scale, and simplify IT with an entry-level 1U rack server designed for businesses with remote and branch offices	The Dell EMC PowerEdge R6515 is a single-socket 1U server designed to handle workloads like virtualization, HCI	The Dell EMC PowerEdge R7515 is a single-socket 2U server designed to handle workloads like software-defined
2-Socket (Supports up	to 2 Processors)		
	to 2 Processors) ures to maximize performance, scale to meet	future demands and adapt to virtually any wor	kload.
		future demands and adapt to virtually any wor	Koad.
		Nuture demands and adapt to virtually any wor	koud.
	ures to maximize performance, scale to meet		koad.
Two socket server portfolio with a mix of feat	ures to maximize performance, scale to meet	Mana -1	UND NOTO
Two socket server portfolio with a mix of feat	ures to maximize performance, scale to meet	PowerEdge R640	PowerEdge R7525

todels Features Specifications Additional Resources Services	
× Clear all filters Sort by: Name (ascending) ∨	1 - 5 of 5 items
Price     Under \$2,000 (5)	HPE ProLiant DL20 Gen10 E-2224 1P 16GB-U S100i 2LFF 290W PS Server
Reseller     TigerDirect (5)     Insight (2)	HPE ProLiant DL20 Gen10 performance server with one Intel Xeon E-2124 processor, 16 GB memory, two large form factor drive bays and a 290W power supply SXU# 21/079-821 Compare
Processor Speed     Family Brand	Show Spedification
<ul> <li>Ferm Factor</li> <li>Processors</li> <li>Generation</li> <li>Memory</li> <li>Processor Type</li> <li>Availability</li> </ul>	Fullind by TgerDirect ↓ \$859.99 ① As low as \$22/no with HFEFS g <sup>*</sup> Available Options Configure 6 Buy
Shopping Made Simple Cet reat-time prices, availability and special form on thousands of products.	HPE ProLiant DL20 Gen10 E-2224 1P 16GB-U S100i 4SFF S00W RPS Server HPE ProLiant DL20 Gen10 performance server with one Intel Xeon E-2136 processor, 16 GB memory, four small form factor drive bays and a S00W power upply SW # P17080-821 Compre
getting HPE Premium products and services at competitive market prices. Find What Best Sults Your Needs	Show Specification

### Lenovo

Filter types are virtually unavailable. Room for improvement in card layout and emphasizing final purchase price. Lenovo highlights some unique purchasing attributes within the product list to alert users to some features or benefits, but lists are not consistent.

### D¢LL

Dell uses a grid view to present their product list information, but do not provide sufficient product details to aid evaluation and comparison. Dell offers some tooltips and information for a few elements within the comparison tool, however not for very domain heavy information.

### Hewlett Packard Enterprise

HPE provides filters within an area of their product details page to help narrow down appropriate pre-configurations. HPE is the only site to provide sorting functionality. HPE is also the only site to offer a Compare check box directly on product cards.

# **Product Details Pages**

## **Product Details Pages: Observations**



### **Initial Reaction**

Layout is not expected for a product page, and user has to scroll all the way to the bottom to find pricing and purchase CTA. Images represented by indicators are likely to be overlooked, either unintentionally or because they lack the information scent needed to be deemed valuable by users. Without help, novice users can have a hard time making sense of industry-specific product aspects.

#### Recommendations

- Move pricing, primary features, model options, and CTA buttons to the top of the page
- Use thumbnails to represent additional images to enable users to quickly identify and expand the images pertinent to their needs
- Provide clarifying text (e.g., with tooltips) for difficult-to-understand product specifications

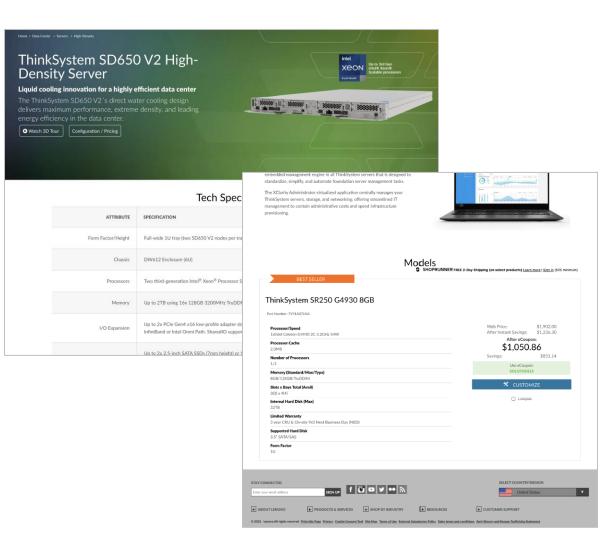
### Find

It can be highly complex to get an overview and locate products that are supplementary to the product currently being viewed.

#### Recommendations

Suggest supplementary products for users who may be looking for addons or accessories to the product they are currently viewing

## **Product Details Pages: Observations**



### Choose

Basic product warranty information may fall short for users who incorporate extended warranties and service support into their decision to buy a product. Users may be put off by the product's high price before they are made aware of financing options.

#### Recommendations

• Any information about available warranty, service upgrades and/or financing should be displayed directly on the product details page

### Buy

The Shop Now secondary buttons are styled similarly to the primary 'Customize' button. Once added to a user's cart, if users click on the product image in the cart they are taken back to a different but similar product page for the exact same product.

- Change the primary buttons to "Buy Now" and "Customize It"
- These buttons need a unique, high-contrast styling that isn't reused for other buttons in the interface.
- Eliminate duplicate product pages.

## **Product Details Pages: Competitor Comparisons**

ThinkSystem SD650 Density Server Liquid cooling innovation for a highly o The ThinkSystem SD650 V2's direct wa	fficient data center er cooling design	TECHNOLINY Shop high-performance	s Support Deals Financing a, workforce-ready laptops and desktops. Stop H Storage & Networking > Sinners > Powerdigs Ra	Now ( Speak to a Dell Technologies Advisor, ek Binners -> Powelsige R740	Inself Xean® Scalible Processors Compare	HF VERTICALE ADDA - LINE TRANSMERTICLE HER BROOTE      Here Line Control - ADDA - LINE TRANSMERTICLE HER BROOTE      Here Line Control - ADDA - LINE TRANSMERTICLE      HERE LINE CONTROL - ADDA - LINE CONTROL - ADDA - LINE TRANSMERTICLE      HERE LINE CONTROL - ADDA - LI	
delivers maximum performance, extreme energy efficiency in the data center. Vatch 3D Tour  Configuration / Pricing	density, and leading		SRO-FO	PowerEdge R740 Solate: 2-Socket (Supports up of 2-P Model: R740 28U Server (Intel) ~ Accelerate your applications Maintine application performance with compare power in a 12, socket platfor Starting at \$4,479.00 Ak leve ad \$150ms* with bel basiness cheft	ecessors) >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		Are you looking for a compact 1U server that supports workloads in a variety of environments? The <u>HPE ProLlant DL20 Gen10 server</u> delivers a compact and versatile server Show Mare QuickGress ~
ATTRIBUTE	SPECIFICATION		<b>360</b> *	Build and Price View Tech Specs			Starting at \$719.99 ①
Form Factor/Height	Full-wild: 1U tray (two 5D650 V2 nodes per tray, six per DW612 Endosure)		Configurations Tech Specs Product De	etails Reviews Drivers, Manuals & S	upport	Index may differ from actual product	As low as \$18/mo with HPEFS
Chassis	DW612 Enclosure (6U)						1
Processors	Two third-generation Intel <sup>®</sup> Xeon <sup>®</sup> Processor Scalable family CPUs per node; 2x nodes per 1U tray				1-4 of 5 Previous Next	+ Show More	
Memory	Up to 2TB using 16x 128GB 3200MHz TruDDR4 DIMMs per node	Compare	Compare	Compare	Compare	🔑 Solutions / Configure 🗮 Base Models 🚇 Features 😂 Addini	onal Resources 😵 Services
I/O Expansion	Up to 2x PCIe Gen4 x16 low-profile adapter slots (2x supported without internal storage) per node for HDR InfiniBand or Intel Onevi Path. SharedIO supported.			oc/IVER1000			
	Up to 2x 2.5-inch SATA SSDs (7mm heinht) or 1x 2.5-inch NVMe SSDs (15mm heinht) our node: up to 2x M 2					SELECT A SOLUTION / MODEL	
		Cookie Consent Edge R740 Rack	PowerEdge R740 Rack	PowerEdge R740 Rack	PowerEdge R740 Rack	Solution Bundles Configure My Own	

### Lenovo

Lenovo provides the user with a 3D tour feature, which includes a series of images (along with a 360 view). Layout is unlike a standard product page, making it difficult to understand that a purchase can be made here. Product images can be difficult for users to decode, in particular when trying to understand features or specifications. Users can be taken to two different product pages for the exact same product based on path they take.

### D¢LL

Dell's layout is a standard/expected product detail page with pricing and next step CTA at the top. Dell shows a delivery date clearly on their product details page to clearly communicate when users should be able to expect their product if purchased. Product videos showcase product features, provide scale and context, and offer educational content.

### Hewlett Packard Enterprise

Pricing and models are close to the top of the page. HPE includes warranty upgrades on the product details page itself, however the included warranty is not available in close proximity to this information. HPE provides supplementary cross-sells on the product details page, however they are relatively hidden behind an "Options" tab.

# Configurator



2021 Lenovo Internal. All rights reserved.

62

## **Configurator: Observations**

Lenovo	PC & TABLETS	PHONES	DATA CENTER	SMART DEVICES	SERVIC	ES & SOLUTI	ONS S	SUPPORT		Wh	at are you looking for?	Q
						Leno	vo <b>PRO</b> ~	Locator	Contact U	Is 🚱   Rewards 🗹	Account 💍   Cart 🖁	🗑   Accessibility 👌
	Solutions	Servers	Storage	Networking	♀ Software	-Defined Infra	structure	Services	(  Soft	tware 🔀 Support	Special Offers	
	Think	System	SR250 (	G4930 80	βB							
		ш	10		1		~	0	<b>O</b>	Search for Part	Q	
	Base	Processors	0	age OS & Software	PCI	-Œ	Others	Security Valu	Je Added	Summa	ary	
	4	1100033013					0.000	ocounty role		Web price:	\$1,823.00	
	★ Ba	0.00						Coll	apse All	After Instant Savin	Contraction and the second	
	থ UEFI Opera		Base							Coupon F		
										\$1,00	7.21	
			✓ Base ≑									
			Qty Descrip	otion				Price	e ⑦ \$	Add To C	Cart	
			ThinkS	stem SR250/SR150 3.5	5"x4			\$4	414.38	🕛 🗿 🛈 Config	uration Tree	
			Chassi	5						<ul> <li>ThinkSystem SR25</li> </ul>	0 - View Detail	
			O ThinkS	stem SR250 2.5" Chas	sis			\$4	\$28.19	Category	Quantity	
			I ThinkS	ystem SR250/SR150 3.5	5"x4 Chassis			SEL	ECTED	Base ThinkSystem SR250, 3.5"x4 Chassis	/SR150 1	
			<ul> <li>UEFI Operating</li> </ul>	Modes \$						Memory ThinkSystem 8GB Tr	ruDDR4 1	
			Qty Descrip	otion				Price	e ⑦ \$	2666MHz (1Rx8, 1.2) UDIMM		
			O Operat Mode"	ing mode selection for:	"Efficiency – Fa	woring Perform	nance	\$	80.00	Storage ThinkSystem SR250 SATA/SAS 4-Bay Bi		
			O Operat Mode'	ing mode selection for:	"Efficiency Fav	oring Power Sa	avings	\$	\$0.00	Kit Select Storage devic configured RAID req	uired	
			O Operat	ing mode selection for:	"Maximum Perl	ormance Mode	e"	\$	60.00	On Board SATA AHO PCI ThinkSystem SR250,		
			O Operat	ing mode selection for:	"Minimal Powe	Mode*		\$	60.00	x8/x8 PCle Riser Power		
								Collap	se All	ThinkSystem SR250, Fixed 300W PSU	/SR150 1	
										2.8m, 10A/100-250V IEC 320-C14 Rack F Cable		
										Others ThinkSystem SR250	Refresh 1	
										Motherboard		
										ThinkSystem SR250, Front VGA Connector		
										ThinkSystem Toolles Friction Rail v2	is 1	
										Security		
										Feature Enable TPM	1.2 1	
										Resource T	racker	

### **Initial Reaction**

Choices are present but overwhelming. There is an overall lack of language to guide users through the configuration process and novice users struggle to understand the choices. Configurator allows users to see price changes as they design their product, but lack of tool tips or other guiding language forces users to go outside of the configurator to find additional information.

#### Recommendations

- Provide base models with option to configure
- Display a 3D visual of the product that highlights each component as the user makes selections
- Reduce the number of steps a user has to take while still keeping tabs
- Redesign component steps and filter to make navigating the Configurator like a wizard that walks the user through the process and provides recommendations
- Include active states and a next button to progress users along the steps needed to be taken

### Find

No clear steps to indicate which specs are required for the configuration. Filtering options are closed by default, making them harder to discover and use.

- Only display required component selections, with a secondary option to make further selections for an expert user
- Redesign sidebar as filters and promote popular selections. Make options always visible and sticky when scrolling
- Consider implementing a sorting tool in addition to filtering

## **Configurator: Observations**

Lenovo	PC & TABLETS	PHONES	DATA CENTER	SMART DEVICES SE	RVICES & SOLUTI	ONS S	UPPORT		Wh	at are you looking for?	Q
					Leno	voPRO-	Locator 🕲	Contact U	s 🖓   Rewards 🕅	Account 💍   Cart	🐨   Accessibility ἑ
	Solutions	Servers Servers	Storage	En Networking Q So	tware-Defined Infra	structure	Services	(a) Soft	ware 🐼 Support	Special Offers	
	Thinks	System	SR250	G4930 8GB							
										Q	
		± ≣ ↓	,0000 000) 💿				<del>f</del>	and the second s			
	Base 🔥	Processors	Memory Sto	rage OS & Software PCI	A Power	Others	Ľ	alue Added	Summ	ary	
							c	ollapse All	Web price: After Instant Savin	\$1,823.00	
	🔭 Bas % UEFI Operati		Base						Coupon	Price:	
	w del r opada	ing modeo	✓ Base ≑						\$1,00	7.21	
			Qty Descr	iption			Pr	ice 🗇 🛊	Add To (	Cart	
				System SR250/SR150 3.5"x4					1	uration Tree	
			1 Chass	is				\$414.38	<ul> <li>ThinkSystem SR25</li> </ul>	i0 - View Detail	
			O Thinks	System SR250 2.5" Chassis				\$428.19	Category	Quantity	
			I Thinks	System SR250/SR150 3.5"x4 Chae	sis		S	ELECTED	Base ThinkSystem SR250 3.5"x4 Chassis	/SR150 1	
			<ul> <li>UEFI Operatin</li> </ul>	ng Modes ¢					Memory ThinkSystem 8GB T	ruDDR4 1	
			Qty Descr	iption			Pr	ice ⊘ 🕴	2666MHz (1Rx8, 1.2 UDIMM	V)	
			O Opera Mode	ting mode selection for: "Efficienc	y – Favoring Perforn	nance		\$0.00	Storage ThinkSystem SR250 SATA/SAS 4-Bay B Kit		
			O Opera Mode	ting mode selection for: "Efficienc "	y Favoring Power Sa	ivings		\$0.00	Select Storage devic configured RAID rec		
			O Opera	ting mode selection for: "Maximu	n Performance Mode	9"		\$0.00	On Board SATA AHO		
			O Opera	ting mode selection for: "Minimal	Power Mode*			\$0.00	ThinkSystem SR250 x8/x8 PCle Riser Power	/SR150 1	
							Coll	apse All	ThinkSystem SR250 Fixed 300W PSU	/SR150 1	
									2.8m, 10A/100-250 IEC 320-C14 Rack F Cable		
									Others ThinkSystem SR250	Refresh 1	
									Motherboard ThinkSystem SR250		
									Front VGA Connector ThinkSystem Toolles Friction Rail v2		
									Security Feature Enable TPM	1.2 1	
									Resource 1	racker	
									Hosoulua		

### Choose

Interface doesn't indicate when one step is finished and the next begins. Lack of helpful information and language makes it hard to make selections for all levels of users. No function for comparing configurations. Frequent errors occur due to options being shown to users that are not compatible based on a user's choices in previous steps.

#### Recommendations

- Include a next button or automatically move to the next step after a selection is made
- Add explanations and make current tool tips more apparent to help users understand how the options differ and assist in selection
- Consider allowing a user to save configurations and compare before getting to the cart or making it easier at the cart step
- Only provide compatible components based on previous user choices
- Make product drawings and datasheets easily accessible to users

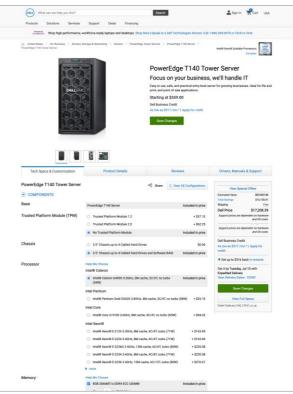
### Buy

Summary doesn't show users pricing for each component. No quick/easy way to just select basic configuration and move on.

- Provide common "base" configurations and provide clear explanations of differences to novice users
- Consider avoiding jargon and spelling out acronyms for novice users
- · Provide a way to compare multiple configurations before adding to cart
- Show pricing for each option in the "Configuration Tree"
- Provide easy and quick access to a customer service representative

# **Configurator: Competitor Comparisons**

& TABLETS P	HONES	DATA CENTER	SMART DEVICE	S SERVICES	& SOLUTIONS	SUPPORT			What are y	ou looking for?
					LenovoPRO	/   Locator 🗐	Contact Us		🗹   Accou	nt &   Cart )#
Solutions	Servers	D Storage	Networking	♀ Software-D	firved Infrastructure	Service	n () Softy	ware 🔗 Su	pport 🔊	Special Offers
ThinkSy	stem	SR250	G4930 80	GB						
_										Q
	m≞ ¤		<b>1</b>		a M	A	X			ų
	Cocessors	6	rage OS & Software	1	Power Others	<u> </u>	Value Added		Summary	
	00000010		inger of a become		Pone on or			Web price:		823.00
¥ Base		Base					Collapse All		nt Savings: \$1, upon Price:	
St UER Operating	Modes								007.2	
		✓ Base 5						_		_
		Qty Desci	speen System SR250/SR150 3	End.			Price 🗇 🕴	0	Add To Cart Configuration	
		1 Chase					\$414.38		m SR250 -	
		O Think	System SR250 2.5* Cha	eala			\$428.19	Category		Quantity
		1 Think	System SR250/SR150 3	5"x4 Chassis			SELECTED	Base ThinkSystem 3.5*x4 Chas	n SR250/SR150	31 C
		v UEFI Operati	ng Modes :					Memory	n 838 TruDDR4	1
		Qty Desc	liption				Price 🗇 🗄	2666MH2 (1 UDIMM	Rx8, 1.2V)	
		O Opera Mode	iting mode selection for	"Efficiency - Favo	ing Performance		\$0.00	Storage ThinkSystem SATA/SAS	n SR250 3.5" 4-Bay BP Cable	31.0
		O Operation	iting mode selection for *	"Efficiency Favorin	g Power Savings		\$0.00		ige devloes – no RAID required	e 90
		O Opera	iting mode selection for	Maximum Perform	ance Mode"		\$0.00	On Board S PCI	ATA AHCI Mode	
		O Oper	iting mode selection for	"Minimal Power M	ode"		\$0.00	ThinkSystem x8/x8 PCIe Power	n SR250/SR150 Riser	.1
							th weights		n SR250/SR150 PSU	1
								2.8m, 10A/1	00-250V, CT3 b 4 Rack Power	p 1
								Cable Others		
								ThirkSystem Motherboar	n SR250 Refresi d	5 J
								ThinkSystem	n SR250/SR150 Connector Kit	1
								ThinkSystem	n Toolless	1
								Friction Rail Security		
								Feature Ena	ble TPM 1.2	1
									source Tracker	





### Lenovo

Expert users have the ability to try many different options and see price changes reflected, but information isn't detailed enough to make selections. Novices need more – guided configuration options, out of box options, etc. Visual experience is not maximizing usability, functionality or ease of use.

### D¢LL

Dell's configurator opens with basic options pre-selected enabling users to add product to cart "as is" or scroll to customize. Not all configurations are included in standard view, but there is a button that allows users to view all. Dell suggests and displays available accessories during the configuration process. "Help Me Choose" tool tips are available throughout the experience, providing users with more detailed information and comparison functionality. Configurations options are also conveniently displayed directly on product detail pages.

### Hewlett Packard Enterprise

HPE's configurator is built directly into the product page instead of opening a new page. Interface allows users to easily reset or cancel configuration at any point in the process. Configuration summary is clear and simple to review and separates base package from configuration upgrades making the total pricing abundantly clear.

# Cart



2021 Lenovo Internal. All rights reserved.

66

### **Cart: Observations**

CONT PC & TABLETS PHONE	S DATA CENTER	SMART DEVICES	SERVICES & SOL	UTIONS SUPP	ORT			What are you looking f	or? Q
				LenovoP	RO~   Locator	r 🔋   Con	tact Us 😚   Reward	Is 앱   Account 옵   C	art 谢   Accessibility ;
Solutions	Servers 🖳 Storage	-Networking	♀ Software-De	fined Infrastructure	Services	Soft	ware 🛞 Support	R Special Offers	
Continue Shopping									
Hurry! Limited quantities. Iten	ns are not reserved until ch	eckout and may sell ou	it.						
Your eCoupon has been app	plied								
product 7D1X100GNA can	not apply the coupon S	OLUTION30							
Your Cart Save Cart   E	Delete Cart					Ne	ed help? Chat or call	1-855-2-LENOVO   Viev	Hours
ThinkSystem SR250 - 3yr Part Number: 7Y51A07LNA	Warranty				\$1,227.66	Or	der Subtotal	\$3,321.5	0
	Ships in more than 2 w	eeks					oupon:SOLUTION	15 -\$216.6	4
and the second se	View/Edit Specs ~			Save feel :	iter   Remove	Sh	ipping	FRE	E
	View/Edit Specs ~			Save for La	iter   Kentove		HOPRUNNER offe	rs FREE 2-Day Shipping & Fr gn in (\$25 minimum)	
ThinkSystem SE350 - 3yr Part Number: 7D1X100GNA	Warranty				\$1,877.20	E	stimated total:	\$3,104.8	6
	Ships in more than 2 w	eeks				Yo	u're saving	\$2,005.1	4
and the second second	- 1 $+$							/Teacher/Senior/Medical ponder Discount	
	View/Edit Specs ~			Save for La	iter   Remove		•	-	
								O TO CHECKOUT	
								in MyLenovo Rewards	
	VIEW IMPORTAN	T ORDER & LEGAL	INFORMATION				erver products do n information pl	ot earn rewards. For mor ease see our FAQs th Lenovo ID	e
							COLUMN STATE		
							See all fina	ncing options >	
							MS & CONDITIONS >		
						KNO	W YOUR PART NUM	BER? +	
							451.6	CT COUNTRY/REGION	
STAY CONNECTED Enter your email address St	ign up 🕇 🗑 🖻	A •• 9					SELE	United States	•
	ODUCTS & SERVICES	+ SHOP BY IND	USTRY	+ RESOURCES		+ cus	TOMER SUPPORT		
021 Lenovo.All rights reserved Print this Page Privat	cy. <u>Cookie Consent Tool</u> Site Mar	Terms of Use External Su	bmission Policy Sales ter	ms and conditions Anti-	Slavery and Human Tr	afficking Statem	ient		Now

### **Initial Reaction**

The cart is fairly clear and functional, however cart load time is slow and some basic design changes could greatly improve the experience. During some user tests, the main navigation of the site changed to PC & Tablets, making it confusing for users who use the cart for a "save" function or storage purposes while they continue to browse the site.

