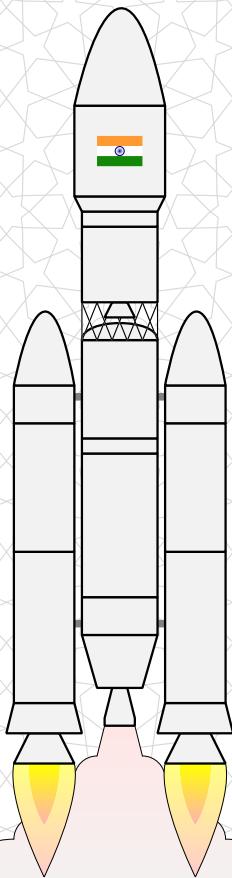
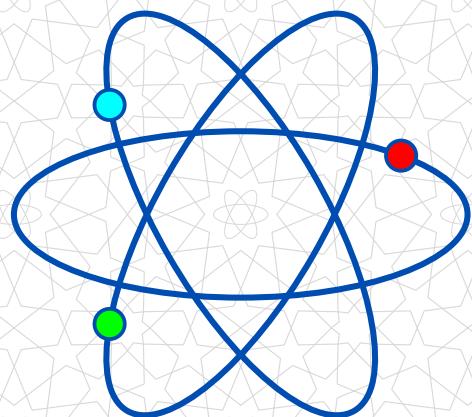


DOLPHIN DESIGN INTELLIGENCE

FOR SCHOOLS AND UNIVERSITIES



Research & Innovation

SCIENCE

TECHNOLOGY

ENGINEERING

ARTS

MATHEMATICS

Dolphin EdTech One Platform. Infinite Possibilities.

Document Intelligence and Sustainability in the Education Sector

Dolphin Development Team

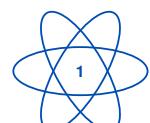
The Dolphin EdTech Intelligence Platform provides a comprehensive and innovative solution for the education sector's high-volume document management needs. It is designed to generate, analyse, and manage a wide range of critical documents, from student records and certificates to transactional records and financial statements, ensuring hierarchical reporting, record-keeping, and legal compliance. By transforming traditional, manual paper-intensive processes into **intelligent**, **organised**, and **sustainable** workflows, the platform empowers educational institutions to achieve greater efficiency. This automation dramatically reduces administrative burdens, minimises human error, and significantly lowers the institution's environmental impact. The platform's benefits extend beyond efficiency by improving data accuracy, data security, and fostering better communication with students, parents, and other stakeholders. Ultimately, Dolphin frees up valuable time and empowers educators to concentrate on their core responsibilities of teaching and research.

1 Introduction

Dolphin is a new paradigm in the digital transformation strategy for the education sector. It leverages artificial intelligence (AI), design intelligence (DI), intelligent document automation (IDA), and robotic process automation (RPA) technologies to streamline document-intensive processes. It is the optimal arbitrage for decision-making. It reduces human errors and optimises performance. It delivers the highest quality results while simultaneously being environmentally the most sustainable. It is an indispensable component of the sector's digital transformation strategy. It significantly reduces costs and improves customer experience by providing quicker and better financial services.

The education sector is undergoing a profound transformation, driven by technology and the need for greater efficiency, accuracy, and improved stakeholder experiences. Educational institutions, from K-12 schools to large universities, manage a massive volume of documents, including student records (applications, scholarships, marksheets, transcripts, certificates, and awards), faculty and staff records (personal and biographical data, employment history, payroll and benefits information, training and development records, health and safety information, and performance records), administrative records (policies, planning documents, and legal agreements), transactional records (suppliers information, quotations, purchase orders, invoices, and reports), and financial records (payments, budgets and accounts). They also maintain research records, which can be institutional or individual, and building and equipment records for inventory management. The manual handling of this extensive paperwork is a labour-intensive, time-consuming process that is prone to human error. This inefficiency diverts valuable resources away from core educational and instructional activities.

Document automation is emerging as a critical solution to these challenges by using technology to streamline the creation, management, and distribution of digital documents at scale. By adapting Dolphin EdTech solutions institutions can automate repetitive tasks such as data entry, document validation, decision-making, information routing, communication, and dissemination. This not only dramatically improves operational performance and reduces administrative costs but also empowers institutions to focus on more strategic, high-value tasks that directly support students, educators, and support staff. As institutions embrace this digital shift, they face new opportunities and challenges, including concerns over data privacy, integration with legacy systems, and the need for new digital



skills. **By Design**, Dolphin Intelligence addresses all of these concerns. Moreover, delivers enhanced productivity, higher accuracy, and a more seamless experience for students, faculty, and staff make document automation an increasingly vital component of the modern educational landscape.

For education sector, Dolphin enables:

- Creation of dynamic designs, certificates, and publications
- Significant reduction in computing, storage, and backup costs
- Faster access to information through DI-powered search and analytics
- On-demand document generation that ensures compliance and brand consistency
- Tangible progress toward digital transformation, **sustainability and carbon reduction goals**

By moving away from static, low-resolution, high-size documents to dynamic, data-driven solutions, Dolphin EdTech solutions help the education sector unlock new operational efficiencies, actionable insights, and sustainability benefits across multiple departments.

