



PTC WINDCHILL STRATTEC

ANALYSTS

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THE BOTTOM LINE

STRATTEC Security Corporation deployed PTC Windchill to replace its existing product lifecycle management (PLM) solution and improve product design tracking and collaboration. Nucleus found that PTC Windchill enables the company to increase productivity and reduced design costs and waste.

ROI: **122%**

Payback: **11 months**

Average annual benefit: **\$1,023,449**

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THE COMPANY

STRATTEC is an engineering firm that develops and manufactures automotive parts. The company's product portfolio includes latches, start systems, locks and keys, ignition housings, power-lift gates, and power-sliding doors. STRATTEC deals mostly with the American "big three" automotive manufacturers; GM, Ford, and Chrysler, but ships its products around the world. Originally part of Briggs & Stratton, STRATTEC was spun off in 1995. It is headquartered in Milwaukee and reported \$348.4 million in revenues in 2014.

THE CHALLENGE

Like all manufacturing firms, product design tracking is an integral part of STRATTEC's daily workflow. The company was using PTC Pro/INTRALINK but was not using its file management controls and, as a result, engineers manually tracked their design documents on spreadsheets and in flat-files. STRATTEC wanted to

more efficiently utilize the time of its employees and began looking for a new PLM solution.

Cost : Benefit Ratio | 1 : 2.5

THE STRATEGY

Over the course of a month, STRATTEC evaluated three different PLM solutions. The company ultimately selected PTC Windchill for a number of reasons including:

- The team found that PTC Windchill would allow for integration with its product development solution, PTC Pro/ENGINEER.
- STRATTEC would be able to support external collaborations as the solution supported computer-aided design (CAD) document types popular with other firms.
- The company felt that the solution would support compliance for automotive processes such as the production part approval process (PPAP), and advanced product quality planning (APQP).
- The team believed that PTC Windchill's search capabilities would enable them to reuse designs across multiple product lines.
- Using three internal staff members, STRATTEC deployed the solution in three months. After the implementation, employees required between 2.5 days and a week of training to become acclimated to the new system.

STRATTEC has been able to support its growth with further investments in PTC Windchill. The company has developed additional libraries to manage the documents and workflows for human resources and operations. Because PTC Windchill communicates with external systems, the company was able to easily transfer files from its partnerships and acquisitions and organize them in its extended libraries.

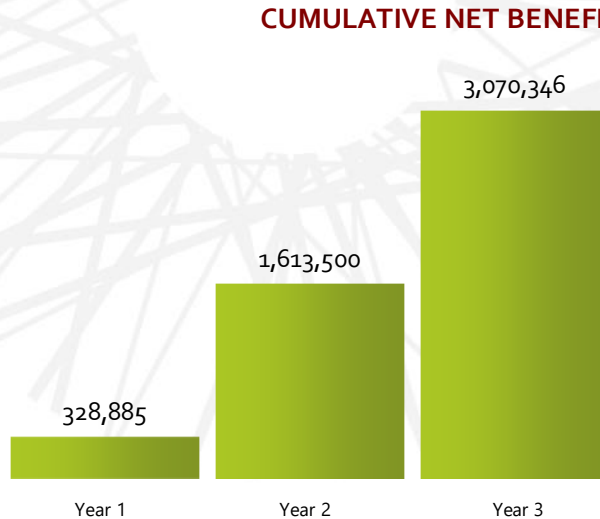
TYPES OF BENEFITS



KEY BENEFIT AREAS

Deploying PTC Windchill has enabled STRATTEC to support growth and product diversity. Key benefits of the project include:

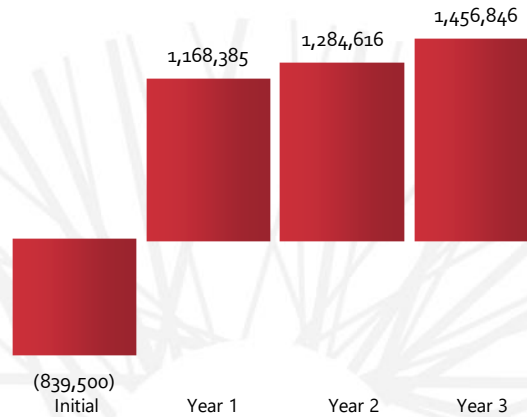
- Increased tracking productivity. The search capabilities reduced the time spent on managing design documents, saving engineers an hour a day.
- Shortened development cycles. The increased visibility of designs across the organization allowing parts to be reused across multiple product lines.
- Reduced scrap and rework. With more insight into design changes and product lines, STRATTEC was able to reduce prototyping and QA/QC testing.
- Reduced IT support costs. Since PTC Windchill requires less server maintenance, STRATTEC eliminated one IT full-time employee through attrition.
- Increased operational productivity. Through information consolidation, STRATTEC is able to support quote generation for its expanding portfolio without hiring additional staff.



KEY COST AREAS

Costs of the project include software license subscription fees, personnel time to implement and support the application, organization-wide training, and consulting costs.

NET CASH FLOWS



BEST PRACTICES

PTC Windchill provides STRATTEC with exceptional flexibility, supporting the company's rapid growth. In particular, the team at STRATTEC can utilize its modular libraries to quickly connect new facilities and spin-off new divisions without needing to locate and reassign content rights. Additionally, the system can communicate with external applications, which decreases the time and effort associated with information transfer.

Given STRATTEC's success with PTC Windchill for product development, it chose to expand the system into additional departments including purchase requisitions activities, training records, and change management. As a result, STRATTEC experienced streamlined operations, while enabling greater communication between the product development team and supporting departments.

CALCULATING THE ROI

Nucleus quantified the initial and ongoing costs of software license subscription fees, personnel time to implement and support the application, employee training

time, and consulting over a 3-year period to calculate STRATTEC's total investment in PTC Windchill.

Direct benefits quantified included the reduced IT costs, reduced scrap and rework, and real estate reallocation. Indirect benefits quantified included productivity increases for engineers, developers, and supporting departments, which were calculated based on the average annual fully loaded costs of the employees.

Not quantified were the additional efficiencies and savings STRATTEC will gain from PTC Windchill as it continues to grow as a company and further expand its use.



FINANCIAL ANALYSIS

STRATTEC's PTC Windchill Project

Annual ROI: 122%

Payback period: 0.9 years

BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	685,000	685,000	685,000
Indirect	0	865,385	1,009,616	1,153,846
Total per period	0	1,550,385	1,694,616	1,838,846

COSTS - CAPITALIZED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	233,000	0	0	0
Hardware	94,000	0	28,000	0
Project consulting and personnel	0	0	0	0
Total per period	327,000	0	28,000	0

COSTS - DEPRECIATION SCHEDULE	Pre-start	Year 1	Year 2	Year 3
Software	0	46,600	46,600	46,600
Hardware	0	18,800	18,800	24,400
Project consulting and personnel	0	0	0	0
Total per period	0	65,400	65,400	71,000

COSTS - EXPENSED	Pre-start	Year 1	Year 2	Year 3
Software	0	107,000	107,000	107,000
Hardware	0	0	0	0
Consulting	110,000	0	0	0
Personnel	82,500	275,000	275,000	275,000
Training	320,000	0	0	0
Other	0	0	0	0
Total per period	512,500	382,000	382,000	382,000

FINANCIAL ANALYSIS	Results	Year 1	Year 2	Year 3
All government taxes	45%			
Cost of capital	7.0%			
Net cash flow before taxes	(839,500)	1,168,385	1,284,616	1,456,846
Net cash flow after taxes	(608,875)	672,042	723,369	833,215
Annual ROI - direct and indirect benefits				122%
Annual ROI - direct benefits only				31%
Net Present Value (NPV)				1,331,171
Payback period				0.9 years
Average Annual Cost of Ownership				671,167
3-Year IRR				102%

All calculations are based on Nucleus Research's independent analysis of the expected costs and benefits associated with the solution.