### Recommendations

- Maintain consistent top navigation inside cart
- Streamline alerts/errors by locating them next to the product or cart summary section they refer to
- Place more emphasis on the total price of individual items and the 'Estimated Total' in the cart summary
- Display each product as a separate item inside the cart to prevent users from adding multiple units to the cart by mistake
- Provide larger thumbnails to help users visually inspect items

### Find

The Cart icon in the courtesy navigation is the same color and weight of all of the other items, making it easy to miss. Icon doesn't update or indicate that you've added an item to the cart or show the current total number of items in the cart, Important details are organized poorly (example shipping time and shipping costs are located in two separate areas of the cart).

- Design the cart icon with more visual impact
- Include a product quantity number next to Cart icon
- Combine discounts, coupon and shipping information all together
- Expand the coupon section so the entry field is open and add explainer language for automatically-applied eCoupons
- Reorganize and redesign the bottom of the cart to optimize the usage of the space and increase the size of information in the cart

### **Cart: Observations**

Lenovo	РС	& TABLET	rs P	HONES	DATA	CENTER	SMART DEVICES	SERVICES & S	OLUTIONS	SUPPORT						W	nat are you look	ing for?	Q
									L	.enovo <b>PRO</b> v	/   Locator	Q	Contact U	Us 🕠	Rewards	Ϋ́ι	Account 💍	Cart 谢	Accessibility 🛓
		Q :	Solutions		Servers	🗒 Storag	e 🏝 Networking		-Defined Infras	tructure 🕻	Services	۲	Software	-22	Support	Æ	Special Offers		
	< Co	ntinue Sh	hopping																
	Hurr	y! Limited	l quantiti	es. Items a	ire not res	erved until cl	neckout and may sell o	out.											
	Your	eCoupor	n has be	en applie	d														
	prod	uct 7D1X	(100GN	IA canno	t apply tl	ne coupon S	OLUTION30												
	Your	Cart	Save Car	rt   Dek	te Cart								Need h	nelp? Ch	at or call 1	1-855-	2-LENOVO	View Hour	s
	<b>Thi</b> Part	nkSysten Number:	n SR250 7Y51A0	<b>) - 3yr W</b> 7lna	arranty					\$	1,227.66		Order	Subtot	al		\$3,3	21.50	
						nore than 2 v	veeks						eCoup Replace		UTION1	5	-\$2	16.64	
			-		View/Edi	t Snars v			s	ave for Later	Remove		Shippir	ng				FREE	
					VIEW/ Edi	Copieca -							S SHOI Retur	PRUNI rns <u>Learn</u>	NER offers	s FREE n in (\$2	2-Day Shipping 5 minimum)	& Free	
	<b>Thi</b> Part	nkSysten Number:	n SE350 7D1X10	<b>) - 3yr W</b> Ogna	arranty					\$	1,877.20		Estin	nated	total:		\$3,10	4.86	
					Ships in r	nore than 2 v	veeks						You're s	saving			\$2,0	005.14	
			/		⊡ 1	$\oplus$							<b>o</b> M		Students/ urse/Resp		er/Senior/Mec Discount	lical	
					View/Edi	t Specs ~			S	ave for Later	Remove		A				HECKOUT		
																	Prequalify		
					VIEW		NT ORDER & LEGA		N.				You	ı could	earn <b>\$0</b> i	n Myl	enovo Rewa rewards. For	rds	
							THORDER OF LEGA						Server	inform		ease se	e our FAQs	more	
															DEFECTION CONTRACTOR		VISA		
														See	all finan	cing	options >		
													TERMS &						
													SHOW C/						
													KNOW Y	OUR PA	ART NUME	3ER? +			
STAY CONNE	CTED														SELEC	TCOU	NTRY/REGION		
Enter your em	ail addre	is		SIGN	UP	f	a a ee y									U	nited States		•
ABOUT L				+ PROD			+ SHOP BY IN		+ RESO			_	CUSTOM	1ER SUPI	PORT				
021 Lenovo	o.All rights	reserved Pr	rint this Pag	e <u>Privacy</u> !	Cookie Cons	ent Tool Site Mi	an Terms of Use External S	Submission Policy Sales	s terms and condi	itions Anti-Slaver	x and Human Tra	fficking S	Statement						NOW

### Choose

Product specs should be organized in a way that facilitates comparisons, especially for users who typically store products in the cart during the browsing phase.<sup>1</sup>

### Recommendations

- Organize spec lists into buckets (Storage, Memory, Power, etc) so they are easier to scan and compare
- Include added price of each configuration spec in "View/Edit Specs" and ability to edit subcategory configurations

### Buy

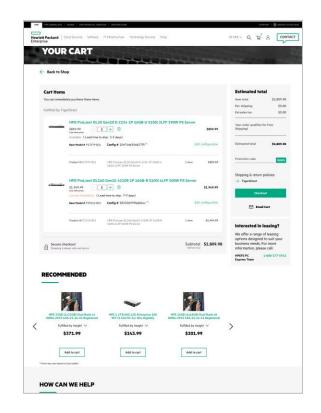
Lenovo is missing an opportunity to cross-sell items related to cart contents. There is currently no way to share cart contents with another decision-maker for approval.

- Include cross-sell section with related accessories. Adapt cross-sell suggestions and promotions strongly to the user's current context. Ensure cross-sells are styled as secondary content<sup>1</sup>
- Include links to print and email cart contents showing pricing and specs

### **Cart: Competitor Comparisons**

PC & TABLETS PHON	ES DATA CENTER	SMART DEVICES	SERVICES & SOL				What are you looking for
🖗 Solutions	🗄 Servers 🗒 Storag	r 占 Networking	♀ Software-D			Image: Contact Us     Image: Ima	
Continue Shopping							
Hurry! Limited quantities. Ite	ms are not reserved until cl	veckout and may sell out.					
Your eCoupon has been ap	plied						
product 7D1X100GNA car	mot apply the coupon S	IOLUTION30					
Your Cart Save Cart	Delete Cart					Need help? Chat or call 1	-855-2-LENOVO   View
ThinkSystem SR250 - 3y Part Number: 7Y51A07LNA	r Warranty				\$1,227.66	Order Subtotal	\$3,321.50
	Ships in more than 2 w	eeks				eCoupon:SOLUTION1 Replace eCoupon	5 -\$216.64
	View/Edit Specs ~			Save for L	ater   Remove	Shipping	FREE
						SHOPRUNNER offers Returns Learn more   Sig	FREE 2-Day Shipping & Free a.in (\$25 minimum)
ThinkSystem SE350 - 3y Part Number: 7D1X100GNA	r Warranty				\$1,877.20	Estimated total:	\$3,104.86
	Ships in more than 2 w	reeks				You're saving	\$2,005.14
and	⊖ 1 ⊕						Teacher/Senior/Medical onder Discount
	View/Edit Specs ~			Save for L	ater   Remove	/Nurse/Nesp	onder Discount
							TO CHECKOUT
						As low as \$87/r	month   Prequalify
	VIEW IMPORTAL	NT ORDER & LEGAL I	INFORMATION			Server products do no information ple	n MyLenovo Rewards t earn rewards. For more ase see our FAQs a Lenovo ID
						The second se	VISA
						See all finan	cing options >
						TERMS & CONDITIONS >	
						SHOW CART ID +	
						KNOW YOUR PART NUME	IER? +
CTED						SELEC	T COUNTRY/REGION
sal address	acn up 🕇 🛍 🖻	3 7 •• 2					United States
ENOVO 🛨 PF	IODUCTS & SERVICES	+ SHOP BY INDU	JSTRY	+ RESOURCES		+ CUSTOMER SUPPORT	
2.All rights reserved Print this Page Print							

Want free expedited shippi Item	ng? Create an account on the next page	Carl Sign-in to view sa	-		
ltern	ng? Create an account on the next page		ved carts		
ltern	ng? Create an account on the next page	to able source its own factors and			
		r to ship your items laster, re	ceive Dell Rewards for you	ar purchases and more!	
Denne		Quantity	Price	Coupons	
				Enter Coupon	Apply Cou
	PowerEdge T140 Tower Server Edt I Save for later	1 ~ Remove	\$889.00	Chat with an agent for additional hel	р.
	View full specs	Remove		\$625.00 Total Savings	
	➡ Hide savings			Subtotal (3 Items)	\$1,748.9
	Price includes 37% off through Dell Business.	Small	- \$330.00	Shipping	Fr
	Details			Tax based on 22040 Change Estimated Total	\$34. \$1,783.
	Save up to \$1000 off select Powerl servers with coupon*. Click here fo				
	Details			Checkout	
	Questions? Our Small Business Teo Advisors can help. Click to Chat	chnology		PayPal	
	Details No interest if paid in full within 90 c			Express Checkout	-
	PowerEdge servers!	lays on all			
	Details			Buy with G Pa	¥
	SonicWall TZ400 - Advanced	1 *	\$1,474.00	Continue Shopping	•
	Edition The savings			Save Cart   Email you	ur cart
Land and states	Limited Time Offer: Save \$295		- \$295.00		
Hi a House	Details			VISA 📥 📰 🔤	- 🧘 G Pay
				Online Banking	
				Visition Verified by 🔤 Si	afeKey-
	C2G 3ft Cat5e Snagless Unshielded (UTP)	1 ~	\$10.99	Learn more Learn	more
	7				
de la					



### Lenovo

Lenovo's cart includes versions of some best practice recommendations currently but adjusting the layout and hierarchy would help to score higher. Discounts, pricing and organization of specs are difficult to scan. Lenovo is missing opportunities for cross-selling. It's difficult for users to add and purchase related accessories when top navigation switches to PC & Tablets. Lenovo lacks functionality to send or share cart.

### DØLL

Dell.com provides a stepped process with cross-selling along the way, however multiple buttons make it hard for users to choose the next step. Product specs are better organized but could be grouped better for easy scanning. Discounts in pricing is featured well but chat and special promotions links within the pricing structure can be distracting to the user. After cart abandonment, homepage features a "Welcome Back" with reminder of your cart details upon return.

### Hewlett Packard Enterprise

HPE provides a drop-down cart view on hover over cart icon. The cart summary clearly shows upgrades with pricing but final pricing for each items can get lost. Users can easily go back to edit their configuration through a link and email their cart items to others, however the ability to save items for later is missing. The layout and hierarchy of sections allows users to clearly find what they need. A section for cross-selling is included for easy access to related items.

# Checkout



2021 Lenovo Internal. All rights reserved.

### **Checkout: Observations**

Secure Checkout					
(1)	2	3	(4)		
Shipping	Payment	Review	All done!		
			View Order Summary ~		
Ship times are estimates. Due to Covid-19	, expect possible shipment delays.	×			
Shipping to an APO? Do this first			Subtotal: \$1,061.91 Shipping: FREE		
Shipping Information			Total: \$1,061.91 You're saving \$860.09		
First name *	Last name *		0.0		
Lauren	Rivers		G Continue to Payment		
Address line 1* 601 W Rosemary St Unit 108	Address line 2		Don't miss out!		
Note: We do not ship to P.O. Boxes. City or Township *	State*		You could earn <b>\$0</b> in Rewards. Server products do not earn rewards. For		
Chapel Hill	North Carolina	·	more information please see our FAQs Login with Lenovo ID		
Zip Code" 27516-2354	Phone or Cell * 919932998	Home > Checkout Shipping & Payment	Login with Lenovo ID		
	Company	A Secure Check	out		
Ext.	Rivers Agence	•	0		
Email* lenovo@riversagency.com		Shipping	Payment	3 Review	4 All done!
Sign up for emails to get the scoop on discr product launches, and more. All information entered will be dealt with according to our Prh We are unable to ship orders to PO bases, hotels, freight forw outside of North America.	acy Policy	Ship times are estimates. D Shipping to an APO? Do this firm Shipping Information	ue to Covid-19, expect possible shipment delays.	X	View Order Summary Subtotal: \$1,061.91 Shipping: FREE Tax \$79.64
2. Shipping & Delivery		Lauren Rivers			Total:         \$1,141.55           You're saving         \$860.09
Ships in" indicates when an item will be picked up fi tandard delivery time is 2-5 days after it has left Le	rom Lenovo by UPS while novo. UPS policy requires	601 W Rosemary St Unit 108 Cl 9199329985 aglogic@riversagency.com	hapel Hill North Carolina 27516-2354 Rivers Age	incy	Continue to Review
ThinkSystem SR250 - 3yr Warranty hips in more than 6 weeks	Delivery Meth 4-5 Day Sta	Payment Method			Don't miss out! You could earn \$0 in Rewards.
		Card Payment	]		Server products do not earn rewards. For more information please see our FAQs Login with Lenovo ID
		For verification purposes, we wi	ill temporarily authorize your credit card(s) for up to \$1.00.1 Credit Card number*	'our card(s) will not be charged.	
		American Express	~		SHOW CART ID>
		Expiration date* (MM/YYYY)	Security code *		
		Month V Ye	ar ×		
		Cardholder Name*			

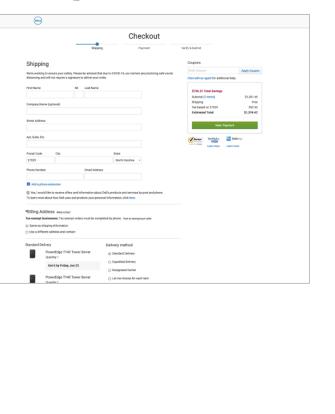
### **Initial Reaction**

Page flow is easy to understand and scoring is generally good for best practices, however interactions and layout could be improved for better user flow and optimal best practices. Page load needs to be optimized.

- Consider an initial step with two buttons: Checkout as Guest and Login/Create an Account
- Consider using a single primary column for form fields since users often skip fields in multiple columns
- Style progress buttons differently so users don't mistake them for the complete purchase button. Provide 'Back' button for navigating to previous checkout steps
- Support the browser 'Back' button for navigating to previous steps
- · Provide clear rollovers and hover states for process step links
- Add appropriate alert messages to specific sections when users try to jump ahead in steps
- Ensure steps within tabs are clearly numbered and labeled
- · Autodetect city and state immediately after zip code is provided
- Use in-line validation with advanced 'Live' logic
- Match the credit card field sequence to the physical card's information sequence
- Emphasize the security of credit card fields
- Include additional financing options offered on the initial cart page
- Include a space to Add Coupon in Order Summary box
- Provide separate 'Edit' links for all distinct information groups on the 'Review' tab
- Rename 'Web Price' to 'Starting Price' in the review summary for consistency based on references on other pages

## **Checkout: Competitor Comparisons**

Payment		Review EDIT CART	Subtotal:	All done!
		EDIT CART	Cubbatal	
			Subtotal:	\$3,749.20
			Shipping:	\$150.00
ThinkSystem SE350 - 3yr Warranty	Web price:	\$2.888.00	Тах:	\$292.44
Part Number: 7D1XCTO1WW	Instant Saving:	-\$1,010.80	Total:	\$4,191.64
Qty: 1	eCoupon	-\$563.16	You're saving	\$4,490.80
Ships in more than 2 weeks	SOLUTION30			
View All specs 🗸	Sale price:	\$1,314.04	Rep ID (Optional)	
			Notice:The Rep. Id should	be exactly 10 digits.
ThinkSystem SR665-3vr Warranty	Web price:	\$5.352.00		
Part Number: 7D2VCTO1WW	Instant Saving:	-\$1,873.20	By placing you order	
Qty: 1	eCoupon	-\$1,043.64		re over the age of 16.
Ships in more than 2 weeks	SOLUTION30			
View All specs 👻	Sale price:	\$2,435.16	Place Ye	our Order
NT				
			Please review your cart to	ensure the items are
Rivers Agency			your order is immediately	sent to be manufactured
	, North Carolina, 27516-23	54	to meet the estimated shi	p date.
			SHOW CARTIDA	
lenovo@riversagency.com			SHOW CARTID	
Bill Ryerson				
Rivers Agency				
601 W Rosemary St Unit 108, Chapel Hill, 9199329985	, North Carolina, 27516-23	54		
Configuration 100				
Credit card type visa Credit card number ending	155			
Expiration 2/2022				
Amount to be charged \$4,191.64				
	99gs in more than 2 weeks View All specs → ThickSystem SR655-Syr Warranty Part Number 702VCT01WW Oyr 1 99gs in more than 2 weeks View All specs → NT Bill Rymon Rivers Agency 601 W Roseman St Unit 108, Chapel Hill, 99g320985 lenoxol@riversagency.com Bill Rymon Rivers Agency 601 W Roseman St Unit 108, Chapel Hill, 99g320985 Credit card humber ending ************************************	94ga h more fau 2 weeks SOUTDONDO View Al specs → Sale price: ThickSystem SR65-3cy Warranty Web price: Part Number: 720×CTO1WW Instant Swing Ory: 1 SoutDONDO View Al specs → SoutDONDO View Al specs → SoutDONDO View Al specs → SoutDONDO Net Spece SoutDONDO Net Spece SoutDONDO Net Spece SoutDONDO SoutDONDO Net Spece SoutDONDO SoutDONDO Net Spece SoutDONDO SoutDO Sou	94ga h nove tha 2 veeds 94ge Al specs → Solu Price: \$1,314.04 ThickSystem SR65-Syr Warranty Part Numer 700x/C101WW Instant Swing: 41,872.30 41,872.30 41,872.30 41,972.40 41,972.4	Sigs in more than 2 weeks     SUL/TIONNO     Note All spects     Image: Superson 2 State Price:     S1,314.04       ThinkSystem SR645-5yr Warranty     Web price:     \$1,334.04     Image: State Price:     S1,314.04       ThinkSystem SR645-5yr Warranty     Web price:     \$1,334.04     Image: State Price:     S1,314.04       ThinkSystem SR645-5yr Warranty     Web price:     \$1,334.04     Image: State Price:     S1,314.04       Sigs in more than 2 weeks     SOLUTIONNO     \$1,043.04     Image: State Price:     S2,0435.16       WIT     Bill Reyron     Regree Agency 601 W Rosemary SL Unit 108, Chapel Hill, North Carolina, 27516-2354     Prace Ver Cart To-       Bill Reyron     Stosemary SL Unit 108, Chapel Hill, North Carolina, 27516-2354     Image: Store



Hewlett Packard Cloud Services Sol Enterprise		
CHECKOUT		
and the second s		Contraction of the second second
- Back to Cart		
Already a user? Sign in	1	
Sign in now. Sign in	1	Estimated Total
1 Shipping Address		Item total \$2,809.98 Ext.shipping \$0.00
County 1 United States		Est.shipping \$0.00 Est.sales Tax \$0.00
United States	<u> </u>	
786.7		Estimated total \$2,809.98
Title	~	Shipping & return policies:
First Name*	Last Name *	TigerDirect
Company	Attention to	
Address Line 1*		
Address Line 2 Coptional		
Address Cine 2 coprionau		
City *	Province* 🗸 Postol Cod	śe '
-		
Phone Number (optional)		
Enter email address *		
Create an HPE account		
Speed up the process for your next order	by creating an HPE account to save the information you've already entered.	Fields marked with *
	by creating an HPE account to save the information you've already entered.	Fields marked with *
Speed up the process for your next order	by creating an HPE account to save the information you've already entered. Report password	Fields marked with *
Speed up the process for your next order are required.		Field's marked with.*
Speed up the process for your next order are required.		Fields marked with *
Speed up the process for your next order are required.		Felds murked with *
Speed up the process for your next order are regulared.		Fable marked with."
Speed up the process for your next order are required.		Fable marked with."
Speed og the process for your next order of the process for your next order of the processord		Frields manhod with *
Speed up the process for your next order are regulared.		fruits sould a um*
Speed og the process for your next order of the process for your next order of the processord		Fridd swinds with *
Speed og the process for your next order of the process for your next order of the processord		Frields manded with *
Send on the process for your and order are required. Pressore Record Shipping Method		Frida sundad ann *
Service No possible for your and entering Pressore  Shipping Method  Payment Method  Payment Method		Frieds manded with *
Send on the process for your and order are required. Pressore Record Shipping Method		Fruits sould a um*

### Lenovo

Lenovo's checkout has some inherent positives, but overall lacks organization and visual hierarchy. The four step check out process is clear at the top of page but steps do not appear to be active links. Checkout load is slower than Dell.

### D¢LL

Dell's form fields don't indicate to users which fields are required and which are optional. Radio buttons for shipping options clearly indicate options to users. Multiple payment options are presented. CTA language clearly guides users to the next step in the checkout process.

### Hewlett Packard Enterprise

HPE presents one long checkout page vs. a tabbed/stepped process. Users must choose between guest or logged-in checkout upfront, but are prompted again during the first checkout step, delaying the purchase goal. Form fields are missing autodetection functionality. Checkout load time is considerably slower than both Dell and Lenovo.

## UX Audit and Recommendations

# **Good/Better/Best**



2021 Lenovo Internal. All rights reserved.

73

**UX** Audit and Recommendations

# Recommendations Sorted By Page/Section

Navigation	Good	Better	Best
1.1 Rename Data Center	•		
1.2 Create Active States for Mega Menu Items	٠		
1.3 Hide Main Lenovo Navigation Once Data Center Journey Starts		•	
1.4 Restructure Site Navigation/Add New Pages			٠
1.5 Create New Mega Menu Style			•
1.6 Move Cart, Search and Account to Sub Navigation			٠
1.7 Add Special Deals Bar Under Sub Navigation			٠

Universal items will be applied to many pages, e.g. Homepage, Product Lander, Solutions, Services, etc.

Universal	Good	Better	Best
2.1 Shorten Page Heroes	•		
2.2 Add e-Commerce Calls to Action	•		
2.3 Make Entire Product Cards Clickable	•		
2.4 Add More Products on More Pages	•		
2.5 Use Problem and Solution Messaging		•	
2.6 Provide Ways for Users to Narrow The Product Catalog Down		•	
2.7 Incorporate Resources		•	
2.8 Sell Through Stories		•	
2.9 Create A Module with Courtesy CTAs for Different Types of Support		•	
2.10 Showcase More Brand Content vs Marketing Content		•	
2.11 Add a Help-Me-Choose Wizard or Filtering Processes			•
2.12 Create a Module to Display Best Sellers, Featured and Popular Products			•
2.13 Add Sticky Nav for In-Page Navigation			•
2.14 Add Case Studies Module			•

See universal items for additional recommendations that may apply.

Homepage	Good	Better	Best
3.1 Prominently Feature Product Categories			•

# **PC Homepage**

4.1 Add Servers to Icon Navigation Module		
4.2 Implement User Tracking to Show a Server Ad in 3-Up Ad Section		•

# **Solutions**

5.1 Recategorize Into Type, Use Case and Industry		
*Recategorize for current content and in future for updated navigation	•	•

Services	Good	Better	Best
6.1 Rename Service Buckets	•		
6.2 Explain the Process of Signing Up			•

# **Success Stories**

7.1 Add More Small Business Case Studies	•	
7.2 Add Search and Filter Functionality to Main Page		•
7.3 Convert PDFs to HTML Pages		•

i See universal items for additional recommendations that may apply.

