

SUN DOG SCIENTIFIC

Design System and UX Development

Spring 2024



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Project Overview

The initiative to enhance Sundog Scientific's online presence to align digital footprint with its reputation as a leader in space weather hazard systems and magnetometer technology. Through this overview, we set the stage for a series of strategic actions aimed at refining the company's website, ensuring it accurately reflects its authority and expertise in the industry.

Objectives

The redesign of Sundog Scientific's website, a company at the forefront of space weather hazard systems and magnetometer technology, aims to craft a digital presence that embodies their expertise and authority. The design architecture should enhance collaborations with major entities like Excel, NASA, and **academic universities**.

The updated website will convey a professional and scholarly demeanor, essential for engagement with significant industry and academic partners. This initiative is aimed at dispelling any ambiguities surrounding the brand while establishing the company's standing in the scientific community.

Project Scope

The comprehensive scope of our project is aimed at redefining and enhancing Sundog Scientific's brand presence and digital footprint. The scope of the project is structured into three primary segments: Research + Positioning, Usability and Accessibility, and Design Development. Each segment is crafted to ensure a holistic approach to the project, aligning closely with Sundog Scientific's strategic goals, operational needs, and the expectations of its varied stakeholders.

Research + Positioning

1.1 Identify and define the roles of all parties involved in the project, including internal teams, external partners, and end-users, ensuring clear communication and alignment of expectations.

1.2 Capture and articulate the key business needs that the project aims to address, ensuring that the deliverables align with Sundog Scientific's operational and strategic goals.

1.3 Refine or develop Sundog Scientific's mission statement to clearly convey the company's core purpose and direction, serving as a foundation for the project's strategic alignment.

1.4 Link the project's objectives to Sundog Scientific's broader business goals, illustrating how the project will contribute to the company's success and growth.

1.5 Clarify Sundog Scientific's unique value proposition, ensuring the branding and website redesign clearly communicate and reinforce this proposition.

1.6 Define Sundog Scientific's target audience, ensuring the project's deliverables are tailored to meet their needs, preferences, and behaviors.



1.7 Conduct comprehensive research on market trends, competitor analysis, and audience segmentation to inform the project's strategic direction.

Usability and Accessibility

2.1 Ensure the project adheres to best practices in usability and accessibility, making the website user-friendly and accessible to all users, including those with disabilities.

2.2 Evaluate current technology trends and platform capabilities to choose the most appropriate and effective solutions for Sundog Scientific's website.

2.3 Investigate best practices in content creation and multimedia integration, ensuring the content strategy effectively communicates Sundog Scientific's message.

Design Development

3.1 Cover the entirety of the initial design process, from brand guidelines and wireframes to mockups, prototyping, and usability testing. Ensure alignment with user needs and business goals.

3.2 Detail the technical aspects of the project, including development phases, chosen technologies, website functionality, responsive design, accessibility standards, SEO, and user analytics.

3.3 Outline the strategy for ongoing content updates and technical maintenance, ensuring the website remains relevant, functional, and aligned with Sundog Scientific's evolving needs.

Stakeholders

The success of our project hinges on the active engagement and collaboration of a diverse group of stakeholders, each playing a vital role in shaping the outcome of Sun Dog Scientific's brand and website enhancement. Understanding and defining the roles and expectations of these stakeholders is crucial for clear communication and the alignment of project objectives. Here is a breakdown of the key stakeholder groups involved in this project:

Internal Teams

Individual Owner: Michael Henderson

Provides strategic direction, approves major project decisions, and ensures alignment with overall business objectives.

Corporate Owner: Computational Physics Incorporated

Offers a corporate perspective, ensuring the project aligns with broader business objectives and leverages CPI's resources and expertise where necessary.

IT and Technical Staff: Collaborate on technical requirements, provide insights on system integration, and ensure functionality aligns with technical capabilities.



End-Users

Customers and Clients

The primary audience for the website, their feedback and user behavior will be crucial in evaluating the website's effectiveness and user-friendliness.

Energy Consumers: Their practical application insights and feedback are invaluable for tailoring the website to meet the needs of large energy sector users.

Potential Business Partners

Including prospective collaborators or investors, their perception of the website can impact partnership opportunities and business growth.

Academic and Research Community

Given Sundog Scientific's sector, engagement with the academic and research community is vital, as their interaction with the website can influence collaborations and reputation in the scientific community.

Stakeholder Engagement

To ensure the project's success, a structured approach to stakeholder engagement will be adopted. Regular updates, meetings, and feedback sessions will be scheduled to keep stakeholders informed and involved throughout the project's lifecycle. Their input will be actively sought and incorporated into decision-making processes, ensuring that the project remains aligned with the needs and expectations of all parties involved.

