Rewind

WHEN THE STORE GOES DOWN

Catastrophic Data Loss and Its Impact on Ecommerce Businesses

JUNE 3, 2020

Increasing competition and rising cybercrime are challenging merchants to safeguard the data that powers their business.

Introduction

The internet has made it possible for sellers to reach a vast pool of potential buyers. Since the first secure online retail transaction in 1994, ecommerce (the buying and selling of goods over an electronic network, primarily the internet) has made giant strides. There are now over 2 billion online shoppers around the globe, an astonishing one-quarter of the world's population.[1] Just five years ago, ecommerce represented slightly over 7% of global retail sales. By 2023, it was forecasted that nearly 25% of all retail sales would be conducted online.[2]

However, that was before the 2020 global pandemic. During the current pandemic, the number has no doubt increased, as people rely on ecommerce to reduce contact with others and limit the spread of the novel coronavirus. For buyers, the number one attraction of online shopping has always been its convenience.[3] Recently, the CEO of Shopify, Tobi Lutke, said this year's events have accelerated the industry ahead by ten years.[4]

A profusion of secure ecommerce platforms has made online purchasing safe and easy, available at any time, from anywhere. Worldwide, there are an estimated 7.1 million ecommerce companies,[5] hosted on platforms such as Wix, Woo, Shopify, Magento, BigCommerce, and others. Online consumers now demand instant results. Any disruptions to a smooth purchasing experience sends them to the competition—often permanently. In fact, one quarter of visitors will abandon a web page that takes longer than 4 seconds to load[6] and 46% of consumers using mobile devices for shopping say they would never purchase from a brand once they have an interruptive mobile experience.[7]

Despite the sector's rapid growth, this report shows that many online retail businesses consist of small teams. They run lean, have razor thin margins, and are unable to afford disruptions to their day-to-day operations. Human error, malicious cyberattacks, and even seemingly harmless third-party apps, used to optimize sales, can cause serious problems. All the sections of an ecommerce store, which may have taken months or years to compile, can be lost permanently, bringing sales to a grinding halt, suffocating cash flow and causing severe setbacks to growth.
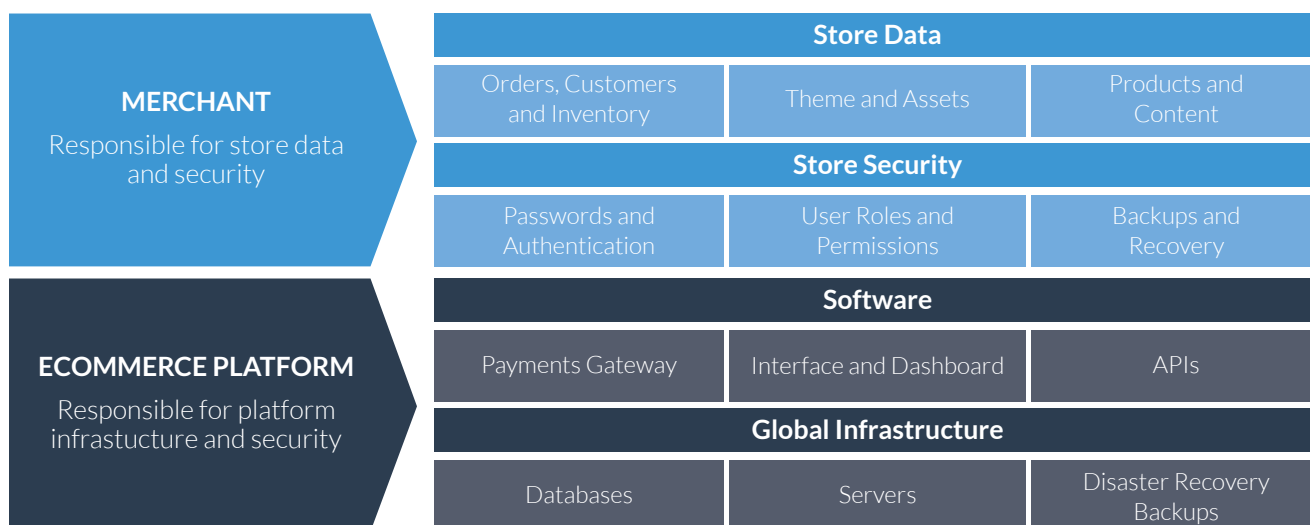
Unprotected Content

- Products and Images
- Inventory
- Customers and Orders
- Price Lists
- Pages
- Product Reviews
- Themes
- Gift Cards
- Menu Navigation
- Blogs and Blog Posts

Some are not prepared to deal with the many threats that can result in critical data loss from an online store, Many retailers mistakenly believe that cloud-based ecommerce platforms save individual shops' data and can restore it in the event of loss. However, ecommerce platforms generally follow the "Shared Responsibility Model" for data backups.[8] Under this model, the platform's obligation is to guarantee the data necessary for their own operations. In other words, everything a merchant sees before they start customizing their store. However, each retailer is responsible for saving their own unique information —product descriptions, images, pages, customer lists, order histories, custom coding, etc.—the kind of critical and unique content merchants depend on to drive sales. In the event an individual shop loses its data, the platform likely can't locate this customized content. They are essentially looking for a needle in a field of haystacks; there is simply too much data to sift through among their thousands and thousands of customers.

This report will show that merchants are aware of the threats to ecommerce data. Yet, the correlation between backing up store data and protecting hard-won revenues remains low. Respondents also clearly stated that their businesses would face significant sales and revenue losses from which they may not be able to recover. Rebuilding unique content can take hours or even weeks, and sales may be halted until the store is back up and running. The job may be such a burden on a small operation that they simply shut down the store rather than start over.