Product Landers	Good	Better	Best
8.1 Remove Carousel and Show All Products		•	
8.2 Guide Users to Comparison Tool			٠

# **Product Lists**

9.1 Add Contextual Guidance Messaging to Product Cards	•		
9.2 Add Ability to Tag By: Performance, Speed, Memory and Storage		٠	
9.3 List Attributes Consistently Visually		•	
9.4 Ensure Prices Are Clear in Product Cards		•	
9.5 Reduce White Space in Product Cards and Make Product List 3-Up		•	
9.6 Add Compare Option Check Box			٠
9.7 Implement Filters for Product Attributes			٠

Product Details	Good	Better	Best
10.1 Ensure the Primary Buttons are Styled in Unique and Prominent Ways	•		
10.2 Add Buy Now and Customize Buttons		٠	
10.3 Use Thumbnails to Represent Product Images		•	
10.4 Explain Industry-Specific Terminology in Product Specifications		٠	
10.5 Change Layout to Emphasize Price, Models and CTAs			•
10.6 Create and Highlight Out-of-Box Options vs Customization			•
10.7 Provide a Cross-Sell Section That Only Contains Supplementary Products			•
10.8 Display Warranty Upgrades and Financing Options			•
10.9 Eliminate Duplicate Product Pages	•		

# **Comparison Tool**

11.1 Create a Dedicated Page	•		
11.2 Provide Inline Help for Industry-Specific Specs		٠	
<b>11.3</b> Add the Ability to Add Products to the Compare Form Tool			•
11.4 Include the Ability to "Add to Cart"			•

Configurator	Good	Better	Best
12.1 Include Active States	•		
12.2 Redesign Filters		٠	
12.3 Provide Descriptive/Explainer Language for Steps		•	
12.4 Highlight and Use Tool Tips to Explain Jargon		٠	
12.5 Spell Out Acronyms		•	
12.6 Add Next Guidance Buttons		٠	
12.7 Display Required Component Selections First		•	
12.8 Make Data Sheets Available		•	
12.9 Reduce Number of Steps			•
12.10 Start with Base Models with Clear Explanations			•
12.11 Display a 3D Visual Showing Reference to Components Being Selected			•
12.12 Add Functionality for Configurator to Act as a Wizard with Guidance			•
12.13 Add a Sorting Tool			•
12.14 Only Provide Compatible Components Based on Previous Step Choices			•
12.15 Create a Way to Compare Multiple Configurations			•
12.16 Show Pricing for Each Option/Component in Order Summary			•

Cart	Good	Better	Best
13.1 Maintain Consistent Top Navigation Inside Cart	•		
13.2 Organize Specifications Lists Into Category Buckets	•		
13.3 Streamline Alerts By Locating Them To Appropriate Related Sections		•	
13.4 Place More Emphasis On The Total Pricing		•	
13.5 Provide Larger Thumbnails			•
<b>13.6</b> Include Added Price Of Each Configuration Spec In "View/Edit Specs" And Ability To Edit Subcategory Configurations			•
13.7 Include Cross-sell Section With Related Accessories			•
13.8 Include Links To Print And Email Cart Contents			٠
13.9 Design The Cart Navigation Icon With More Visual Impact			٠
13.10 Include A Product Quantity Number Next To Cart Icon			٠
13.11 Combine Discounts, Coupon And Shipping Information All Together			•
<b>13.12</b> Expand Coupon Section And Add Explainer Language For Automatically- applied Ecoupons			•
<b>13.13</b> Optimize Usage Of Space On Bottom Of Page To Increase Size Of Information			٠

Checkout	Good	Better	Best
14.1 Provide Clear Rollovers And Hover States For Process Step Links	•		
14.2 Style Buttons That Progress Users Forward In Steps Differently	•		
14.3 Ensure Steps Within Tabs Are Clearly Numbered And Labeled	•		
14.4 Rename 'Web Price' to 'Starting Price'	•		
14.5 Provide 'Back' Button For Navigating To Previous Checkout Steps		•	
14.6 Autodetect City And State After Zip Code Is Provided		•	
<b>14.7</b> Match The Credit Card Field Sequence To The Physical Card's Information Sequence		•	
<b>14.8</b> Add Appropriate Alert Messages To Specific Sections When Users Jump Ahead In Steps		٠	
14.9 Allow Users To Edit Individual Category Data Directly At The Review Step		•	
14.10 Use Single Primary Column For Form Fields			•
14.11 Provide Two Buttons: Checkout As Guest And Sign In			•
14.12 Include Additional Financing Options			•
14.13 Include Collapsed Add Coupon in Order Summary Box			•
14.14 Use In-Line Validation With Advanced Live Logic			•
14.15 Support The Browser 'Back' But For Navigating			•
14.16 Emphasize The Security of Credit Card Fields			•

**UX** Audit and Recommendations

# **Recommendations Sorted By Impact**

**Novol** 

# **Good Recommendations**

Navigation	1.1 Rename Data Center	Cart	13.1 Maintain Consistent Top Navigation Inside Cart
Navigation	1.2 Create Active States for Mega Menu Items	Cart	13.2 Organize Specifications Lists Into Category Buckets
Universal	2.1 Shorten Page Heroes	Checkout	14.1 Provide Clear Rollovers And Hover States For Process Step Links
Universal	2.2 Add e-Commerce Calls to Action	Checkout	14.2 Style Buttons That Progress Users Forward In Steps Differently
Universal	2.3 Make Entire Product Cards Clickable	Checkout	14.3 Ensure Steps Within Tabs Are Clearly Numbered And Labeled
Universal	2.4 Add More Products on More Pages	Checkout	14.4 Rename 'Web Price' to 'Starting Price'
Solutions	5.1 Recategorize Into Type, Use Case and Industry		
Services	6.1 Rename Service Buckets		
Success Stories	7.1 Add More Small Business Case Studies		
Product Lists	9.1 Add Contextual Guidance Messaging to Product Cards		
Product Details	<b>10.1</b> Ensure the Primary Buttons are Styled in Unique and Prominent Ways		
Product Details	10.9 Eliminate Duplicate Product Pages		
Comparison Tool	11.1 Create a Dedicated Page		
Configurator	12.1 Include Active States		

# **Better Recommendations**

Better recommendations are mutually inclusive with good recommendations.

Navigation	1.3 Hide Main Lenovo Navigation Once Data Center Journey Starts	Comparison Tool	11.2 Provide Inline Help for Industry-Specific Specs
Universal	2.5 Use Problem and Solution Messaging	Configurator	12.2 Redesign Filters
Universal	2.6 Provide Ways for Users to Narrow The Product Catalog Down	Configurator	12.3 Provide Descriptive/Explainer Language for Steps
Universal	2.7 Incorporate Resources	Configurator	12.4 Highlight and Use Tool Tips to Explain Jargon
Universal	2.8 Sell Through Stories	Configurator	12.5 Spell Out Acronyms
Universal	2.9 Create A Module with Courtesy CTAs for Different Types of Support	Configurator	12.6 Add Next Guidance Buttons
Universal	2.10 Showcase More Brand Content vs Marketing Content	Configurator	12.7 Display Required Component Selections First
PC Homepage	4.1 Add Servers to Icon Navigation Module	Configurator	12.8 Make Data Sheets Available
Product Landers	8.1 Remove Carousel and Show All Products	Cart	<b>13.3</b> Streamline Alerts By Locating Them To Appropriate Related Sections
Product Lists	9.2 Add Ability to Tag By: Performance, Speed, Memory and Storage	Cart	13.4 Place More Emphasis On The Total Pricing
Product Lists	9.3 List Attributes Consistently Visually	Checkout	<b>14.5</b> Provide 'Back' Button For Navigating To Previous Checkout Steps
Product Lists	9.4 Ensure Prices Are Clear in Product Cards	Checkout	<b>14.6</b> Autodetect City And State After Zip Code Is Provided
Product Lists	9.5 Reduce White Space in Product Cards and Make Product List 3-Up		<b>14.7</b> Match The Credit Card Field Sequence To The
Product Details	10.2 Add Buy Now and Customize Buttons	Checkout	Physical Card's Information Sequence
Product Details	10.3 Use Thumbnails to Represent Product Images	Checkout	<b>14.8</b> Add Appropriate Alert Messages To Specific Sections When Users Jump Ahead In Steps
Product Details	10.4 Explain Industry-Specific Terminology in Product Specifications	Checkout	<b>14.9</b> Allow Users To Edit Individual Category Data Directly At The Review Step

Lenovo 2021 Lenovo Internal. All rights reserved.

# **Best Recommendations**

Best recommendations are mutually inclusive with good and better recommendations.

Navigation	1.4 Restructure Site Navigation/Add New Pages	Product Lists	9.6 Add Compare Option Check Box
Navigation	1.5 Create New Mega Menu Style	Product Lists	9.7 Implement Filters for Product Attributes
Navigation	1.6 Move Cart, Search and Account to Sub Navigation	Product Details	10.5 Change Layout to Emphasize Price, Models and CTAs
Navigation	1.7 Add Special Deals Bar Under Sub Navigation	Product Details	10.6 Create and Highlight Out-of-Box Options vs Customization
Universal	2.11 Add a Help-Me-Choose Wizard or Filtering Processes	Product Details	<b>10.7</b> Provide a Cross-Sell Section That Only Contains Supplementary Products
Universal	<b>2.12</b> Create a Module to Display Best Sellers, Featured and Popular Products	Product Details	10.8 Display Warranty Upgrades and Financing Options
Universal	2.13 Add Sticky Nav for In-Page Navigation	Comparison Tool	<b>11.3</b> Add the Ability to Add Products to the Compare Form Tool
Universal	2.14 Add Case Studies Module	Comparison Tool	<b>11.4</b> Include the Ability to "Add to Cart"
Homepage	3.1 Prominently Feature Product Categories	Configurator	12.9 Reduce Number of Steps
PC Homepage	<b>4.2</b> Implement User Tracking to Show a Server Ad in 3-Up Ad Section	Configurator	12.10 Start with Base Models with Clear Explanations
Solutions	5.1 Recategorize Into Type, Use Case and Industry	Configurator	<b>12.11</b> Display a 3D Visual Showing Reference to Components Being Selected
Services	6.2 Explain the Process of Signing Up	Configurator	<b>12.12</b> Add Functionality for Configurator to Act as a Wizard with Guidance
Success Stories	7.2 Add Search and Filter Functionality to Main Page	Configurator	12.13 Add a Sorting Tool
Success Stories	7.3 Convert PDFs to HTML Pages	Configurator	<b>12.14</b> Only Provide Compatible Components Based on Previous Step Choices
Product Landers	8.2 Guide Users to Comparison Tool	Configurator	<b>12.15</b> Create a Way to Compare Multiple Configurations
Lenovo 2021 Lenovo	Internal. All rights reserved.	Configurator	<b>12.16</b> Show Pricing for Each Option/Component

# **Best Recommendations**

Best recommendations are mutually inclusive with good and better recommendations.

13.5 Provide Larger Thumbnails
<b>13.6</b> Include Added Price Of Each Configuration Spec In "View/Edit Specs" And Ability To Edit Subcategory Configurations
13.7 Include Cross-sell Section With Related Accessories
13.8 Include Links To Print And Email Cart Contents
13.9 Design The Cart Navigation Icon With More Visual Impact
13.10 Include A Product Quantity Number Next To Cart Icon
<b>13.11</b> Combine Discounts, Coupon And Shipping Information All Together
<b>13.12</b> Expand Coupon Section And Add Explainer Language For Automatically-applied Ecoupons
<b>13.13</b> Optimize Usage Of Space On Bottom Of Page To Increase Size Of Information
14.10 Use Single Primary Column For Form Fields
14.11 Provide Two Buttons: Checkout As Guest And Sign In
14.12 Include Additional Financing Options
14.13 Include Collapsed Add Coupon in Order Summary Box

Checkout	14.14 Use In-Line Validation With Advanced Live Logic
Checkout	14.15 Support The Browser 'Back' But For Navigating
Checkout	14.16 Emphasize The Security of Credit Card Fields

UX Audit and Recommendations

# Expanded Recommendations



**UX** Audit and Recommendations

# 1. Navigation



2021 Lenovo Internal. All rights reserved.

# Rename Data Center

Impact



**1.1** "IT Infrastructure" encompasses all the products and services Lenovo offers and is also a common navigation label used by competitors.

### Issue Solved:

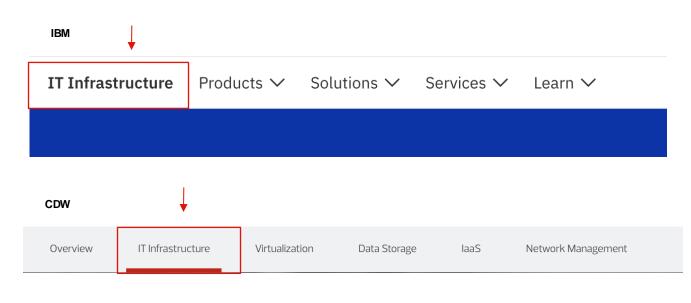
Lenovo's 'Data Center' label on the main navigation bar does not clearly convey the types of product categories offered (e.g., servers). Data Center gives the impression of a Learning or Resource library.

### DELL TECHNOLOGIES

Products engineered to help you realize your digital future.

Start your transformation and <u>realize your future</u> as a digital organization. Modernize with IT infrastructure that takes you to the next level and give your workforce the power to perform their best.

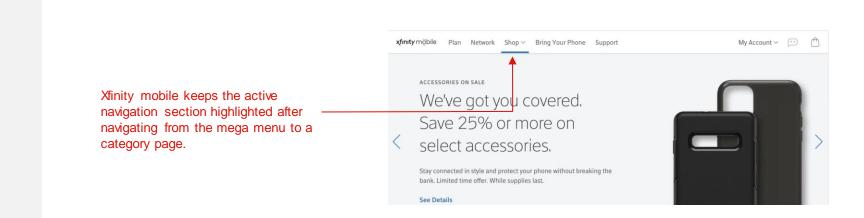
Dell.com uses Data Center which links to Dell Technologies. From there, all references are to IT Infrastructure, not Data Center.



### HITACHI



# Create Hover and Active States for Mega Menu Items



â Mac iPhone Watch Music Support ŕ OS IPad ea 11 iPad Pro iPad Air iPad iPad mini Compare Apple Pencil Keyboards AirPods iPadOS Accessories دلهم New

Apple's top navigation highlights the active category and the sub categories appear below with clear hover states

Impact

Good

**1.2** Use active states to change the appearance of a link when hovered on, clicked or active.

### Issue Solved:

Users are not able to visualize current page links in the navigation or dropdown menus. Additionally, product landing page labels ("Explore Servers") are not linked, forcing users back to the main navigation to access that link. HPE's top navigation shows an underline for hover and active states. Secondary navigation titles change and sub-sections are also highlighted.



# Hide Main Lenovo Navigation Once Data Center Journey Starts

Impact



**1.3** Control what users see in the navigation once they start a Data Center journey by hiding or minimizing the full site navigation.

### Issue Solved:

'Services & Solutions' and 'Support' language is duplicated in the link labels of the main nav above, causing confusion about where to click for these important utilities.

### IBM's main navigation disappears once you've selected IT Infrastructure

M			Search Q
frastructure Products $\checkmark$ Solutions $\checkmark$ Ser	vices 🗸 Learn 🗸	+	
Services	Assembly and Test Services	Client Experience Centers	Lab Services
Services	Assembly and Test Services Assembly and Test Services from IBM are	Client Experience Centers Located around the world, IBM Client	
Services		· ·	Lab Services

### HPE's main navigation disappears on scroll once a user has selected from the primary navigation

#### BEFORE SCROLL:

Hewlett Packard Enterprise		Wh	y HPE Product	s Support	Contact			Q	
PRODUCTS	Overview Clo	d Compute	Data Storage	Networking	Software	Services	BUY NOW >		

### AFTER SCROLL:



# Overview Cloud Compute Data Storage Networking Software Services BUY NOW >

# HPE SERVICES AND SOLUTIONS

# Restructure Site Navigation/ Add New Pages

### Impact

Best

**1.4** Group similar navigation items under shared categories to help increase scannability. Use labels that help accentuate the purpose of the subcategory.

Issue Solved: Category and subcategory labels are non-standard.

## Recommended new associative navigation for IT Infrastructure:

## IT Infrastructure (old Data Center in nav)

Products Servers Storage Lenovo ThinkAgile Networking Software All Products

One place for users to view all.

## Learn

SMB Playbook Success Stories Lenovo Partner Hub Lenovo Press Forum Blog

## ♦

Create a dedicated education tab for users with content and links to help users learn more. Solutions High-Performance Computing Cloud Computing Business Continuity Machine Learning By Use Case By Industry All Solutions

# Recategorize solutions into meaningful labels.

## Help

How to Buy Customer Support Technical Support

How to Buy is a new recommended page that will explain off-the-shelf vs full configuration and the buying process.

### Services

Advisory Services (old Solutions services) Implementation Services Lenovo TruScale Infrastructure Services Support Services (old Support tab in nav)

Remove duplicative words in the navigation by creating unique service labels.

# Create New Mega Menu Style

Impact

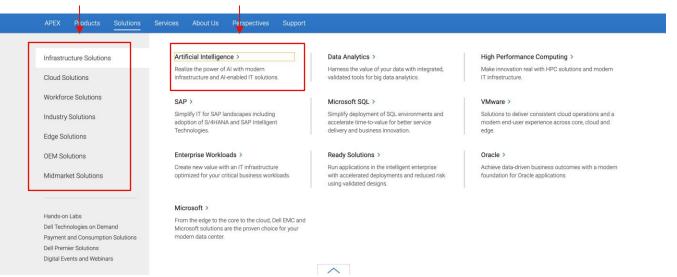
Best

**1.5** Add contextual information to mega menu to deliver relevant hints to users.

### Issue Solved:

Small labels and ambiguous icons make it hard for users to understand where to go to find the information they are looking for.

# Dell Technologies creates tabs within their mega menu allowing users to select categories and view more information with subcategories



### IBM uses contextual information to guide users in their mega menu.

			anahar (, manana tanana , i 111 maana)
IBM Products & Solutions ^ Set	vices & Consulting V Learn & Support V E	Explore more 🗸	Q
The essentials	Top products & platforms $\rightarrow$	Solutions	Industries $\rightarrow$
Hybrid Cloud	Aspera	Artificial intelligence	Aerospace & defense
Blend cloud and on-premises resources for flexibility and balance	Cognos	Automation	Automotive
What is Hybrid Cloud? →	Db2	Blockchain	Banking & financial markets
Hybrid Cloud solutions →	IBM Cloud	Business operations	Education
	IBM Cloud Paks	Cloud computing	Electronics
Artificial intelligence	IBM Sterling	Data & Analytics	Energy & utilities
Unlock the value in your organization with Watson	IBM Storage	Hybrid Cloud	Government
What is AI? $\rightarrow$	IBM Z	Servers and storage	Healthcare
AI solutions $\rightarrow$	Red Hat OpenShift	Quantum computing	Insurance
	SPSS Statistics	Security	Life sciences
	Watson	Supply chain	View all Industries
	WebSphere	COVID-19 solutions	
	View all products $\rightarrow$		

# Move Cart, Search and Account to Sub Navigation

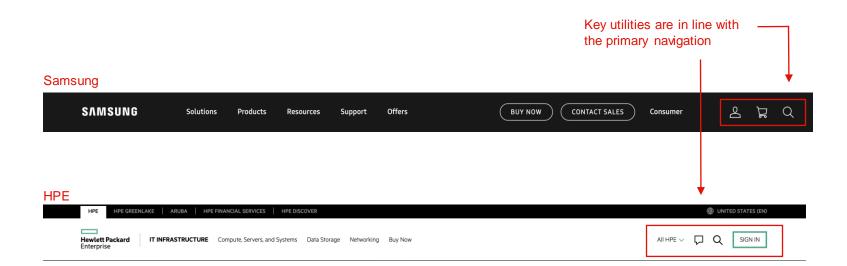
### Impact

Best

**1.6** Move key utilities (Cart, Search, Account) to the same level as Data Center. Icons and location should be simple and predictable.

### **Issued Solved:**

Search, a critical tool for users who already know what they want, is located too far away from Data Center navigation. Key utilities shift from secondary navigation to top navigation when the user scrolls causing confusion when looking for these items.



# Highlight Special Deals Under Sub Navigation

### Impact

**1.7** Add a bonus bar to highlight specific promotions directly under the navigation.

**Issue Solved:** 'Special Offers' is the only prompt to purchase in the sub navigation. This implementation is vague and doesn't quickly capture the user's attention.

Best

Kids Swim Lounge Cashmere <mark>Sale</mark> Factory	Q Search J.Crew Sign In
Women's dressy styles under \$100 ± Extra 50% off select	: sale styles ± Double points on swim with J.Cre
ent promotions and rewards gation	
s display ongoing order perks that apply to all prod	ucts
Free next-day delivery on thousands of items.	Same-day delive Order by 3 p.m., get it by
	Stores   Español
Shop Why Verizon Support	Sign in 🔍 🖞
Get it fast with In-Store & Curbside Pickup or same day delivery. ①	
40% off select No7 skin care BOGO 50% off Walgreens	health 20% off all contacts
Shop Walgreens your v	way
3	women's dressy styles under \$100 ±       Extra 50% off select         ent promotions and rewards ation       intervention         s display ongoing order perks that apply to all prod       intervention         Extra 50% off select       intervention         s display ongoing order perks that apply to all prod       intervention         Shop WhyVerizon Support       intervention         Get it fast with In-Store & Curbside Pickup or same day delivery.       intervention

UX Audit and Recommendations

# 2. Universal



2021 Lenovo Internal. All rights reserved.

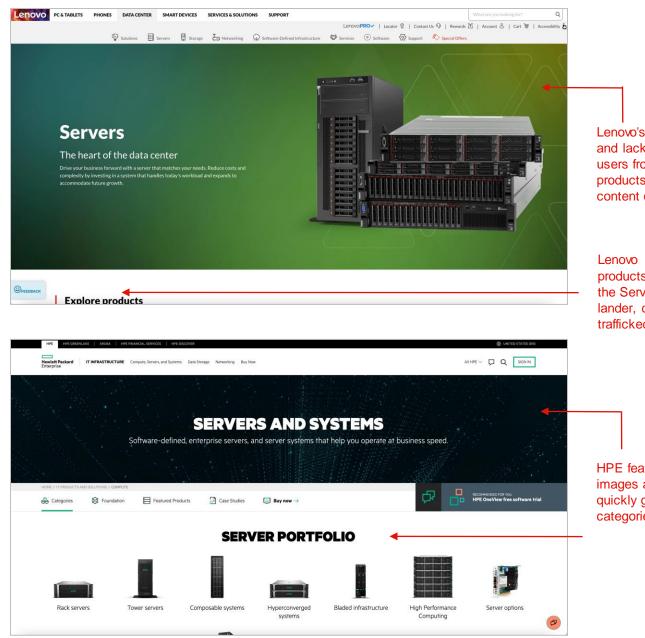
# Shorten Page Heroes

Impact

# Good

**2.1** Shorten the height of the heroes so that users can get to page content more quickly.

**Issue Solved:** Users are forced to scroll to get to products and guidance content. Actionable items are missing from the top of pages.



Lenovo's tall hero images and lack of CTAs prevent users from getting to products and important content quickly

Lenovo users can't see products when they land on the Server product category lander, one of the most trafficked pages on the site

HPE features short hero images allowing users to quickly get to product sub categories below.

# Add e-Commerce Calls to Action

Impact



**2.2** Give users enough information in CTAs so they act as signposts for users to know what to do next. Action language increases engagement with direct instructions, making the next step as predictable as possible.

### **Issue Solved:**

Buying calls to action are completely missing from the homepage design.

On product category landers purchase CTAs are unclear. "Learn More" links are too vague leaving users to guess at where they might go next.

Product grid pages do not allow users to compare and do not prompt users to start the buying process of individual products. Lenovo's buttons typically communicate "Learn More" or "Explore". The language is too ambiguous for an effective experience.

## **Business Applications**

Streamline your operations, automate tasks, and gain the agility you need to stay competitive in your industry.

### Learn more ►

## High Performance Computing

Solve today's and tomorrow's challenges with reliable highperformance solutions — from exascale to everyscale — that meet your organization right where you are.

