Project Presentation

VOLKSWAGEN

Enhancing Volkswagen’s Digital Storage Platform: A UX-Driven Solution for Improved Customer Experience

User Research & Enhancing Customer Experience for Digital Storage Platform

TYPE OF PROJECT:
UXR | UXD

CREATED & PRESENTED BY:
Priyanshi Singh

WM REPLY

NDA DISCLAIMER

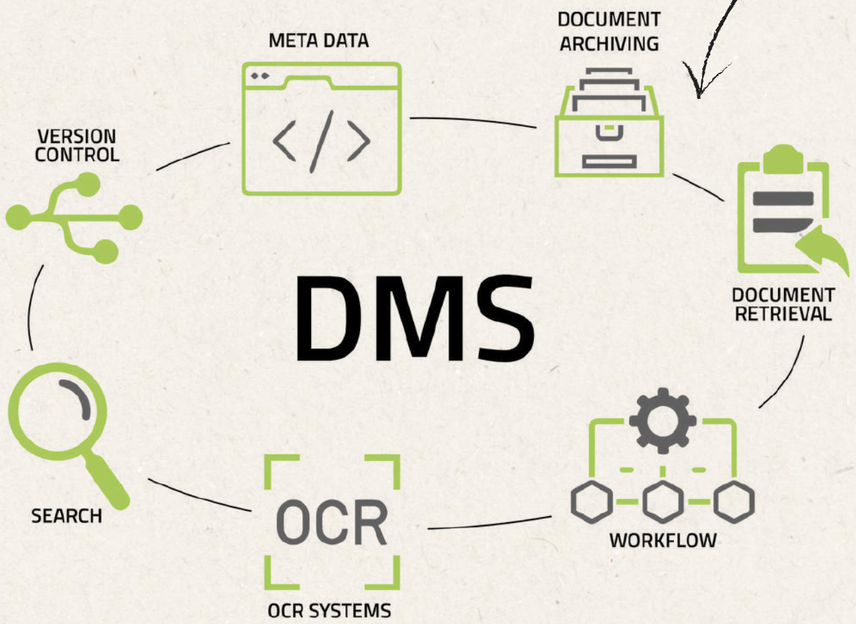
Note:

- This project was conducted under strict NDA guidelines.
- Due to non-disclosure agreements with VW and Reply Group, images of the final platform design or sensitive business data related to the VW users and DMS software are not allowed to be shared externally.

However, coming up:

- **Fidelity Prototype/Feature UI**
- Design thinking process
- Detailed UX research approach
- Key research insights (snips)
- Problem-solving strategies
- Impact & Results

PROJECT OVERVIEW



01 About:

- Group DMS (Document Management System)
- A software platform used to receive, manage and store documents and others.
- Technology Integrations.

02 Problem Statement:

DMS platform used by VW was:

- **Outdated & Traditional**
- Inefficient & complex interface.
- Inconsistent workflows.
- Led to user frustration and reduced productivity.

03 Objective:

- Understand Group DMS in VW.
- **Determine** direct DMS customers.
- Identify VW's pain point with DMS.
- Find DMS Usability Issues
- **Provide** quick UX solutions
- Optimize software workflow
- Re-design priority UI features.

DMS OVERVIEW

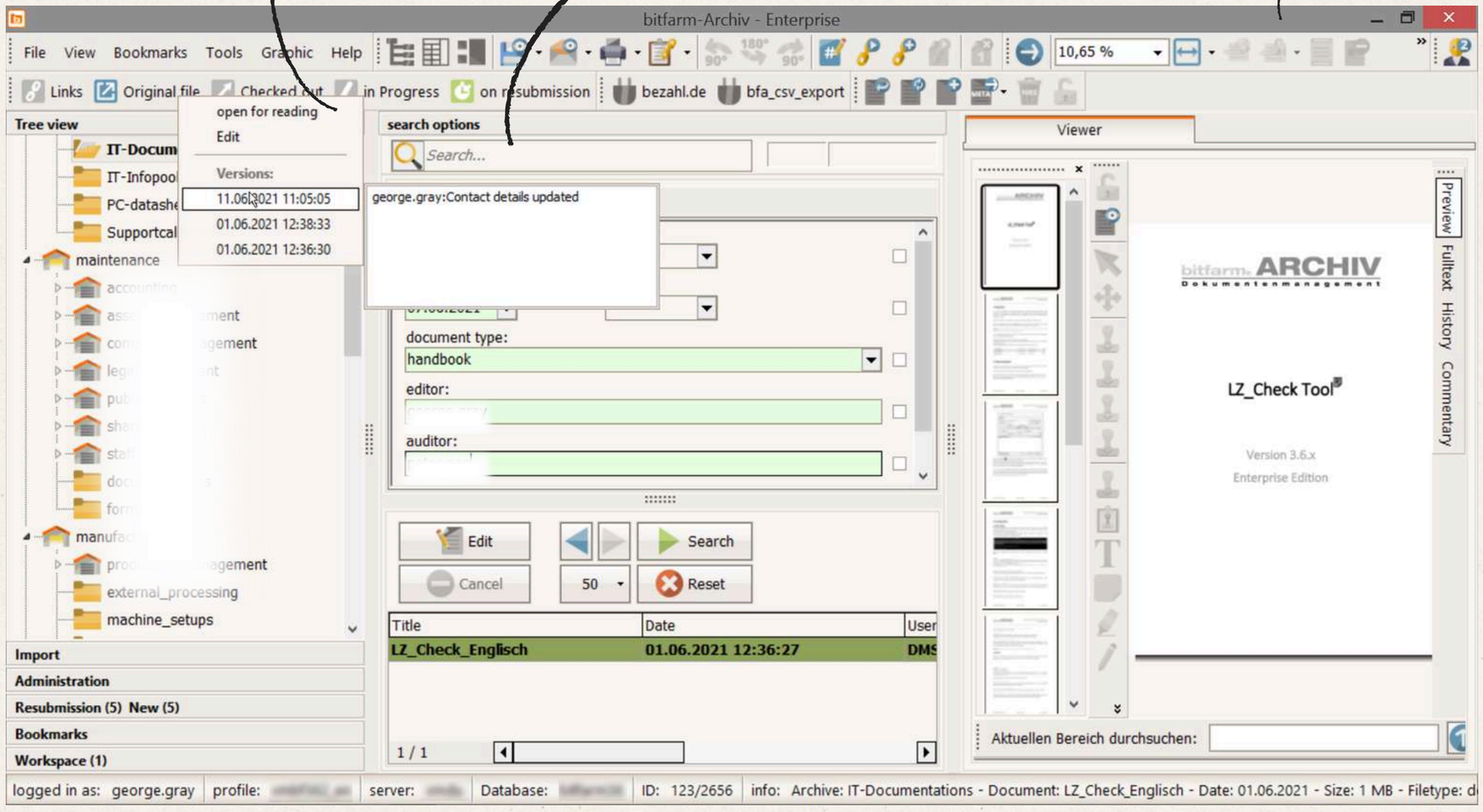
OLD DMS Dashboard

Manual Version Control

Inefficient Search

Outdated UI

Unaccessible Features



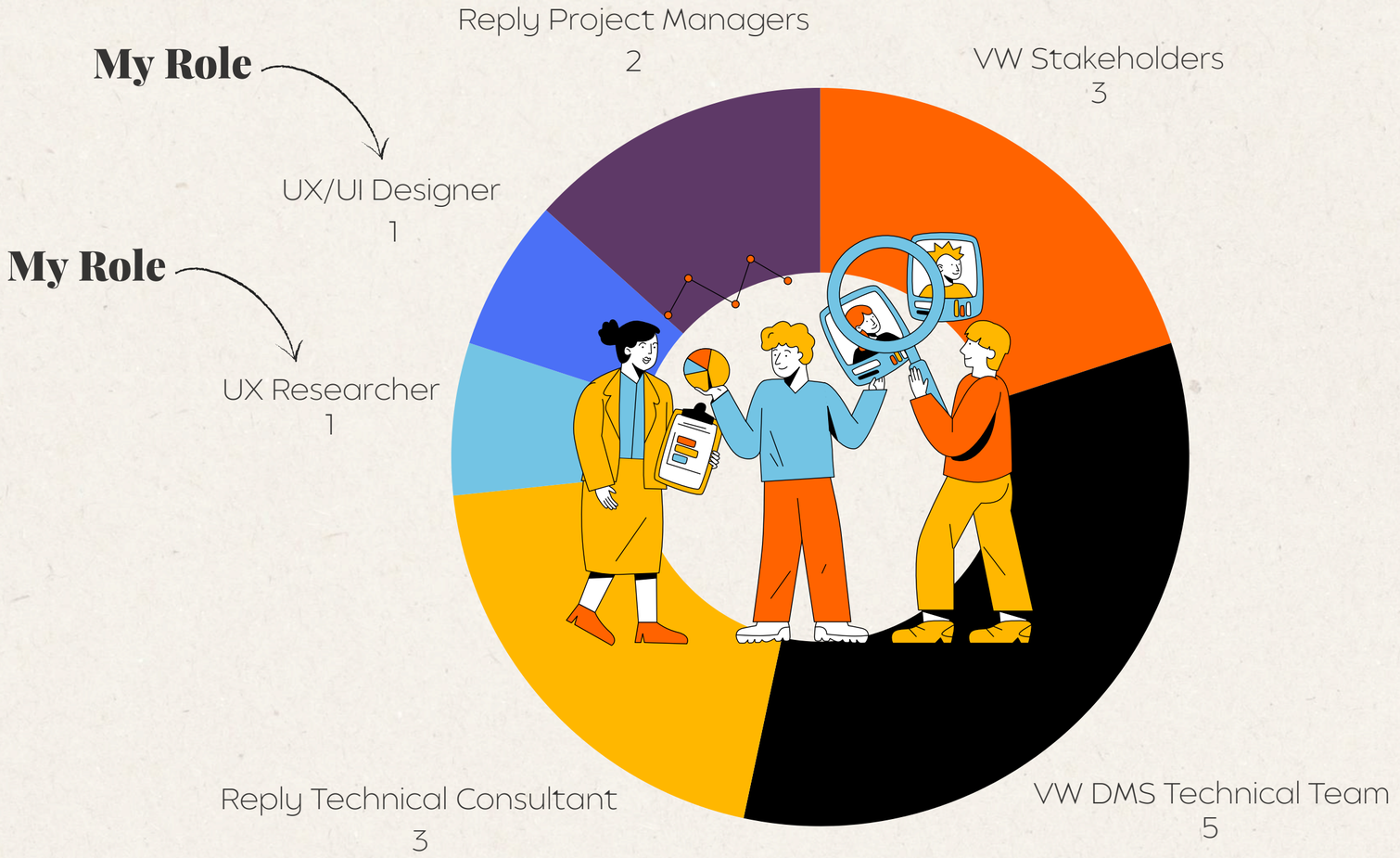
MY ROLES & RESPONSIBILITIES

01 **My Role:**
Primary UX Designer & Researcher, leading research, design, and collaboration efforts.