The following summarizes the key findings from the *Rewind 2020 Data Protection Survey*. The survey assessed the data backup practices currently in use by ecommerce businesses, their awareness of threats to their site, and the impact of interruptions to business continuity and resiliency. The full methodology of the survey can be found at the end of the report.

MERCHANT Responsible for store data and security	**Store Data**		
	Orders, Customers and Inventory	Theme and Assets	Products and Content
	Store Security		
	Passwords and Authentication	User Roles and Permissions	Backups and Recovery
ECOMMERCE PLATFORM Responsible for platform infrastructure and security	**Software**		
	Payments Gateway	Interface and Dashboard	APIs
	Global Infrastructure		
	Databases	Servers	Disaster Recovery Backups

Shared Responsibility Model, *source; Amazon Web Services*

Survey Highlights

There is little awareness of the risk stores face.

Nearly **60%** of respondents said that prior to recently installing a data protection and recovery solution, they **did not back up their site by any method**. 9% inherently trusted their ecommerce platforms to back up.

Ecommerce businesses are vulnerable to numerous threats.

Respondents identified the biggest threats to their online stores as **human error** (57%), **malicious attacks** (57%), and **third-party integrations** (53%).

Time wasted trying to recover was significant.

Of those who lost data, 28% said recovery took 5 hours or less, and 13% reported spending between 6 and 25 hours. Nearly 8% said they **never fully recovered from the loss**.

One in four businesses surveyed had previously lost all or part of their store.

25% of the businesses surveyed had lost essential data at some point. Most lost their products and images (23%), but significant numbers lost orders (8%), pages (7%), themes (7%), inventory (7%) customer lists (6%) and other unique content.

Losing parts of a store can cripple a business.

An overwhelming number (79%) of respondents agreed the negative impact of losing site content on sales and operations would **significantly affect their business**. The most-named impacts were time wasted trying to recover and rebuild with limited human resources (34%), lost sales and revenues (33%), and damage to the company's reputation/unhappy customers (7.5%).

Survey Participants

Survey participants were owners or employees of ecommerce stores in North America using the Shopify or BigCommerce platforms. The vast majority (70%) were small businesses with 5 or fewer employees; another 20% employed between 6 and 15 people. Most of the survey respondents (78%) were owners or founders of their company. Nearly half of respondents said that ecommerce drove 76% to 100% of their sales.

Reading into these numbers, the bulk of respondents have businesses which are owner driven, work with small teams, wear many hats, and are fully dependent on their digital presence to drive revenue. This makeup means any disruption is likely to have a dramatic impact on their day-to-day operations. Revenue aside, the time spent restoring a site from data disaster means other aspects of the business are neglected; picking orders, preparing shipments, and organizing delivery logistics are all things that can be delayed as teams scramble to fix any issues.