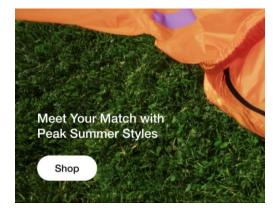
Learn more ▶

## **Database Solutions**

Harness rapid technology growth to collect rising amounts of data, extract meaningful insights, and support high online transaction rates.

Learn more 🕨

Short, actionable button language tells users what they are going to do next by clicking on the button:





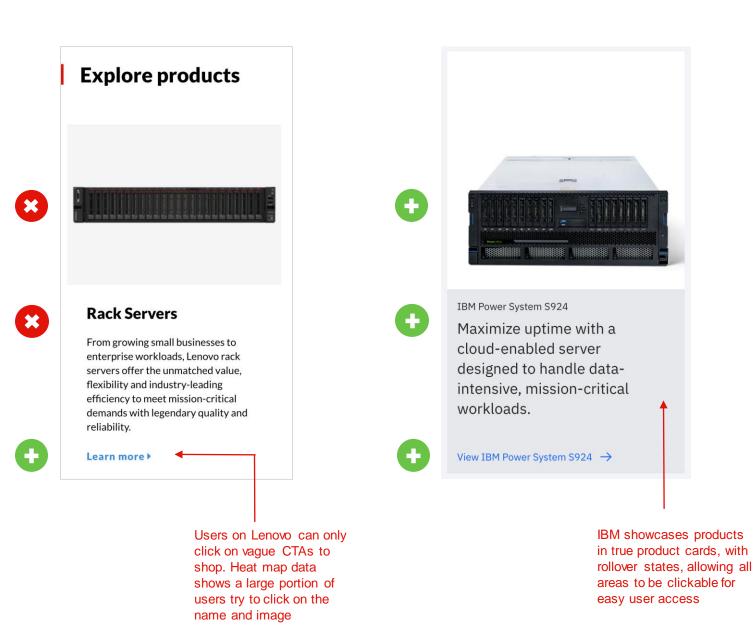
# Make Entire Product Cards Clickable

### Impact

# Good

2.3 Make entire product cards clickable.

**Issue Solved:** Heat map data shows that users are trying to click on product images and descriptions but are unable to link anywhere. The only linked content on the card is the small CTA at the bottom.



# Add More **Products on** Pages



2.4 Add key products and include main navigation categories to promote guick access to the product catalog. Highlight related products to increase cross-selling opportunities.

CATEGORY PAGE

Featured products

PowerEdge R440

HPC, web tech and scale-out

infrastructure.

Shop Now

Gain performance and density in a

compact 1U, 2-socket rack server for

RECOMMENDED

HPE 96W Smart Storage Lithium-ion

Battery with 145mm Cable Kit

Fulfilled by TigerDirect  $\, \checkmark \,$ 

\$108.99

Add to cart

density.

Shop Now

HPE 800W Flex Slot Platinum Hot

Plug Low Halogen Power Supply Kit

Fulfilled by TigerDirect 🗸

\$171.99

Add to cart

HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS

Fulfilled by TigerDirect ∨

\$455.99

Add to cart

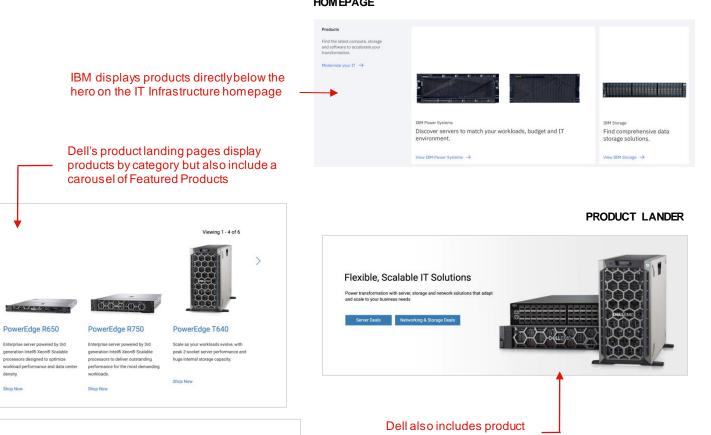
>

### Issue Solved:

Product finding is key to e-commerce, yet Lenovo's homepage and category pages don't reflect the site's product range (or any products at all). This leads to lack of awareness of ecommerce and a slower buying process for consumers.

Cross-selling opportunities are lost on pages where related products could be featured.

### HOMEPAGE





HPE's Recommended Products module is based on products the user has alreadyput in their cart

# Use Problem and Solution Messaging

Impact

## Better

**2.5** Include problem solution language to give the right context to products and users.

### Issue Solved:

There is little to no content that helps a user make a choice on what product they need or is right for them. Content is not written in a user friendly way that helps guide the user. Dell anticipates IT infrastructure areas where businesses need help and calls them out with solutions Dell can offer:



Manage expenses and stay within your budget by leveraging servers that keep you in step with the latest technology



**Reduce complexity** in your IT infrastructure with servers that are easy to use and manage



**Keep your data safe** with a cyber-resilient architecture, featuring security built into every step of the server lifecycle

Sections of HPE's site ask direct questions to small businesses as a way to assist novice users in identifying the best product option for their needs:

### HPE ProLiant MicroServer Gen10 Plus

Are you a small office, home office or small business with branch offices looking to build a customized solution for your office?

The HPE ProLiant MicroServer Gen10 Plus delivers an affordable compact yet...

Show More

Any business exploring PayPal's services can identify with the clear, action-oriented way their benefits are described:

### Simplify payments

Make and accept payments, onboard customers, and manage risk with a single global platform. Experience the streamlined ease of a trusted technology stack.

### Drive revenue

Tap into the power of a trusted global network and offer preferred payment options used by millions of merchants and consumers around the world.

### Cisco emphasizes benefits over features, understanding that users are driven by what the company can offer them:

What do you need to succeed with IoT?



Protection from

security threats





Operational resiliency in uncertain times

Help deploying and managing at scale A bridge between IT and operations

# **Provide Ways for Users to Narrow The Product Catalog Down**

### Impact

Better

2.6 Offer thematic or guided product browsing (e.g. Explore by Use Case, Explore by Industry, etc) for users who may need a helping hand to guide them to optimal options.

### Issue Solved:

Too much marketing content and not enough catered to multiple audiences.

### HPE provides both product category and business segment/industry browsing from their IT Infrastructure homepage



The Embroker site segments users based on business size/growth stage and offers different products based on user selection

#### Industry-Specific Coverage Growth Stage Startup Scaling up? Investment of \$50m and above? Just starting out? Get all the startup insurance coverage your company needs. Application is Our Growth Stage package is your tailored alleasy and takes under ten minutes. in-one solution. LEARN MORE LEARN MORE EMBROKER COVERAGE -FOR BROKERS ABOUT RESOURCES -SIGN IN Startup Package. Directors & Officers Employment Practices Liability Four Policies, One Application Tech Errors & Omissions incl. Cyber Get any or all of the policies listed here and save time by filling out just one application for all of them. Fiduciary Liability MORE DETAILS >

HPE also provides solution options that cater to different business goals







#### Grow my business Do more with your data, leverage AI, and adopt virtualization solutions to maximize performance and scale while reducing costs. Server virtualization $\rightarrow$

College prep by price



Under \$100

Under \$30

Amazon provides category browsing by price range

# Incorporate Resources

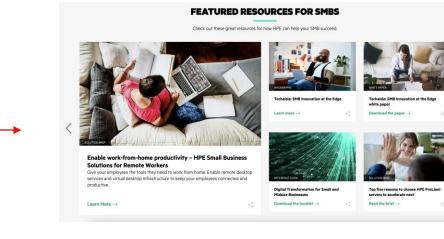
Impact

Better

**2.7** Include links to learning resources for novice users unsure of what product type to choose, or for users who may be seeking inspiration or alternative paths to the products they're searching for.

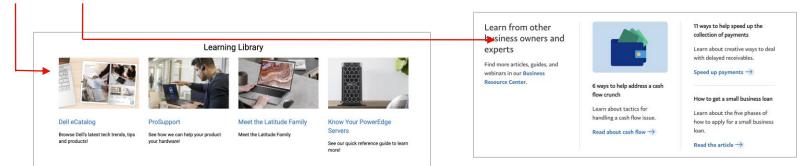
### Issue Solved:

Pages could benefit from more support tools to help guide users. Resources should be readily available when users are looking at a product. HPE targets SMB customers who many need additional guidance by providing a Resources module with links geared to their specific needs



#### ESSENTIAL RESOURCES Start with these essential server resources Our Artificial Intelligence Point of View Analysts: Modernize IT infrastructure 0 to get more from your data lere's how we're removing the barriers to innovation and bringing the power of AI to organizations of all sizes. Research finds that market-leading businesses are combining data management and analytics with modernized IT to drive business value Read Whitepaper and stand out from the competition. The Dell servers page includes a Read Brief module with multiple resource links Ignite Your Innovation Engine Shift into High Gear with Adaptive Compute earn how Dell Technologies can help you drive innovation into new frontiers with technologies and solutions that deliver critical capabilities Learn how Dell Technologies systems and software are optimized for across your environment the latest advancements across processor, memory, networking, storage and acceleration. ad Po

## Dell and PayPal feature separate links leading to a variety of resources: product catalog, chat, articles, guides, datasheets



# Sell Through Stories

Impact

## Better

**2.8** Use real customer stories and quotes on key pages to boost customer trust and show customers Lenovo cares about their success.

### Issue Solved:

Users may not trust Lenovo's capabilities and expertise in IT Infrastructure as much as compared to industry leaders.



IBM's success stories feature large, recognizable corporations and the ways in which its IT Infrastructure solutions improved high-profile businesses

## Real customer quotes and portraits on MailChimp's site help to build brand trust

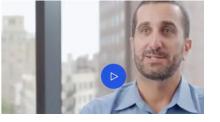


"The hook back to our database is incredibly important, because it keeps our data up to date, relevant, and accurate so that when we're emailing, we are doing so at the right point in someone's customer life cycle."

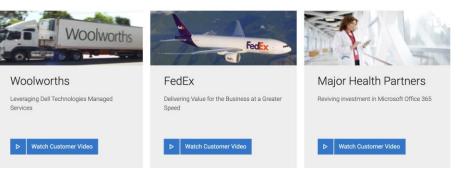
### Watson Assistant in action at Autodesk

See how Autodesk sped up customer response times by 99% with Watson Assistant. (01:02)

IBM and Dell Technologies use indepth customer story videos about familiar brands. Video labels and copy include recognizable company names and brief descriptions of the products and solutions covered in the video



# How our customers make transformation real



# Create A Module with Courtesy CTAs for Different Types of Support

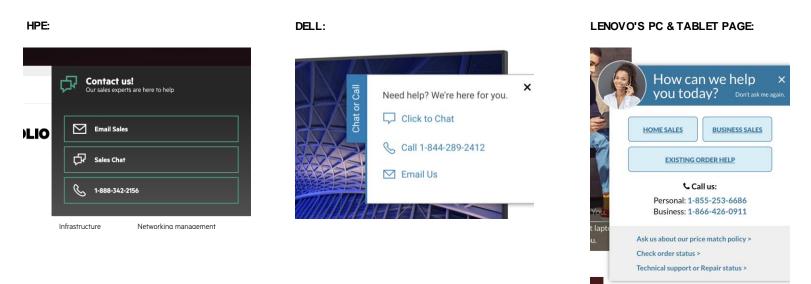
Impact

**2.9** Raise the bar for e-commerce customer support with a consistent courtesy module. Include multiple options for getting in touch or learning more.

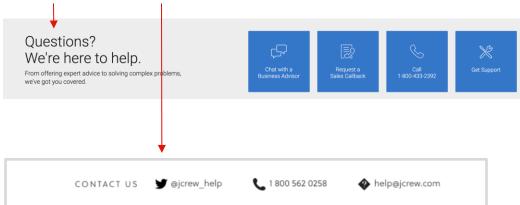
Better

## Issue Solved:

It's unclear to users on many pages what their next step should be or how to get support, particularly within sections like Services, where the end goal is not purchasing a product online. HPE, Dell and Lenovo's PC & Tablet page feature pop ups or pop outs with multiple ways to get in touch. The Data Center website only provides a pop out when the user is on the configurator page.



## Dell Technologies and J. Crew have consistent contact bars at the bottom of each page:



# Showcase More Brand Content vs. Marketing Content

Impact



**2.10** Create a quick scan/high impact branded content feature so users can quickly evaluate Lenovo's point of view. Include Lenovo's value proposition or other explicit brand features to help consumers establish a positive opinion of Lenovo.

### Issue Solved:

Branded content is presented is the same way as Lenovo category portals instead of a powerful brand message. The homepage and product landers are missing the impact of engaging messaging about the company. Lenovo's four key points of view are currently styled the same way as product categories

How to get there

Data doesn't transform the world. People do. Get the technology, tools, and partnership you need to make the most of it.





Cloud Computing Increase efficiency, time-to-value, and confidence with a cloud Analytics and AI Get the analytics you need to stay competitive today, and tomorrow – with AI to than over.





As-a-Service Spend less time maintaining your infrastructure, and more time maintaining your more mealted pay-per-use solutions. Edge Computing Speed things up by bringing compute capabilities wherever you need them. Our edge soluragged reliable, and rousy to work.

JOIN US FIND IN STORE

Brand messaging is disconnected to the brand video and the story the video tells



### Who are The Data-Centered?

- They are the people who use data to dramatically accelerate their organizations, improve their industries, and solve humanity's greatest challenges with:
- ✓ End-to-end solutions and services at any scale
- Reliable technology to deliver real insights
- A trusted partner every step of the way





We're the modern farming company reimagining what a flavorful future tastes like. STRIKING TO LOOK AT. THRILLING TO OWN. ENGINEERED TO LAST.

Meet the home collection of your dreams priced for your reality. Use brand messaging that is easily scanned and catches the attention of the user.

# Add a Help-Me-Choose Wizard or Filtering Processes

## Impact

**2.11** Provide a product recommendation wizard or tool to assist small businesses/novice users find what they need.

Best

## Issue Solved:

There is no information concerning the comparison and selection process of products available for purchase. There is little to no content or tools that help a user make a choice on what product is right for them.

#### FILTERING

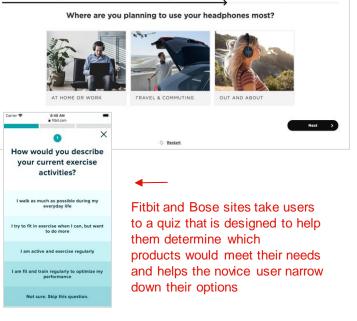
Categories	Vendors	Pricing Plans		Delivery Methods	
All categories	 All vendors	 All pricing plans	_	All delivery methods	

The AWS Marketplace site features a comprehensive search at the top of their page to help users narrow down choices to suit their specific needs

### FILTERING



#### WIZARD



The product selector tool on HP's site helps users get started with finding products for their specific industry, saving users

the tedious task of plowing through the main navigation or

attempting to find relevant products using search

Microsoft's site helps users choose a PC based on a small set of questions and it displays one recommended product and three other PCs with similar features



# Create a Module to Display Best Sellers, Featured and Popular **Products**

Impact

Best

2.12 Best practices say product landing pages need to also include individual product listings to help reduce the number of clicks. Lenovo would benefit from recommending and featuring products it knows customers are searching for.

## Issue Solved:

Users have a lack of guidance and guick access to individual products that are popular or recommended (except on the product grid pages).

Novice and new users on HPE can start with the popular solutions if they are not familiar or want to see what other people like about the brand.

#### HPE



#### DELL

categorizing the options and

a helpful side-by-side

comparison



Dell highlights best sellers giving users a sense of what the company is known for and what's most popular.

#3

LG VX8300

**食食食食**含 369

10.10

Samsung Knack, Black (Verizon Wireless)

★★★★☆☆ 28

1 offer from \$19.95

## AMAZON



VERIZON

**Best Sellers in Verizon Wireless** 

Motorola Barrage V860 Phone (Verizor

Wireless)

★★★☆☆ 406 2 offers from \$14.95

110

# Add Sticky Nav for In-Page Navigation

#### Impact

Best

**2.13** Include an in-page navigation that allows users to understand the sections of the page and quickly jump to the information they need.

## Issue Solved:

Users need easier access on pages with longer or more complex content.

Dell Technologies, HPE and IBM minimize their main navigation to avoid the issue and complexity of having two different inpage navigations. A sticky nav on scroll helps users quickly get to relevant information on content-heavy pages:

Product	Categories	Essential Resources	Custe	omer Stories	Contact Sales			
		storage, data protecti			olutions from Dell EMC. Give y ative PCs and displays from D	our workforce the power to performed.	m their	
	HOME / IT PRODUCT	S AND SOLUTIONS / SERVERS			101 -	ф		RECOMMENDED FOR YOU HPE OneView free software tria
	E Portfolio	Featured Products	Solutions	Services	$\square$ Buy now $\rightarrow$			HE Olleview life soliwale in
	Portfolio	Featured Products	Solutions	🛞 Services	[ ] ] Buy now $ ightarrow$	Learn more →		

IBM

#### IEM Products & Solutions 🗸 Services & Consulting 🗸 Learn & Support 🗸 Explore more 🗸

Services & Consulting Services 🗸 Learn 🗸 Explore more 🗸

01	02	03	04	05	06	07
Benefits	Services	Solutions	Case studies	Partnerships	Resources	Related solutions

Bose's sticky nav is high contrast, identifies which section a user is in, and includes a constant Buy Now button with price



Adobe provides a table of contents of landing pages in the form of a sticky sidebar with jump links that provide more information about each section



# Add a Case Studies Module

Impact

Best

**2.14** Provide case studies on product pages to show evidence that Lenovo and its IT products are capable of benefitting and transforming businesses.

### Issue Solved:

Users may not trust Lenovo's capabilities and expertise in IT Infrastructure compared to that of industry leaders.

HPE's site includes case studies on product pages that walk readers through challenges, solutions and results. The case study includes a quick reference to HPE's products that are featured in the case study

#### SUCCESS IN ACTION

9 SEAGATE

#### SEAGATE TRANSFORMS MANUFACTURING WITH DEEP LEARNING FROM EDGE TO CLOUD

Seagate transformed manufacturing quality assurance using deep learning, pushing decision making closer to the edge where it does the most good for product quality and process efficiency.



#### Challenge

Seagate generates about 15 million images a day. The information that delivers is valuable, but human operators are unable to see it all.

#### Solution

Seamless integration between HIPE Apollo and NVidia powers an AI environment which is, in effect, a supercomputer for machine learning that maximises value and supports better decisions.





"We can take action right when the new problem starts to occur and prevent the problem from affecting any of our product." Bruce King, Sesgare Technology

#### Result

Seagate now is able to capture valuable information that allows it to see and understand things that human operators in the past have not been able to see.

igsquire Watch the video ightarrow

# 3. Homepage



# Homepage

# Prominently Feature Product Categories

#### Impact

Best

**3.1** Highlight product categories and single product listings prominently on the homepage.

## **Issue Solved:**

Users cannot link directly to product categories or single product from the e-commerce homepage.

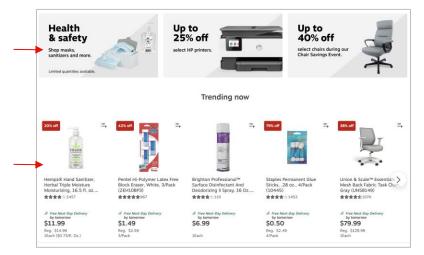
## IBM places product cards directly under the homepage hero:



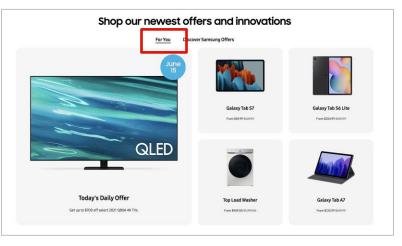
# Dell features products in the hero with icons and product categories in a bar below the hero $_{\rm I}$



# Staples features product deals under the hero followed by a carousel of currently trending products:



Samsung has a personalized product/sale recommendation section tailored to user's specific needs and based on previous browsing:



# 4. PC Homepage



# PC Homepage

# Add Servers to Icon Navigation Module

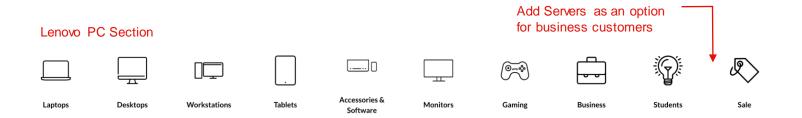
#### Impact

Better

**4.1** Highlight servers in the PC icon navigation bar on the PC homepage for a cross-selling opportunity.

#### Issue Solved:

SMB customers visit the PC section more than the Data Center section, which means those customers will typically enter the site on the PC homepage. There is a loss of cross-selling opportunity to those PC and SMB customers if they don't know to navigate to the Data Center to find servers or storage.



Dell.com shows "Servers & Storage" in their homepage sub-nav based on user tracking. If a user isn't a business user and has browsed personal products, then this option changes

	Ē	Ē	Ē		<u></u>
Laptops	Desktops	Workstations	Monitors	Servers & Storage	Accessories

# PC Homepage

# Implement User Tracking to Show a Server Ad in 3-up Ad Section

#### Impact

Best

**4.2** Utilize user tracking to display custom server ads on the PC homepage within the ad sections for the "For Business" and "Suggested For You" tabs.

#### **Issue Solved:**

SMB customers visit the PC section more than the Data Center section, which means those customers will typically enter the site on the PC homepage. There is a loss of cross-selling opportunity to those PC and SMB customers if they don't know to navigate to the Data Center to find servers or storage. Opportunity to cross-sell within this ad section on the PC side

Hand and Nai

ndustrial Strengt

Shaving Cream -Sandalwood

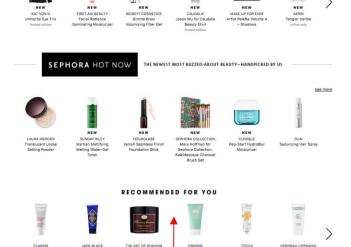


Dell's site tracks user behavior patterns and serves up product ads that match



SERVERS, STORAGE, NETWORKING Flexible, scalable IT solutions Power transformation with server, storage and network solutions that adapt and scale to your business needs.

#### Shop Servers Shop Storage



...

The "Recommended for You" section at Sephora is based on a user's previous browsing history – here, the user had been looking at hand creams and shaving creams, and the "Recommended for You" section offers additional products in those categories

ke A Differe

Crema da Mano -

**Rich Girl Broa** 

# **5. Solutions**

2021 Lenovo Internal. All rights reserved.

118

# Solutions

# Recategorize Solutions Into Type, Use Case and Industry

#### Impact



(Recategorize within existing)

Best

(Recategorize completely based on new nav)

**5.1** Group solutions by type, use case, and industry.

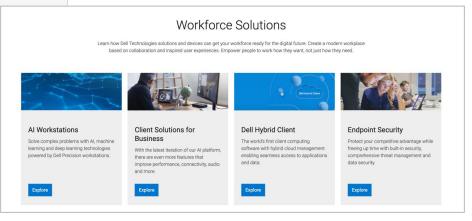
## Issue Solved:

The Solutions page could benefit from better content organization. Page should consider different audiences needs by showing use case or industry cues. HPE's page categorizes solutions by topic (Internet of Things, High Performance Computing, etc), but also allows users to browse solutions by industry





Dell categorizes solutions into type (AI), use case (endpoint security), and industry (business) all in one section



# 6. Services



## Services

# Explain the Process of Signing Up

#### Impact

Best

**6.2** Be transparent about the process of engaging Lenovo about services, what the user can expect to happen and when.

## Issue Solved:

It's unclear how a user can purchase consultive services from the website.

