CESS

Company Introduction

CESS, a pioneering software company, is at the forefront of revolutionizing the way civil engineers work. We specialize in crafting cutting-edge applications tailored to meet the unique demands of the civil engineering industry. We are committed to delivering innovative solutions to streamline workflows and enhance productivity, while minimizing cost and eliminating human error. From robust design and analysis tools to intuitive project management software, our applications are designed to elevate efficiency, accuracy, and collaboration, allowing our clients to navigate complex projects with confidence and precision.

Our approach utilizes the three pillars of modern technology to transform the world of civil engineering: Automation, Big Data, and Artificial Intelligence.

Automation is integrated into every aspect of our softwares, streamlining project timelines from years to months– upwards of a 500% increase in efficiency. All aspects of Roadway Design are automated in the respective CESS software, automatically synced to CAD platforms, entirely eliminating the time needed to manually design and calculate design points.

Big Data empowers your engineers to make fully informed decisions about all projects, based on comments, data, and summary from all previous projects– all centralized and easily accessed in the CESS software. Bringing in data from the internet, integrated big data also allows for smart budgeting and resource allocation management, providing current material prices, all of which adhere to local and federal regulation standards.

Artificial Intelligence provides your company with smart analysis, management, and optimization capabilities. Based on the initial parameter input, CESS software automatically generates the optimized design, adhering to all input standards, alongside local and federal. Alongside Big Data capabilities, AI produces risk potentials, cost estimation, resource allocation, and more.

At CESS, we believe in harnessing the power of technology to transform the world of civil engineering, driving innovative progress and shaping the infrastructure of the future. We are dedicated to providing the best service possible, for all your civil engineering needs.

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Critical Project Pain Points

1. **Alternative Solutions**: Tight project timelines leave no time to produce or compare alternative solutions, leading to greater risk and less client satisfaction.
2. **Communication**: Last-minute scheduling changes and a lack of information to your team's availability reduce efficiency, while leading to bottlenecks in project progress.
3. **Tight Scheduling**: Pressure to achieve deadlines leads to a decline in quality work.
4. **Resource Allocation**: Employees find difficulty balancing varied workloads, and work is unevenly and inefficiently distributed amongst team members. Ensuring the proper allocation of manpower, equipment, and materials can be difficult and lead to slow-downs in project progress.
5. **Cross-Discipline Coordination**: Communication lacks between different groups and disciplines.
6. **Criteria and Standards**: Employees in the design process often spend excessive amounts of time manually cross-checking calculations to standards. Standards are also often not centralized, and require time to be retrieved, slowing down project progress.
7. **Experience**: Employees who had previously worked on similar projects have no way to share their collected data, designs, calculations, and potentially useful information with the team members of a new project. Experience is not utilized properly, failing to increase efficiency company-wide with each additional project.
8. **Technological Learning Curve**: Many senior engineers have a difficult time learning new softwares, due to complex design processes and interfaces.
9. **Technology Adoption**: Integrating new technologies and software tools into existing workflows may require training and adjustment periods, affecting overall efficiency until the team becomes proficient in using them.
10. **Data Collection and Analysis**: Inaccurate or incomplete data can lead to faulty assumptions and decisions during the design and construction phases.
11. **Cost Estimation**: Accurate cost estimation is crucial for budgeting, and errors in this process can lead to financial issues during the project's execution.
12. **Remote Collaboration**: With dispersed teams or clients, ensuring smooth communication and coordination can be difficult without proper tools and processes in place.