As ecommerce progresses, traditional market categories are fragmenting into multiple niches.
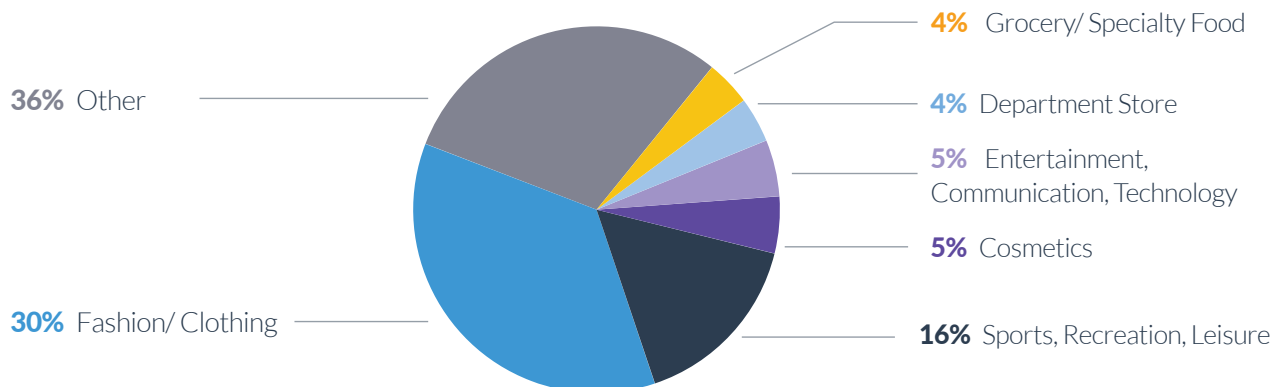
Nonetheless, nearly a third of respondents identified themselves as clothing and cosmetic retailers. The remainder of participants in this survey represented a wide range of industries including, sports and recreation, and entertainment, communication and technology.
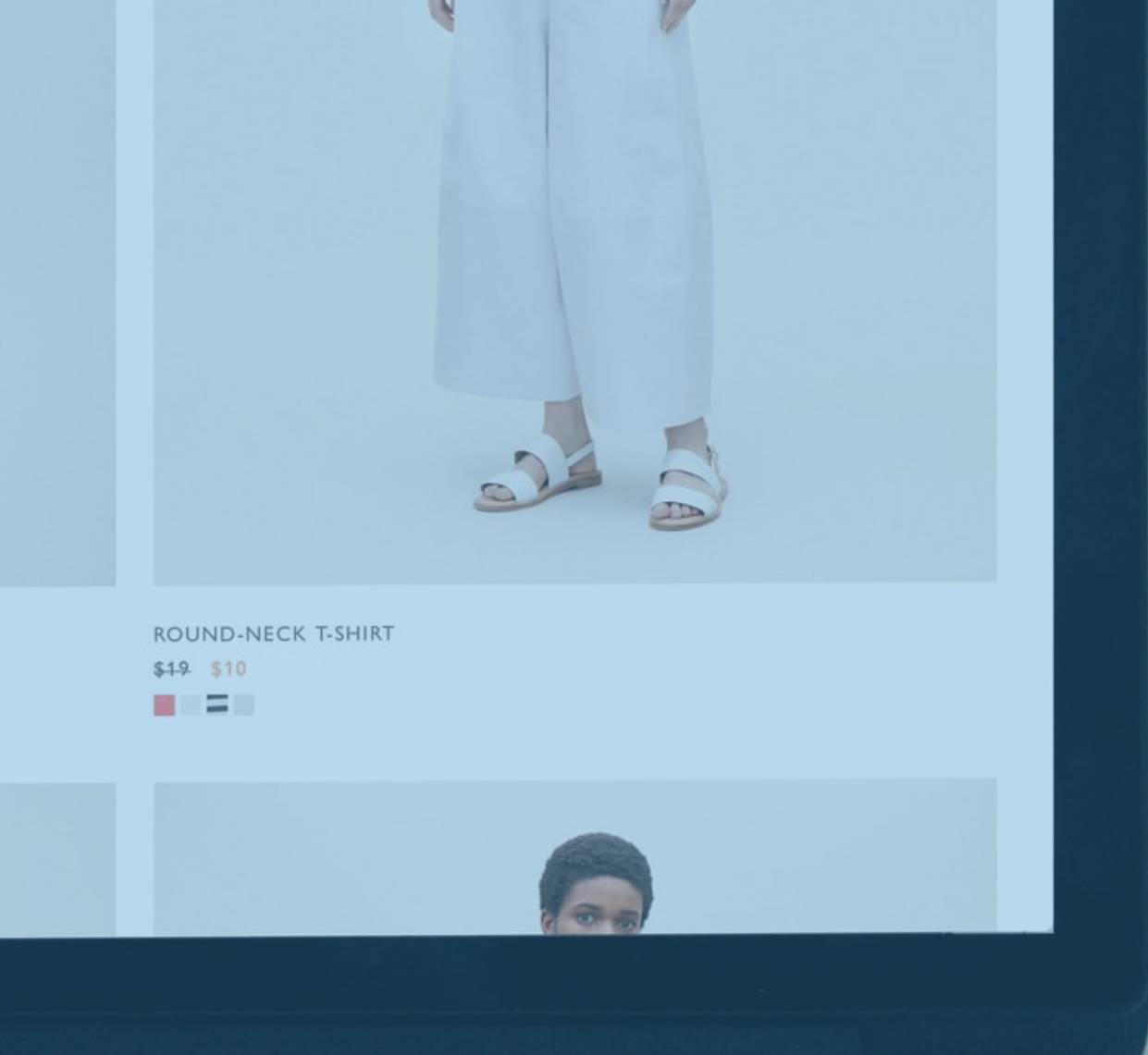
We often hear about the "Direct to Consumer" (D2C) revolution within ecommerce, but this survey pushes back slightly against that narrative, as 56% of survey participants said they were "Business to Consumer" (B2C), whereas D2C made up 30% of respondents. 11% of businesses surveyed were positioned as business-to-business (B2B), selling at the wholesale level rather than to the consumer.

With B2C and B2B operations making up the bulk of respondents, it's likely that the majority of ecommerce businesses are operating on thin margins, especially considering all the competition retailers face online. Therefore, protecting revenue and every transaction is paramount.

All respondents were using a data backup solution for their ecommerce store at the time of the survey.

Survey Respondents' Industries

- **36%** Other
- **30%** Fashion/ Clothing
- **4%** Grocery/ Specialty Food
- **4%** Department Store
- **5%** Entertainment, Communication, Technology
- **5%** Cosmetics
- **16%** Sports, Recreation, Leisure

ROUND-NECK T-SHIRT

~~$19~~ $10

> "If our store went down, we're looking at **thousands of orders** that can't be placed."

Julia Friesen
Ecommerce Merchandising Manager, Knix.com

Key Findings

The Rewind 2020 Data Protection Survey reflects an industry trend toward data protection as part of an overall business resiliency strategy.

All of the respondents to this survey had adopted a backup strategy, which may indicate they are better informed about threats and potential interruptions to business operations than the larger ecommerce population. However, nearly 60% of respondents, before implementing their current system, had never backed up their web content by any method at all. As highlighted in the results, there is an inherent trust in cloud software, which may be driving this lack of urgency to install a data protection solution.

The survey revealed that data/revenue protection was the main motivator for using a backup system. Most respondents pointed to preventing catastrophic loss of store content and the consequent interruption to business operations as their main reason for adopting a backup and recovery solution.

Many had invested a significant amount of time building their sites with product descriptions, images, thousands of SKUs, customer details, orders and other specific content. The time needed to recreate that data and start over was a burden their small businesses could not bear. Others reported that the inability to make sales while their store was down for days or weeks would be disastrous to cash flow. It could even sink their business altogether.

The survey findings are grouped into four sections: the backup behaviors of a range of ecommerce businesses; their experience with past website content loss and the time to recover; the impact of important content losses on their sales and business continuity; and their awareness of the biggest threats to online stores.

The main findings of each section are presented here.