Lenovo's Service pages only provide one method to engage with Services, a contact form:

# **Need more information?**

Fill out this form so a Lenovo representative can contact you.

CONTACT US

IBM explains the process of getting started with their Services in 3 easy steps at the bottom of the page:

Ready to get started?		• • •	• • •	• • •	• • •	• • •
1. Sign up for an IBM Cloud account	2. Create a service instance	3. E>	plore	and l	earn	
Access IBM Cloud Object Storage and a USD 200 credit toward any IBM Cloud app or service.	Choose the IBM Cloud free tier or the Standard plan. Pay only for storage you use.	Review s you get s				
$\rightarrow$	$\rightarrow$					$\rightarrow$

Dell's Service pages allow you to Register to see additional content and get started with their services without needing to speak to a sales representative:

# Less Effort. Faster Resolution.

Get support, order replacement parts, and boost your team's productivity—all from one place with TechDirect. To get started, register at Dell.com now. We'll bring you back here when you're all set.

Register at Dell.com Learn more

# 7. Success Stories

# Success Stories

# Make the Success Stories Section More Accessible

## Impact

Better

7.1 Add more small-business case studies.

## Issue Solved:

Lenovo could benefit from additional SMB case studies.

## Impact

Best

**7.2** Add search and filter functionality to Success Stories page.

## Issue Solved:

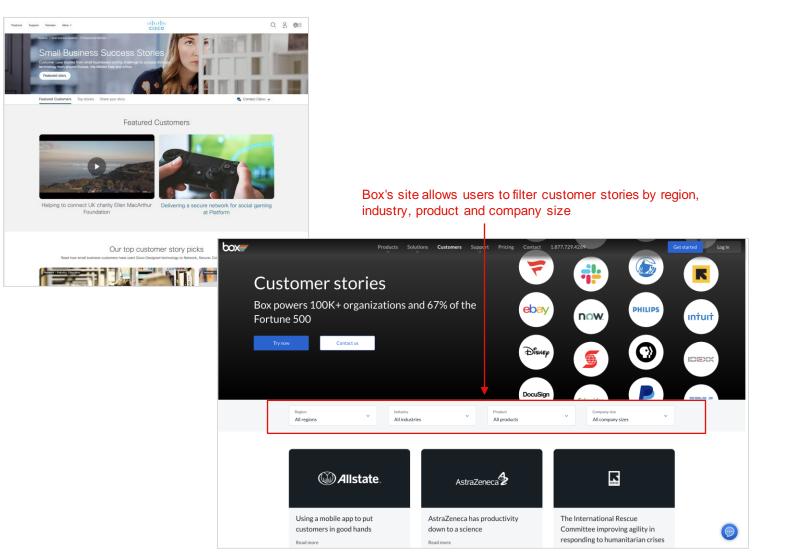
It's cumbersome for SMB users to find the Success Stories that most closely relate to their business.

7.3 Convert case study PDFs to HTML pages

## Issue Solved:

Best practices show that having web pages vs. PDFs provides the best experience.

# Cisco has an entire page dedicated to small business success stories



# 8. Product Landers

2021 Lenovo Internal. All rights reserved.

124

## **Product Landers**

# Take Product Categories Out of Carousel and Display All

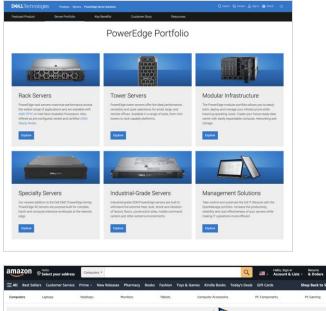
#### Impact

Better

**8.1** Display all product categories instead of using a carousel.

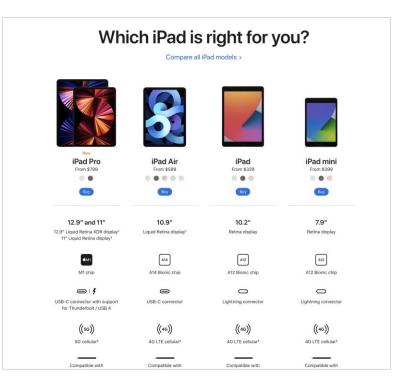
**Issue Solved:** Users are overlooking the product subcategories hidden in the carousel.

Landing pages on Dell Technologies and Amazon display all categories in product cards to make it easy for users to compare and select



 Best Sealer
 Compare
 Lance
 Processor
 Pr

Apple's landing pages display all product categories alongside specs to help the user choose between them



## **Product Landers**

# Guide Users to the Comparison Tool

## Impact

Best

**8.2** Link to the product comparison tool from product landing pages to make it easier for users to distinguish between products.

## Issue Solved:

It's overwhelming for a novice user to find the right solution and configuration. It's a costly and high-pressure decision for a small business. Beyond the product listing in the carousel, there is little to no content or tools that helps a user make a choice on what product they need or is right for them. HPE's product lander speaks to small business users by highlighting the simplicity of SMB solutions and linking directly to the comparison tool

#### INNOVATIONS

# WHY CHOOSE HPE SMALL BUSINESS SOLUTIONS?

Simplicity is important to your business as you plan for the future. Your criteria for selecting new tech are better product experience, great value, and solutions performance. Your choice would lean towards choosing solutions that will meet your long-term needs.

Easy to select	Peace of mind
Simplified installation	Artificial intelligence



#### Easy to select

Find the right solutions and configurations for your business that provide the foundational on-premises component for the hybrid cloud by using the HPE Solutions Wizard.

Find your solution ightarrow



In less than 2 minutes answer a few questions and we'll help you choose. Or, compare tech specs of each computer to see how they stack



## Microsoft's Surface product lander incorporates an ad that links to both a Help wizard and a comparison tool

# 9. Product Lists & Filtering

# **Add Contextual** Guidance Messaging to Product Cards

Impact

# Good

9.1 Add contextual information directly to product cards (e.g. problem/solution language and descriptions).

## Issue Solved:

Product listings don't offer use case scenarios or problem/solution cues for users.

	HPE Parallel File System S	torage					
	Are you frustrated with the archi current high performance file sto		ical limitations of you	1r		roduct lists incl ed cues that	lude
	HPE Parallel File System Storage Show More	is cost-effective, par	allel storage for you	r high	•	problems that t eds to solve.	he
		E	Compare Get Qu	uote			
SCALITY	HPE Solutions for Scality Does your organization need an data-intensive applications? HPE scalable unstructured data archiv Now, cloud-native applications a Show More	Solutions for Scality ves and tiers behind (	provide object stora primary storage arra	age for ys.			
Drobo's messagi describes differer seemingly similar identifying user n	nces between r products by		Drobo 503 Gold & Platinum Libtoning fast storage for bord reactive workflow with Storad 4K display support	Drobe Bays: 6 Interface: 2 X Thunderbolt 3			Dobo B810i Dobo B810i Best in class 8 Bay iSCSI SAA engineered for SMB's with Data – Aware Tiering A of Drive Bays: 8 Interface: 2X Gigabit Ethernet (ISCSI)
		More Info	More Info	More Info	More Info	More Info	More Info

# Add Ability to Tag Products

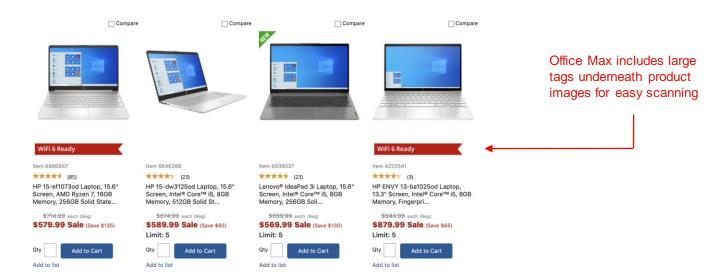
Impact



**9.2** Add consistently-structured product data and product tags to products for quick scanning (e.g. Performance, Speed, Memory, Storage tags).

## **Issue Solved:**

Lack of data and data structure severely impedes the user's ability to find relevant products as well as their desire to purchase those items once found.



Staples color-codes tags with special deals and discounts at the top of the product card



# List Product Attributes Consistently Across Product Cards

Impact

**9.3** Standardize product attributes across all product cards to allow for more user-friendly product comparisons.

Better

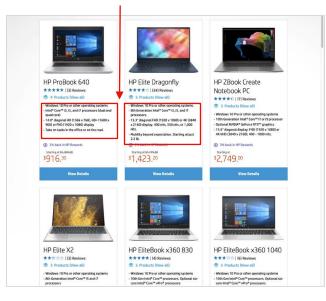
#### **Issue Solved:**

When information is included or presented inconsistently across list items, users have a difficult time comparing them and may pass over numerous perfectly relevant products. On HPE, both the information shown and the order is consistent (though it is in paragraph format instead of list format, making it more difficult to scan)



Sold Out Pick up today Compare 🛄 Save Availability Exclude Out of Stock Item Acer - Swift 3 14" Refurbished 33501 - 808 Memory - 51208 \$597.99 Brand Free item with purchase A \$29.99 value Search brand Not yet reviewed Sold Out Sold Out 🖂 НР Compare Save Dell Lenove ASUS Microsof 🔄 Samsung \$910.99 Acer MSI Free item with purchas A \$29.99 value Show More Processor Mode Intel Core i3 Intel Core i5 Intel Core i7 Intel Core i9 \$611.99 AMD Ryzen 3 AMD Ryzen 5 Shop Open-Box AMD Ryzen 7 Intel Celero Show More Delivery: Not available for th RAM () 512 gigabytes Compare Sav 256 gigsbyter 64 gigsbytes 48 gigabytes 32 gigabyter \$611.99 16.0 gigabytes 🔄 16 gigabyter 12.0 gigabyte

On HP, similar specs are consistently included across similar items in product lists. The presentation of the specs, each in a separate bulleted line, is also consistent and users can therefore easily compare attributes across different laptops



Sometimes certain information is in an "empty" or other special state for some products — for example, when there are no user ratings for a given item. To avoid uncertainty and confusion, Best Buy includes a "Not yet reviewed" label, thus explicitly describing the special state of a product

# Ensure Prices Are Clear in Product Cards

Impact



**9.4** Style the final purchase price to be more prominent than discounts, old prices, and nonessential list item info.

## Issue Solved:

Final prices are hard to discern making Lenovo look less transparent than it should to consumers and more difficult to scan and compare products directly from the list HPE clearly shows a single price, which is bolded, to communicate a transparent purchase to the user

Free Shipping

Gaming Madness

Telephones / VolF

Phone & Confer

Telephone Accessorie

Wired Networking

Ship From Country

Switches

Newegg

pro-trade

outletmall

KH Online
 Premium Wholesal
 Airlink Tech
 SHOW MORE

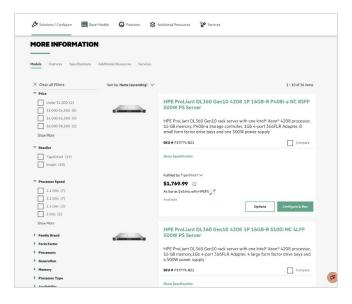
Cisco Systems

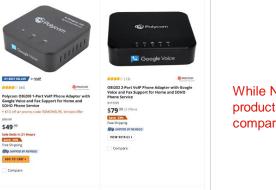
(623)

(247)

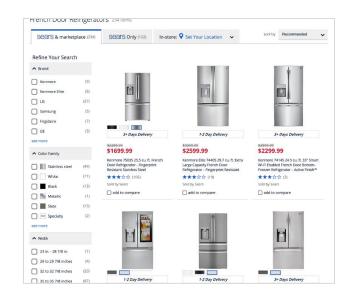
(373)

(110)





Sears prominently shows the purchase price on product list and discounts as secondary through font styling



While Newegg shows other prices on the product list, the styling deemphasizes them in comparison to the main purchasing price

# Reduce White Space in Product Cards and Change to 3-Up Layout

Impact

Better

**9.5** Reduce white space within cards and increase the width of cards by decreasing the number in the row to make them shorter.

#### Issue Solved:

Users have to scroll too far to browse all product details and are not able to compare products side by side. Lenovo's cards have unused white space, making them longer than necessary



Apple's cards have a lot of information, but they make good use of the space and the hierarchy of information makes scanning very easy



AMD RADEON PTO SSUUM 2.6GHz 6-core 9th-generation Intel Core i7 processor Turbo Boost up to 4.5GHz AMD Radeon Pro 5300M with 4GB of GDDR6 memory 16GB of 2666MHz DDR4 memory

512GB of SSD storage<sup>1</sup> 16-inch Retina display with True Tone Magic Keyboard Touch Bar and Touch ID Four Thunderbolt 3 ports

\$2,399.00

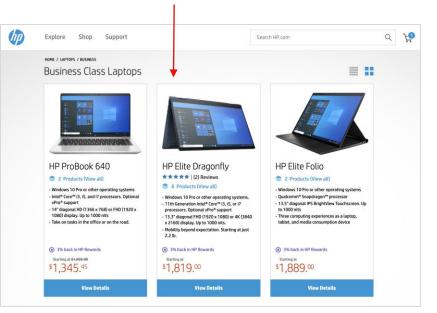
\$199.91/mo. for 12 mo.\* Learn how to pay monthly at 0% APR when you choose Apple Card Monthly Installments

Apple Trade in Get credit toward a new Mac when you trade in your eligible computer. Or recycle it for free.\* Get started

Select 🔗 Order by 3:30pm. Delivers to 22201\*\*

Today within 2 hours — \$9.00 Mon, Jun 28 — Free

 Pick up, in store or curbside: Today at Apple Clarendon HP's cards are 3-across, allowing them to maximize thumbnail size. Bulleted lists have more width, so cards don't get as tall



# Add a Compare Products Check Box

#### Impact

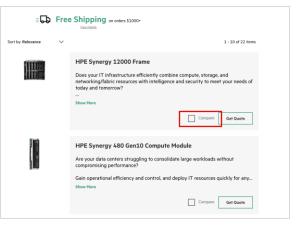
Best

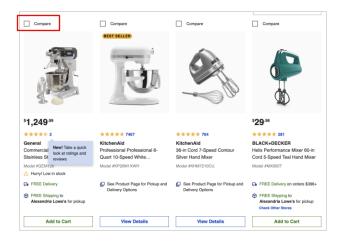
**9.6** Provide the ability to compare products in the list view rather than on the product detail page.

## **Issue Solved:**

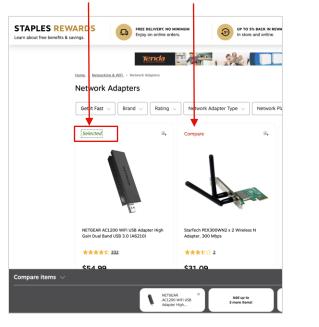
On Lenovo's site, a user has to navigate past the product list page to the very bottom of a single product page to find the compare check box. Once a product is selected for comparison, it is difficult to navigate around to add more products and difficult to find the comparison tool.

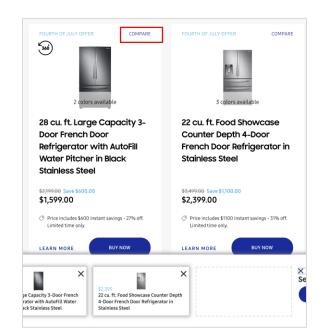
## HPE and Lowes have Compare check boxes prominently displayed on each product card





Staples and Samsung cards have a Compare link at the top. Most sites use a footer to gather/add products for comparison. Staples' Compare link notes changes when an item is selected





# Implement Additional **Filters**

#### Impact

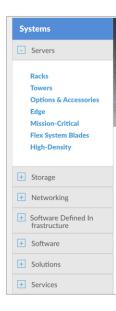
Best

9.7 Include all list item attributes (bulleted specs) as filters in the left-hand column. Modify the current categories list into one sortable filter.

## Issue Solved:

Lenovo lacks filtering, sorting, and comparison functionality.

## Lenovo only offers the ability to filter by product category:

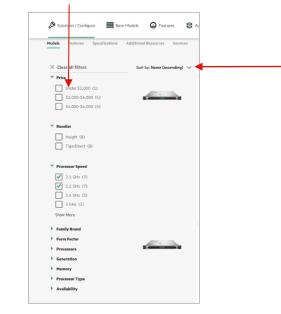


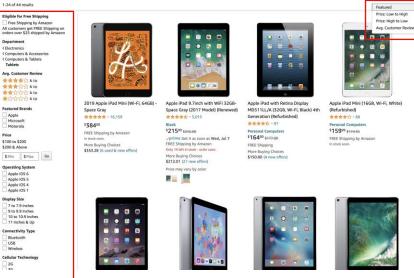
Amazon features a multitude of filtering and sorting options



26

HPE's filters help the user narrow their selection down to appropriate pre-configurations. It also offers the ability to sort





# **10. Product Details Pages**

# Ensure the Primary Buttons are Styled in Unique and Prominent Ways

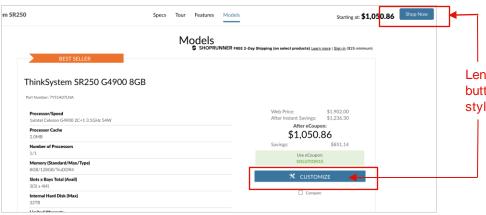
#### Impact

Good

**10.1** Primary action buttons need a unique, high-contrast styling that isn't reused for other, less important links in the interface.

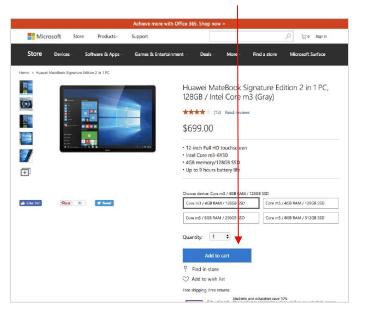
#### Issue Solved:

The 'Shop Now' secondary button is styled too closely to the primary 'Customize' button. Additionally, the 'Shop Now' button doesn't lead to a new action; instead it jumps users down the page to customize. If an item can be bought off-the-shelf, 'Shop Now' should add product to the cart.



## Lenovo's Shop Now and Customize buttons have two different actions but are styled very similarly

On Microsoft's site, despite all the buttons visible on the interface, it's still immediately clear to users where the "Add to Cart" button is due to its unique, high-contrast styling

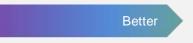


HP's product page includes a configurator, where there are a lot of selection options. However, the Add to Cart button is still the most prominent

Explore Shop Support	Search HP.com	Q Ý
Configure your HP ProBook 640 G8 Notebo Customizable	ook PC -	
Operating system Choose the right OS for your work style.		Ships on: 12/03/2021
Windows 10 Pro 64 - HP recommends Windows 10 Pro for business	Included in price	This platform has ar extended build time. Component availabil ty, and hence the ship date, may change.
Windows 10 Home 64	-\$92.00	\$1895:00 <sup>-</sup> \$1345.45
FreeDOS	-\$233.00	This PC will be custom-built after you place your order. <b>Need a PC sooner?</b> Check out our Rrady-to-Ship PCs!
Base features Note: Available options will vary based on compatibility.		You save 3549.55 ADD TO CART
HP ProBook 640 GB with Intel® I3-1115G4 processor, integrated Intel® UHD Graphics, and Thunderbolt - 1YSD9W	Included in price	SEND CONFIGURATION
HP ProBook 640 GB with Intel® I3-1125G4 processor, Integrated Intel® UHD Graphics, and Thunderbolt - 342K2AV	-\$30.00	Need Help? Chat now or call 1-888-650-1543
	4202.00	

# Add Buy Now and Customize Buttons

Impact



**10.2** Include both "Buy Now" and "Customize" buttons on product details pages, when applicable, to make it easier for novice customers to buy off-the-shelf products.

## Issue Solved:

By only offering a customize button, novice users may be dissuaded to continue with a complex purchase.

## The Stokke website includes an Add to Cart button along with a secondary button to customize

No Interest if paid in full in 6 months with PayPal CREDIT. Learn more
 in stock
 Add to Cart
 Complimentary Engraving
 Add to Registry

Rakuten's site has a primary Add to Cart button along with an alternate See All Buying Options that takes the user to other configuration options





Description

Nikon D7100 Digital SLR Camera (Body Only) Black

The D7100 marks an exciting advancement in image quality for high-resolution DX-

# Use Thumbnails to Represent Product Images

Impact

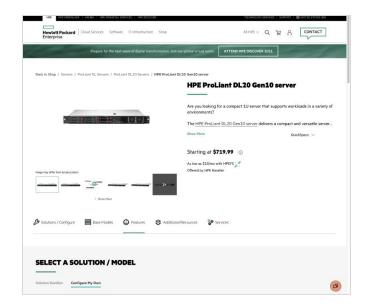


**10.3** Integrate imagery in the 3-D tour navigation to allow users to have more control over what view they use. Move product views and thumbnail functionality higher up on the page.

## **Issue Solved:**

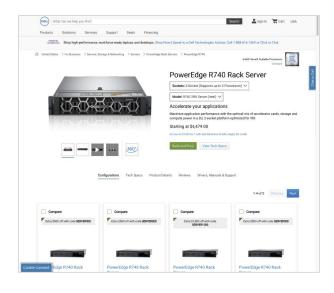
Additional product images are likely to be overlooked, either unintentionally or because they lack the information scent needed to be deemed valuable by users.

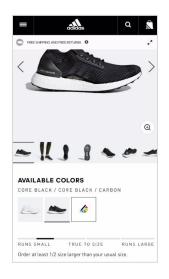
# HPE uses thumbnails below the main product image to show multiple views available



On Adidas product pages, the current image is clearly indicated by the distinct black bars on the top and bottom of the thumbnail navigation, and thumbnails themselves are large enough that users can clearly see what each one depicts

# On Dell, thumbnail images, video and 360 degree views are also available higher up on the page





# Explain Industry-Specific Terminology in Product Specifications

#### Impact

## Better

**10.4** Provide clarifying text (e.g., with tooltips) for difficult-to-understand product specifications.

## Issue Solved:

Without help, novice users can have a hard time making sense of industry-specific product aspects. When the wording used in product descriptions is not fully understood, novice users are either forced to simply live with not knowing or go off-site to research the terminology.

## Lenovo ThinkSystem ST250 Tower Server Starting at: \$848.10 Shop No Specs Tour Features Models Tech Specs DESCRIPTION SPECIFICATION · 4U chassis: Height: 430mm (16.9 inches), Width: 175mm (6.9 inches), Depth: 566mm (22.3 inche Ontional ST250 rack-mount kit 1x Intel<sup>®</sup> Xeon<sup>®</sup> E-2200 processors, up to 8 cores at 95W Up to 128GB in 4x DIMM slots using 32GB DIMMs 2666MHz TruDDR4 x1 lane PCIe Gen3 in x1 slot; x16 lane PCIe Gen 3 in x16 slot (for GPU); x4 PCIe Gen3 in x4 slot; x4 PCIe Gen3 Expansion Slots Up to 8x 3.5-inch simple-swap and hot-swap SATA/SAS bays: up to 16x 2.5-inch I Drive Bays inch media bay (for optical drive or tape): 1x M.2 support HBA/RAID Support Intel VROC Software RAID support; multiple hardware RAID configurations supporter · 1x front USB 3.1 G1 port and USB 2.0 port for XCC mobil · 2x rear USB 3.1 G2 ports and 2x rear USB 3.1 G1 ports I/O Interface 1x Serial Comport and 1x VGA port Network Interface 2x 1GbE ports standard: 1x 1GbE dedicated management por Dual-redundant 80 PLUS power supply unit (PSU) 550W; fixed PSU 250W; power efficiency up to Platinum; Energy Star 2.1 complian



LL Bean users can seek out explanations for difficult-tounderstand product attributes by hovering on the tooltip icon. Using this approach, L.L.Bean avoids cluttering the product specification sheet with descriptions, yet the information is still available for users who need them

Country of Origin	China
Dimensions	H136.5 x W90 x D48.7cm
Drip Tray	NO
Fuel Type	Charcoal
Guarantee	<del>5 year gua</del> rantee
Ignition Type	Jet Flame ignition: ame Ignition System
Side Shelf	ignites a jet of gas along the side of the burner as the gas control is turned
Thermometer	on. Independent Direct Ignition: every burner
Viewing Window	lights independently letting you to cook on
Warming rack	any one instantly
Weight 🚯	72.5kg

Best Buy offers users tooltip text for industry-related technical terms, allowing users to easily access detailed information around unfamiliar terms or industry-specific jargon

# Change Layout to Emphasize Price, Models and CTAs

Best

#### Impact

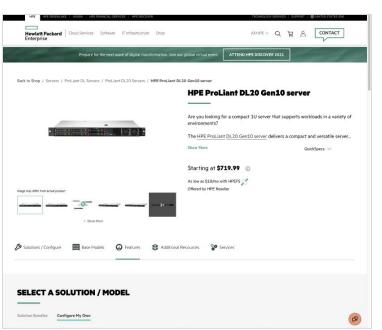
**10.5** Move pricing, primary features, model options, and CTA buttons to the top of the product details page.