02 **My Responsibilities:**

- UX Research & Ownership
- Customer Interaction
- Workflow Analysis
- Use Case Development
- UX Solution Design
- Simplify DMS Usability
- Quick UX fixes
- Enhance overall customer experience

03 **My Team:**
Cross-functional collaboration with: VW stakeholders and internal Reply team.



TOOLS & SOFTWARES USED

FigJam

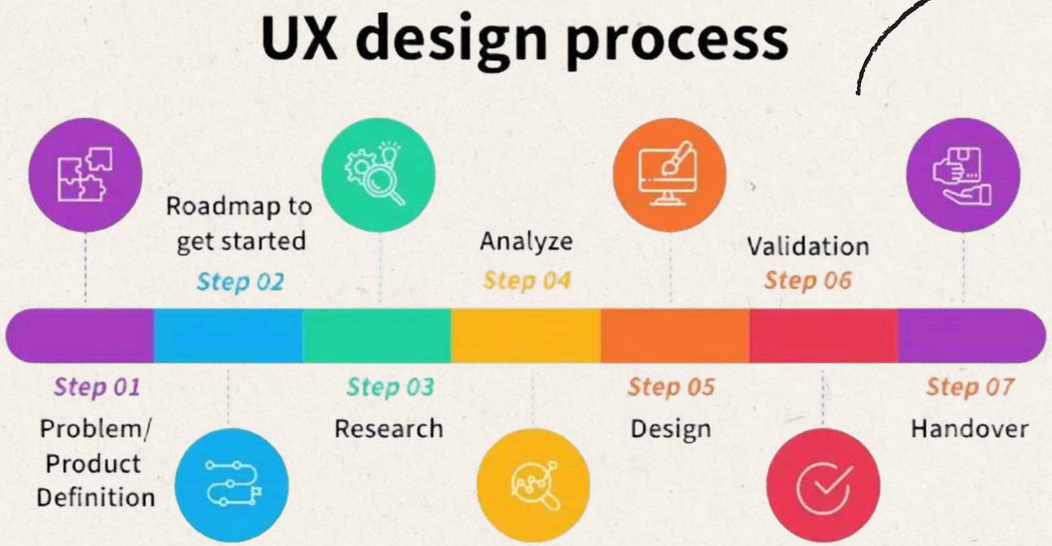
Microsoft Loop

Forms

Planner

Jira

UXD Methodology



✅ User-Centered
✅ Iterative
✅ Data-driven design

WHY?

Given the complexity of the VW-DMS project, this process helped me in systematic:

- Structured Approach: Ensured a systematic UX process.
- User-Centered: Understanding user needs & pain points.
- Iterative Process: Continuous improvement and validation.
- Collaboration: Aligned my team for efficient execution.
- Data-Driven Decisions: Supported my design choices.
- Scalability: A most reasonable method for complex DMS.

Research Methodology

Systematic Process

01. Reports

Collected and analyzed internal reports to identify patterns and trends in DMS performance and usage.

Qualitative/Quantitative User Insights

02. Interviews

Conducted in-depth interviews with key VW users to gather qualitative insights on DMS usage.

Qualitative User Insights

03. Surveys

Distributed tailored surveys to capture a broader user perspective in metrics across VW departments.

Quantitative User Insights

04. Results

Uncovered key findings that highlight both strengths and areas for improvement in the current DMS.

05. Achievement

Successfully identified actionable insights and formulated UX recommendations/fixes for improving the target user experience with DMS.

Research Process Step I

KEY METRICS

Understanding Reports - DMS Usage

Why reports?

- Provided me with a detailed, **data-driven understanding** of DMS usage, including:
  - Storage trends, interaction patterns, performance and abilities.
- Using data to:
  - **Validate** user complaints.
  - Identify hidden UX bottlenecks.
  - Challenge any assumptions.
- **14+** detailed reports were analyzed.
  - Qualitative and Quantitative metrics.

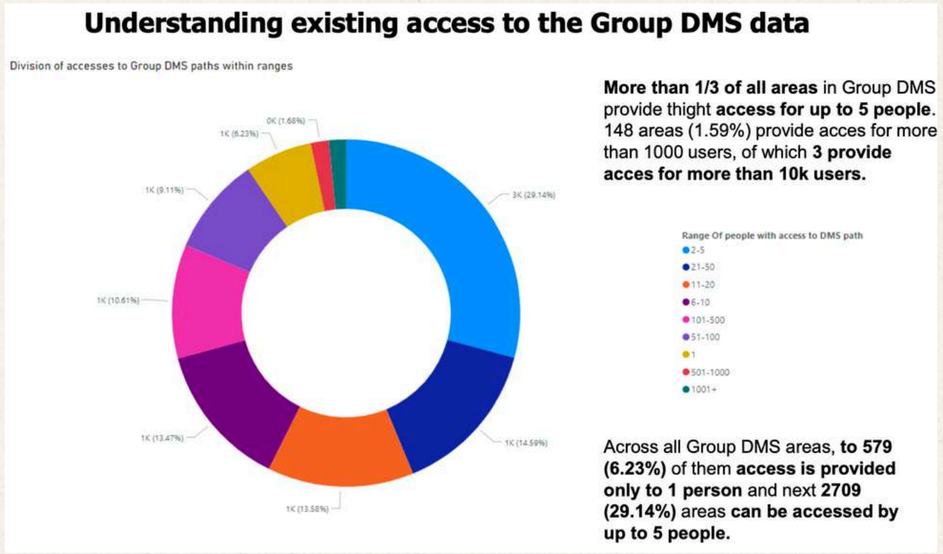
Led to schedule interviews:

- Report discoveries prompted:
  - Importance of conducting user interviews.
  - To better understand:
    - my target users
    - usability issues directly from users
  - **Validate** the gathered quantitative insights.

Top DMS Usage Users

vw(employees)	count(document)
Klante, Timo (vw7wtlo)	127802
Petzold, Katharina (av01kpd)	128126
Krause, Thomas (ebb4555)	130804
Behn, Michael (tp73ben)	131618
Hauk, Samuel (fv4lo0w)	135438
Meyer, Trutz (emeyet6)	139936
Maca, Jacqueline (triylbh)	140812
Andersson, Silke (dlp1asi)	145115
Weiser, Pascal (gq13edd)	150336
Achilles, Stephanie (av01sna)	154659
Esau, Sergej (vwft0ku)	155187
Thomas, Carsten (dl82tho)	158522
Imriska, Martin (dlbxim8)	161059
Sickert, Joern (esculcw)	164512
Schumann, Rolf (eschum2)	174837
Branka, Matthias (dv50brn)	176012
Schenke-Mauer, Doerte (dlp0shk)	178398
Hildebrandt, Michael (fit0mhi)	181584

Space Allocation
Unused Documents
Unidentified Accounts



Ambiguous Report Data

Report Findings 🎯

KEY METRICS

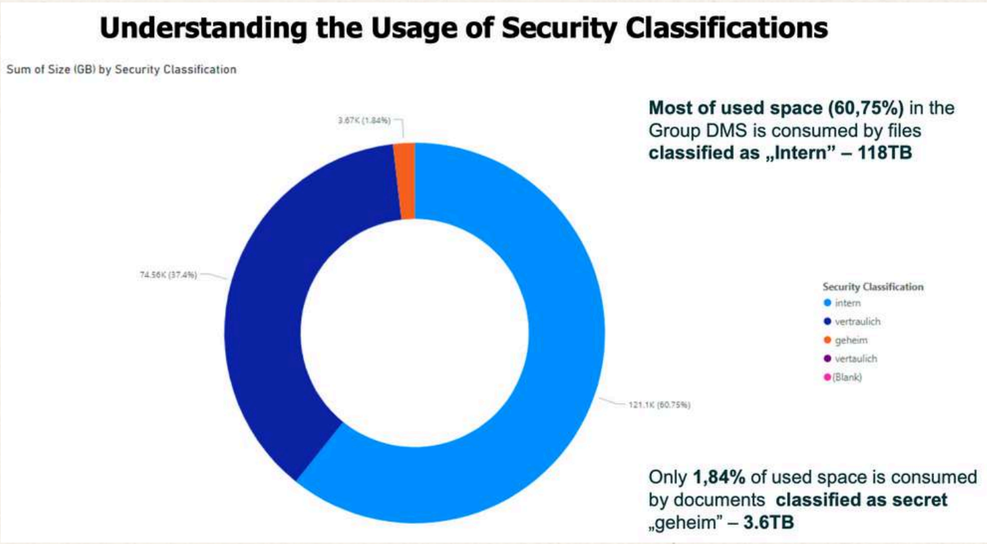
Target Group Identified

- Highest number of created files in Group DMS belongs to technical accounts like: **„DIDOKP", „tisdmsp" or „dmadmin2"**

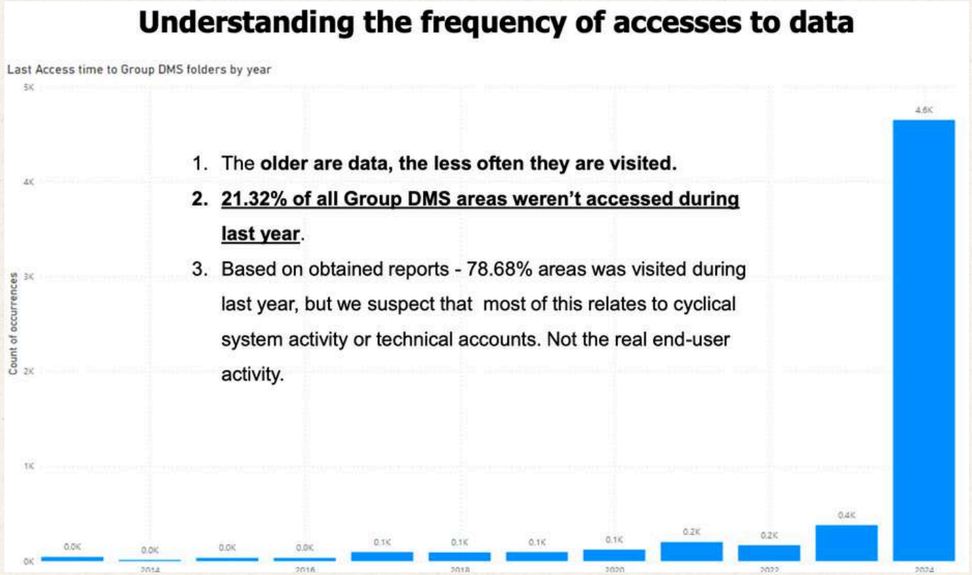
- The reports revealed critical insights such as:
  - Inefficient file storage patterns
  - **Inefficiency** of certain existing features ex, security.
  - Performance bottlenecks ---> workflow delays by **50%**.

- Spotlighted findings were: 🎯
  - DMS was **not meeting user needs**, particularly in terms of storage management and system usability.