Backup Behaviour of Ecommerce Businesses

Reasons for Implementing Backup System
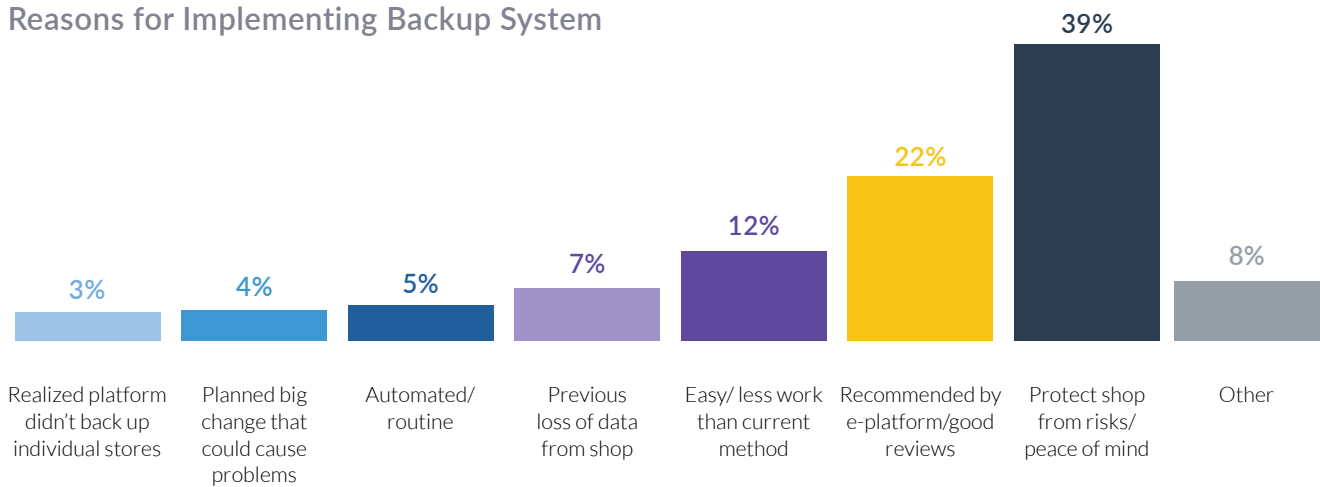
"Other" includes good price point/free; app features; recommended by consultant/employee/word of mouth/advertisement; and security of an offsite server

The survey first looked at online businesses' backup behaviors and their motivations for choosing an automated backup system. All respondents were using a backup system at the time of the survey. However, prior to installing their current backup system, a large majority (60%) of respondents had never put in place a strategy or solution to protect their data.

Of those who did report having some form of data protection strategy in place, prior to installing their current system, the most common methods included manually exporting CSV files (13%). Although using CSV files is common, they are unreliable for complete data control. Most platforms only allow sections of a store to be exported and merchants typically can't transfer all their customizations or images. Updating and managing hundreds, or possibly thousands of CSV files could drain on small and lean ecommerce operations.

> " *If we had an issue with our internet connection, I would lose half a download and have to start all over again. I kept thinking, 'Do I really have to do this?' When you're the general manager of a small company, there is other stuff that you could be doing with your time.*

Nick Lococo
General Manager of Rx Smart Gear

The remainder of survey respondents said they used an onsite server (11%), and relied on their ecommerce platform (9%). However, as highlighted earlier, relying on ecommerce software companies puts a business at risk, due to the limitations of cloud backups.

The most popular reason for choosing the backup application was to protect their shop from risks/ for peace of mind (39% of respondents). In the words of one participant, *"We have put thousands of hours into building our store's database (over 28,000 SKUs). We are not ready to risk it."* Other reasons for adopting a third-party backup system included that it would be easy to use or easier than their current method, and since it was automatic they could rely on it being thorough and regular.

A number of respondents (4%) wanted a backup of their site before making a substantial change (e.g., updating or changing a theme, making bulk uploads), or giving new employees or contractors access to the site, in case something went wrong. A smaller number (3%) had been alarmed to discover that their ecommerce platform did not actually back up individual store data as they thought it had.