Business Requirements

Mission Statement

At Sun Dog Scientific, we are dedicated to pioneering advancements in geomagnetic disturbance hazard studies. Our team of scientists and engineers implement cutting-edge tools and sensors to analyze the impacts of geomagnetic storms, monitor hazards, and provide critical, actionable information.

We strive to safeguard critical power infrastructure and enhance public safety by delivering precise and reliable geomagnetic data visualizations and insights.

Business Objectives

The redesign of Sundog Scientific's website, a company at the forefront of space weather hazard systems and magnetometer technology, aims to craft a digital presence that embodies their expertise and authority. The design architecture should enhance collaborations with major entities like Excel, NASA, and academic universities.

The updated website will convey a professional and scholarly demeanor, essential for engagement with significant industry and academic partners. This initiative is aimed at dispelling any ambiguities surrounding the brand while establishing the company's standing in the scientific community.



Target Audience

Energy Production Corporations

The primary audience for the website, their feedback and user behavior will be crucial in evaluating the website's effectiveness and user-friendliness.

Potential Partners

Including prospective collaborators or investors, their perception of the website can impact partnership opportunities and business growth.

Academic and Research Community

Given Sundog Scientific's sector, engagement with the academic and research community is vital, as their interaction with the website can influence collaborations and reputation in the scientific community.

Timeline

Phase	Deliverables	Notes
1. Project Overview (06/24 - 06/28)	<ul style="list-style-type: none">● Project Overview● Business Requirements	Client Interview
2 Research (07/01 - 07/05)	<ul style="list-style-type: none">● Industry Audit● User Research● Content Research	User Journey Maps User Personas Client Check In
3 Strategy (07/08 - 07/12)	<ul style="list-style-type: none">● User Analysis● Technology Analysis● Content Strategy● Wireframes	Usability + Accessibility
4 Design Development (07/15 - 07/19)	<ul style="list-style-type: none">● Low Fidelity Prototype● Usability Testing● Design Systems	
5 Release For Review (07/22 - 07/26)	<ul style="list-style-type: none">● High Fidelity Prototype	

User Research

Key Considerations

Data Processing: Requires robust systems for processing and visualizing large volumes of data in real time.

Data Transmission: Needs reliable and fast communication channels to transmit data from sensors to visualization systems.

User Interface: Must have intuitive interfaces for users to interpret real-time data quickly and accurately.

Alert Systems: Should include mechanisms for triggering alerts based on specific data thresholds or anomalies.

Integration: Often involves integrating data from multiple sensors and sources for comprehensive visualization.

Live Data Visualization

Data Processing Infrastructure: High-performance computing systems to handle the continuous flow of data and perform real-time analysis.

Reliable Communication Networks: Ensuring fast and stable data transmission from magnetometers to visualization systems.

Visualization Software: Tools capable of rendering real-time data into comprehensible visual formats such as graphs, maps, and dashboards.

Automated Alert Systems: Software that can detect anomalies in real-time data and automatically generate alerts.

User-Friendly Interfaces: Intuitive interfaces that allow users to easily interpret data, customize views, and respond to alerts

Data Applications

Application Area	Purpose	Use Cases	Methods
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Archaeology	Locates and maps archaeological sites by detecting magnetic anomalies.	Identifying buried structures, hearths, kilns, and ancient pathways.	Magnetometer surveys of archaeological sites to detect variations in the magnetic field.
Biomedical Applications	Maps brain activity by recording magnetic fields produced by neural activity.	Non-invasive brain imaging, studying brain function, diagnosing neurological disorders.	Magnetoencephalography (MEG) systems with highly sensitive magnetometers.
Environmental Monitoring	Detects changes in the Earth's magnetic field caused by environmental events.	Monitoring volcanic activity, earthquake prediction, studying ocean currents.	Magnetometer networks and satellite-based magnetometers to track magnetic field changes.
Geophysics	Measures the Earth's magnetic field to study geological and tectonic processes.	Mapping magnetic anomalies, studying the Earth's core dynamics, exploring plate tectonics.	Airborne and ground-based magnetometer surveys.
Industrial Applications	Detects metal objects within structures or underground.	Non-destructive testing, locating buried pipelines, detecting reinforcing bars in concrete.	Handheld and fixed magnetometers used in construction, maintenance, and safety inspections.
Military Applications	Detects submarines, unexploded ordnance, and other magnetic objects.	Anti-submarine warfare, mine detection, locating hidden metallic objects.	Towed array magnetometers, airborne magnetic anomaly detection systems, handheld devices.