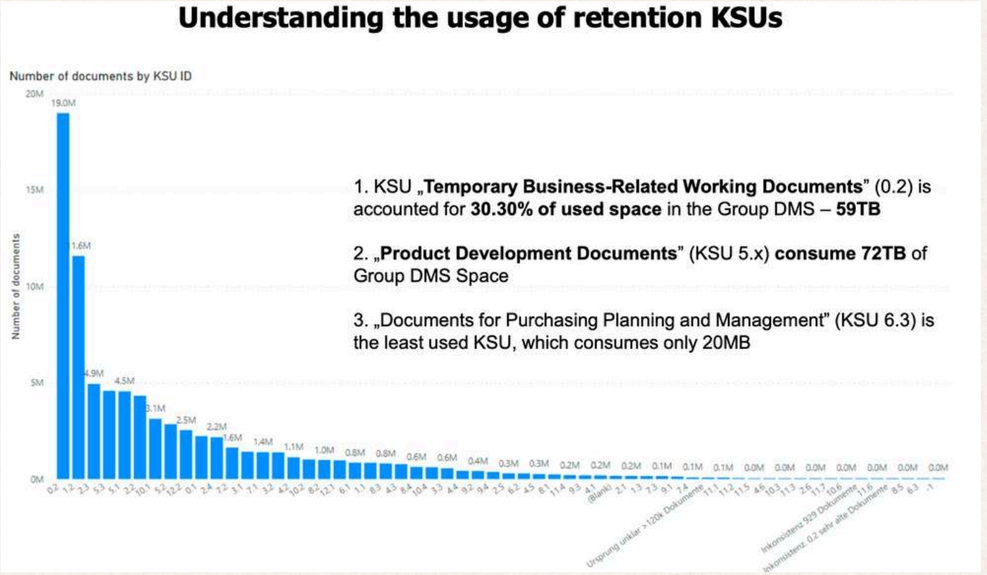
Understanding the Usage of Security Classifications



Understanding the frequency of accesses to data



Understanding the usage of retention KSUs



Research Process Step II

VW Customer (target users) Interviews

Why I conducted interviews?

- Understanding the user's **perspective**.
- **Validation** of the report data/insights.
- Found 5 key usability improvements.
- Bridge gaps between both teams.

How did I gather diverse feedback?

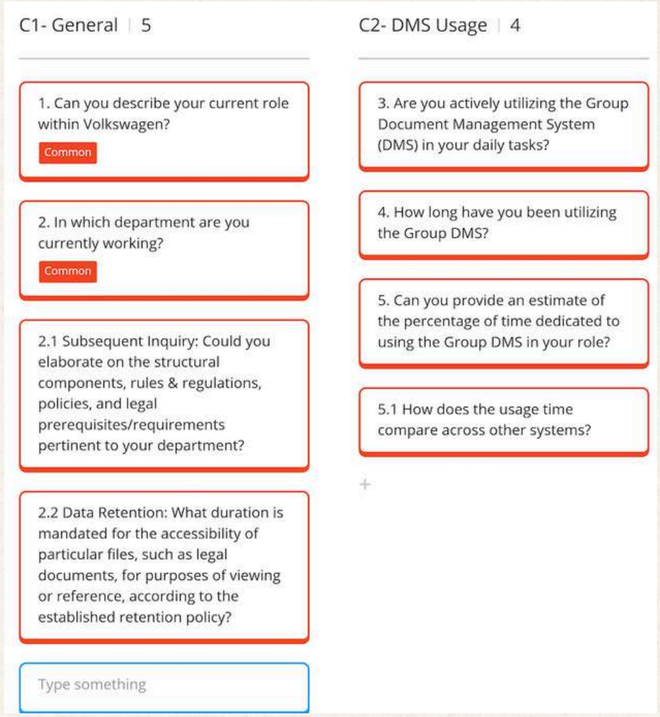
Diverse target groups to understand interaction and usability patterns with DMS.

03	TECHNICAL ACCOUNT
05	POWER USERS
03	WORKFLOW USER
04	DMS MANAGEMENT TEAM

(15) DAILY DMS USERS

How I prepared Interview Guide?

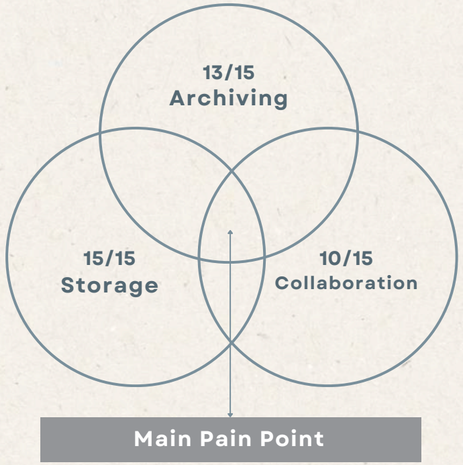
Based on the data and artefacts gathered from reports. ***(NDA)**



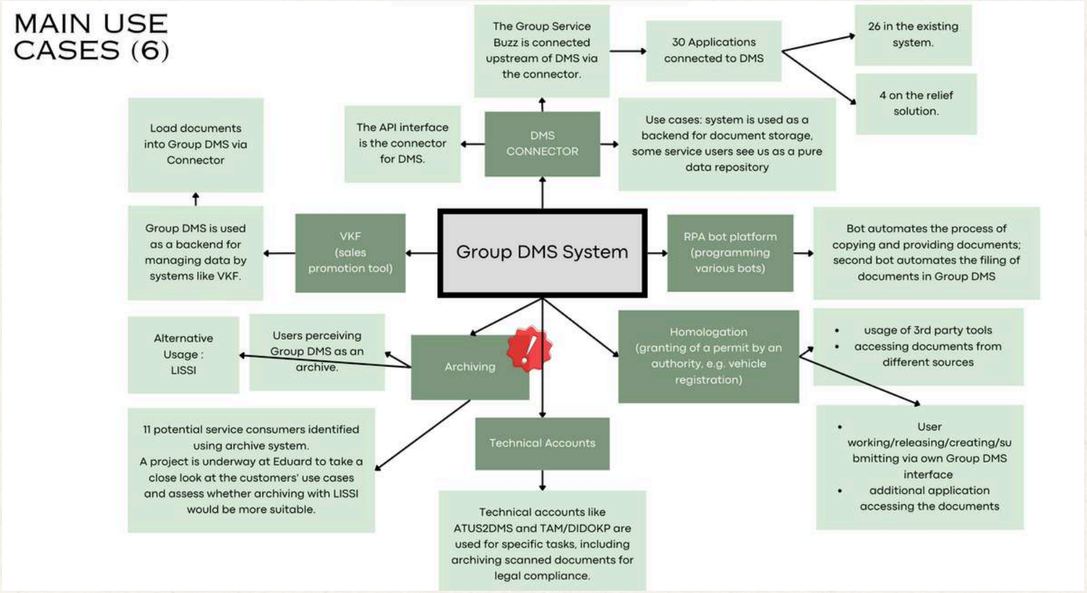
Interview Findings 🎯

KEY METRICS

- Strengths & flaws of DMS
- Understood my end user
- Personas & Pain Points
- Identified DMS Use Cases



Dive Deep



User 1

The phrase "please also file this in the DMS" is often heard, so we tend to use it as a storage location, but not for collaboration; **you can't work together in DMS.**

User 2

There should be an **archiving system** that we can access directly (no waiting time of a day is acceptable). 98% of the files are estimated not to have been touched again.

User 3

It is **difficult to find the document** packages in the Group DMS, even if I know the numbers. Documents older than 4 years should be locked automatically; this does not happen.

User 4

No system is introduced correctly, no central point of contact. Everyone has a healthy **half-knowledge**. No time is taken to deal with this.

Research Process Step III

Conducting Surveys -
Quantitative & Qualitative Data Collection

Question Set

General Questions:

1. In which department are you currently working?

1.1 Subsequent Inquiry: Could you elaborate on the structural components, rules & regulations, policies, and legal prerequisites/requirements pertinent to your department?

1.2 Data Retention: What duration is mandated for the accessibility of particular files, such as legal documents, for purposes of viewing or reference, according to the established retention policy?

Usage of Group DMS

2. Are you actively utilizing the Group Document Management System (DMS) in your daily tasks?

3. How long have you been utilizing the Group DMS?

4. Can you provide an estimate of the percentage of time dedicated to using the Group DMS in your role?

4.1 How does the usage time compare across other systems?

Systems Usage and Features

5. Alongside the Group DMS, which other systems do you regularly use in your daily business operations?

6. Regarding the systems you use:

6.1 What specific features do you leverage in the Group DMS?

6.2 What functionalities are you utilizing in SharePoint?

6.3 Are there any notable features in other systems that play a significant role in your daily tasks?

Why Survey?

- Gathered quantitative and broader response from daily users and stakeholders.
- **Validated** and expanded on interview findings. ✅
- Identified DMS key issues and usage (in numbers).
- **Volkswagen Limitation:** Insufficient interview participants. I suggested conducting the survey.

Why the 2nd Survey was not conducted:

- VW Works Council did not grant final approval.
- Because of time constraints and lack of approval, the project timeline was not extended, leaving insufficient time.
- Unable to execute phase II survey within the remaining period.

CHALLENGE

Workaround:

- Conducted another quick interview with the DMS support team. ✅
- **Collaborated** with Stakeholders to adjust the project timeline and extend the 2nd Survey deadline.

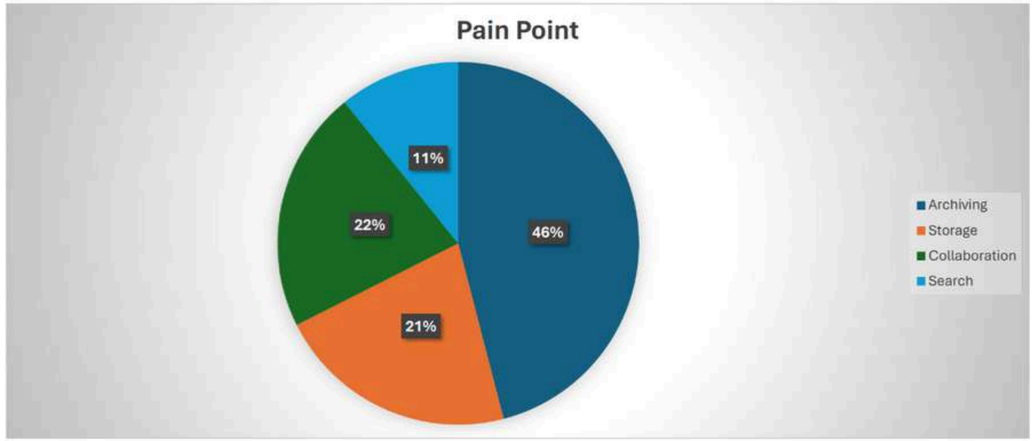
KEY METRICS

Survey Findings 🎯

- Biggest Challenge:
  - Archiving
  - Collaboration
  - Storage
- DMS fail to support **83%** of critical business processes.
- **100%** of users highlighted the need for a structured archival solution to meet compliance standards.