The fact that the majority of the respondents had adopted a backup system may indicate that awareness is growing of the potential for losing critical ecommerce data, and its devastating effect on business continuity. One reason awareness may be growing is that experts are increasingly recommending ecommerce companies have a business continuity plan.[9] Identifying vulnerabilities and preparing a strategy for dealing with them ahead of time could mean the difference between life and death for an online business in the event of a disaster. As one survey respondent put it, *"Backups are vital, maybe not today, but when you least expect it."*
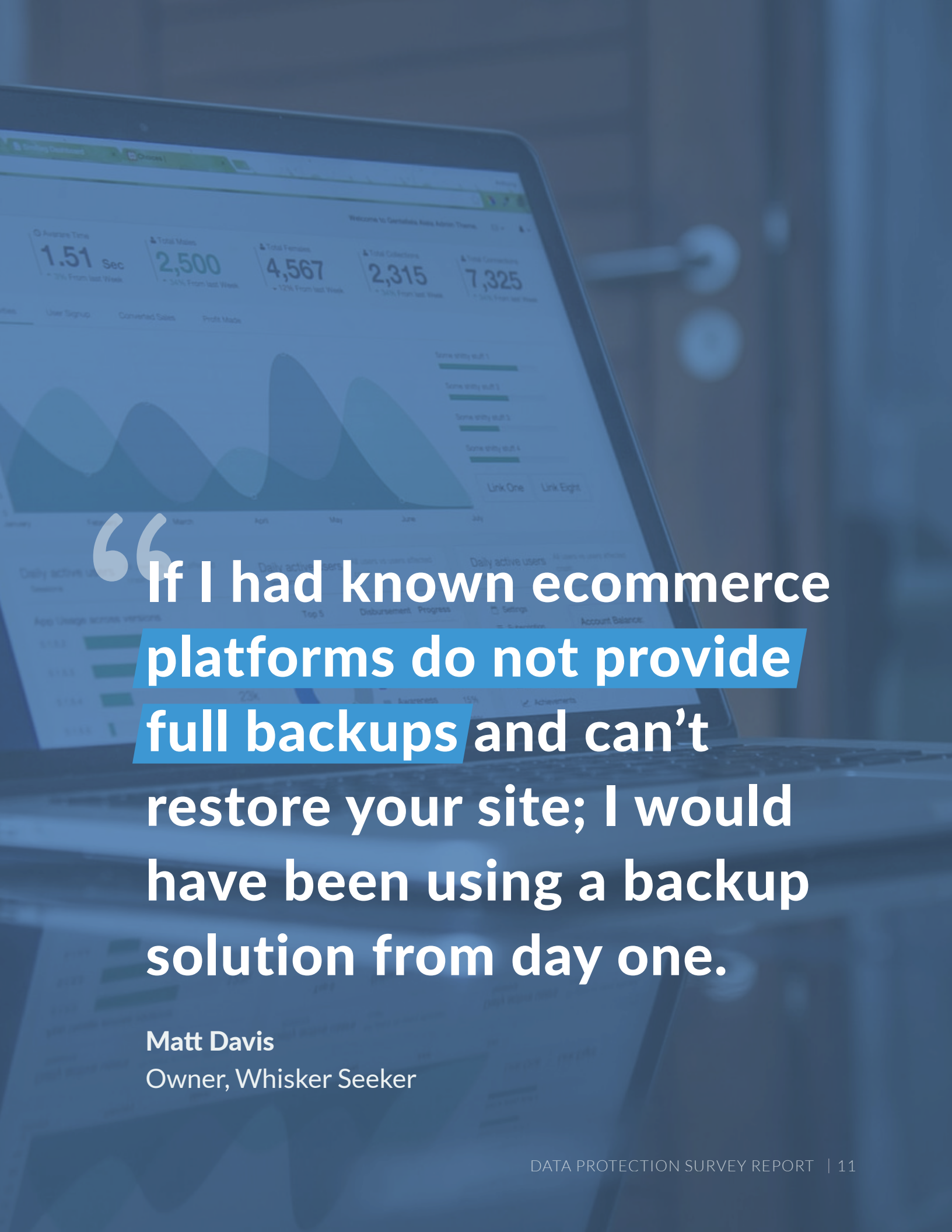
> **"If I had known ecommerce platforms do not provide full backups and can't restore your site; I would have been using a backup solution from day one.**
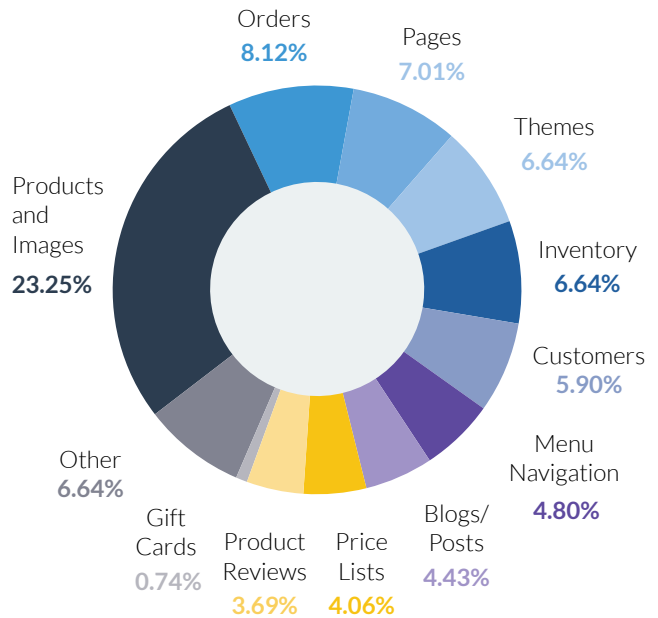
Matt Davis
Owner, Whisker Seeker

Past Data Loss and Time to Recover

The survey revealed that ecommerce data loss is surprisingly common. When asked whether they had ever lost website data in the past, 25% of respondents reported losing critical content that needed to be restored. The kinds of content most commonly lost were products and product images (23%), orders (8%), pages (7%), themes (7%) and inventory (7%). A smaller number of participants reported losing customer data, menu navigation, blog posts, pricing lists, product reviews, gift card information, metadata and custom coding.

Restoring their website operations required at least one person, often the business owner, to dedicate time to recover or recreate the lost data and rebuild that part of the online store. Most respondents pegged the time to recover from the data loss at between 0 and 5 hours (28%), with 13% reporting that it took anywhere from 6 to 25 hours. Nearly 8% of respondents said they never fully recovered from the loss. It's possible that without a data protection strategy a complete lack of recovery may become more common. As websites become more customized, building out more intricate shopping experiences, businesses may be forced to find workarounds to sustain operations. Overall, with shoppers taking mere seconds to decide whether to buy from a site, even a loss of just a few hours would be a blow to any retailer.

Interestingly, just over half of respondents (52%) who had lost data were unsure how long the interruption to their operations lasted. This could indicate either a brief interruption that didn't impact their business enough for them to notice the recovery time, or a sustained interruption that caused them to lose track of the time to recovery.