Mineral Exploration	Locates mineral deposits by identifying magnetic variations.	Detecting ore bodies, oil and gas reservoirs, geothermal resources.	Airborne and ground-based magnetic surveys to map magnetic anomalies associated with minerals.
Navigation Systems	Provides orientation and heading information.	Used in compasses, smartphones, advanced navigation systems in vehicles and aircraft.	Integration of magnetometers with <i>GPS and inertial navigation systems</i> .
Space Exploration	Measures magnetic fields of planets, moons, and other celestial bodies.	Studying planetary magnetospheres, understanding celestial bodies' composition, analyzing space rocks.	Spacecraft-mounted magnetometers on missions like Mars rovers and orbiters.
Space Weather Monitoring*	Monitors solar storms and space weather events.	Predicting geomagnetic storms, protecting satellites and power grids, studying solar-terrestrial interactions.	Ground-based magnetometer networks and satellite-based magnetometers.

Space Weather Monitoring

Geomagnetic Storm Prediction

Real-Time Data Processing: Magnetometers continuously send data to processing centers where algorithms analyze it for signs of impending geomagnetic storms.

Visualization: Data is visualized on interactive maps showing the intensity and trajectory of magnetic disturbances, helping predict the impact area and time.

Alerts: When data indicates a potential storm, alerts are generated and sent to operators of satellites, power grids, and other vulnerable systems.

Immediate Protection Measures

Data Streaming: Continuous data feeds enable operators to monitor space weather conditions in real time.

Protective Actions: Operators can take immediate actions such as switching satellites to safe modes, adjusting power grid operations, and halting high-risk activities.

Visualization: Dashboards display real-time space weather conditions, highlighting areas of concern and recommended protective actions.

Spacecraft Navigation:

Real-Time Navigation Support: Spacecraft equipped with magnetometers provide live data to mission control, helping navigate through space weather disturbances.

Visual Tools: Real-time maps and graphs show the current and predicted space weather conditions along the spacecraft's trajectory.

Adjustments: Mission control can adjust spacecraft routes and operations based on live data to avoid or minimize exposure to adverse conditions.

Scientific Research:

Continuous Data Collection: Researchers access real-time data streams to study the ongoing interactions between the Sun and Earth's magnetic field.

Visualization: Real-time data is visualized using scientific software tools, allowing researchers to observe patterns and test hypotheses.

Collaborative Platforms: Data and visualizations are shared with the global scientific community for collaborative research and model improvement.

Industry Audit

Computational Physics, Geomagnetic Disturbance Division

Lafayette, CO

<https://gmd.cpi.com/magnetometers.html>

Website	Mobile	Information Architecture (IA)	Features	Visual Design
<ul style="list-style-type: none"> + Specs Sheet + Linked sections - Difference between newsletter + whitepaper? 		<ul style="list-style-type: none"> + About Us + Contact + Magnetometers + TPL-007 - Non-function based 	<ul style="list-style-type: none"> + TPL Compliance links + Multiple CTA for specs, contact, and quote 	<ul style="list-style-type: none"> + Active verbs in accent color + Partner / Collaborator / Client logos on homepage - Lack of text hierarchy in spec sheets - Double header - links look same as verbs



Direct Stakeholders

Explore how best to incorporate multimedia elements (images, videos, infographics) to enhance user engagement and comprehension.

Computational Physics, Inc.

Springfield, VA; Lafayette, CO; New England
<https://www.cpi.com/>

Website	Mobile	Information Architecture (IA)	Features	Visual Design
+ Detailed contact information in footer + Separated Division pages		+ Home + About + Solutions + Contact + Employment	- No CTAs	+ B/W high contrast + Gold/blue accents + 'More Information' dropdowns + Section links

Indirect Competitors

Investigate best practices for web content that engages and informs users, optimizing for readability, engagement, and SEO.

National Oceanic and Atmospheric Administration, Space Weather Prediction Center

Washington D.C
<https://www.swpc.noaa.gov/>

Website	Mobile	Information Architecture (IA)	Features	Visual Design
+ Color visibility - Information overload - Small fonts	+ positive - negative	+ About Space Weather + Products and Data +Media and Resources - Excessive footer - Lacks menu subcategories or organization	+ synthesized data + Stakeholder + Collaboration transparency - Lack live data - Lack practical application / intuitive frameworks	+ red severity warnings - Lack hierarchy - Difficult to read text

NewSpace Systems

South Africa

<https://www.newspacesystems.com/>

Website	Mobile	Information Architecture (IA)	Features	Visual Design
<ul style="list-style-type: none"> + Describes practical uses + Datasheet Link for Products CTA (functional, physical, environmental characteristics; interfaces) 	<ul style="list-style-type: none"> + positive - negative 	<ul style="list-style-type: none"> + Hierarchical + Home + About + Products (Features / Applications / Qualifications) + Contact 	<ul style="list-style-type: none"> + Spacecraft Components + Quote CTA menu hover + - No search 	<ul style="list-style-type: none"> + Dark blue high contrast design + Futuristic font + Motion graphics + Gray neutrals + iconography

PCE Instruments (Process Control Engineering)