- **Outcome**: ✅
  - The **necessity** of refining Volkswagen's DMS strategy to enhance usability, accessibility, and experience.

'Identified' Main Pain Points



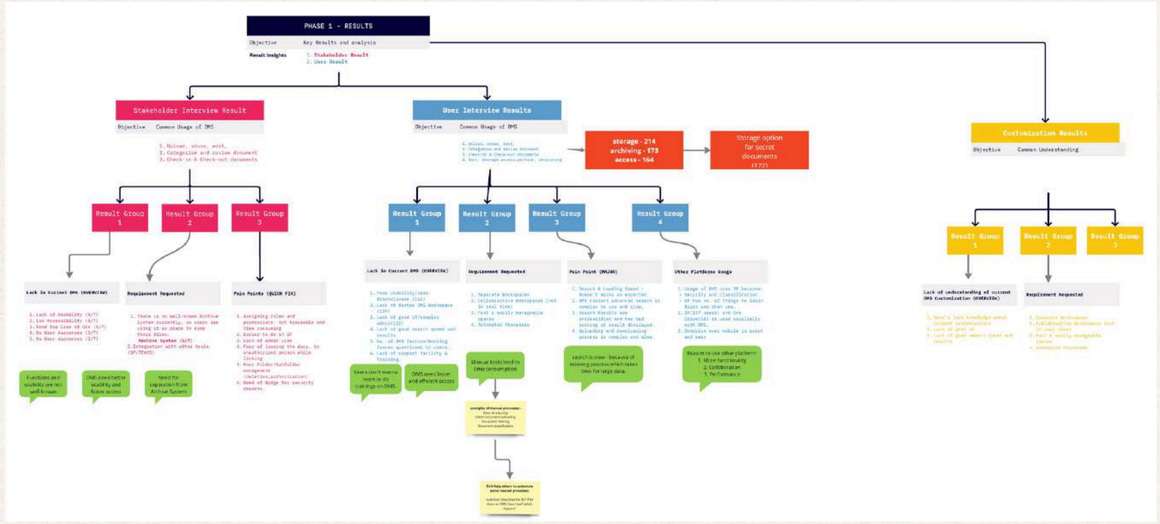
WHICH TOOL WHEN

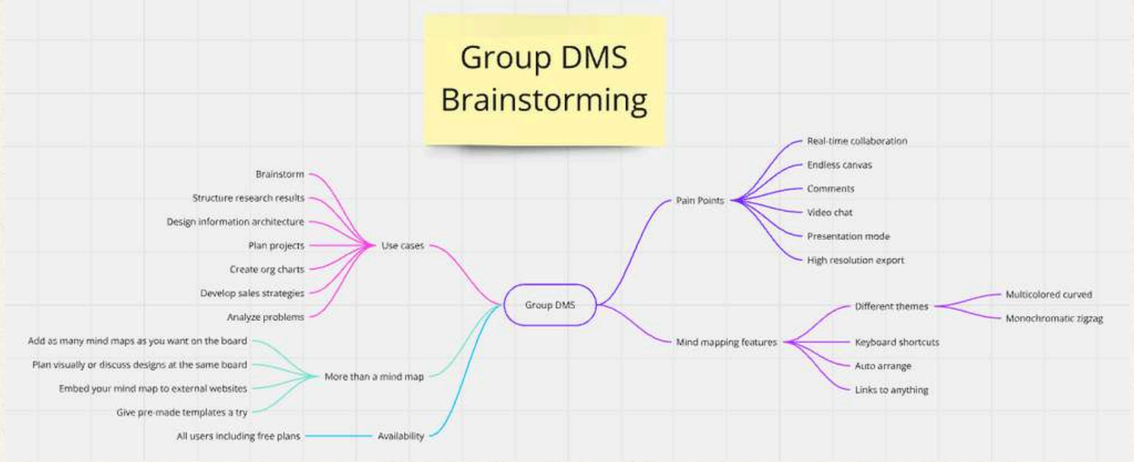
Use-case \ dedicated system	SharePoint	GROUP SMS	LIPS Service
New documents creation	✓	✗	✗
Collaboration on documents with colleagues, editing, correcting etc.	✓	✗	✗
Documents sharing	✓	✗	✗
Documents update, new version	✓	✗	✗
Project kick-off & ongoing materials	✓	✗	✗
Project or business unit closure	✗	✗	✓
Legal Hold	✓	✓	✗
Data archive according to KSU	✗	✗	✓

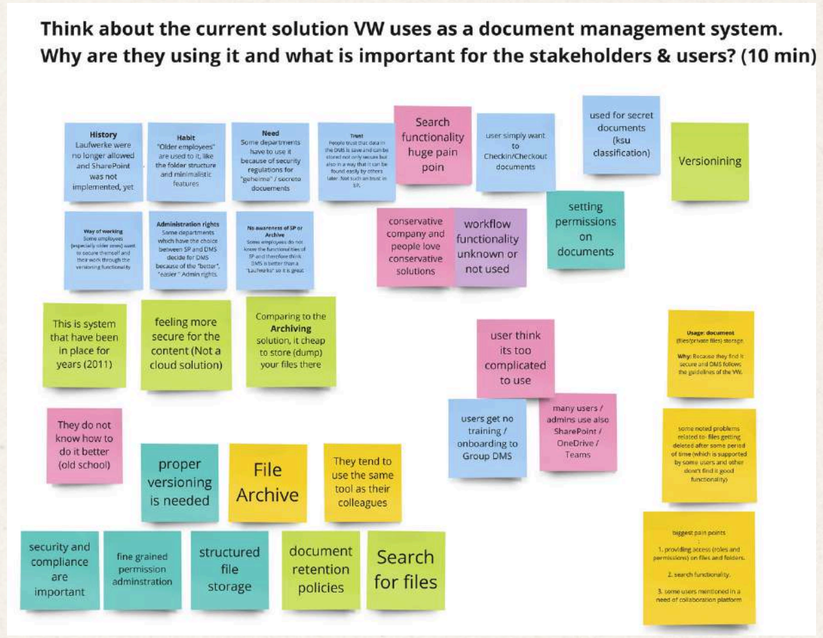
Result Collection 🎯

Brainstorming Workshops

- Miro - WM Internal Collab
- Whiteboard - VW Customer Collab







Final Research Findings 🎯

UX Reccomendations

PAIN POINTS ⚠	UX SOLUTIONS ✅
⚠ Inconsistent data management	✅ Archiving Feature
⚠ Limited usability of DMS	✅ Quick UX Fixes
⚠ Lack of collaboration Feature	✅ Live Collaboration Space
⚠ Storage limitations	✅ Cloud Migration (Sharepoint)
⚠ Difficult document search	✅ Functional Search Button

2. Key User Stories

- Archiving Old Documents in DMS.
- Identified top **6** user story.

Diverse User Stories

As a Compliance Officer, I need to ensure that archived documents remain accessible for regulatory audits and legal purposes, so I can retrieve necessary records when required.

As a Legal Advisor, I need to be able to access archived contracts and agreements quickly, so I can review them in case of legal inquiries or disputes.

As a Project Manager, I need to archive completed project documents securely, so they are preserved for future reference but are no longer cluttering the active workspace.

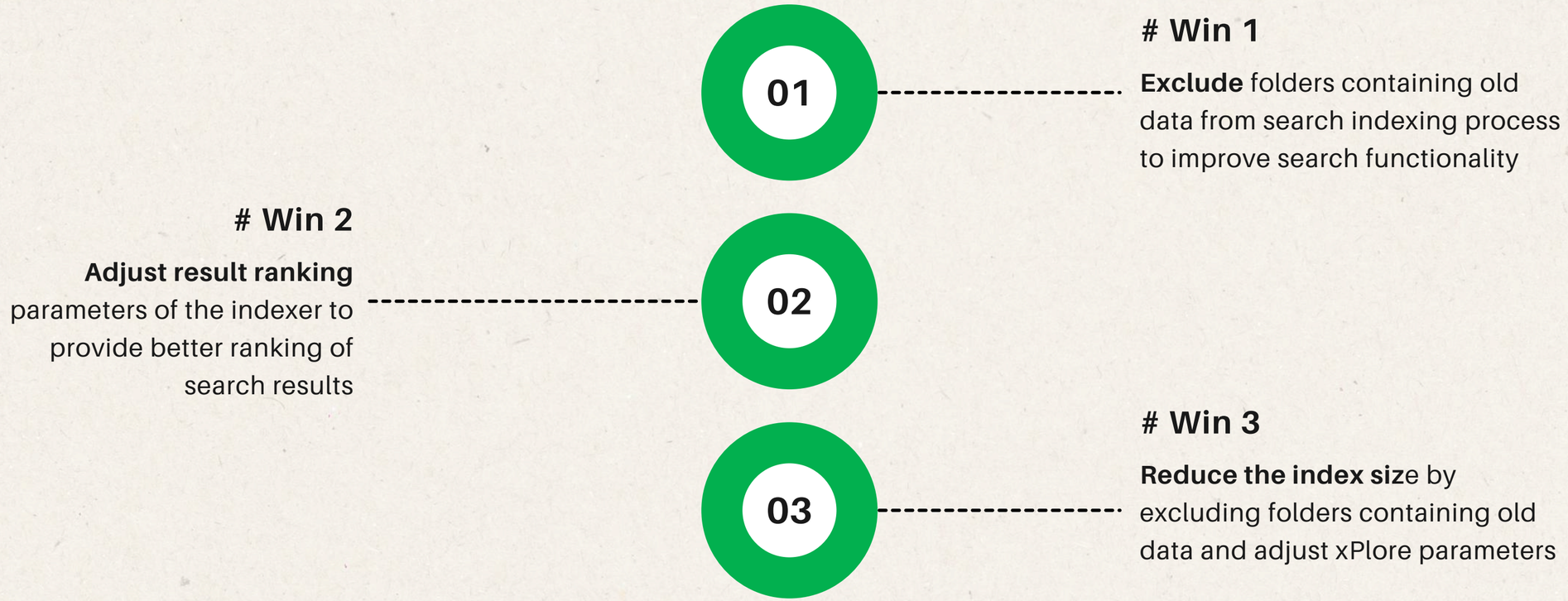
As an Admin, I need to organize archived documents by date, project, and category, so I can ensure the system remains structured and retrieval is efficient.

As a Senior Executive, I need to have a snapshot of all archived financial records, so I can access the data when preparing for annual reviews or audits.

As a User, I need to archive outdated internal reports in bulk, so I can clear up space in the active document repository while retaining the information for future reference.