Content Lost from Respondents' Sites

Orders **8.12%**
Pages **7.01%**
Themes **6.64%**
Inventory **6.64%**
Customers **5.90%**
Menu Navigation **4.80%**
Blogs/Posts **4.43%**
Price Lists **4.06%**
Product Reviews **3.69%**
Gift Cards **0.74%**
Other **6.64%**
Products and Images **23.25%**

Metadata, custom coding

** 65% of respondents answered "None/not sure" and are not included here

Time Spent Recovering from Data Loss

- 0 - 5 hours **28%**
- 6- 25 hours **13%**
- Never fully recovered **8%**
- Unsure **52%**
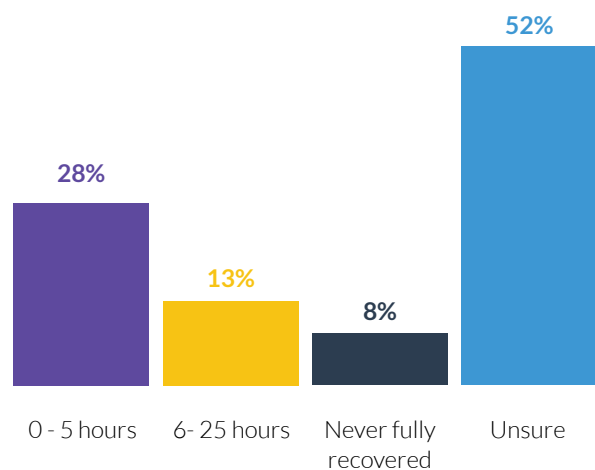
Impact of Content Loss on Sales and Business Continuity

There are dozens of datasets and content elements within every ecommerce site, which merchants rely on to create a positive and unique experience for shoppers. In the highly competitive world of ecommerce, pulling on any one of these threads can unravel everything.
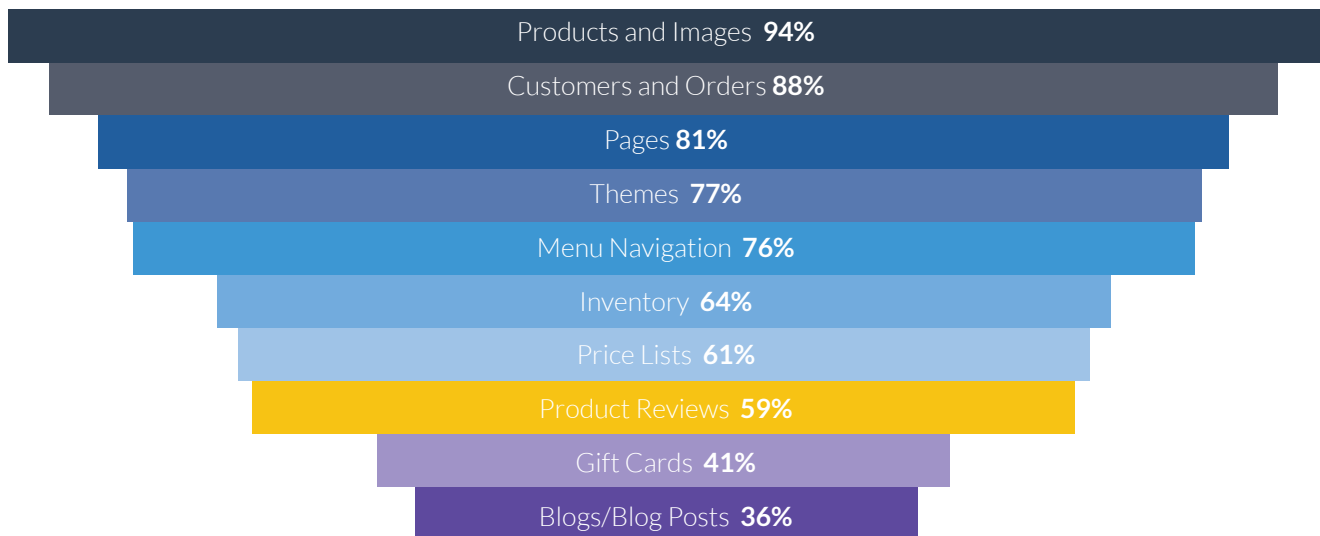
When asked how important specific datasets were to their online shop, in other words, what would be most damaging to lose, 95% said products and images were very important . Due to the visual nature of ecommerce, it's not surprising this is a key part of the business people wish to protect. A bricks and mortar retailer which had bare shelves and displays would see negative impacts on sales. Online retailers are no different, as consumers won't buy what they can't see.