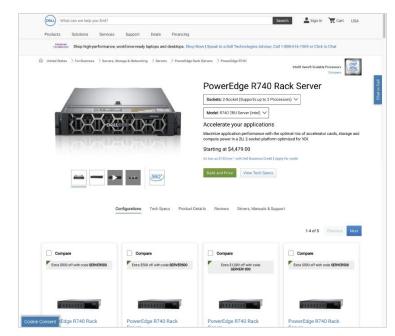
#### **Issue Solved:**

Layout is not expected for a product page, and user has to scroll all the way to the bottom to find pricing and purchase CTA. HPE and Dell have layouts and descriptions that are expected from a product page e-commerce site. Pricing, financing options and model options are all displayed at the top of the page

DELL

#### HPE





# Create and Highlight Out-of-Box Options vs Customization

#### Impact

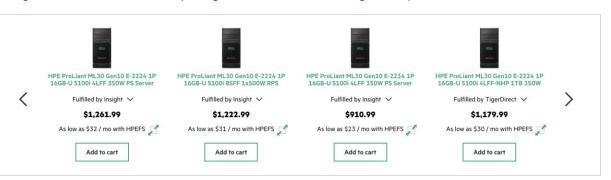
**10.6** Make popular base models available for off-the-shelf purchase right away, allowing novice users the option to bypass configuration all together.

Best

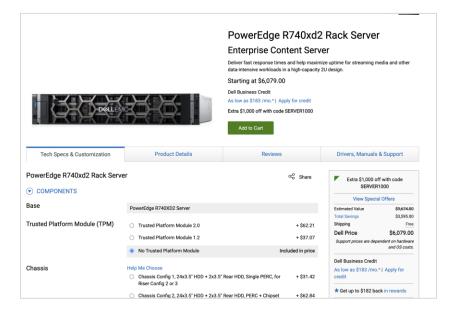
## Issue Solved:

Some users may prefer an easier path to purchase without product customization.

# HPE's site offers base models that a user can immediately add to cart or the option to configure a model. Base model pricing is also included in configurable product cards.



Dell's product pages offer either the option to add a base model to cart with a prominent Add to Cart button at the top of page or the ability to scroll down and make adjustments to the components.



# Provide a Cross-Sell Section that Only Contains 'Supplementary Products'

Best

Impact

**10.7** Suggest supplementary products for users who may be looking for add-ons or accessories to the product they are currently viewing. For example, when viewing a server, Lenovo could suggest supplementary products such as cables.

## Issue Solved:

It can be highly complex for users to find compatible supplementary products.

# On B&H Photo's DSLR camera pages, users are offered an extensive list of compatible "Accessories" within the product page |

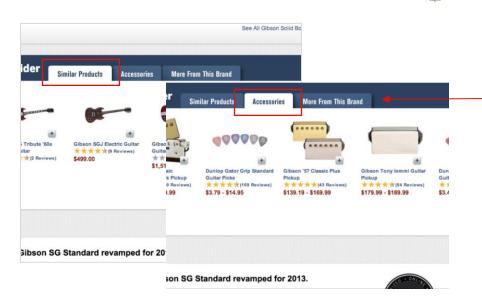


Clicking View All allows users to drill-down to a specific subtype of accessories, allowing for a greater number of matching accessories to be shown

OVERVIEW SPECS REVIEWS 493 Q&A 276 QUICK COMPARE

Canon R5 Accessories

Photography Video &	Audia	Showcased Ac	cessories		
Photography video &	Audio				
howcased Accessories	>	See all Memory Cards	See all Lenses	See all Batteries & Power	See all Lens Ada
Memory Cards ssential	>	Ellines MD			6
enses ssential	>	128 cm has to mit Sambiski	Conserved 50		
atteries & Power	>	Essential	Essential		
ens Adapters	>	Save \$49.01 SanDisk 128GB Extreme PRO CFexpress Card Type B	Canon RF 50mm f/1.8 STM Lens	ikan Dual Charger for Canon LP-E6 Type Batteries	Save \$25.00 Vello Auto Lens Ada for Canon EF/EF-S L Canon RF-Mount Ca
lattery Grips	>	**** 225	**** 102	****3	***** 61
xternal Microphones	~	samo \$199.99	\$199.00	\$69.95	\$64.95
Aler nar and opnoties		Add to Cart	Add to Cart	Add to Cart	Add to Cart
anas					



On the Musician's Friend site, users are given the option to both look at closely related products while also given the opportunity to see supplementary products (Accessories)

# Display Warranty Upgrades and Financing Options

Impact

Best

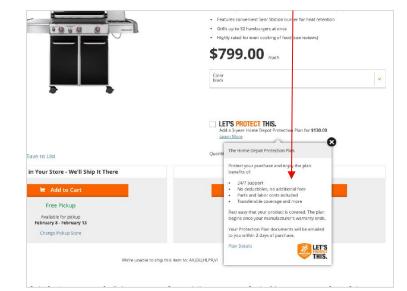
**10.8** Any information about available warranty, service upgrades and/or financing should be displayed directly on the product details page, and not saved for after a user has added a product to the cart.

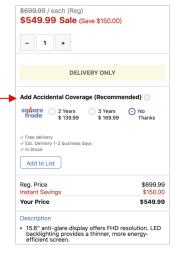
## Issue Solved:

Basic product warranty information may fall short for users who incorporate extended warranties and service support into their decision to buy a product. Users may be put off by the product's high price before they are made aware of financing options. HPE show warranty services that can be purchased within the primary product's product detail page, however it is somewhat hidden behind a "Services" tab

London Dubbel London III II		•	
DRE INFORMATIO	N		
els Features Specifications	Additional Resources Services		
Clear all filters	Sort by: Name (ascending) 🗸		1 - 10 of 108 items
Warranty Coverage			
In Warranty (81)	Hardware	HPE 3 Year Proactive Care Next Business	Day DL20 Gen10
Post Werranty (22)	& Software Support	Service	
		SKU # HCSP3E	Compare
Service Level (Coverage)			
24x7 (62)		Show Specification	
Standard Business Hours and D. (14)	ауз		
		Fulfilled by TigerDirect V	
Additional Options		\$349.99	
Support Service Type		Available	_
Response Time			👷 Add to cart
Service Method			
Duration (Term)	Hardware	HPE Installation ML/DL Series 10 Service	
	Installation	SKU # U7WZ5E	Compare
		Show Specification	
		Fulfilled by Insight 🗸 🗸	
		\$210.99	

Additional coverage plans are displayed near the "Buy" section for a laptop at Office Depot. A tooltip icon provides one-tap access to detailed information about what's included in each plan Home Depot outlines preliminary features of the protection plan. Clicking "Plan Details" link opens an overlay with even more detailed information — including a description of the premium protection plan compared to the manufacturer's warranty





# **11. Comparison Tools**

### Comparison Tool

### Move the Comparison Tool to a Dedicated Page and Add More Controls

#### Impact

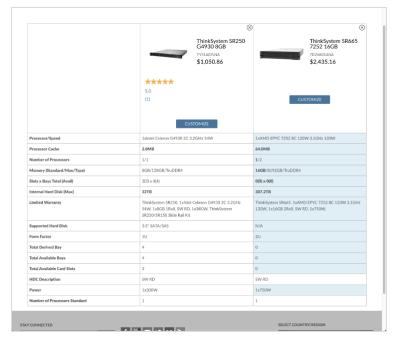
Best

**11.1** Place the comparison tool on its own page to allow for ads that link to product comparisons. Include the ability to add more products to compare directly from the new page rather than going back to a product list.

#### Issue Solved:

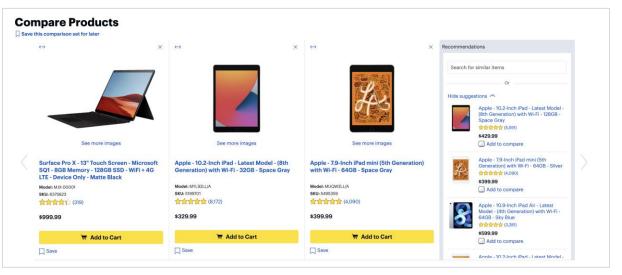
The comparison tool is within an overlay, making it impossible to link to comparisons or add more controls or filters.

### Lenovo's current comparison overlay:



### HPE's comparison grid makes it easy to compare specs, but doesn't create a unique url to link to specific comparisons.

×	×	×
HPE ProLiant DL385 Gen10 Plus server	HPE ProLiant DL325 Gen10 Plus server	HPE ProLiant DL325 Gen10 server
\$2,599.99 Select	\$2,149.99 Select	\$1,809.99 Select
Drive Supported 8 or 12 LFF SAS/SATA/SSD with 4 LFF rear drive optional and and 2 SFF read rive optional 8 or 24 SFF SAS/SATA/SSD with 4 SFF rear drive optional, 16 SFF NVMe Front bay	Drive Supported 12 LFF SAS/SATA/SSD, 24 SFF SAS/SATA/NVMe/SSD 10 SFF with Optional 2x 2 SFF SAS/SATA/SSD or 2x 2 SFF NVMe or 2x 2 uFF, 10 SFF NVMe with Optional 2x 2 SFF NVMe or 2 SFF SAS/SATA/SSD or 2x 2uFF depending on model	Drive Supported 4. LFF SAS/SATA/SSD 8 SFF SAS/SATA/SSD with Optional 2.SFF SAS/SATA/SSD or 2.SFF NVMe 8 SFF NVMe with Optional 2.SFF NVMe or 2.SFF SAS/SATA/SSD depending on model
Power Supply Type 2 Flexible Slot power supplies, maximum depending on model	Power Supply Type 2 Flexible Slot power supplies, maximum, depending on customer configuration	Power Supply Type
System Fan Features Hot-plug redundant fans, standard	System Fan Features Hot-plug redundant fans, standard	System Fan Features
Memory Slots 32	Memory Slots 16	Memory Slots 16
Warranty Standard Statement 3/3/3 - Server Warranty includes three years of parts, three years of labor, three years of on-site support coverage. Additional information regarding worldwide limited warranty and technical support is available at:	Warranty Standard Statement 3/3/3 - Server Warranty includes three years of parts, three years of labor, three years of on-site support coverage. Additional information regarding workdwide limited warranty and technical support is available at:	Warranty Standard Statement 3/5/3 - Server Warranty includes three years of parts, three years of labor, three years of on-site support coverage. Additional information regarding worldwide limited warranty and rechnical support is available at:



Best Buy takes users to a new page and allows them to search for and add more products, and even save comparisons, without navigating away.

### Comparison Tool

### Provide Inline Help for Industry-Specific Specs

#### Impact

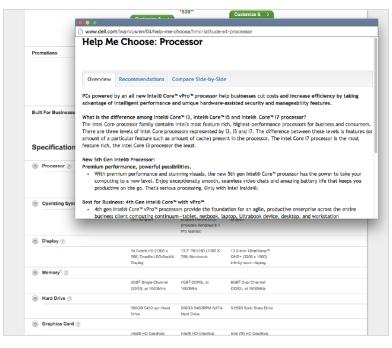
Best

**11.2** Include tool tips next to specification titles within the comparison tool.

#### Issue Solved:

Without inline help, novice users can have a hard time making sense of industry-specific product aspects.

### Dell provides help text, represented by "?" icons, for computer specs with detailed descriptions to "Help Me Choose"



### Crutchfield provides explanations for specifications in a tooltip

Channels)				
Bridged Power (Wt x Channels)	N/A		N/A	200 x 2
Minimum Impedance Bridged	N/A		N/A	4
Best Frequency Response	12-300 Hz		20-20k Hz	20-20k Hz
Signal to Noise Ratio	110 dB		84 dB	90 dB
Features	Sound Ordnance"	M-1500	Alpine KTP-445A Power Pack	Rockford Fosgate Prime R400-4D
Amplifier Class	AB		D	D
Low-Pass Crossover Frequency	40-300 Hz		N/A	50-250 Hz
Low-Pass Slope (dB/octave)	12 dB/oct		N/A	12 dB/oct
High-Pass Crossover Frequency	N/A	,	N/A	50-250 Hz
High-Pass Slope (dB/octave)	Crossovers are chara		A	12 dB/oct
Bass Boost	frequency (Hz or kHz) steepness of their roll-	off slopes (the	,	0-18 dB
Bass Boost Frequency	rate of attenuation out bands) as measured i		A	45 Hz
Fuse Rating	interval (dB/octave). A results in a gentler fre			40
Speaker Level Inputs	while a higher slope c		irness	No
Preamp Outputs	1 pair		No	1 pair
Width (inches)	15-1/4		7-7/8	9-1/8
Height (inches)	2-1/8		1-1/2	2
Depth (inches)	9-13/16		2-9/16	7-3/8
Parts Warranty	3 Years		1 Year	90 Days
Labor Warranty	3 Years		1 Year	90 Days
	Owner's Manual		Owner's Manual	Owner's Manual
	Useda en Deserval		Uanda an Dasaarah	Uanda en Dassarah

**UX** Audit and Recommendations

# 12. Configurator

Refer to page 170 for Lenovo UX team audit.

UX Audit and Recommendations

## **13. Cart**



2021 Lenovo Internal. All rights reserved.

148

### Maintain Consistent Top Navigation Inside Cart

#### Impact

Good

**13.1** Maintain consistent top navigation during cart experience in all supported browsers

#### Issue Solved:

In some user tests, the main navigation of the site changed to PC & Tablets once DC items were added to the cart. This is not recommended, especially for users who use the cart as a save function while browsing the site.

### When an HPE user is in the cart, the sub-navigation remains consistent in the Shop section



Verizon's site keeps a user within the Personal section when they transition to the cart



On the Asos and Zalando sites, the primary navigation remains active on the previously- selected category, "Women", when a user is in the cart	HELP & CONTACT	Accessories Sports Designer Brands Sale	ALL ABOUT ZALANDO
	My Bag (1 item)		Total
	Mark	ketplace Help & FAQs 😩	
New in Clothing Shaes Accessories Activewear Face + Br			
OCCASIONWEAR	reserved for 60 minutes		

### Cart

### Organize Spec Lists into Category Buckets

Impact

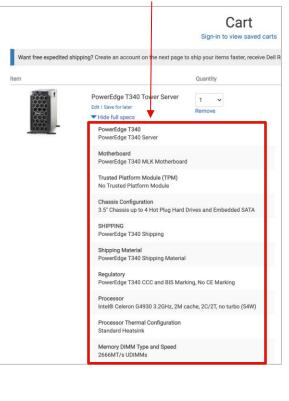


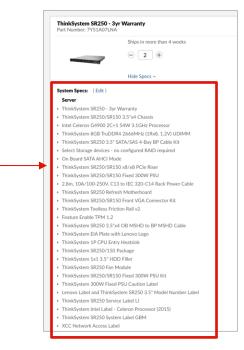
**13.2** Under "View/Edit Specs", organize the spec lists into buckets by type (Storage, Memory, Power, etc) so they are easier to scan and compare.

#### Issue Solved:

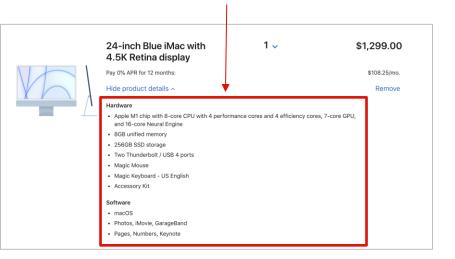
Product specs should be organized in a way that facilitates comparisons, especially for users who typically store products in the cart during the browsing phase. System specs can be viewed in the cart on the Lenovo site; however, they aren't grouped into categories with intuitive labels (Storage, Memory, Power) like they are in the configurator. This makes it difficult to understand what some components are and also difficult to scan

In Dell's cart, a server's specs are categorized, making it easier to scan and recognize the components





#### Apple's cart also includes specs organized by spec category



Cart

## Improve User Interactions

Impact

Better

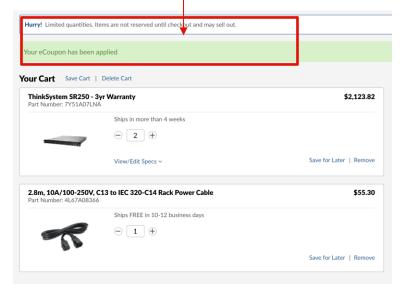
13.3 Streamline alerts by moving them next to the product they refer to.

13.4 Place emphasis on the total price in the cart summary.

**Issue Solved:** 

Lenovo's cart experience lacks trustworthiness because pricing and discounts aren't clear to users.

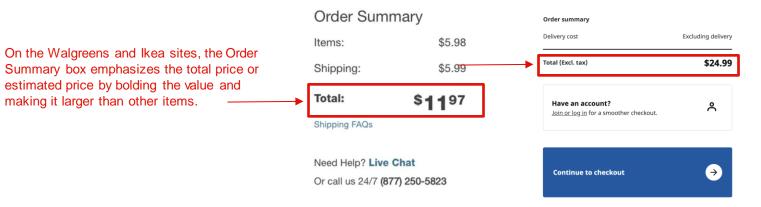
Lenovo's cart alerts all appear above the cart, rather than next to the product they refer to. Even though an eCoupon has been applied, pricing for individual products has not changed and a user doesn't know which item the coupon applies to.



making it larger than other items.

#### On AT&Ts site, alerts and discounts are noted directly next to the products they apply to.





### Improve Product Listings

Impact

Best

13.5 Provide larger thumbnails.

**13.6** Include added price of each configuration in View/Edit Specs.

#### Issue Solved:

Product images and pricing should be organized in a way that facilitates comparisons, especially for users who typically store products in the cart during the browsing phase. Apple's cart is optimized for product comparison and storage by featuring large thumbnails



### Here's what's in your bag.

Free delivery and free returns.

	ghtning to 3.5 mm Head dapter	dphone	Jack	Qty: 1 ~	\$9.00 Remove
\₽	Add a gift message				Add
٩	Order by 7am, delivers: Today 7am - 9am - Fastest Wed, Aug 29 - Free Delivery options for: 10001 ~	۲	Pickup: Today at Ap Show more	pple West 14th Street e stores	

\$10,474.93 — 1	6 Gen10 Plus 7302 1P 32GB-R 8SFF 500W	PS Server	\$10,474.93	
Base Model # P07596-B21	Config # 4e913676e7e65c5^	Edit	configuration	
Product #P07596-B21	HPE ProLiant DL385 Gen10 Plus 7302 1P 32GB-R 85FF 500W PS Server	1 item	\$3,159.99	HPE includes pricing for each
Product #VZ3380	Assembly fee for complexity low	1 item 🗊	\$80.00 ┥	 individual configured item and
Product #P18434-821	HPE 960GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	1 item	\$475.99	ability to delete from the cart
Product #P18436-B21	HPE 1.92TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	1 item	\$712.99	
Product #832514-B21	HPE 1TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty Digitally Signed Firmware HDD	1 item	\$245.99	
Product #765466-B21	HPE 2TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e Digitally Signed Firmware HDD	1 item	\$599.99	
Product #BD505A	HPE iLO Advanced 1-server License with 3yr Support on ILO Licensed Features	1 item	\$259.99	
Product #P11061-B21	Microsoft Windows Server 2019 (16-Core) Datacenter Reseller Option Kit English SW	1 item	\$4,939.99	

### Include Cross-Sell Section with Related Accessories

Impact

Best

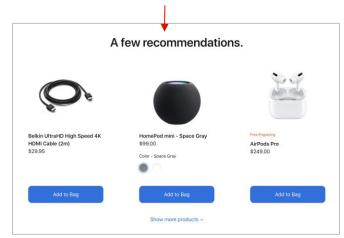
**13.7** Include a cross-sell section with related accessories. Adapt cross-sell suggestions and promotions strongly to the user's current context. Ensure cross-sells are styled as secondary content.

#### Issue Solved:

Lenovo is missing an opportunity to crosssell items related to cart contents.

ltem		Availability	Price	Quantity	Item Total
-	HPE ProLiant DL380 Gen10 SMB Networking Choice - rack-mountable - Xeon Gold MFG Part: P34850-621 CDW Part: 6424503 UNSPSC	In Stock Get it Thursday, June 17	58.882.00 \$6,045.99 Advertised Price	1	\$6,045.99
	Top Recommendations			@ ilO	
	and the second se			14	

Apple's cart includes a section that recommends accessories to products a user has added to the cart alongside products related to the user's browsing history



Can	on EOS 5D Mark III DSLR Ca	imera (Body Only	y)
You	Pay \$2,499.00		
	к	eep Shopping >	View Cart
sauare	3 Year Drops & Spills	\$297.99	ADD
square trade protection	2-day Service Guarantee     Worldwide coverage     24/7 Customer Service		View more plans Starting from \$97.0
Recommended Access	orios		
Recommended Access	ories		
Required Items: A lens	is not included, Get the type of ler nory card is not included, be sure t		
Required Items: A lens A men	is not included, Get the type of ler	o purchase enough s	storage capacity.
Required Items: A lens A men	is not included, Get the type of ler nory card is not included, be sure t	Convertient SanD Pro O	storage capacity.
Required Items: A lens A men	is not included, Get the type of ler nory card is not included, be sure t	Compartiant Compa	storage capacity. Disk 32GB Extreme CompactFlash
Required Items: A lens A men	is not included, Get the type of ler nory card is not included, be sure t anon EF 24-70mm (2.8 LI I USM Lens 32	Compartitue The PRO To Having SanDisk SanDisk	storage capacity. Disk 32GB Extreme CompactFlash tory Card
Required items: A lens A men	is not included, Get the type of ler nory card is not included, be sure t anon £7.24.70mm (2.28.11 USM Lens av Pay \$1,799.00 ➡ Add to Cart anon LP-E6N Lithium-	Construction Co	itorage capacity. Disk 32GB Extreme CompactFlash bory Card Pay 559.95 Add to Cart k Tank
Required Items: A lens A men	is not included, Get the type of ler nory card is not included, be sure t anon EF 24-70mm (22BL II USM Lens (22L II USM Lens (22L II USM Lens (22L II USM Lens) (22L II USM L	o purchase enough s me PAD Wo way Samblak You F Thim Phot	storage capacity. Disk 3268 Extreme CompactFlash Fory Card Yay \$59.95 Add to Cart
Required Items: A lens A men	anon EF-24-70mm (228L II USM Lens ou Pay \$1,799.00 ■ Add to Cart anon LP-E6V Lithium- on Battery Pack (2.2V,	e o purchase enough s me PRO We way Samilar Samilar You F You F Thin Phot Shou	torage capacity. Disk 3268 Extreme CompactFlash Yary S59.95 Add to Cart k Tank o Retrospective 21

At IKEA, the 'You Might Also Like'cross-sell section presented at the bottom of the cart contains onlyother similarlypriced kitchen tools that could conceivably be of interest to a user purchasing a measuring cup



### Include Links to Print and Email Cart Contents

Impact

Best

**13.8** Provide users a way to print or email the details and pricing of the products in their cart.

Issue Solved:

There is currently no way to share cart contents with another decision-maker for approval.