Quick Fix - based on the research 🏆

Suggested solutions for **‘Search Functionality’** – **Quick Wins & Impact**



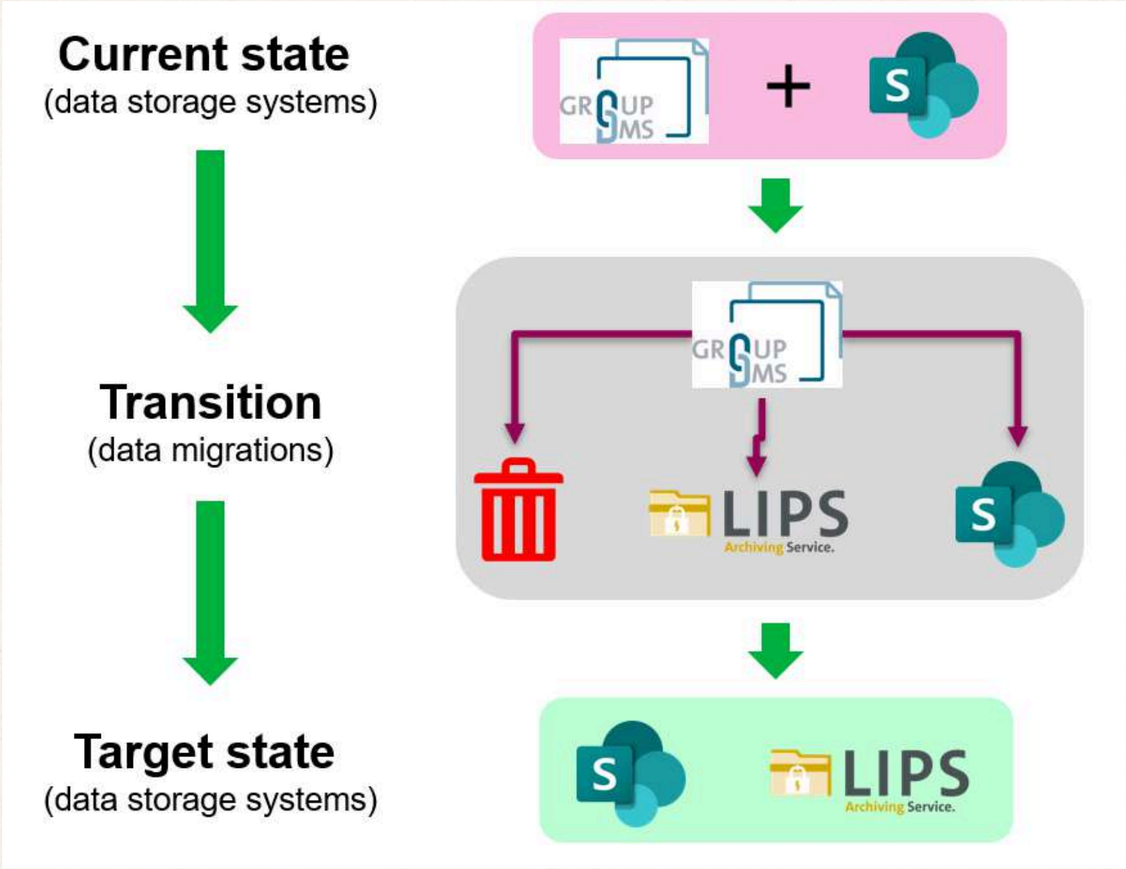
Deliver

Quick UX Recommendation - based on the UX research 🏆

Based on my investigations, analyses, surveys, direct interviews and verifying existing solutions – the **solution model** was recommended which consists of **two elements**:

SharePoint – as a main, front system for data in use.

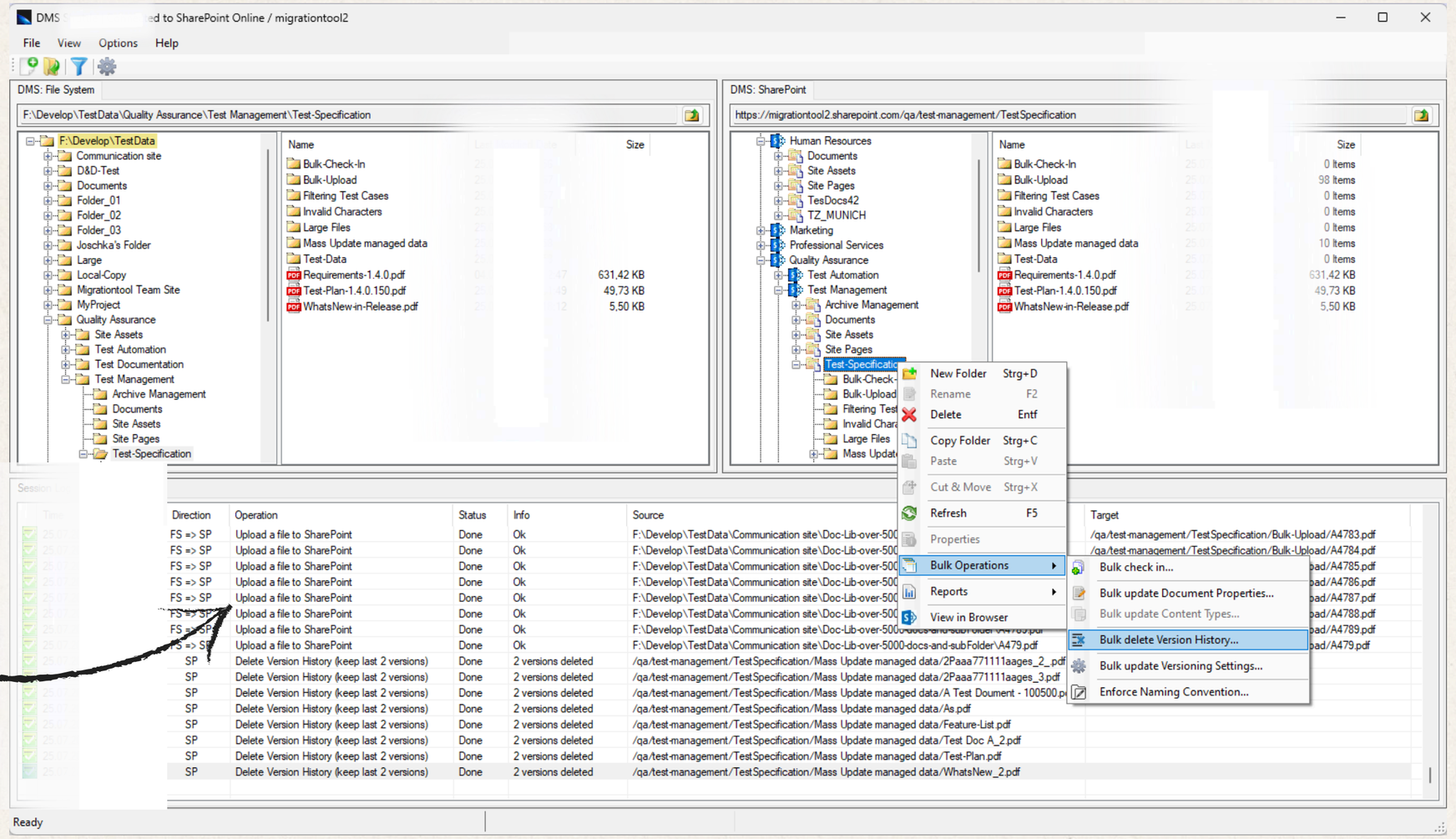
LISSI/LIPS – as a central archive system for not used „cold data”.



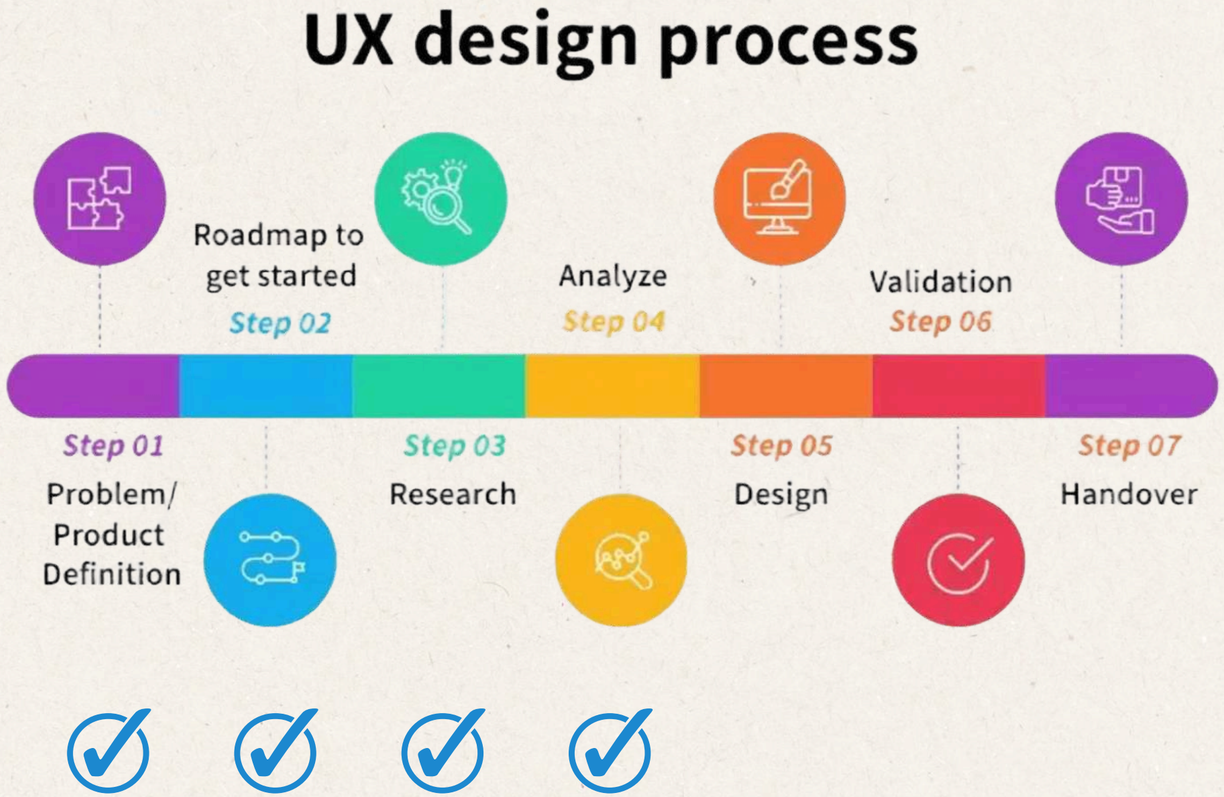
Deliver

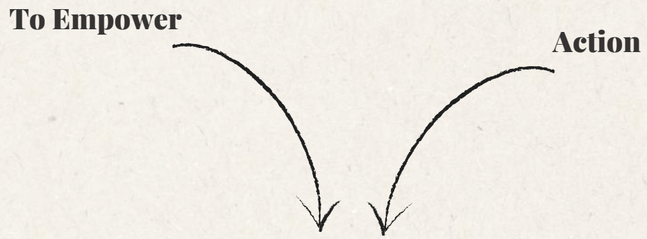
UX Solution For Storage Issue - DMS To Sharepoint Migration Plan

Quick Action & Win



From Research to Design





UX SOLUTION PROPOSED:

- Intuitive Dashboard
- Archiving Feature
- Search Functionality
- Live Collaboration Space
- Effective Storage Management
- Alternative Cloud Storage Solution (SP)

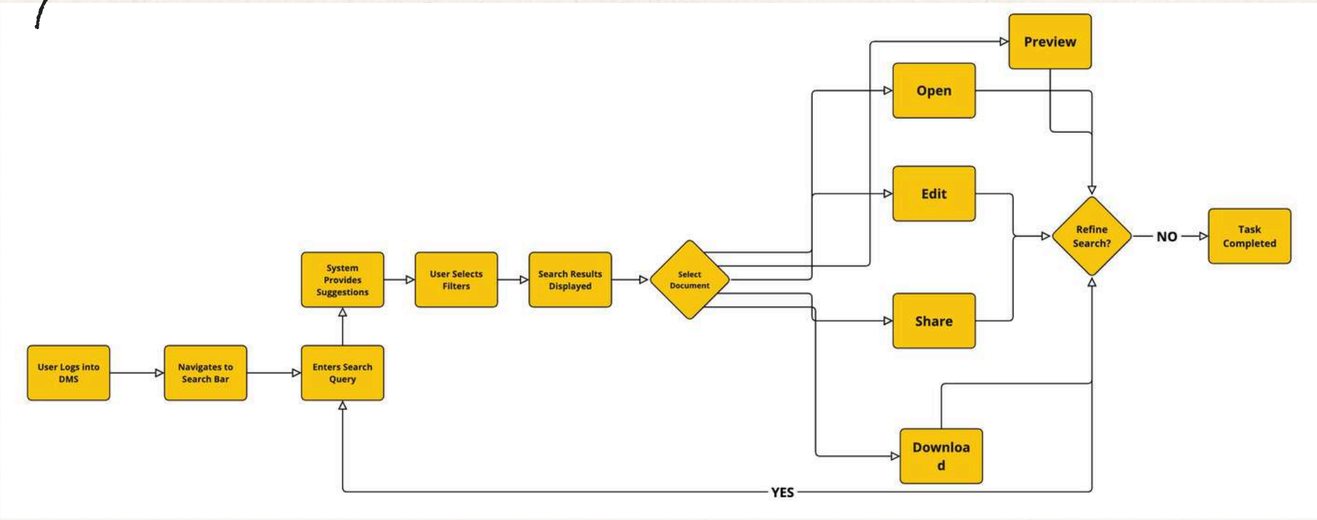
Design Process 🎯

KEY METRICS

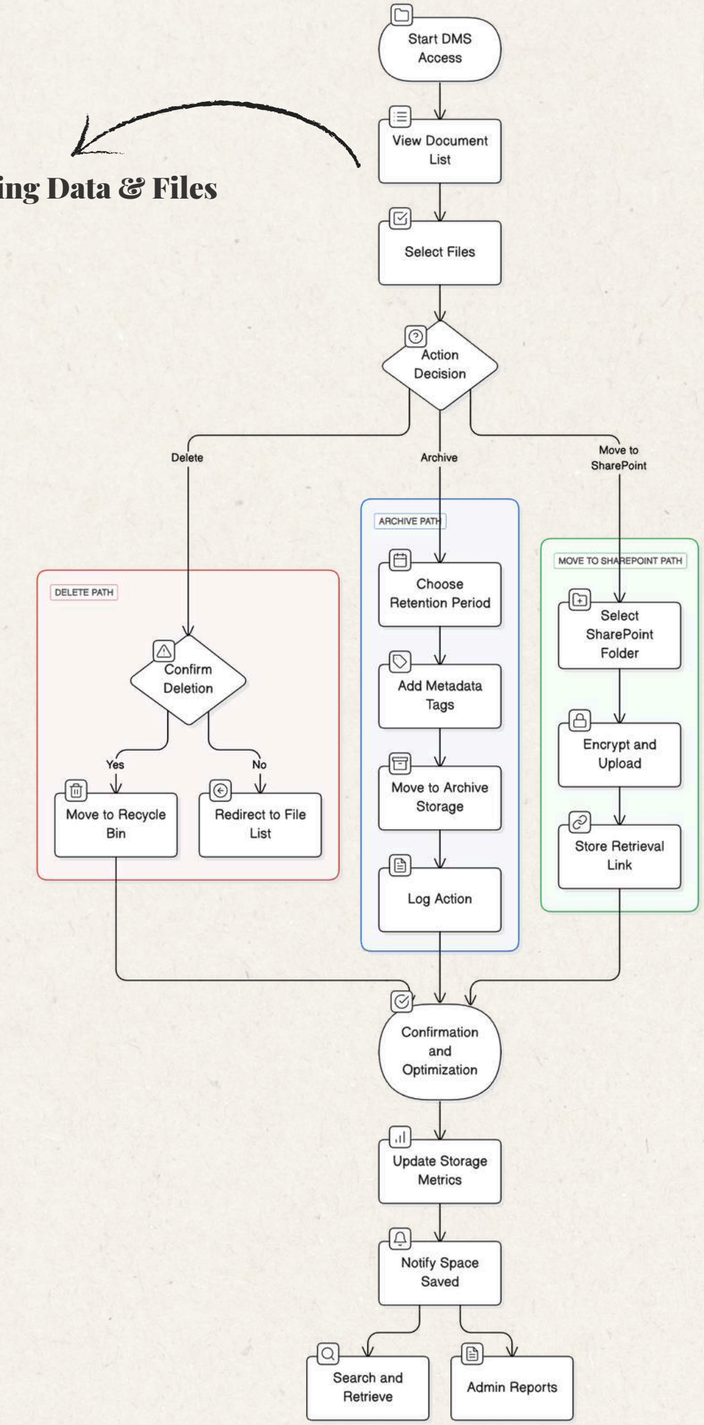
1. User Flows

- Search Functionality.
- Managing Data in DMS (Delete, Archive, or Move to SharePoint)

User Flow 1: Search Proess



User Flow 2: Managing Data & Files



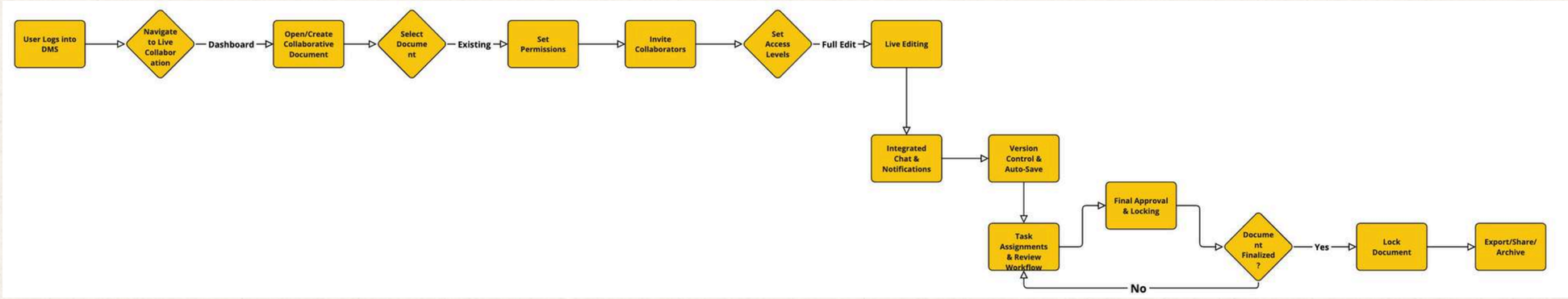
Design Process 🎯

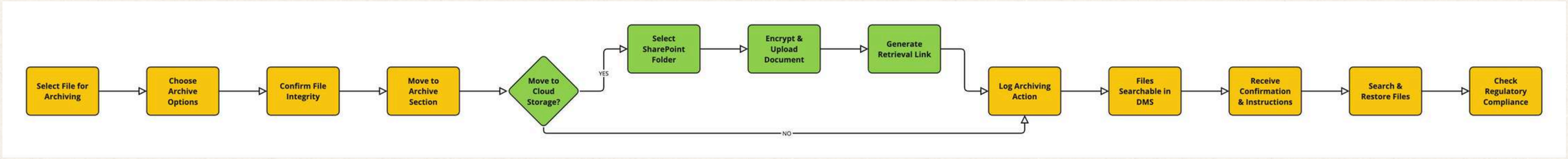
KEY METRICS

2. Task Flows (recommended)

- Live Collaboration Space for DMS.
- Archiving Files in DMS & Moving to Cloud Storage.

Task Flow 1: Collaboration Feature



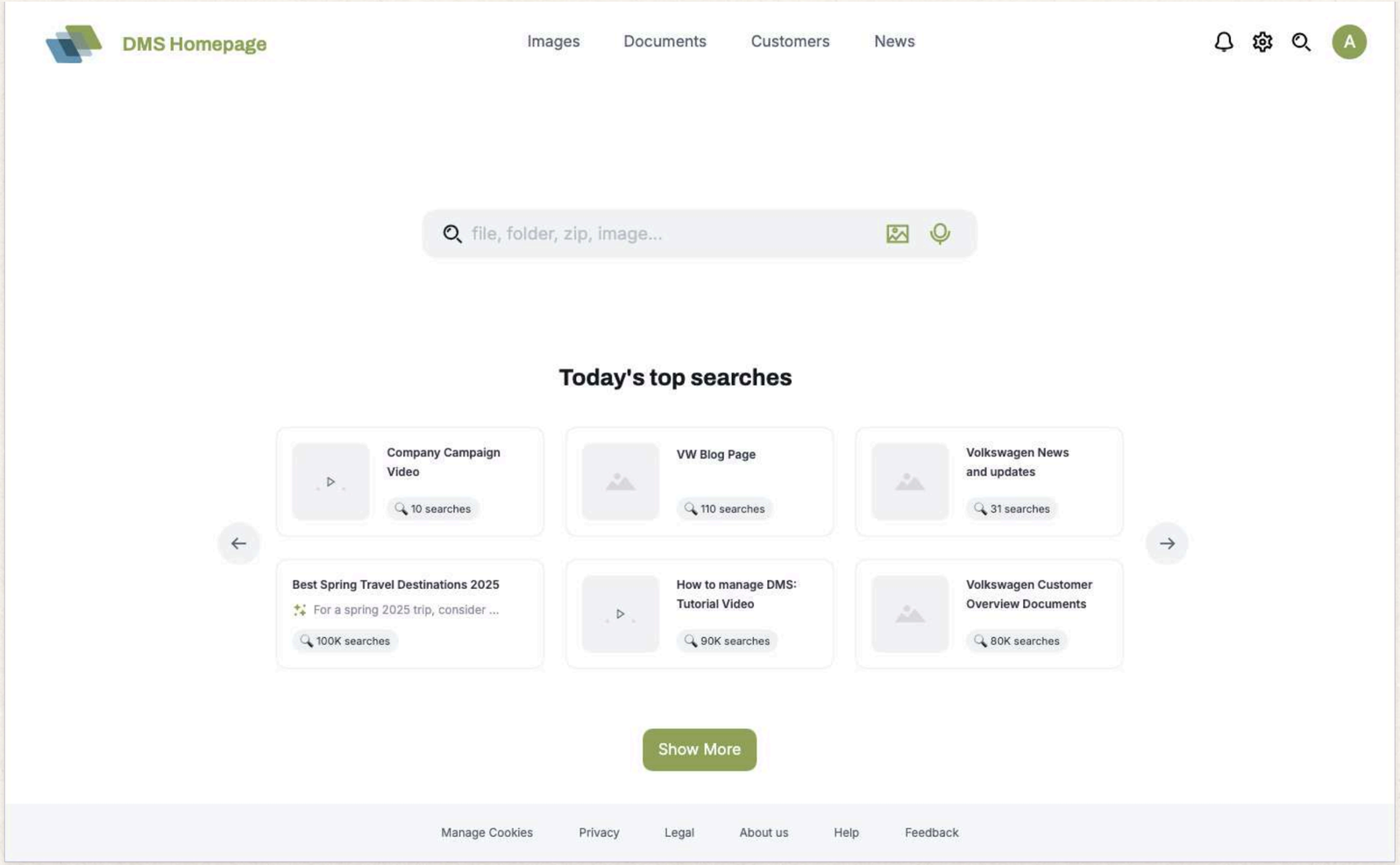


Task Flow 2: Archiving (or Sharepoint)