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CESS Solutions

1. **Fully CAD-Integrated**: CESS applications are designed to minimize, to the greatest extent possible, the transitional period of implementing new software. All design, management, calculation, etc. software is seamlessly integrated into the most commonly used civil engineering CAD platforms.
2. **Integrated Communication**: All CESS applications contain automatically updated communication tools– design comments and status updates allow all project members to properly understand project progress, alongside what additional tasks need to be completed.
3. **Automated Design Processes**: Design processes, done manually in the past, can be rendered in CAD platforms automatically. These designs adhere to basic user input regarding project-specific limitations, alongside all local and federal standards.
4. **Real-Time Monitoring and Analysis:** Track and record the works and tasks in different disciplines , and analysis based on the real time data
5. **Integrated All Disciplines on One Platform:** All-in-One platform provides multiple digital tools for different disciplines and work together
6. **100% Accuracy**: All calculations are done with 100% accuracy. Utilization of computer capabilities, and the elimination of manual calculation, consequently eliminates potential human error throughout the entire project.
7. **Integrated Standards**: Local and federal standards are all integrated into CESS softwares, significantly reducing times needed to locate standards. All project values are automatically cross-checked, eliminating the need for manual intervention.
8. **Libraries**: Over 15 unique libraries throughout all CESS applications allows for all team members to upload projects, designs, templates, and other useful information for future use, applicable company-wide. Alongside pre-integrated templates, as your company's libraries become more extensive, time spent on projects is drastically reduced.
9. **Cost Estimation**: Drawing in current market prices at local and national levels, CESS brings in powerful cost estimation, adhering to all construction regulations, empowering your engineers to make informed decisions about design and budget.
10. **AI-Powered Optimization**: Given the basic data input and project-specific parameters, CESS design softwares generates the optimal design automatically.
11. **Simple UI**: Our easy to understand UI makes learning the new software simple and straightforward.

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Common Questions & Concerns

Q: How well do CESS softwares work with other civil engineering softwares?
A: All CESS softwares contain the ability to automatically render into existing CAD platforms, ensuring a seamless transition into CESS products.

Q: How does CESS software integrate into CAD platforms?
A: All software is in *Addins* format.

Q: How will my data be stored and protected?
A: CESS does not store *any* of your personal or sensitive data in the software or any of the applications; we instead operate by storing file path / location in our cloud, allowing for seamless collaboration and secure storage of your data.

Q: Are there any requirements or limitations to use the software?
A: No – all CESS software can be used at any time, at any place when it connects to the Internet.

Q: What aspects of a civil engineering project do the different CESS softwares cover?
A: CESS softwares covers nearly all of Roadway Design, MOT, and Traffic & Transportation.

Q: Is there a big learning curve for beginners?
A: No – CESS software is incredibly user-friendly, with a straightforward UI and requiring very little manual intervention. Even without manuals or guidance, it is very easy for someone to learn and use the software.

Q: Who maintains the database?
A: Clients can maintain it by themselves, or commission CESS.

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Collaboration

At CESS, we are dedicated to bringing you both revolutionary software, alongside unparalleled cooperation and support. We aim to make your transition to CESS software as seamless as possible.

Short-Term Cooperation

Software Support

1. 4-hour free training
   Aside from the user manual, we're here for 4 hours to teach you the ins and outs of CESS software– without cost.
2. Full guidance and support for your first project
   Let's make sure your first experience with CESS goes as smoothly and efficiently as possible. If, after the 4-hour free training, you run into any issues or confusion with the CESS software– we're here to help.

Work Cost Exchange

1. One CESS software
   Of the portion of the budget set aside for one project aspect, pay CESS a portion– we will complete the project using the applicable CESS software, demonstrating the efficiency and utility of the application.
   If you like it, you only have to pay the remaining price for the software (*it's like a free trial, but you get free work done, plus training for the application!*).

First-year CESS Discount: **50% off, up to $_____**

Long-Term Cooperation

Free Templates

1. Applicable to Traffic Sign, ITS

Customizable Function

1. One customizable function, for life

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Profit Comparison to Efficiency Increase

Current Profit	Efficiency Increase				
	100%	**200%**	**300%**	**400%**	**500%**
5%	950%	1267%	1425%	1520%	1583%
10%	450%	600%	675%	720%	750%
15%	283%	378%	425%	453%	472%
20%	200%	267%	300%	320%	333%
25%	150%	200%	225%	240%	250%
30%	117%	156%	175%	187%	194%
35%	93%	124%	139%	149%	155%
40%	75%	100%	113%	120%	125%
45%	61%	81%	92%	98%	102%
50%	50%	67%	75%	80%	83%

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