#### HPE DELL Coupons Estimated total Enter Coupon Apply Coupon \$13,923.91 Item total Chat with an agent for additional help. Est. shipping \$0.00 HPE and Dell's carts both Est.sales tax \$0.00 include a link to Email Cart \$5,401.68 Total Savings Subtotal (4 Items) \$8,406.00 Your order gualifies for Free Shipping! Shipping Free Tax based on 27516 Change \$630.48 Estimated Total \$9,036.48 Estimated total \$13.923.91 Checkout Promotion code Apply **PayPal** Shipping & return policies: Express Checkout 🔻 $\rightarrow$ Insight Buy with G Pay → TigerDirect Checkout Continue Shopping 🔻 Save Cart Email your cart 🗹 🛛 Email Cart AT&T includes an option to Print the cart and users can then save as a PDF during that function to email to decision makers. My cart Check out Print Save cart Retrieve cart Empty cart

### Improve the Cart Icon Design and Functionality

#### Impact

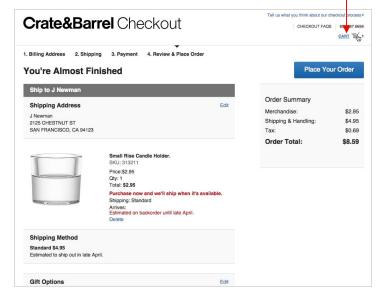
**13.9** Design the cart icon with more visual impact.

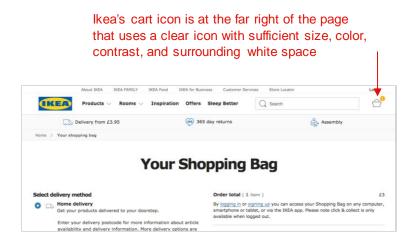
Best

**13.10** Include a product quantity number next to Cart icon.

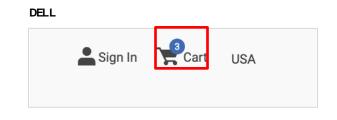
**Issue Solved:** It is difficult to spot Lenovo's cart at a glance, making it difficult for users to access items that have been saved in the cart or begin the checkout process.

### Crate&Barrel features a large cart icon and link, with no distraction of any other icons nearby





Dell and HPE both include a number next to the cart icon to indicate how many products a user has added



ຂ ເມື່⊛ ⊕ ລ cart

HPE ProLiant DL385 Gen10 Plus 7402 2P 32GB-R 16SFF

Product: P07598-B21

NVMe 800W PS Server

HPE

htact

### Cart

### Redesign Discounts and Coupons

#### Impact

#### Best

**13.11** Reorganize discounts and coupon information.

**13.12** Expand the coupon section so the entry field is open by default and add explainer language for automatically-applied eCoupons.

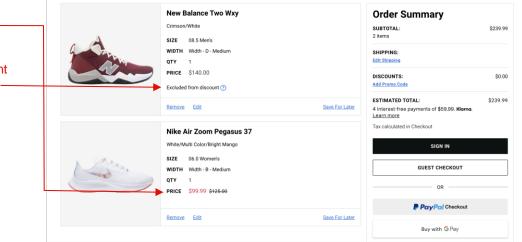
#### Issue Solved:

Important details are organized poorly. The cart and coupon entry is not quickly accessible or explained when automatically added.

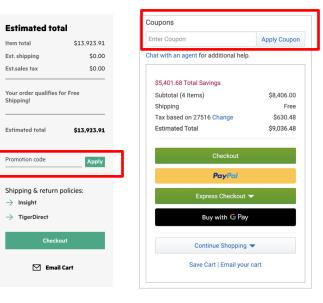
Foot Locker's discounts are clearly labeled next to each product

Items that are excluded from the discount are labeled in the product box as well —

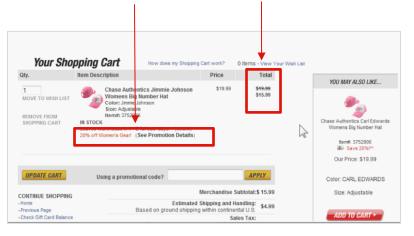
Discounts are well organized within the Order Summary



### HPE and Dell have open coupon box fields in the cart summary section



### NASCAR.com notes the discounted price for an item in the cart, providing the discount amount and an explanation of which promotion was applied



### Reorganize and Redesign the Bottom of the Cart

Accessories

Accessorie for you.

Shop a

#### Impact

**13.13** Optimize the usage of the space on the page and increase the size of information in the cart.

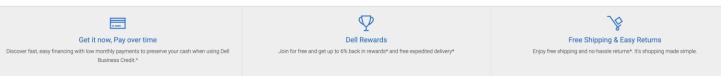
Best

#### Issue Solved:

There is too much unused white space on the cart page.

Apple AirTag Edit   Remove Duo Case for iPhone 11 Pro/XS/X	Due today* - \$29.97 Wireless Charging Pad with Fast	One or more of your items is out of stock at this time. Your entire order will ship to 70-70-21 when all items are available.     Order summary     Have a promo code or discount?     Subtotal     \$29.97     Due today     \$29.97	Verizon and Best Buy make space on the Cart page. The of information and options o information is organized logi are divided to make it easy t	bugh there is a lot n the page, cally and sections
s29.59 all accessories > Add to cart >	Charge 540.90  Your Cart  Special Offers: We found offers available ba  Sory -WF-1000M4 True Workshop Conf. True Workshop Conf. True	Unavailable within 529 miles of Ballery Constraints Unavailable of the same. Presse clock other stores REE Shopping to 27514 With only you when 1% ready to ship		
	Buds Totally Wreless Noise Noise-C ************************************	\$229.99		

Dell includes a section on the bottom of its cart page organizes extra information about financing, rewards, shipping and returns. This section is easy to find but doesn't get in the way of the primary cart content



UX Audit and Recommendations

# 14. Checkout



### Ensure Checkout Process Steps are Clear

#### Impact

Good

**14.1** Provide clear rollovers and hover states for process step links.

**14.2** Style buttons that progress users forward in steps differently than final purchase button.

**14.3** Ensure steps within tabs are clearly numbered and labeled.

#### Issue Solved:

Users intuitively click or tap on process steps to navigate the checkout, which isn't clear on Lenovo. In addition, users may become confused or lost if they aren't able to match their progress in the checkout flow to the process steps displayed. In the first step of Lenovo's checkout, "Shipping & Delivery" is labeled #2 (the second step on that page), but "Shipping Information" is missing its "1" step label

1	2	3	
Sh pping	Payment	Review	All done!
▲ Ship times are estimates. Due to Covid-	19, expect possible shipment delays.	× View	Order Summary
Shipping to APO? Do this first		Subto	
Shipping Information		Shipp Total You're	-
Contactor and	( test source t		
First name * Lauren	Last name * Rivers		Continue to Payment
Address line 1*	A day of the A		Don't miss out!
601 W Rosemary St Unit 108	Address line 2		You could earn \$0 in Rewards.
Note: We do not ship to P.O. Boxes.			Tou coula cum po in reviewa.
City or Township * Chapel Hill	State" North Carolina	· · · · · · · · · · · · · · · · · · ·	ver products do not earn rewards. F
Спарег на	North Carolina	m	ore information please see our FAQ
Zip Code*	Phone or Cell*		Login with Lenovo ID
27516-2354	9199329985		
		SHOT	W CART ID>
	Company	300	W CARLID?
Ext.	Rivers Agency		
Email*			
lenovo@riversagency.com			
Sign up for emails to get the scoop on dis product launches, and more.	counts,		
All information entered will be dealt with according to our P	tivacy Policy		
We are unable to ship orders to PO boxes, hotels, freight fo		ional expertent, or any address	
sutside of North America.	menang or consumption content, and party hubs, internati	normal support out of our serve and \$2000	
onave of norm remental			
2. Shipping & Delivery			
Ships in" indicates when an item will be picked up Standard delivery time is 2-5 days after it has left l			
hinkSystem SR250 - 3yr Warranty	Delivery Method*	$\sim$	
hips in more than 6 weeks	4-5 Day Standard Delivery (FR	EE)	

### American Eagle's checkout has multiple steps that are clearly numbered and labeled:

Shipping Address		
Country		•
Don't see your country? Change Site Settings		
First Name	Last Name	
Street Address		
Street address, house number		
Apt #, Floor, etc. (Optional)		
Apartment number, unit, floor, etc.		
City	State	•
Zip Code Shipping Options (Estimated) (?) Odda by 188 EST to receive by data below		
Shipping Options (Estimated) ⑦ Order by 1PM EST to receive by dates below.		\$7.00
Shipping Options (Estimated) ③ Order by 1PM EST to receive by dates below.		\$7.00
Shipping Options (Estimated) ③ Order by 1PM EST to receive by dates below.		\$7.00 \$15.00
Shipping Options (Estimated) (*) Order by 194 EST to receive by dates below.		
Shipping Options (Estimated) ③ Order by 1PM EST to receive by data below.	Free Returns. Sign.Up Free   Sign.in	\$15.00
Shipping Options (Estimated) (*) Order by 19M EST to receive by data below. STANDARD 37 Business Days Arrives between July 05-July 09 TYO DAY 2 Business Days Arrives by July 02 OVERNIGHT 1 Business Days Arrives by July 01	Free Raturns. Sign Up Free   Sign In	\$15.00

### Crate&Barrel's primary Place Order button is styled differently



Place Your Order

By placing your order, you are agreeing to our Terms of Use and Privacy Policy. Clicking Place Your Order will finalize your transaction.

### REI's buttons include helper text to reassure users that clicking a Continue button won't lead to a final purchase

Next, add your contact information

Continue

Next, review your order. You won't be charged yet.

### Provide a 'Back' Button In Checkout Process

Impact

Better

**14.5** Allow users to use a "Back" button to navigate backwards through all checkout steps.

#### Issue Solved:

Since it's unclear that a user can navigate using the top process steps, they may not realize they can go back to edit until the final step which displays a small 'Edit' link. The Crate&Barrel and Bell sites both provide secondary-styled buttons that allows the user to go back one step in the checkout process

Redeem Promo Codes or Rev	vards +
Pay with Credit/Debit Card 💿	
The payment below will be applied to y	/our order.
VISA XXXX-XXXX-9540 Edit	
Pay with 2 credit o	cards
Back to Shipping Page	Continue to Review Page

You will have an opportunity to review your order on the next page.

1

Name and address associated w	ith the credit	card						
<ul> <li>Your billing and shipping information</li> </ul>	tion below m	ust exa	ctly match t	the informatio	n your credit ca	ard comp	oany has on file.	
<ul> <li>Your billing address must be a here</li> </ul>	ome address.	We on	ly accept p	ersonal credi	t cards.			
<ul> <li>You must be the primary cardhol</li> </ul>	der on your c	redit ca	ird account					
Note: we don't ship orders to P.0	). boxes.							
Cardholder name	Federico (	Caria E	dit					
Billing address	54 Virginis	Avo F	aet Vork (	ON M4C 2S7	Edit			
* Credit card number						0	VISA 🌒	×
* Expiration date	мм	\$	YYYY	\$				
* Card security code				0				
<b>W</b>								

### Simplify Address and Credit Card Entry

#### Impact

Better

**14.6** Autodetect city and state immediately after zip code is provided.

**14.7** Match the credit card field sequence to the physical card's information sequence.

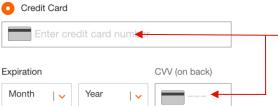
#### Issue Solved:

Typing generally fatigues users and they will occasionally make typos, even for wellknown inputs. Simplifying form entries leads to higher conversion rates on all platforms and auto-fill and detect improves address accuracy. Home Depot hides city and state fields, and also provides explanatory text to ensure users understand they must enter their zip code to see the city and state. Eye-tracking tests confirm that users are able to fully cope with the unconventional address sequence of having the zip code field first.

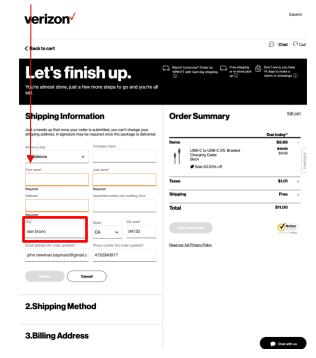
Carrier *	R 3:57 PM B secure2.homedepot.com
Addres	s Line 1
Add	ress Line 1
Addres	s Line 2 (Optional)
Ара	rtment, suite, building, etc.
ZIP Co	de
	Enter ZIP Code to see city and state.
V:	se as Billing Address

### Payment

### PayPal



Verizon autodetects city and state values after users have entered the last digit in their zip or postal code, but it also allows users to override the autodetected values.



The credit card field sequence should match the order of the information on the physical card — in particular, the "Card Number" should be the first field, while "Security Code" or "CVV" should generally be the last field.

### Add Alert Messaging When Users Jump Ahead in Steps

Impact

Better

**14.8** Highlight incorrect fields in red and place the error message in close proximity. With a single error, autoscroll users to the erroneous field; with multiple errors, show them a universal message outlining there are multiple errors at the top of the page.

#### Issue Solved:

Users must be able to understand that an error occurred and exactly which fields caused it in order to resolve the error. Error and alert messages are not consistently shown across supported browsers (e.g. Firefox).

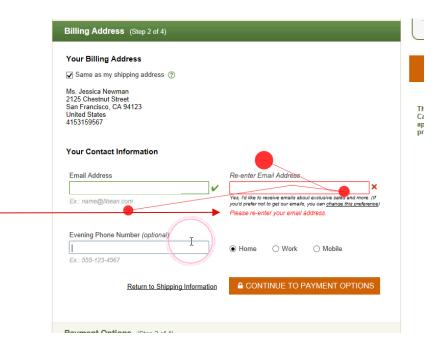
On REI, when a user's credit card fails to
validate, they are autoscrolled to where
the error took place, making it easy to
spot where on the page a correction is
needed

On LL Bean, a live inline validation error alerts the user to the mistake when they skip a field. Live inline validation prevents a user from getting to the next page and allows them to fix the input while it's still fresh in mind

KEI membership No REI membership s Edit			Total due	\$119.63
Payment method	1	1		00% SATISFACTIO GUARANTEE
Coupon code Gift card				
Credit card				
Card number*		ity code* ⑦		
There appears to be information to try ag		r your credit card		
Continue Don't	worry, your card won't be charged yet.			

### **3. REVIEW AND SUBMIT ORDER**

Live Help 5 am to 10:30 pm PT More contact options 1-800-426-4840 Call 7 days a week 4 am to 11 pm PT



### Allow Users to Edit Individual Category Data Directly at the Review Step

Impact

#### Better

**14.9** Allow users to edit information directly at the review step via inline form fields or page overlays (ie Shipping, Billing, Payment).

#### Issue Solved:

Editing prior-typed information often leads to cumbersome navigation when users are sent backwards in the checkout flow. Previously entered data is not saved when users go back to previous steps to make changes. On Lenovo, editing in any checkout category during 'Review' step forces the user to the beginning of the checkout process, clearing credit card data along the way

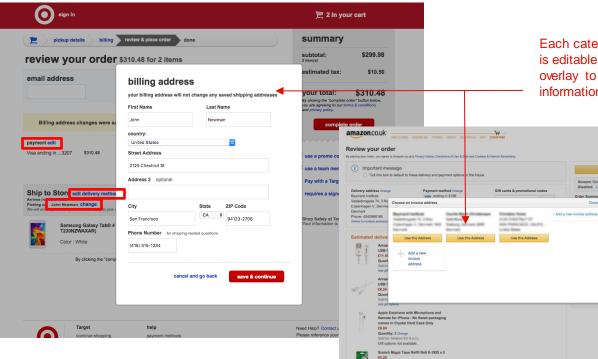
#### EDIT SHIPPING & PAYMENT

Shippin

Billing I

Paymer

ng Details	Lauren Rivers
	Rivers Agency
	601 W Rosemary St Unit 108, Chapel Hill, North Carolina, 27516-2354
	9199329985
	aglogic@riversagency.com
Details	Lauren Rivers
	Rivers Agency
	601 W Rosemary St Unit 108, Chapel Hill, North Carolina, 27516-2354
	9199329985
ent Details	Credit card type Visa
	Credit card number ending ********5155
	Expiration 2/2022
	Amount to be charged \$1,141.55



### Each category on Target and Amazon is editable and brings up a page overlay to allow users to edit information directly at the review step

GBP 5.88

GBP 51.57

### Use a Single Column for Form Fields

Impact

Best

**14.10** Avoid multi-column form designs — use a single primary column for form fields. Having minimal credit card and address fields on the same line can be okay.

**Issue Solved:** Two column form fields in checkout make it easy for users to accidentally skip steps or input data into the wrong fields.

#### On Bell, all the forms are displayed in a single column Bell Back to summary • 3. Review & place Billing and shipping \* Required field 0 • First name \* Last name 0 \* Street address Can't find your address? Entry code (optional) \* Email address e.g., example@email.con \* Confirm email address Daytime phone numbe e.g., 1234565670 Evening phone number (optional e.g., 1234565676 Back to Summary Continue to payment

address	fields side by	side	
Create Account			
Activate Stop & Shop Rewards			
you shop online or in store. First Name	Checkout		Show Order Summary: \$1,53
Last Name	Where sho	u <b>ld we send yo</b> u nd address:	ur order?
Street Address	First Name		
Apartment or Suite (optional)	Last Name Street Address		
City	Apt, Suite, Building (Op	tiona)	
	Zip Code 22201 Country/Region	City, State Arlington , VA	·
State Zip Code	United States This is a business add	ress. 🕘	
Email Address	What's your conta	ct information?	
	Email Address		We'll email you a receipt and send order updates to your mobile phone via SMS or iMessage.
	Phone Number		The phone number you enter can't be changed after you

### Add an Initial **Step with Two Buttons**: **Checkout** as **Guest and Sign In**

Impact

Best

**14.11** Add an initial step with two buttons: Checkout as Guest and Login. Separate New Customers and Returning Customers a the start and encourage users to create an account later in the process.

Issue Solved: No quick prompt for existing customers to login for checkout process. Reminding customers to login early reduces friction by autofilling appropriate customer data.

### On Lenovo, the only spot promoting Lenovo Pro is small and within the order summary box

iome > Checkout Shipping & Payment				
Secure Checkout				
(1)	2			(4)
Shipping	Payment	Review		All done!
Ship times are estimates. Due to Covi	id-19, expect possible shipment delays.	×	View Order Summary	,
Shipping to an APO? Do this first			Subtotal: Shipping:	\$1,061.9 FRI
Shipping Information			Total: You're saving	\$1,061.5 \$860.
First name * Lauren	Last name * Rivers		Co.rtinue	to Payment
Address line 1* 601 W Rosemary St Unit 108	Address line 2			niss out!
Note: We do not ship to P.O. Baxes.			You could earn	\$0 in Rewards.
City or Township * Chapel Hill	State* North Carolina	~	more information p	not earn rewards. For please see our FAQs
Zip Code" 27516-2354	Phone or Cell * 9199329985		Login with	Lenovo ID
Ext.	Company Rivers Agency		SHOW CART ID>	

Crate&Barrel does this best by segmenting between New and Returning customers. New users Continue as Guest and then have the opportunity to create an account later. Returning customers are prompted to log in to save time in the checkout process

Crate&Barrel Checkout	Tell us what you think about our checkout process CHECKOUT FAGS   800.967.6894 CART 👾 1
New Customers	Returning Customers
Proceed to checkout and you will have an opportunity to create an account at the end if one	Sign in to speed up the checkout process and save payments to account.
does not already exist for you.	Email: required
Continue as Guest	Password: required
	Remember me Forgot your password?

Sign In

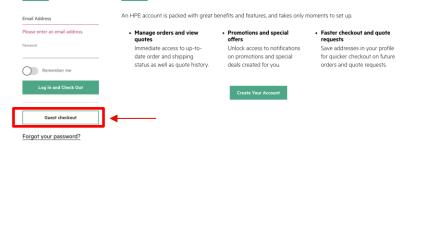
### Dell and HPE prompt users to either sign in or check out as a guest, though guest checkout is secondary

	Checkout
Sign In 🔻	Guest Checkout
Email me a one-time passcode	Create an account (Optional)
Email Address *	Continue as Guest
<b>2</b> 0	
Password *	
Show	
Sign In Forgot your password?	

Norton

SIGN IN

### CREATE AN ACCOUNT



### Include **Additional** Financing **Options**

#### Impact

Best

14.12 Display financing options on the payment page.

#### Issue Solved:

As new payment methods gain traction, users' expectations about what they can use during checkout will evolve (Apple Pay, Google Pay, Visa Checkout, MasterPass, etc). A subset of users will expect more than one option, specifically a financing option, when the price of the product is high.

Dell provides information at the top of their payment page promoting low monthly payments, other benefits and how to apply

#### **3** Payment Method

Credit/Debit Additional Payment Methods

Purchase Request

Leasing Option

HPEFS lease as low as \$54.29/mo 📝

Purchase Order Number

Your purchase request will be sent to HPE Financial Services and TigerDirect order management teams. Before processing the order, they will contact you to confirm credit approval and review financial terms including actual monthly payment.

V



Make your upgrade to the leading edge technology affordable with low monthly payments when using Dell Business Credit.^

- A Hide
- Quick, simple financing with Dell Business Credit gets you: - Affordable monthly payments
- Access to exclusive sales and special financing offers
- May build your business credit profile

New/Existing Customers: Select Dell Business Credit as your payment method from the options below.

#### Select method of payment



Dell Business Credit

payments

Apply for Dell Business Credit<sup>^</sup>

#### Already a Dell Business Credit customer?

· Dedicated technology line of credit designed Don't wait. Your Dell Business Credit purchasing power specifically for your business' needs · Improve your cash flow with low monthly ignite your business.\* · Instant ownership of state of the art technology No annual fees

is ready to help you acquire the technology you need to Pay using Dell Business Credit

Apply now

HPE includes an "Additional Payment Methods" tab with leasing options

### Include Collapsed 'Add Coupon' in Order Summary Box

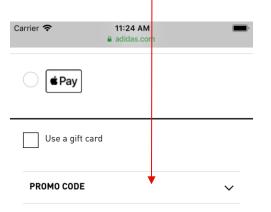
#### Impact

Best

**14.13** Give users multiple chances to add a possible coupon code during checkout instead of having to exit checkout to apply in the cart. Collapse coupon and promotional fields behind links, and place those links secondary to the step's primary purpose.

#### Issue Solved:

The only place to add or edit a coupon code is before the user begins the checkout process. Adidas offers users the ability to input a promo code at both the cart and the payment step, but collapses the field to decrease the emphasis.