Germany

<https://www.pce-instruments.com/f/t/us/main.htm>

Website	Mobile	Information Architecture (IA)	Features	Visual Design
<ul style="list-style-type: none"> + Clear structure + Informative product use images + Hub + Spoke product navigation simplifies complex subjects - Non specialized 	<ul style="list-style-type: none"> + positive - negative 	<ul style="list-style-type: none"> + Hierarchical + Products + Services + Support + Company + Quick Cart + Quick Call + Languages 	<ul style="list-style-type: none"> + Instruments + Appeal to consumer/ commercial level + Global Outreach + Tabletop + 2 Sensors - Lack data visualization - Lack context - Indoor only 	<ul style="list-style-type: none"> + Futuristic fonts + Banner overlays + High contrast blue/white -Overwhelming text

User Personas Clients, Partners, Researchers



Energy Production Corporation Representative: Alex Thompson

Project Manager at a renewable energy company, with 10 years of experience in energy production and sustainability.

Preferred Solutions: Integrated data dashboards, predictive analytics tools, comprehensive impact analysis.

Goals	Needs	Pain Points
Integrate geomagnetic data for optimizing energy production, ensure stability of energy grids.	Reliable geomagnetic data, real-time monitoring tools, impact analysis reports	Difficulty in correlating geomagnetic data with energy production metrics, limited access to real-time data

Environmental Monitoring Specialist: Dr. Emily White

Environmental scientist specializing in natural disaster prediction and environmental changes.

Preferred Solutions: High-quality real-time data, predictive models, and a consolidated historical database.

Goals	Needs	Pain Points
Monitor environmental	Accurate real-time	Inconsistent data quality,

changes, predict natural disasters, access historical event data.	monitoring, predictive analytics, comprehensive historical datasets.	lack of predictive tools.
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Potential Partner: Sarah Johnson

Business Development Executive at NASA looking to partner on innovative projects for public good

Preferred Solutions: Detailed case studies, clear articulation of benefits, easy access to partnership proposals.

Goals	Needs	Pain Points
Identify potential partnership opportunities, understand technological capabilities.	Clear presentation of technological expertise, success stories, contact information	Difficulty in assessing potential impact, unclear partnership benefits.

Academic + Research Community Member: Prof. Michael Brown

Professor of Geophysics with a focus on using technology for research and education.

Preferred Solutions: User-friendly data repositories, interactive research tools, downloadable educational materials.

Goals	Needs	Pain Points
Access detailed geomagnetic data for research, collaborate with other researchers, use data for teaching.	Comprehensive datasets, research publications, collaboration tools.	Limited access to high-quality data, complex interfaces.

Geophysics Researcher: Dr. Jane Smith

Geophysicist with 15 years of experience in seismic and magnetic field studies.

Preferred Solutions: Simplified data search and retrieval, interactive data visualizations, and a well-organized repository of publications.

Goals	Needs	Pain Points
Access detailed geomagnetic data for research, download datasets, stay updated on the latest	Clear presentation of complex data, easy access to research publications, and tools for data analysis.	Difficulty in finding specific datasets, complex navigation on data platforms.



Industrial Applications Engineer: John Davis

Industrial engineer focusing on non-destructive testing and infrastructure monitoring.

Preferred Solutions: Real-time anomaly detection tools, user-friendly data visualizations, comprehensive reports.

Goals	Needs	Pain Points
Detect and analyze structural anomalies, ensure the safety and integrity of infrastructure.	High-resolution magnetic field data, real-time alerts, detailed analysis reports.	Delayed detection, complex data interpretation.

Mineral Exploration Geologist: Alex Martinez

Geologist specializing in mineral exploration with 12 years of experience.

Preferred Solutions: High-quality survey data, integrated data platforms, and predictive analysis tools.

Goals	Needs	Pain Points
Locate mineral deposits, access geological data, validate exploration hypotheses.	Detailed geomagnetic surveys, historical geological data, predictive modeling tools.	Inconsistent data quality, difficulty in integrating data from multiple sources.

Space Exploration Engineer: Karen Lee

Aerospace engineer working on planetary missions and satellite technology.

Preferred Solutions: Real-time data dashboards, easy-to-integrate data formats, and timely alerts.

Goals	Needs	Pain Points
Monitor planetary magnetic fields, access real-time data for mission planning.	Real-time data feeds, historical data comparisons, alerts for magnetic anomalies.	Delayed data updates, difficult data integration with existing tools.

Space Weather Monitoring Specialist: Dr. Emily Green

Space weather scientist focusing on predicting and mitigating solar storm impacts.

Preferred Solutions: High-quality real-time data, advanced predictive models, consolidated historical databases.



Goals	Needs	Pain Points
Predict geomagnetic storms, protect satellites and power grids, understand space weather phenomena.	Accurate real-time monitoring, predictive analytics, comprehensive historical datasets.	Inconsistent data quality, lack of advanced predictive tools.