Prototype

KEY METRICS

3. SEARCH DASHBOARD (USER INTERFACE) 🔍



- Quick File Search & Navigation
- Streamlines document retrieval with an intuitive UI.
- Allows users to search files, folders, images, and documents.

✅ UX Solution: Enhanced search functionality with keyword-based lookup and suggested searches.

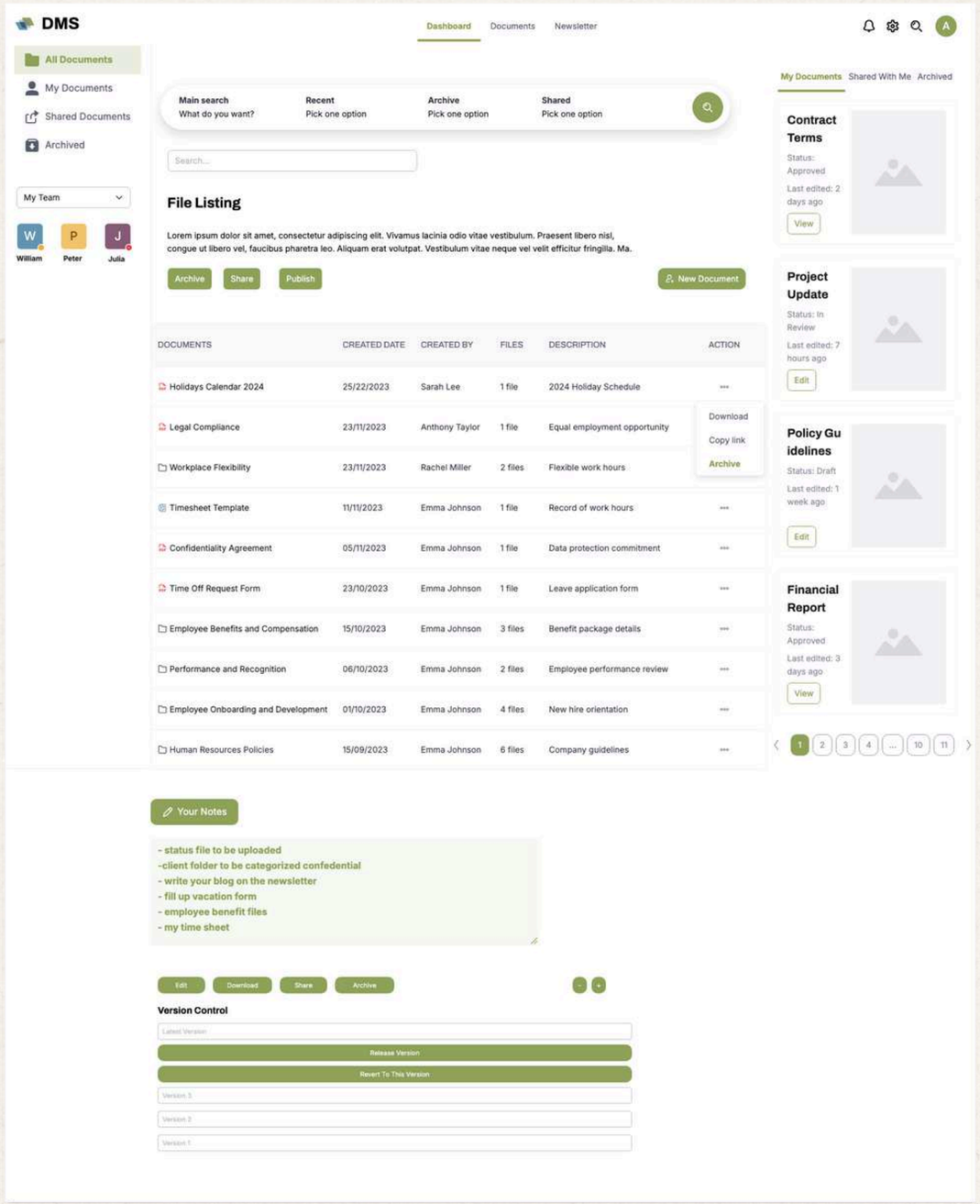
KEY METRICS

Prototype

4. Document Management System (UI)

- Organized Document Management
- Lists all documents with filters for Active, Shared, and Private files.
- Provides document details like creator, date, and status.

✅ UX Solution: Categorized file listing, version control, and filtering for better document management.



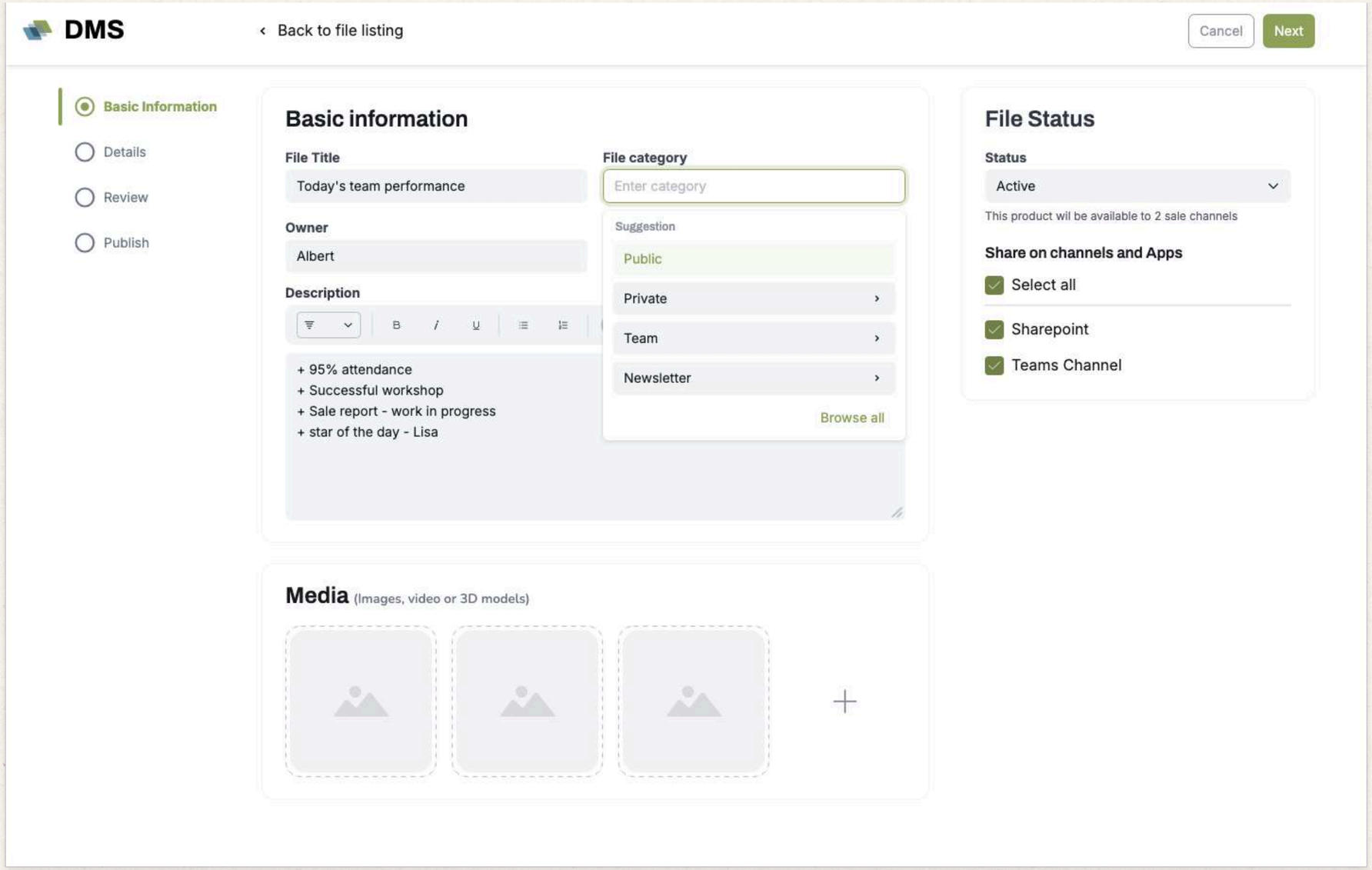
Prototype

KEY METRICS

5. Create File & Folder

- Structured File Creation & Categorization
- Users can set file titles, categories, and ownership.
- Allows adding team access & sharing permissions.
- Supports media attachments for enhanced documentation.

✅ UX Solution: Defined file ownership, categorization, and controlled access settings.



