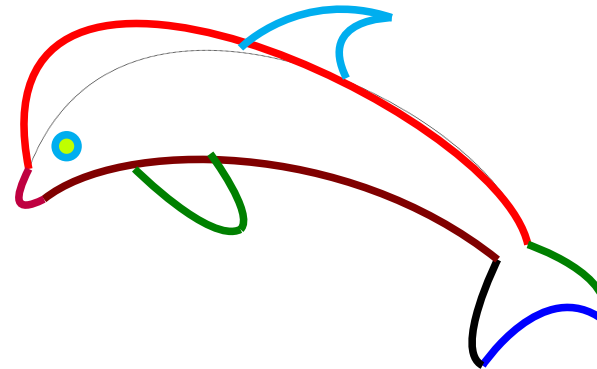


On the Holistic Approaches to Design Transformations



# Dolphin: A Dynamic Visualization Studio



Dolphin Development Team  
Strategic Vision & Implementation Roadmap

A Proposal for Discussions and Further Actions

January 18, 2025

# Outline

- Introduction and Background
- Key Challenges of Static Designs
- Proposed Creative and Innovative Solutions
- Capabilities and Value Propositions
- Our Intellectual Property
- Potential Beneficiaries
- Case Study 1: Consumer Products Industry
- Case Study 2: Manufacturing Digital Twin Dashboards
- Product Development Roadmap and Key Tasks

# Introduction

- **What is Data Visualization?**

- Data visualization deals with the graphic representations of information, data, or knowledge intended to communicate and improve cognition about information derived from variety of data sources quickly, clearly and effectively via visual or graphical means.
- Data Visualization help understand complex ideas, patterns and trends hidden in the data to derive meaningful insights for informed data-driven decision making.

- **Current State-of-the-Art**

- Consumer Art Design - Adobe Illustrator, Inkscape, Canva
- Industrial Design - SolidWorks, AutoCAD
- Collaborative Design - Figma
- Data Visualization - Power BI, Tableau, D3.js, Chart.js
- Technologies Options - SVG, HTML Canvas, WebGL

# Key Challenges of Static Designs

- Bulky Requiring Large Data Storage
- Low Performance with Slow Loading Time
- Not Configurable and Personalizable
- Not Easy to Search and Retrieve
- Difficult to Version Control and Traceability
- Not Collaborative and Interactive
- High software licencing costs

# Our Innovative Solution - The Dolphin Studio

- Dolphin Studio is a data-driven vector visualization platform designed to empower users to create:
  - Visually Appealing Consumer Art Designs
  - Business Intelligence Dashboards
  - Automated Reporting and Publications
- Our designs are dynamic, interactive, and vector-based, enabling on-the-fly design customization to meet changing requirements.
- Our pioneering innovation in art design and data visualization blends mathematics with the computing technology.
- With Dolphin, you can achieve significant size reduction without compromising quality, ensuring high performance, and contributing to environmental sustainability.
- Dolphin is a cloud-native solution that is available as a lightweight, stand-alone, client-side application as well as the most efficient server-side data visualization engine.

# Key Features and Core Capabilities

## ● Powerful Possibilities to Create

- High Quality Graphic Designs that are Configurable, Collaborative and Engaging
- Rich Data Visualizations with Animation and Personalization
- High performing Business Intelligence dashboard
- Digital Twins for Manufacturing Plants, Systems, Processes
- Automated Reporting and Publications for digital and print media

## ● Core Capabilities

- Raster to Vector Transformation for Size Reduction, High Quality, and High Performance
- Static to Dynamic Vector Enhancements for Real-Time Design Configuration and customization
- Data Management and Traceability using Attribution, Labeling and Tagging for Efficient Searching and Retrieval
- Image Generation using DNA Evolution Principles
- Design Intelligence for Image Analysis such as Size, Material, and Costing, etc.

# Intellectual Property and Value Propositions

- **Intellectual Property**

- Dynamic Data Visualization for Any Medium
- Robust Data Security
- Digital Twinning
- Publication Automation

- **Value Proposition**

- Significant Reduction in Storage Requirements
- Significant Reduction in Computational Resources
- High-Performing Solution with Minimal Latency
- Visually Appealing and Aesthetically Pleasing Designs
- Contribution to Environmental Sustainability

# Deployment Offerings

- **Flexible Software Deployment Options**

- Lightweight Client-side Library
- Most Efficient Server-side Visualization Engines, tailored to your business needs
- Cloud-Native and Enterprise-Ready Applications

- **Targeted Customers**

- Consumer Products Industry
- Business Intelligence Solutions
- E-Commerce and Digital Publications
- Image Processing Community
- Training and Skill Development



# Case Studies and Product Demonstrations

- **Consumer Industry**

- Icons and Logos
- Olympic 2024 Pictograms - Presentation and Brochure
- Flags of Countries

- **Manufacturing Industry**

- Physical System - Mass Spring System
- Mechanical System - Boiler Drum
- Building Automation
- Wave Energy System
- Process Automation

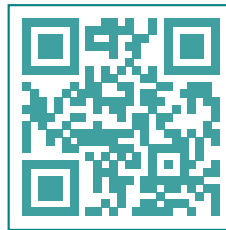
- **Infrastructure Management**

- Metro Rail Network Management - Low Quality Delhi Metro Map Needs Redesigning
- River Network Management
- Public Healthcare

- Dolphin Studio Website

# Contact

- Email: `info@problemx.in`
- GitHub Repository



Dolphin.js