Content Research

Best Practices

User-Centric Design

Understand Your Audience: Identify the key user personas and their needs. Tailor the website experience to cater to these users, whether they are scientists, enthusiasts, or industry professionals.

Intuitive Navigation: Design a clear and simple navigation structure. Users should easily find sections like product information, educational content, and case studies.

Responsive Design

Mobile Optimization: Ensure that the website and all its features are fully responsive. The content should adapt seamlessly to different screen sizes and devices.

Consistent Experience: Maintain a consistent user experience across all devices, ensuring that functionality and interactivity are preserved on mobile.

Accessibility

Color Contrast: Use high-contrast colors for text and important data points to ensure readability for users with visual impairments.

Keyboard Navigation: Ensure that the website is fully navigable using a keyboard. Include focus states for interactive elements.

Alt Text: Provide descriptive alt text for all visual elements to assist users with screen readers.

Performance Optimization

Efficient Data Handling: Use efficient methods for loading and displaying content to minimize server load and improve performance.

Caching: Implement caching strategies for static content to reduce load times and server requests.

Scalability: Design the system to handle spikes in traffic, especially during product launches or significant events.

Engaging and Informative Content

Educational Resources: Offer engaging, easy-to-understand educational content about magnetometers and space weather. Use multimedia elements like videos and interactive infographics.

Product Information: Provide detailed product information, including features, benefits, and use cases. Use clear and concise language to explain complex concepts.

Case Studies and Applications: Showcase real-world applications and success stories to illustrate the impact and relevance of your technology.

Personalization

User Dashboards: Allow users to create personalized dashboards where they can view the content most relevant to them. Offer customization options for data types and preferences.

Alerts and Notifications: Provide options for users to set up alerts and notifications for specific events or updates. Ensure that these alerts are timely and actionable.

Security and Privacy

Data Protection: Implement robust security measures to protect user data and ensure the integrity of the content.

Privacy Policies: Clearly communicate your data privacy policies and ensure compliance with relevant regulations.

Continuous Improvement

User Feedback: Regularly collect and analyze user feedback to identify areas for improvement. Use surveys, feedback forms, and user testing sessions.

Analytics: Utilize web analytics tools to monitor user behavior and website performance. Use this data to make informed decisions about UX enhancements.

Collaboration and Updates

Regular Updates: Keep the content and features of the website updated with educational content, product information, and case studies.

Collaborative Tools: Use collaboration tools to facilitate communication and coordination among the design, development, and content teams.

Enhancing Brand Identity

Positioning as an Innovator: Showcasing live data visualization can position your brand as a leader in technological innovation and real-time data analysis.

Trust and Transparency: Providing real-time data builds trust with users by being transparent about monitoring and analysis capabilities.



Visual Storytelling: Use dynamic visualizations to tell the story of how your technology works and its impact, making complex data accessible and engaging.

Improving User Experience (UX)

Interactive Elements: Incorporate interactive charts and graphs that allow users to explore data on their own, enhancing engagement.

Customizable Views: Allow users to customize the data they see, tailoring the experience to their interests and needs.

Website Features

Feature	Description	Implementation
Case Studies + Applications	Showcase real-world applications of your technology through interactive case studies.	Use live data to demonstrate the effectiveness and impact of your solutions in various scenarios.
Educational Content	Interactive tutorials and explanations about magnetometers and their applications.	Integrate explainer videos, interactive infographics, and real-time data feeds to enhance learning.
Alerts and Notifications	Real-time alerts for significant space weather events.	Implement push notifications and email alerts for registered users.
Data Customization Tools	Allow users to filter and customize the data they view based on their interests.	Provide filtering options, range sliders, and toggle switches for users to personalize their data view.
Subscription Access	Access to historical data alongside real-time data for comparison and trend analysis.	Create an archive section where users can view and compare past data with current real-time data.
Mobile-Friendly Design	Ensure all data visualizations are optimized for mobile devices.	Use responsive design techniques and test visualizations on various devices for a seamless experience.

Technology Analysis

Technical Considerations

Data Integration: Ensure seamless integration of live data feeds from magnetometer networks into your website's backend.

Scalability: Design the system to handle large volumes of data and traffic, especially during significant space weather events.

User Privacy and Security: Implement robust security measures to protect user data and ensure the integrity of the data being visualized.

Tools and Technologies

Visualization Libraries: D3.js, Chart.js, Highcharts for creating interactive data visualizations.

Backend Solutions: Use real-time databases like Firebase or data streaming platforms like Apache Kafka.

Web Development Frameworks: React, Angular, or Vue.js for building dynamic, responsive web interfaces.