Customers and orders were next (88%), followed by pages (81%), themes (77%), and menu navigation (76%). Slightly fewer respondents considered inventory product reviews, gift cards,
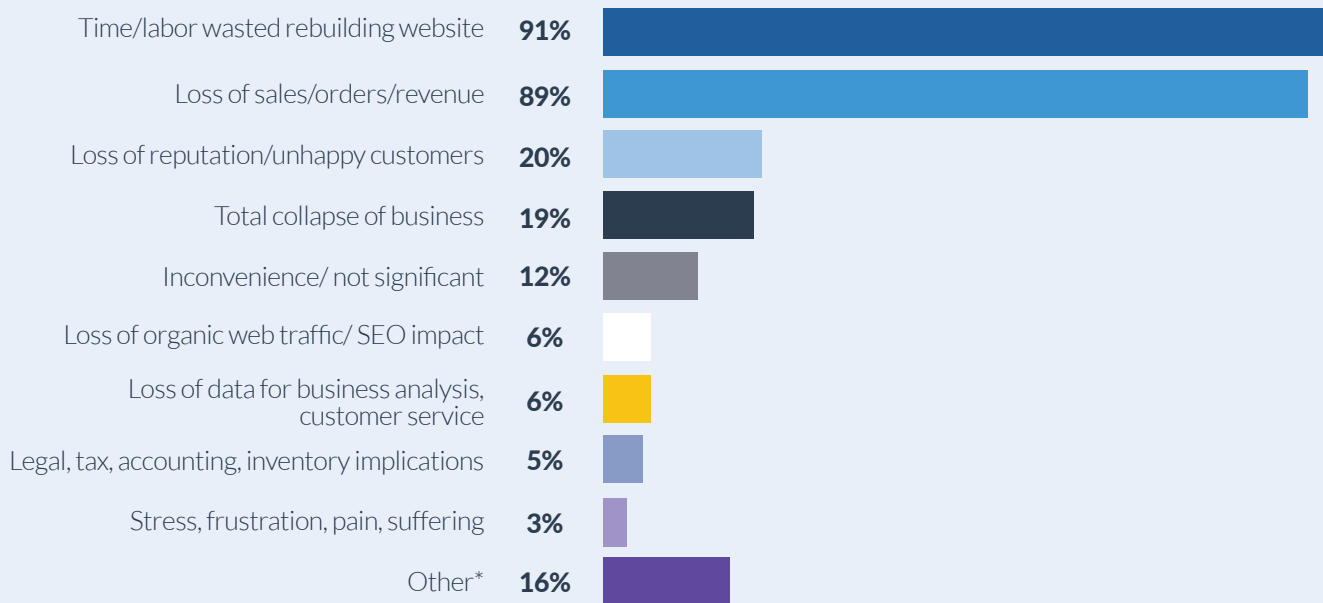
and blogs as very important. A small number of respondents also identified metadata, SEO, and custom coding as critical to protect.

The overwhelming majority of respondents (79%) said that losing the data they identified as very important would have a significant impact on their business. Wasted time recovering, recreating, and rebuilding the website was the number one negative effect of data loss on business operations (34% of responses). One respondent commented, *"An enormous amount of time was expended creating my entire online store. The thought of having to start all over again is mind-shattering."* Most survey respondents were businesses with 5 or fewer employees, and many said they could not afford to tie up critical human resources duplicating earlier work. One participant noted, "We're a small-time business. The loss of hours to restore data would be crippling."

Most Critical Site Content to Protect

Content	Percentage
Products and Images	94%
Customers and Orders	88%
Pages	81%
Themes	77%
Menu Navigation	76%
Inventory	64%
Price Lists	61%
Product Reviews	59%
Gift Cards	41%
Blogs/Blog Posts	36%

Impacts of Data Loss on Business

Impact	%
Time/labor wasted rebuilding website	**91%**
Loss of sales/orders/revenue	**89%**
Loss of reputation/unhappy customers	**20%**
Total collapse of business	**19%**
Inconvenience/ not significant	**12%**
Loss of organic web traffic/ SEO impact	**6%**
Loss of data for business analysis, customer service	**6%**
Legal, tax, accounting, inventory implications	**5%**
Stress, frustration, pain, suffering	**3%**
Other*	**16%**

* "Other" includes loss of web portion of business, not knowing where to begin to restore, permanent data loss, and business would not operate optimally

** Some respondents reported multiple impacts

How Would Losing Store Data Impact Your Business

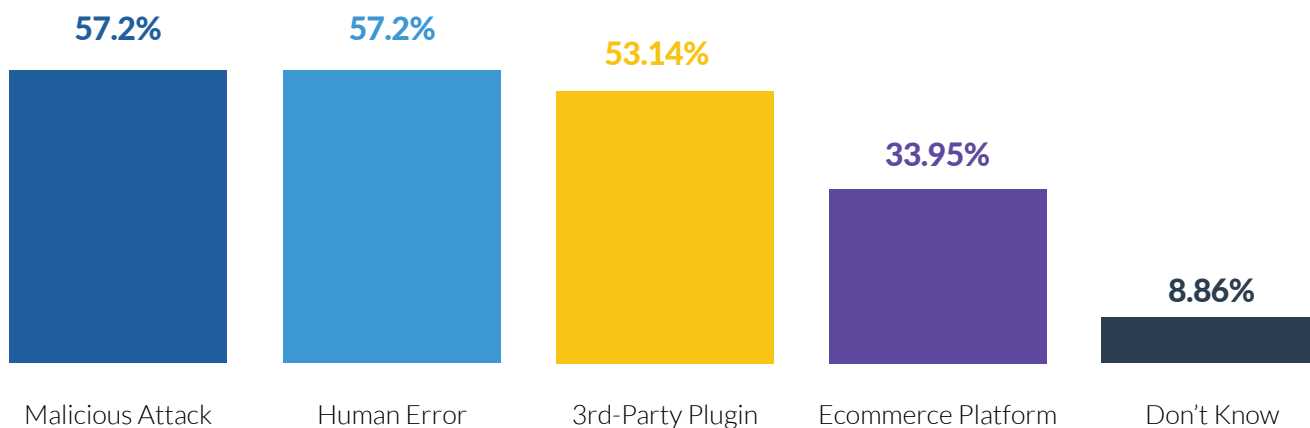|	
Time	"We would need to do intensive work for weeks to put in products." "I spent months trying to update...3000 products again manually." "I would have to spend a lot of time fixing the issues and so would not be able to produce my products since everything on my store is handmade."
Money	"5K daily." "Loss of sales!!" "Significant loss of sales and revenue." "Business would have no income until it was fixed."
Headaches	"Big huge awful pain."
Catastrophe	"It would cripple the entire business" "Almost too much to measure" "I would probably shut down my store. Too much hassle to rebuild and start over."