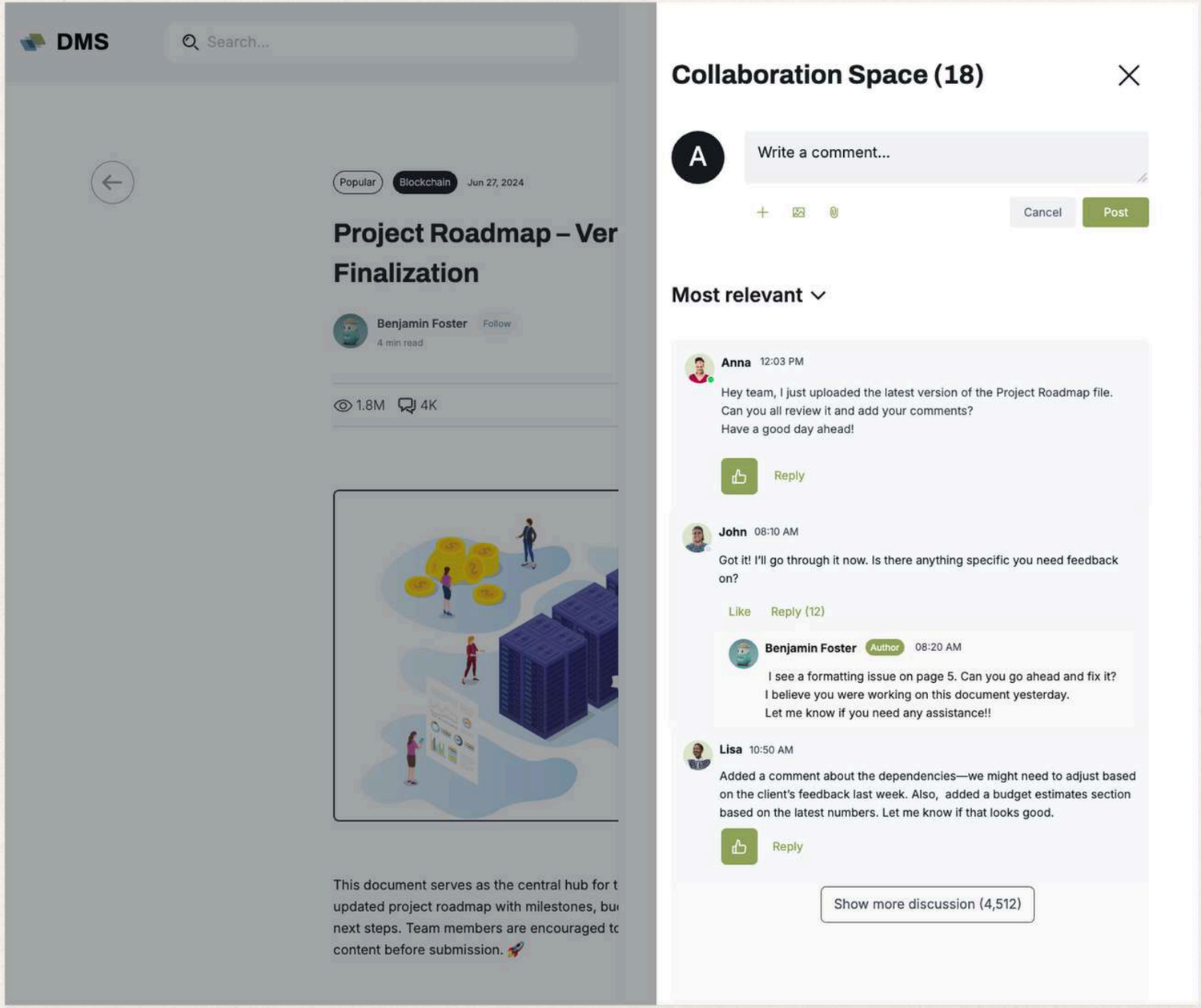
KEY METRICS

Prototype

6. Collaborate on Document

- Real-Time Collaboration & Feedback
- Enables users to comment, review, and discuss within documents.
- Displays threaded discussions for clear communication.

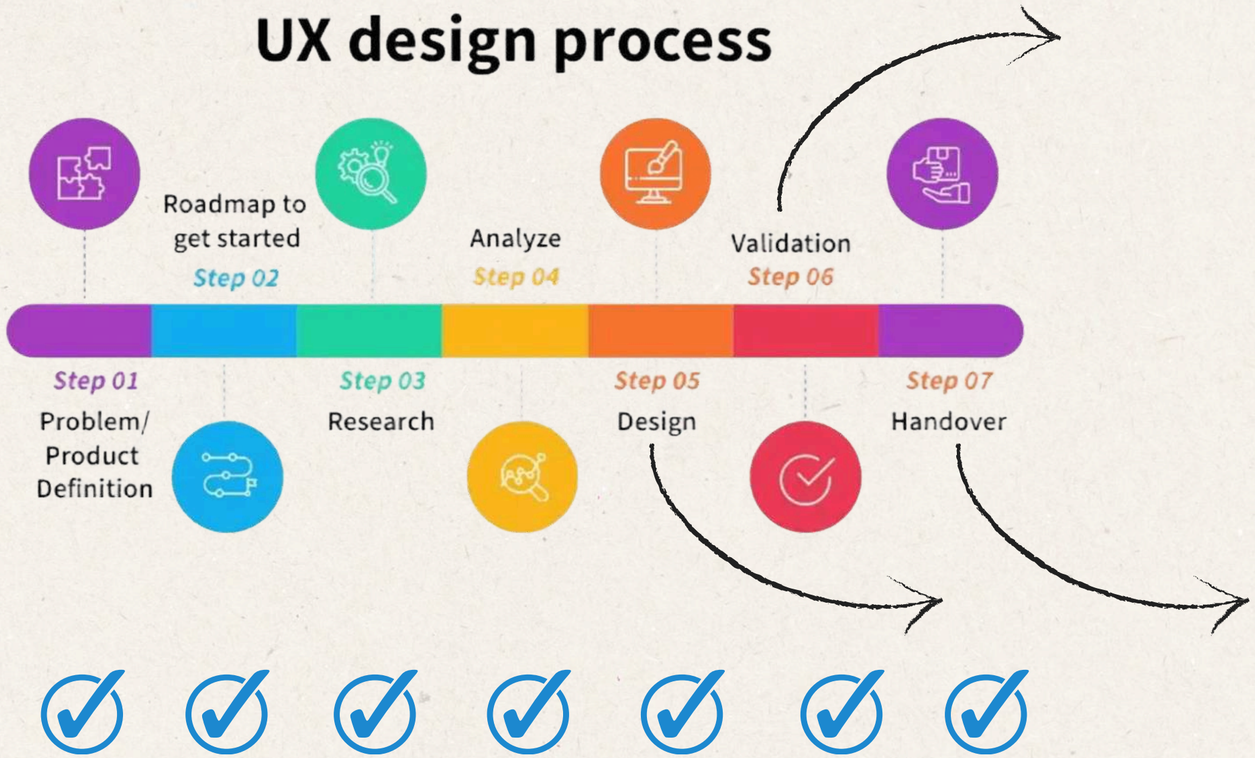
✅ UX Solution: Real-time commenting, discussion threads, and version-based collaboration.



Design Process 🎯

KEY METRICS

7. From Research to Prototyping



✅ **FINAL ACTIONS**

- **Rapid Ideation** (group brainstorming and crazy 8) defined a new UI concept/layout for the new digital storage platform.
- **Wireframing:** Created paper wireframes based on the ideation and features to be fixed or required by VW employees.
- Created a **storyboard** prototyping to check the user flow of the new digital solution (dashboard).
- Designed low-fidelity clickable **wireframes** and **click-throughs** using Figma and tested.
- **Prototyping:** Designed high-fidelity prototypes using Figma for VW's new UI digital dashboard.
- **Usability Testing:** Conducted internal testing (moderated/unmoderated) to validate prototype flow.
- **Rapid prototyping** on high-fidelity flows based on qualitative feedback.
- Quality Handover & **Delivery.**

CHALLENGES

As Sole UX Designer & Researcher under tight deadlines.

Major Project Challenge 1 📌

- **Situation:**
  - When the VW company's CEO made strategic decisions to **shut down** some of its VW operations in Germany in 2024.
  - This news and change indirectly **impacted** the timeline of our project, and we were required to meet a very tight deadline to deliver critical tasks.

- **Task:**
  - **Prioritize** the most critical UX tasks.
  - Research and design deliverables to be met on time.
  - Quality over quantity.
  - Quick and efficient to meet the deadline.

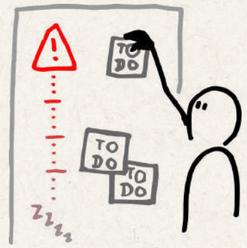
Customer Obsession
Ownership
Deliver
Bias for Action

How I overcame?

- **Action:** Calculated risk where speed was critical.
  - **Prioritization** of critical Research & UX tasks.
  - Efficient Time Management, where I **allocated** specific blocks of time for each task.
  - Clear Communication & Transparency.
  - **Quick** risk-taking decisions.

- **Result:**
  - Research analysis were successfully completed (**15% faster**) and delivered on time.
  - Stakeholder trust was maintained.

- **Delivery:** As speed matters so, my key deliverables:
  - Research deck, Competitive Analysis
  - Personas, empathy maps, and user journeys
  - Quick Solutions & Design Fixes



CHALLENGES

Ownership

Earn Trust

Challenge 2: Aligning Diverse Stakeholder Expectations 📌

- **Situation:**
  - Different stakeholders (e.g., power users, admins, daily users) had **conflicting priorities** and requirements, making it difficult to finalize workflows and design decisions.
  - Ex. Conflicting features: like **Archiving and collaboration.**

- **Task**:
  - Find a way to align diverse stakeholder opinions.
  - Choose the best solution for both the business and the end customers.
  - **Demonstrate** that the UX decisions were rooted in both user feedback and business goals.

- **Action:**
  - Conducted collaborative workshops and presented user personas & research insights to **align** stakeholders on a shared understanding of user needs.
  - I also **used data-driven evidence** from research work to prioritize features that balanced business goals and user expectations.
  - For example, I showed that archiving features had a **24% higher vote rate** in the survey compared to collaboration features, which helped prioritize archiving.

- **Result**:
  - **100%** stakeholder alignment on prioritized features.
  - Conflicting ideas were **resolved** in a collaborative manner.
  - **40%** adoption of new features post-launch, confirming the design's success.
  - **Earned trust** by fostering open communication, respecting differing opinions, and using data to back up decisions.

Why I did what I did ?

Deliver

Strive to be Earth's Best Employer

📌 At the core of every design decision, I tried to **know & <u>understand</u>** my customers and their real problems.

📌 For the Volkswagen project, the outdated DMS was a clear roadblock.

- I knew that creating a better user experience wasn't just about making things look good–it was about **understanding the 'why'** behind these challenges. ✅

📌 I started by **listening**–through surveys, interviews, and mapping user journeys–to truly understand the frustrations and needs of diverse user groups. This approach ensured that every step I took in the UX process was rooted in real insights, **not assumptions.** ✅

📌 Moreover, my role was to bridge the gap between what users wanted and what was technically feasible.

- Therefore, I collaborated closely with cross-functional teams. ✅

📌 Ultimately, I did what I did because I believe great research work and design doesn't just solve problems–it **helps people to work better and businesses to thrive.**

My Learning

- Customer Focus
- Time Management
- Effective Communication
- Cross-Functional Collaboration
- Problem-Solving

- User Research
- Data Analysis
- Quick Fixes
- Rapid Ideation
- Rapid Prototyping
- Alternative Tech
- Usability Testing

- Process Transformation: Improved Volkswagen’s digital storage platform by translating user needs into intuitive, efficient solutions.

- Business Insights: Aligned user-centered designs with business goals to enhance the engagement and productivity of VWs employess.

PROJECT PRESENTATION END

Thank You

EMAIL YOUR FEEDBACK

Start

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