Technology Trend	Feature + Benefit	Benefit	Platform Compatibility
Responsive Web Design	Adaptable layout	Access reports on phone Use reports in field	Mobile/Desktop
Web Accessibility	ARIA roles and attributes	Ensures accessibility for users with disabilities, improving usability for all users.	Mobile/Desktop
Progressive Web Apps (PWAs)	Offline capabilities, push notifications	Access critical data and tools even without internet connection, and receive timely updates.	Mobile/Desktop
Performance Optimization	Faster load times	Enhances user experience, reduces bounce rates, keeps users engaged.	Mobile/Desktop
Security Enhancement	HTTPS, secure cookies	Protects sensitive data, builds trust with users (important for grant providers and energy sector users).	Mobile/Desktop
Voice Search Optimization	Voice search capabilities.	Allows for hands-free interaction, making it easier for busy professionals to access information	Mobile/Desktop

AI and Chatbots	Real-time customer support	Provides instant assistance and personalized user experience	Mobile/Desktop
Interactive Data Visualizations	Interactive graphs and charts	Enhances data comprehension and engagement, crucial for academic research and grant evaluations.	Desktop
SEO Optimization	Customizable meta tags, alt text for images	Improves search engine ranking, making it easier for users to find the website.	Mobile/Desktop
Mobile Optimization	Mobile-friendly design	Ensures a seamless experience on smartphones and tablets, important for fieldwork and on-the-go access.	Mobile

Content Strategy

Content strategy at Sun Dog aims to convey core educational values and public applications. By highlighting specialized services and providing valuable resources on sourcing of data, Sun Dog Scientific aims to communicate transparency of company objectives and values for funding and partnership considerations.

Content Requirements

To effectively communicate Sun Dog Scientific's objectives, values, and unique technology and services, we will use simplified and active text with high-quality images, compelling videos, and informational downloadable resources.

Main Pages	Subsections	Type of Content	CTAs
0.0 Homepage		Introduction, Tagline, Key Services Overview Images: Hero Image, Service Images Video: Short introductory video Downloadable: Brochure (PDF)	<i>Learn More</i> <i>Contact Us</i>
1.0 About Us	1.1 Mission Statement	Mission Statement	<i>Learn More</i>

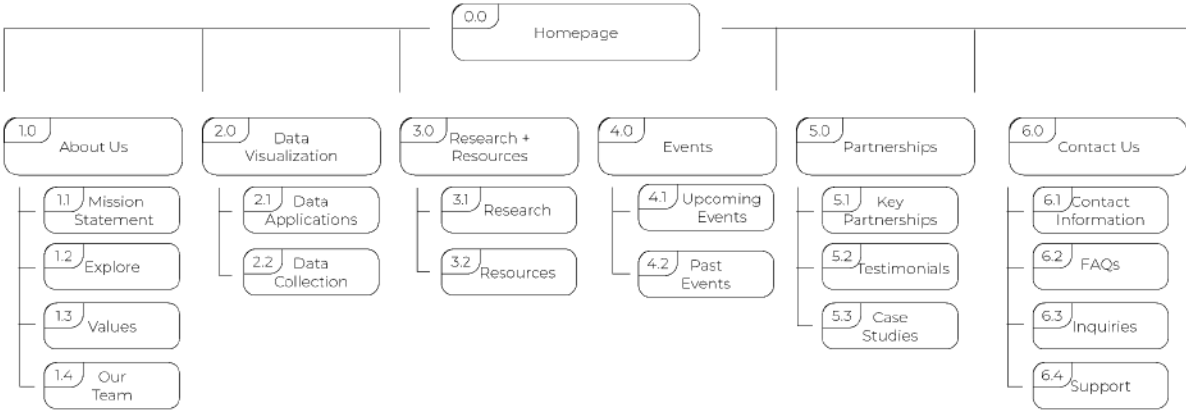
	1.2 Company History	Company History, Milestones Images: Timeline Profile Document (PDF)	<i>Learn More</i> <i>Download</i>
	1.3 Values	Values and Principles	<i>Learn More</i>
	1.4 Team Bios	Bios Images: Team Photos	<i>Learn More</i>
2.0 Data Visualization	2.1 Data Applications	Application Descriptions (benefits + uses) Images: Application Diagrams Case Studies + success stories Videos: Demonstrations Downloadable: Application Brochures (PDFs)	<i>Learn More</i> <i>Download</i> <i>Watch Video</i>
	2.2 Data Collection	Data Collection Methods Images: Collection Tools Videos: Tutorials Downloadable: Collection Guides (PDFs)	<i>Learn More</i> <i>Download</i> <i>Watch Video</i>
3.0 Research & Resources	3.1 Research Publications	Summaries Images: Publication Covers Downloadable: Research Papers (PDFs)	<i>Learn More</i> <i>Download</i>