Lost sales and revenue while the store was down was the second most predicted effect of critical content loss (33% of responses). One participant claimed they would experience a "total loss of business until fully recovered," and another remarked, *"Our ecomm site is a major part of our revenue. Being down is not an option."*

Other respondents said such disruptions would harm their business's reputation and make their customers unhappy (7.5%). A small but significant number said they would be driven out of business altogether (7%). In the words of one respondent, *"I would lose it all...everything. I wouldn't know what to do. Orders would be unfulfilled, I would let my customers down, I*

would get negative feedback." A noteworthy minority (3%) even predicted psychological consequences for themselves, using words such as "stress," "frustration," "pain," and "suffering."

Ultimately, the impact of content loss on a business may be too severe to recover from. According to an IDC study, small and medium-sized businesses can lose between $80,000 and $256,000 during a single downtime event,[10] a steep cost that many could not bear. A backup and recovery solution is therefore a prudent investment, particularly an automated system that will reliably backup all aspects of a store and allow for rapid recovery of lost content to minimize downtime.

Awareness of threats to online operations

57.2%	**57.2%**	**53.14%**	**33.95%**	**8.86%**
Malicious Attack	Human Error	3rd-Party Plugin	Ecommerce Platform	Don't Know

Biggest Threats to Ecommerce Stores

The ecommerce businesses surveyed identified a number of significant threats to their online stores. The majority (57%) recognized that both human error and malicious attacks were key threats to their operations, citing "my own ignorance" or the fact that "certain employees have access to sensitive areas of the store and could wipe out everything," or describing scams they had encountered.

Slightly fewer (53%) were aware that the third-party plugins used by almost all ecommerce operations can crash a site and cause permanent data loss. Nearly 34% identified their own ecommerce platform as a potential problem (e.g., server errors).

Conclusion

Data and content loss have a dramatic, negative impact on ecommerce stores. In order to maintain continuous business operations, e-businesses must safeguard their data to be able to react quickly to business disruptions.

The Rewind 2020 Data Protection Survey revealed that a large proportion of ecommerce businesses are moving to safeguard their data against threats. While 1 in 4 have experienced the grim consequences of data loss, even those who have not yet acknowledged the serious risks that human error, malicious attacks, and rogue third-party integrations pose to their unique online store content.

The survey also revealed that most ecommerce companies believe this kind of data loss would have a significant impact on their business continuity, by potentially shutting down sales, cutting off revenues, and constricting cash flow.

Many participants see the time they have spent building their site and the data they have accrued as an investment worth protecting, and have moved to an automated backup system for a rapid rebound in the event of catastrophic data loss.

Despite this increasing awareness, there is still much room for improvement. 9% of respondents could not name a single threat to their online business. Just as many were relying on their e-platform to save account-level data. Nearly 60% had performed no backups whatsoever prior to recently installing their current solution.

Nevertheless, the outlook is positive. Reliable, cost-effective, automated backup solutions exist for protecting and recovering data and enhancing business resiliency. Those businesses that have taken steps to implement data backup best practices are well positioned to weather the many threats to their data, and to thrive in the new era of digital trade.

Methodology

Rewind sent a survey to approximately 9500 ecommerce merchants in their database who own or oversee the ecommerce operations of an online or traditional retail business. Recipients worked in a variety of roles, such as owner, marketing lead, ecommerce operations lead or information technology lead. Responses were collected from 271 professionals over a seven week period from January to March 2020. The 271 individuals who completed the survey, formed the dataset used in this report. The margin of error for the results is +/-6% at the edge of a 95% confidence interval. In order to gather responses anonymously, the online survey software SurveyMonkey was used. A link to the survey was sent to recipients via email.

References

1. Fortunly. (2019). Top 40 eCommerce Statistics of 2020. Available from:
https://fortunly.com/statistics/ecommerce-statistics/#gref

2. Statista. (2020). E-commerce Share of Total Global Retail Sales from 2015 to 2023. Available from:
https://www.statista.com/statistics/534123/e-commerce-share-of-retail-sales-worldwide/

3. KPMG. (2017). The Truth about Online Consumers: 2017 Global Online Consumer Report. Available from:
https://assets.kpmg/content/dam/kpmg/xx/pdf/2017/01/the-truth-about-online-consumers.pdf

4. Kim, E. (2020). Shopify's CEO says his team had to 'delete' all existing plans amid COVID-19 because the future of retail just arrived 10 years early. Available from:
https://www.businessinsider.com/shopify-ceo-says-retail-changes-expected-2030-are-happening-today-2020-5

5. Etailinsights. (2019). How Many Online Retailers Are in the US? Available from:
https://www.etailinsights.com/online-retailer-market-size

6. Work, S. (n.d.) How Loading Time Affects Your Bottom Line. Available from:
https://neilpatel.com/blog/loading-time/

7. Spero, J. (2017). How to Make Every Mobile Moment a Brand-Builder [Think with Google article]. Available from:
https://www.thinkwithgoogle.com/consumer-insights/consumer-mobile-brand-content-interaction/

8. AWS (Amazon Web Services). (2020). Shared Responsibility Model. Available from:
https://aws.amazon.com/compliance/shared-responsibility-model/

9. Eaton-Cardone, M. (2018). Disaster Prep 101: How To Develop Your E-Commerce Business Continuity Plan (Forbes magazine). Available from:
https://www.forbes.com/sites/forbestechcouncil/2018/11/30/disaster-prep-101-how-to-develop-your-e-commerce-business-continuity-plan/#2bad8b264829

10. Carbonite. (2018). IT Pro Survey: Truths About Data Protection. Available from:
https://www.carbonite.com/blog/article/2018/01/it-pro-survey-truths-about-data-protection/

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