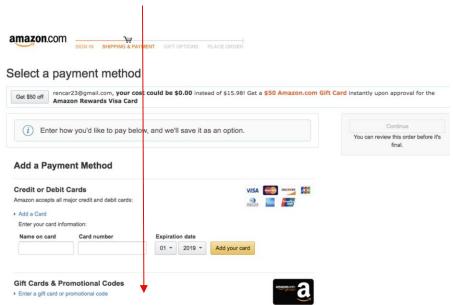


#### ORDER SUMMARY

Total	\$132.38
Sales Tax	\$10.38
Delivery	FREE
Product total	\$122.00
1 product	

PLACE MY ORDER  $\longrightarrow$ 

#### Amazon offers a place to input promotional codes, but it's also collapsed on the payment step



### UX Audit and Recommendations

# Appendix



2021 Lenovo Internal. All rights reserved.

168

### Sources

- 1. Baymard Institute: <u>https://baymard.com/</u>
- 2. Nielsen Norman Group: <a href="https://www.nngroup.com/">https://www.nngroup.com/</a>
- 3. Statista: https://www.statista.com/
- 4. Interaction Design Foundation: <a href="https://www.interaction-design.org/">https://www.interaction-design.org/</a>
- **5.** *Designing the User Interface: Strategies for Effective Human-Computer Interaction*, Authors: Ben Shneiderman and Catherine Plaisant
- 6. Lenovo UX Team Configurator Audit, May 2021
- 7. McKinsey Servers CX Research, June 2021
- 8. Blue Triangle User Path Audit, June 2021
- 9. Adobe Analytics, February 2021-May 2021

Smarter technology for all

# DCG Server Configurator

Leah Kaufman | May 2021

O NO U O NO

2021 Lenovo Internal. All rights reserved

### Server Configurator Study: Goals & Method

### Goals

- Get a basic understanding of the successes vs. pain points when using the Configurator
- Use this to discuss
  - Ideas for improving the Configurator
  - Plan additional research

### Method

- Usability test with IT admins (n=8) & Interviews with Lenovo server customers (n=3)
  - Show us how they use configurator
  - · Comment on what works vs. doesn't
  - · List improvements they want to see
- Use results from the two studies to get an initial sense of what could be improved

	i i i i i i i i i i i i i i i i i i i	Search for Part	
Base Processors Memory	Storage OS & Software PCI Power Others Security Value Added Options Services	Summary	
Processors memory	Storage US a soutwate PUL Power Uniters Security Value Aqueo Options Services		\$1,902.00
ase Base	Base	Collapse All After Instant Savings: Coupon Price:	\$1,236.30
WEFI Operating Modes     UEFI Operating Modes		\$1,050.86	
	✓ Base ∅		
	Qty Description	Price 🕐 🏶 Add To Cart	
	1 ThinkSystem SR250/SR150 3.5'x4 Chassis	S414.38 O ( Configuration Tree	
	O ThinkSystem SR250 2.5" Chassis	\$428.19 View	Detail >
	1 ThinkSystem SR250/SR150 3 5'x4 Chassis	SELECTED Category Base	Quantity
	✓ UEFI Operating Modes ♦	ThinkSystem SR250/SR150 3.5"x4 Chassis Processors	
	Qty Description	Price (2)  Price (2)  Memory	
	O Operating mode selection for: "Efficiency - Favoring Performance Mode"	S0.00 ThinkSystem 8GB TruDDR4 2666MHz (1Rx8, 1.2V) UDIMM Storage	
	Operating mode selection for: "Efficiency Favoring Power Savings Mode"	S0.00 ThinkSystem SR250 3.5" SATA/SAS 4-Bay BP Cable Kit Select Storage devices - no configured RAID	1
	Operating mode selection for: "Maximum Performance Mode"	\$0.00 required On Board SATA AHCI Mode	
	O Operating mode selection for: "Minimal Power Mode"	PCI \$0.00 ThinkSystem SR250/SR150 x8/x8 PCIe Riser Power	
		Collapse All ThinkSystem SR250/SR150 Fixed 300W PSU 2.8m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable Others	
		Outers	

### Server Configurator Study: Main areas to improve

Filters separate the filter and nav functions; stay visible as user scrolls down

Summary make it easy to save, compare, and share this info

Processors better differentiation of the processors, more details

Memory more filter options; provide a visual to show layout of bays/slots

**Storage** review order of Storage choices so that dependencies make sense; change UI to show only compatible choices & get fewer error messages; provide visuals to show layout and support planning for future expansion

### Knowledgeable users

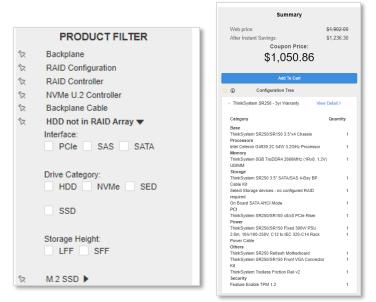
- The control and flexibility & ability to try different set-ups and see how the pricing changes, is great for those who know what they're doing
- **Could benefit from** more granular info so they don't have to leave the site to go learn the details

### Less Tech-savvy users

- Users with less knowledge struggle to understand the choices and the dependencies that generate the error messages; may simply make best guess or settle for default selections
- **Could benefit from** guided set-up wizard and/or smaller set of choices; more education built into the content; easy access to rep when they have questions

### Both groups could benefit from

· Visuals that show layout & help them understand what goes where and how many will fit



**Comment on Processors** "Someone who does this will have a good understanding of the processor they want but this can be hard to decipher if you don't know what all these processors are. Maybe having more descriptors on the processors or having a way at a glance to differentiate them, that would be beneficial."

**Comment on Memory** "Most useful is knowing the layout, can you do 4 sticks, 8 sticks, number of sticks in each bay. [Would a visual help?] Visual of the board would be a real quick easy reference drawing that shows how many slots..."

### Server Configurator Study: Main nav bar

### Successes

• Clearly shows choices

### Issues

- Some users expect a 'Next' button that takes them to the next section
- Not anchored; as you scroll down you lose the label that identifies which section you're in

### **Recommendations/What to Consider**

- Consider whether a 'Next' button might be effective or another UI change that clearly shows users how to move through the sections
- Have icons change to show which ones the user has used
- Is this the right order for these eleven items
- Do customers need to make selections in all sections? If not, indicate which ones are required

### **Server Configurator Study: Filters**

### Successes

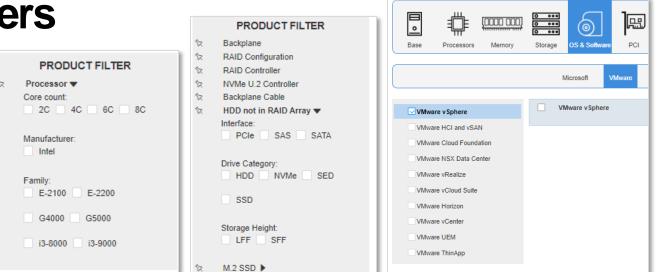
Clearly shows choices

### lssues

- Easy to ignore and never discover
- Pane is a mix of navigation and filtering, not always clear when it's doing just one vs. both
- Pushpin icon doesn't communicate that this is a nav
- OS & Software Nav lists need to be radio buttons
- Selecting a nav item takes you to it on the page but the nav pane stays anchored at the top

### **Recommendations/What to Consider**

- Make it stand out more, more findable
- Better visual cue for nav vs. filter functions
- Label at top says 'Filter' but not all of these are filters; consider different labels or separate sections
- Let left-hand pane move with scrolling so that the choices and ability to select are always present



Base	Processors	Memory	0 ••• 0 ••• 0 ••• Storage	05 & 50	ftware PC		<b>Ge</b>	Others	Security	Value Added
হি হি Systei হি Front VGA	Others	s other Boar	d 0							
Rai     Kit       L     External cables option       L     External Conversion Cable				Qty 1	Description ThinkSystem	SR250 Refi	resh Mothe	rboard		
			۲	1	ThinkSystem	SR250 Refi	resh Mothe	rboard		

### **Server Configurator Study: Summary**

### Successes

Clearly shows list of specs

### lssues

- No price for each item
- No way to save, share, or send this

### **Recommendations/What to Consider**

- Consider adding prices
- Find a way to let customers hang on to this content
  - Consider letting them name and save this
  - Build in a function that lets them compare saved summaries
  - Superpower: Let them and their team members annotate the saved summary (highlight, add comments) so they can literally compare notes during their decision process

Summary Web price: \$1,902.00 \$1,236.30 After Instant Savings: Coupon Price: \$1,050.86 Add To Cart 1 Configuration Tree ThinkSystem SR250 - 3yr Warranty View Detail > Quantity Category Base ThinkSystem SR250/SR150 3.5"x4 Chassis Processors Intel Celeron G4930 2C 54W 3.2GHz Processor 1 Memory ThinkSystem 8GB TruDDR4 2666MHz (1Rx8, 1.2V) 1 UDIMM Storage ThinkSystem SR250 3.5" SATA/SAS 4-Bay BP 1 Cable Kit Select Storage devices - no configured RAID 1 required On Board SATA AHCI Mode 1 PCI ThinkSystem SR250/SR150 x8/x8 PCIe Riser 1 Power ThinkSystem SR250/SR150 Fixed 300W PSU 1 2.8m. 10A/100-250V. C13 to IEC 320-C14 Rack 1 Power Cable Others ThinkSystem SR250 Refresh Motherboard ThinkSystem SR250/SR150 Front VGA Connector 1 Kit ThinkSystem Toolless Friction Rail v2 1 Security Feature Enable TPM 1.2 1

### Server Configurator Study: Processor

### Successes

Clearly shows list of choices

### lssues

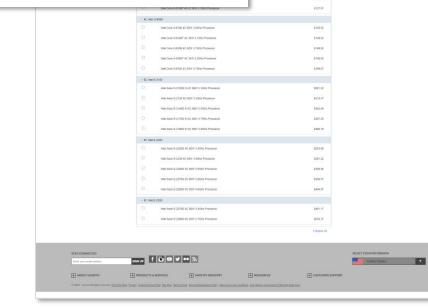
- Not enough detail, need to leave site to get more info
- Hard to tell them apart
- Filter has 'Processor Family' but this info isn't actually in the model name for each processor
- No way to compare the processors, have to leave site to get more info

### **Recommendations/What to Consider**

- Are there other ways to differentiate the processors? What details are most important and can we use color, highlights or other visual cues to distinguish them
  - Let the user select the core count they want and then highlight those processors with a color
- Add a way to compare the processors, help users understand how they differ

"Someone who does this will have a good understanding of the processor they want but this can be hard to decipher if you don't know what all these processors are. Maybe having more descriptors on the processors or having a way at a glance to differentiate them, that would be beneficial."

ThinkSystem SR250 G4930 8GF



OPRO→ | Locator @ | Contact Us 9 | Rewards 🛣 | Account & | Cart 🗑 | Acc

\$1,050,8

(\*) Seltaver 🍪 Support 🔊 Serie

### Server Configurator Study: Memory

### Successes

Lots of choices

### Issues

- Need more filter options, e.g. Total RAM
- User needs to plan for future, decide if they need room to grow; will leave site to get info about RAM and slots, would rather have the info here
- Is RAM error-correcting
- Visual of the board would be excellent

### **Recommendations/What to Consider**

- More filters
- More details
- Provide wireframe drawings that show bays, slots, number of sticks that can go in each bay, and other details

	Base Processors Memory	Storage OS & Software PCI Optical Drive Power Others Security Services		
			Collapse Al	
\$	PRODUCT FILTER ☆ Memory ▼ Memory Type: 3DS RDIMM RDIMM	Memory		
		Information Lenovo now offers a memory configurator to assist you in selecting DIMMs optimized for your needs. Try it now by clicking the "Launc by selecting the "Memory Configuration" link in the Tools menu.	h Memory Wizard" or	
	Launch Memory Wizard	✓ Memory ■		
		Qty Description	Price (each) ⑦	
		ThinkSystem 8GB TruDDR4 2933MHz (1Rx8 1.2V)		
		1 RDIMM-A	\$81.44	
		1 v ThinkSystem 8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM-A	\$81.44 <del>\$179.00</del>	
		0 v ThinkSystem 16GB TruDDR4 2933MHz (1Rx4 1.2V) RDIMM-A	\$131.50 <del>\$289.00</del>	
		0 v ThinkSystem 16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM-A	\$131.50 <del>\$289.00</del>	
:14-0	vol" difference	x8 1.2V) RDIMM-A	\$136.04 <del>\$299.00</del>	
	-	e in how many slots	\$240.70	
DU USE UP WOULD be really helpful - how X4 1.2V) RDIMM-A				
an	s altogether and then	\$268.00		
	· · ·	by how much I want	\$589.00	
			\$245.25	
	ether and make	e even more granular,	\$ <del>539.00</del>	
tog				
tog	you want it distr	ributed." Rx4 1.2V) RDIMM-A	\$481.85 <del>\$1,059.00</del>	

"Most useful is knowing the layout, can you do 4 sticks, 8 sticks, number of sticks in each bay. [Would a visual help?] Visual of the board would be a real quick easy reference drawing that shows how many slots..."

\$1,546.55 \$3,399.00

Collapse All

### Server Configurator Study: Storage

### Successes

• Lots of choices

### Issues

- Given the dependencies, order of choices on the page may not be correct
- Error messages about Storage/Memory/Processor conflicts aren't always helpful;
  - Messages sometimes suggest options that aren't available
  - Not enough detail about **why** the error is occurring
- There are use cases that simply don't fit with the choices, e.g. 2 HDs mirrored

### **Recommendations/Whatto Consider**

- Review order pick Raid level first and all other choices should reflect this dependency
- Find use cases where Storage just doesn't work; consider how to re-work Storage to make these use cases doable
- Understanding dependencies is hard; need to work on:
  - Back-end has to have correct data/info, e.g. don't show choices in the error message that aren't available
  - · Clear explanations of why error occurred
  - Rebuild system so that based on previous selections, only compatible choices are visible and choose-able

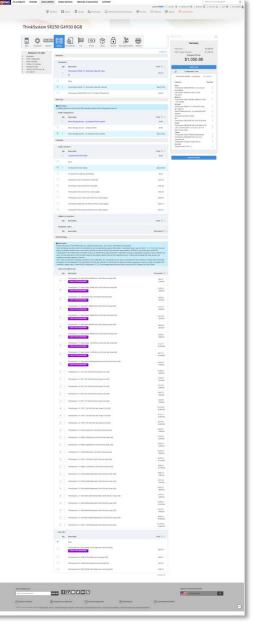


### Server Configurator Study: Order of Storage Choices

"...this is kind of backwards, here I pick Backplanes, here I pick Raid configuration, then Raid controller, and down here is Raid Level. When purchasing you have Raid level in mind and you pick that first and based on that, it should affect the rest of my choices. Kind of all over the place as to which drives are gonna go where; no info on Raid controllers, there's Raid Config and Raid Controller, and here you have Raid Level and Secondary Raid Level, there's no real way of knowing which Backplane or drive ports or any of that would be used for Raid setup or how many bays there are.

That again comes into play with upgradablility down the road. e.g. Raid 6 requires more drives and I'd want to know how many drives I have, where in the chassis they're located, what controller comes with the unit, where the optional Raid Controllers will take up space or what port they're going to use. We want to know how it will be specced when we get it, want to know growth options when we move forward with it...We got 10 bays and would it be cheaper with 10 smaller drives vs. 5 bays with larger drives; some people would rather leave bays empty and spend less money up front. Don't want to spec a server to the point where it's maxed out and then have to replace it with new equipment later on.

Visuals would help on this. A lot of times I deployed a new server, and we didn't have visuals until we got it, leads to more cumbersome steps or you order more parts or there's parts you didn't know you needed."



### Server Configurator Study: But do they like it?

### Knowledgeable users

- The control and flexibility that it provides, the ability to try different set-ups and see how the pricing changes, is great for those who know what they're doing
- Could benefit from
  - More granular info so they don't have to leave the site to go learn the details

### Less Tech-savvy users

- Users with less knowledge struggle to understand the choices and the dependencies that generate the error messages
- May simply make best guess for each section without really understanding what they're selecting or choose to settle for the default selection because they are overwhelmed by choice
- Could benefit from
  - Smaller set of choices; more education built into the content; easy access to rep when they have questions

### Both groups could benefit from

• Visuals that show layout, slots, and help them understand what goes where and how many will fit

*"[this configurator] allows me to* drill down based on research l've already done, get pricing, compare and contrast on different set-ups. Time is essential. Right now, when we get a quote, the team discusses it and we talk then have to go back to the sales rep with the changes. The ease of being able to come in here and pick and choose on the fly and see how this affects pricing, this helps a lot. I have notes on the quote to drill down with the sales rep on all that info, how many slots, what's where. Some info is on the product page but having it here while you're configuring would be really valuable.

Lenovo 2021 Lenovo Internal. All rights reserved.

### PRELIMINARY

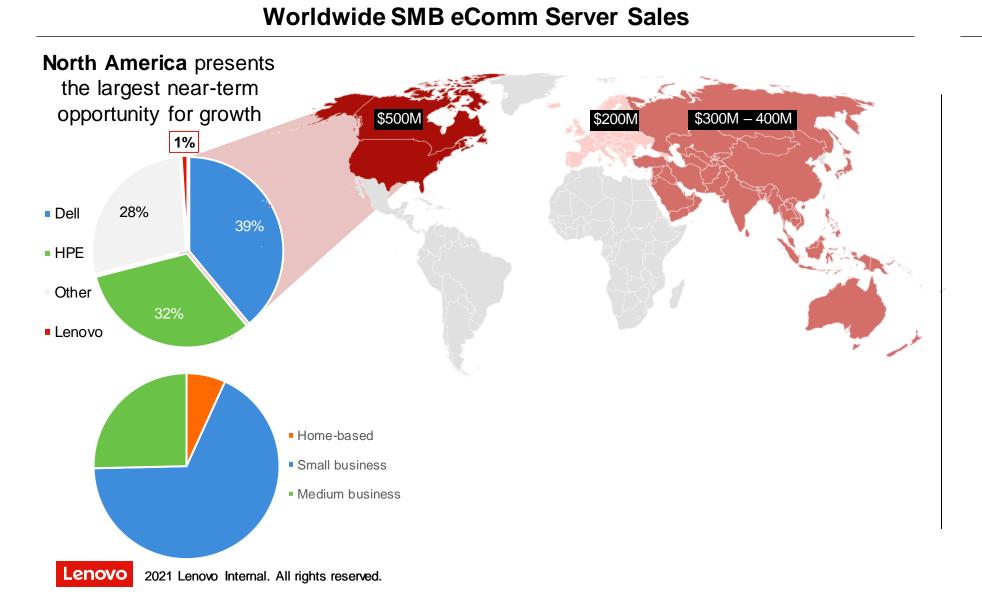
### SERVERS MARKET RESEARCH

### **Discussion document**

June 2021



### Global SMB Servers market through eComm totals 1.1\$B



### Main market trends



### Shift to Online

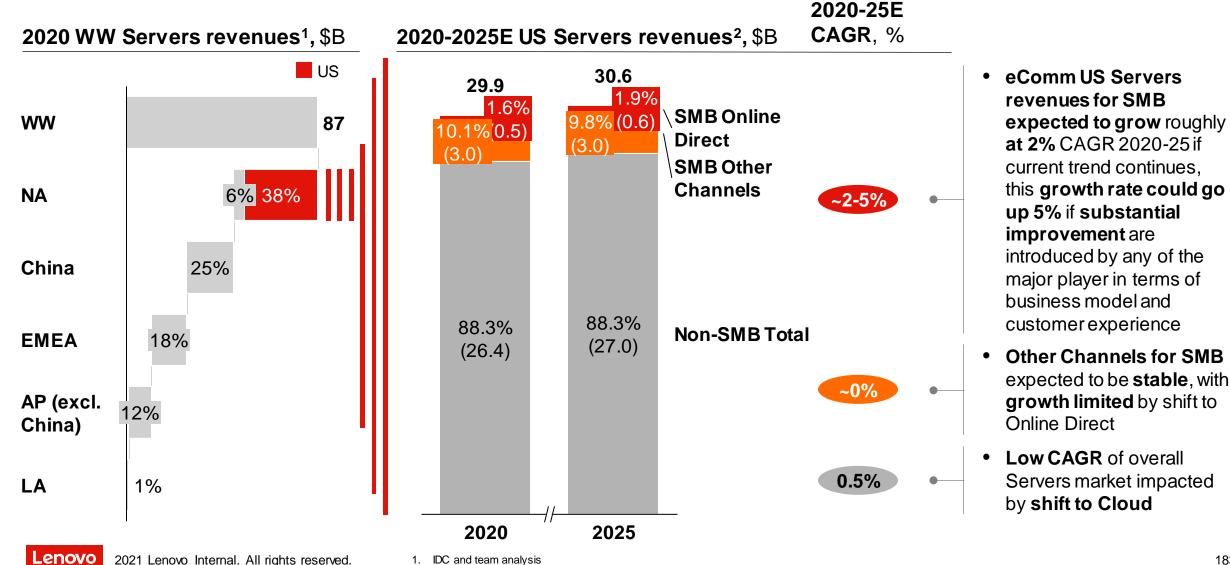
Consumers shift purchases to online as eComm server market expected **to grow 2-5%** vs. 0.5% non-eComm over next 3 years



### **Higher CX Expectations**

Consumers now demand that eCommerce sites **have a higher CX** standard from browsing to checking out

### US market expected to be flat over the next 5 years with moderate channel shift towards eComm



Analysis Mason and team analysis, large systems not included

eComm US Servers revenues for SMB expected to grow roughly at 2% CAGR 2020-25 if current trend continues. this growth rate could go up 5% if substantial **improvement** are introduced by any of the major player in terms of business model and customer experience

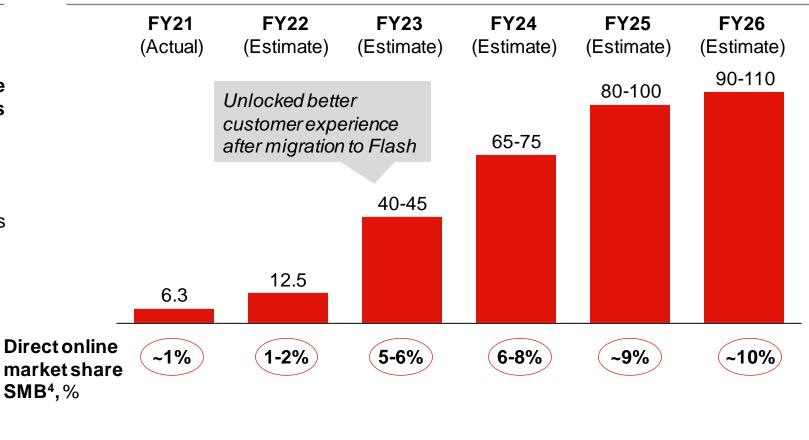
183

# Lenovo.com could reach ~10% WW market share in SMB Servers online by 2026, generating ~\$100m revenues

Lenovo.com SMB Server Online revenues2, \$ mn

### Assumptions and implications

- Assuming:
  - the server market for SMB online grows at a 2-5% CAGR, driven by innovative and improved online offers that help accelerate the offline to online shift
  - Lenovo reaches its "fair" market share<sup>1</sup> of 5-10% in the online market (up from its current ~1% in Direct Online SMB market share<sup>3</sup>), gaining share from non-Dell/HP by improving / innovating its online proposition
- Lenovo.com's revenue for Servers online could reach
   \$100mn by FY2026



. 6% Lenovo market share calculated for total market (direct and indirect) excluding China in 2020 (IDC data)

2. Including Tele- and Chat-supported, including servers-related Services

3. 1% Lenovo market share calculated for SMB Direct Online Market excluding China (Analysys Mason data)

4. For Servers only, not including servers-related Services

Lenovo 2021 Lenovo Internal. All rights reserved.

### Lenovo.com lags in several 4P dimensions

	Lenovo	DØLL	Hewlett Packard
Company			Enterprise
Tower Server Portfolio		•	
Rack Server Portfolio	•		
Storage Portfolio			
Edge Portfolio	•	•	
Service & Support Offerings			
Genuine Options & Accessories			
3 <sup>rd</sup> Party Options & Accessories			
Software Offerings		•	
Competitive Pricing	•	•	
Free Shipping			
Full stack capable telesales team			
Global Coverage			
Stock holding of pre-configured models			
Indirect fulfillment options	•	•	

Poor 🛑 Okay 🔵 Good

# Smarter technology for all

#