	3.2 Educational Resources	Resource Descriptions Images: Diagrams + infographics Videos: Webinars, Tutorials Downloadable: Guides (PDFs)	<i>Learn More</i> <i>Download</i> <i>Watch Video</i>
4.0 Events	4.1 Upcoming Events	Overviews and details of upcoming events, including dates, times, locations, and agendas Event Calendar	<i>Register Now</i>
	4.2 Past Events	Recaps and photos of past events; Event highlights + objectives Images: Event Photos Videos: Highlights Downloadable: Event Agendas, Presentation Slides (PDFs)	<i>Learn More</i> <i>Download</i> <i>Watch Video</i>
5.0 Partnerships	5.1 Key Partnerships	Partnership Descriptions	<i>Learn More</i>
	5.2 Testimonials	Testimonials Videos/Quotes Testimonials	<i>Watch Video</i>
	5.3 Partnership Case Studies	Downloadable: Case Studies (PDFs)	<i>Download</i>
6.0 Contact Us	6.1 Contact Information	Address, Phone, Email, Map	<i>Contact Us</i> <i>View Map</i>
	6.2 FAQs	Support Info, FAQs	<i>Learn More</i>

		Downloadable: FAQ Document (PDF)	<i>Download</i>
	6.3 Inquiry Form	Form Fields	<i>Submit</i>
	6.4 Support Tutorials	Videos: Tutorials Support tutorial videos explaining common issues	<i>Watch Video</i>

Information Architecture (IA) and Sitemap

Organize content logically. Develop a sitemap that outlines the website's structure, ensuring easy navigation for users to find information about products, services, and the company.



Design Development

In the Design Development phase, I translate research insights and content strategies into tangible design solutions. This stage involves crafting detailed wireframes, creating high-fidelity prototypes, and developing a cohesive design system that ensures visual and functional consistency across all platforms

Design System

Foundational visual and conceptual components that define Sun Dog Scientific's identity refine core brand assets, including the logo, color palette, typography, and iconography. By establishing a consistent and cohesive visual language, these brand elements ensure that all communications and touchpoints convey a unified, professional, and technologically advanced image.



BRAND ELEMENTS

SUN DOG

SCIENTIFIC



COLORS

Primary Accent

R: 235 C: 2
G: 96 M: 77
B: 50 Y: 90
#EB6032 K: 0

Dark Alternate

R: 15 C: 76
G: 24 M: 62
B: 18 Y: 70
#0F1813 K: 81

Light

R: 248 C: 2
G: 242 M: 3
B: 235 Y: 6
#F8F2EB K: 0

Light tones

R: 191 C: 25
G: 192 M: 19
B: 186 Y: 24
#BFC0BA K: 0

Midtones

R: 92 C: 62
G: 95 M: 52
B: 92 Y: 55
#5C5F5C K: 26

TYPEFACE



Font Family: Acumin Variable Concept
Font Weights: Wide, Light, Default, Thin

H1 Heading Wide

H2 Heading Default

H3 Heading Light

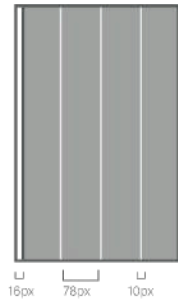
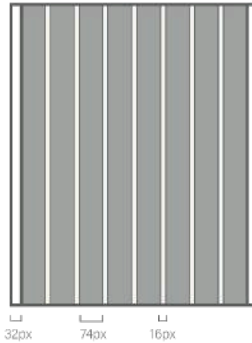
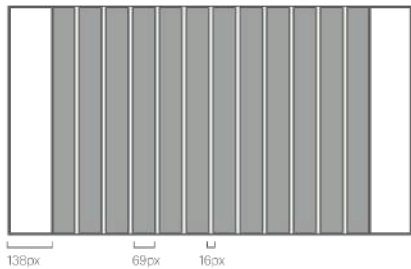
H4 Heading Thin