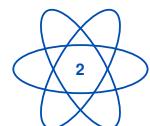
2 Current Challenges

Manual, non-instructional activities and labor-intensive documentation workflows result in hundreds of lost instructional hours annually. Despite the effort, this process generates inconsistent, low-quality documents and incurs high costs for tools and infrastructure. To correct this, a new system is needed to automate these tasks, which would eliminate errors, improve performance, and allow students and educators to focus on learning, teaching, research, and innovation.

Documents in the education sector serve to track student progress, manage administrative processes, and improve teaching and learning. They are critical in maintaining accurate records, proving identity, ensuring regulatory compliance, managing risk, and supporting decision-making for both institutions and their stakeholders. The sector generate millions to trillions of documents every year—from academic and transactional records to financial statements and audit reports. In most cases, these documents are converted into static PDF files for compliance and long-term record-keeping.

While this approach is convenient and familiar, it creates several hidden inefficiencies that accumulate over time:

- **Low-Resolution and High-Size Design:** The traditional design results in poor quality due to pixelation, blurriness, and a loss of detail when scaled up. The disadvantage of a high-size lead to performance issues like slow loading times, larger storage needs, and longer processing times for printing.
- **Redundant and Storage-Heavy:** Redundancy is the most common problem in today's inefficient document workflows, where every record is saved in multiple locations: structured databases for transactions, as static PDF files on portal for delivery and compliance access, and as static PDF files for archiving. This duplication increases data volumes, drives up costs, and complicates long-term management.
- **Limited Search and Visibility:** Once converted to PDFs, document content becomes difficult to query or analyze. Most systems support only basic metadata searches (e.g., date, title, name, or user ID). Extracting or analysing actual text within documents requires advanced OCR or Document AI tools — which are expensive and compute-intensive.
- **Growing Sustainability Impact:** As document volumes multiply, the escalating need for storage, backup, and compute resources drives up operational costs and enlarges the carbon footprint, making traditional storage models unsustainable long-term.



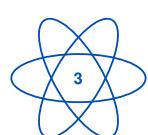
3 Introducing Intelligent Dolphin EdTech Solution

The Dolphin EdTech Design Intelligence Platform addresses the challenges of administrative burden by automating high-volume documents effortlessly and securely. It replaces static document storage with an intelligent, data-first generation model. Instead of saving every document as a PDF, Dolphin stores the essential data and smart template logic, creating a dynamic, reusable structure that generates branded PDFs on demand having the lowest possible file sizes. This data-driven platform empowers institutions to automatically generate the following highest quality documents at scale:

- Marksheets, Certificates, and Awards
- Official Letters, Academic Records, and Marketing Materials
- Student Records, IDs, and Compliance Reports
- Automated Admission Processing, Recruiting, and Strategic Dashboards

4 Key Differentiators

- **Consistency:** Ensures 100% brand consistency and faster document output.
- **Quality:** Eliminates human errors and delivers the highest-quality print-ready outputs.
- **Data-first architecture:** Documents remain live, intelligent, and reusable instead of being frozen.
- **Deep Insights:** Instant access to contextual insights without OCR or manual processing.
- **Secured by Design:** Secured at source and during transmission and record validation.
- **Sustainability Built-in:** Lower data storage means lower energy use and carbon emissions.
- **Enterprise Scalability:** Works seamlessly across all departments and document types.
- **Vendor Agnostic:** Integration with existing record-keeping and analytics systems.



5 About Us

5.1 Team Expertise and Intellectual Property

Our internationally acclaimed multidisciplinary team brings a wealth of experience and expertise in **graphic designing** (artworks, illustrations, visual identity and branding, marketing and advertising, user interfaces, packaging, print and publications), **data engineering** (building and maintaining the infrastructure for data collection, storage, processing, transformation, and modeling), **data science** (analysis, extracting insights, finding patterns, building predictive models, designing algorithms for optimisation, and deriving optimal control policies), **software engineering** (designing, developing, and maintaining software applications and systems), **information technology** (support, management, and maintenance), **project management**. At Dolphin, we pursue world-class research, innovation, and education in all these areas. Our contributions have been featured in leading scientific journals and are accessible on prominent open-source platforms, including [CTAN](#), [NPM](#), [PyPI](#), and [GitHub](#). Our collaborative efforts not only advance academic knowledge but also foster a vibrant community of practitioners and researchers. By engaging with industry partners and educational institutions, we aim to bridge the gap between theory and practice, ensuring that our work has a meaningful impact on skill development, wealth creation, and advancing society.

5.2 Our Mission

To **free up staff time** for high-value works, giving institutions **the power of digital technology** to streamline operations and use **data as an asset** for intelligent, data-driven leadership. Our initiatives are committed to advancing skill development, strengthening institutional capacity, and generating jobs in design, data technology, and publications.

6 Call for Action

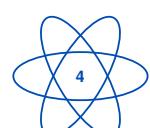
We invite you to experience Dolphin Design and Document Intelligence in action. Partner with us as a sponsor or customer to unlock recurring revenue opportunities, accelerate your market growth, and become a leader in the field.

6.1 Contact Us to Get Started

To explore how our solution can benefit your organisation, we cordially invite you and your colleagues to schedule a demonstration. For a discussion on your specific requirements, please contact our team at info@bapfoundation.org.

References

1. Design intelligence tools for data transformations, <https://pypi.org/project/pysvg2csv>
2. Design intelligence library for the screen, <https://www.npmjs.com/package/js-svg-client>
3. Design intelligence library for the print, <https://ctan.org/pkg/pst-flags>
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