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SPACING



TABLET

MOBILE

ICONOGRAPHY

NAVIGATION + INTERFACE



CONTENT



MISCELLANEOUS



ACTIONS



MEDIA CONTROL



SERVICE-SPECIFIC CONTENT



STATUS + FEEDBACK



FORMS + DATA ENTRY

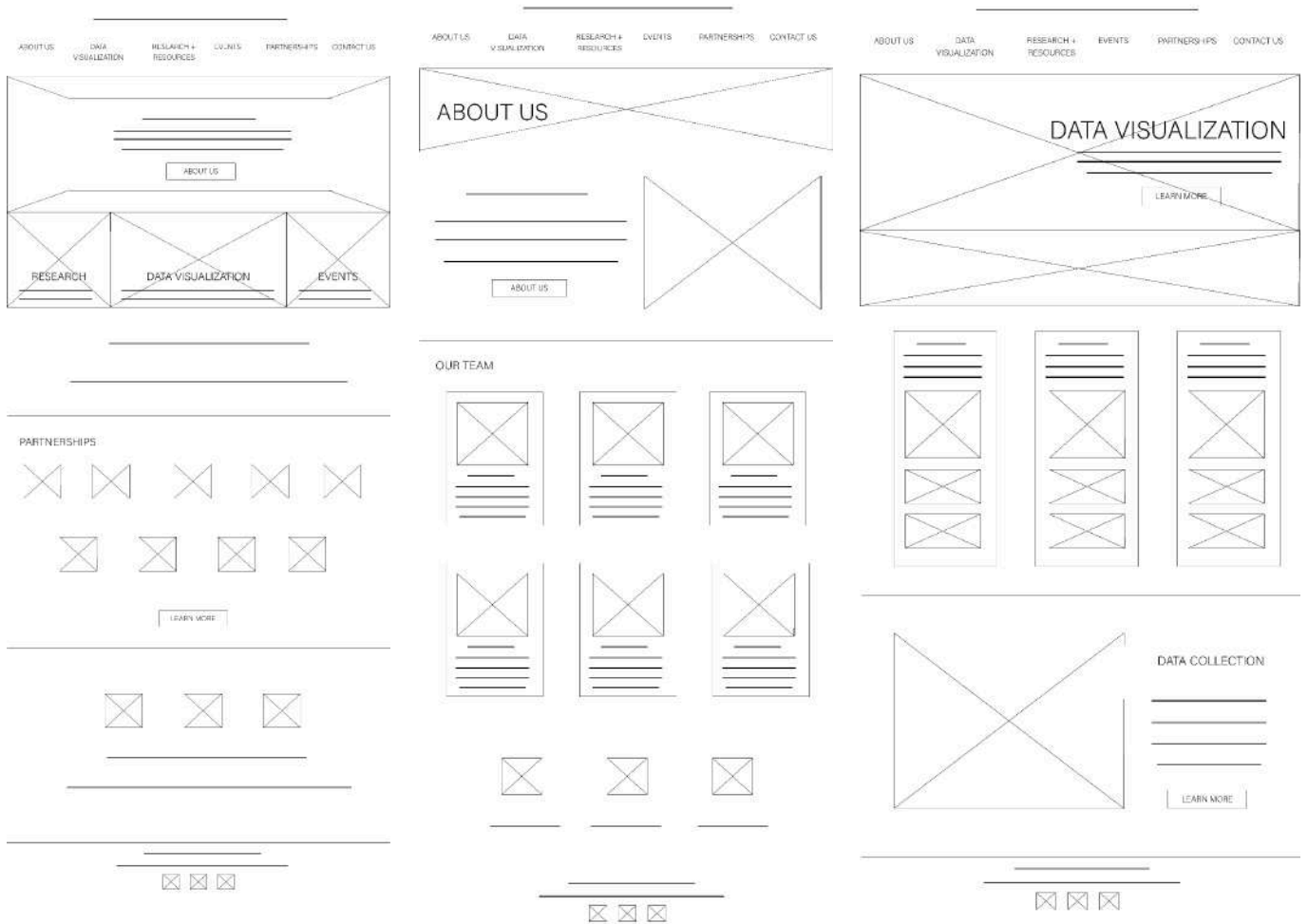
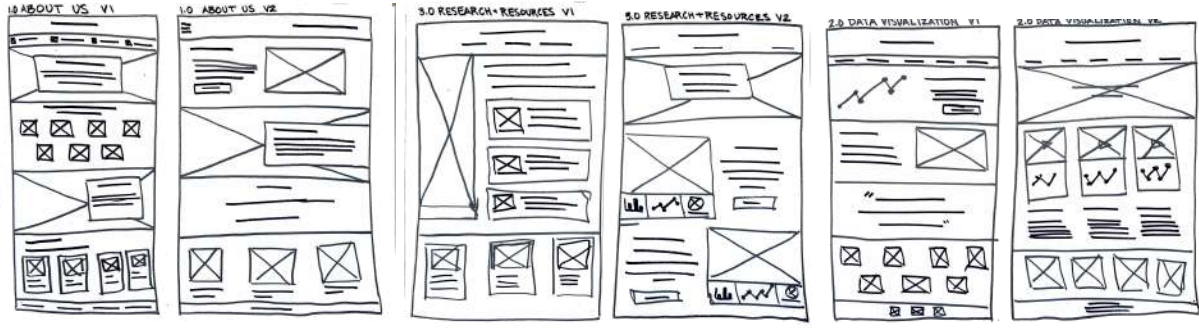


COMMUNICATION



Wireframes

The initial wireframes serve as a foundational layout, mapping out the structure and flow of content without the distraction of detailed design elements. By focusing on functionality and user experience, wireframes highlight key navigation paths, content organization, and interactive elements for a clear visual representation of the user journey and the overall site architecture.



Mockups

