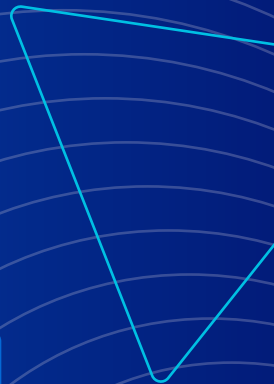




# How streamlining the quote-to-cash process can save \$300,000 per year

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A Guide for Engineering and Consulting Firms



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# Introduction

The quote-to-cash process is a crucial business cycle that encompasses all the stages from generating a sales quote to receiving payment from the client. Within engineering firms, where projects are typically delivered on a contractual basis, the quote-to-cash process holds immense significance. It involves converting project proposals into tangible revenue by efficiently managing the various steps, including lead generation, proposal creation, contract negotiation, project execution, and invoicing.

The quote-to-cash process serves as the financial backbone of engineering firms, encompassing not only revenue generation but also cost management, financial tracking, and client relationship management. A well-optimized quote-to-cash process ensures accurate estimation of project costs, timely invoicing, and efficient revenue recognition, safeguarding profitability and maintaining healthy cash flow. Additionally, it establishes clear communication channels, builds trust with clients, and strengthens long-term relationships, positioning the firm as a reliable and professional service provider.

**By understanding the impact of better resource and project management within engineering firms on the quote-to-cash process, decision-makers can recognize the critical need for streamlined practices.**

In the subsequent sections, we will delve deeper into the challenges faced by engineering firms and explore how optimizing the quote-to-cash process, can lead to enhanced profitability and sustainable growth.

# Typical Quote-to-Cash Process

# Typical Quote-to-Cash Process

The quote-to-cash process within engineering firms is a comprehensive operation that starts with the initial client inquiry and ends with revenue collection. This critical business process is characterized by several distinct, interconnected stages.



## **Initial Client Inquiry and Needs Assessment:**

This is the first point of contact between a potential client and the engineering firm. The client presents their project requirements and objectives, and the firm conducts a comprehensive needs assessment to fully understand the scope and scale of the project.



## **Quote Creation:**

Once the project's requirements are well understood, the firm generates a detailed quote. This quote includes the estimated costs for labor, materials, and other resources, as well as projected timelines for project completion. The accuracy of this quote is critical, as it can influence the client's decision to award the project to the firm.



## **Contract Negotiation and Agreement:**

If the client is satisfied with the quote, both parties engage in contract negotiations. These negotiations cover all terms and conditions of the project, including the scope of work, payment terms, and any contingencies that may arise during project execution. Upon agreement, the contract is signed, marking the formal commencement of the project.



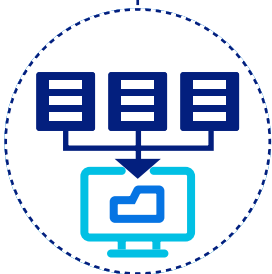
### **Project Execution and Management:**

This is where the bulk of the work occurs. The firm mobilizes its resources — personnel, materials, and equipment — to execute the project in accordance with the agreed-upon scope, timeline, and budget.



### **Billing and Invoicing:**

Upon completion of project milestones or the project as a whole (depending on the agreed payment schedule), the firm issues an invoice to the client. This invoice details the work completed, the associated costs, and the payment due date.



### **Payment Collection:**

This is the final stage of the quote-to-cash process. The client pays the invoice, and the firm records the revenue in its financial system. This payment represents the culmination of the quote-to-cash process and the firm's revenue realization.

It is essential to note that while this process may seem straightforward, it is often complicated by various challenges. These may include inaccurate quotes, project scope creep, ineffective resource allocation, delayed invoicing, or delayed payments, all of which can adversely impact the efficiency of the process and the profitability of the project. Consequently, there is a pressing need for engineering firms to optimize their quote-to-cash process to maintain competitiveness and enhance profit margins.

# **Common Issues within the Quote-to-Cash Process**

# Common Issues within the Quote-to-Cash Process

While the quote-to-cash process is critical to the operational efficiency of an engineering firm, it is not uncommon for certain issues or inefficiencies to arise within this process. These challenges can directly impact the firm's profitability, client satisfaction, and overall business growth. The following points provide an overview of some of the most common issues:

## **Inaccurate Estimates & Quotes:**

Creating accurate quotes is a pivotal stage in the quote-to-cash process. However, inaccuracies can often occur due to a lack of comprehensive understanding of the project's scope, unexpected changes in resource availability or costs, or a misjudgment in estimating the required labor or time. These inaccuracies can lead to underestimated project costs and timelines, resulting in reduced profit margins.

## **Project Scope Creep:**

This refers to uncontrolled changes or continuous growth in a project's scope, beyond its original objectives, without a corresponding increase in resources, timeline, or budget. It's a common issue that can seriously disrupt the quote-to-cash process and severely diminish the profitability of a project.





## **Ineffective Resource Allocation:**

Effective resource management is crucial for the smooth execution of the quote-to-cash process. If resources are not optimally allocated—whether it's manpower, equipment, or materials—it can lead to delays, increased costs, and a decrease in the overall quality of the project.

## **Challenges with Time and Expense Tracking:**

In engineering firms, where billable hours and reimbursable expenses constitute significant components of project costs, accurate and timely tracking of these elements is crucial. However, firms often face substantial challenges in collecting and processing time logs and expense reports from employees and contractors. Manual time and expense tracking can be error-prone and time-consuming, leading to inaccurate billing, delayed invoicing, and potential disputes with clients.

Furthermore, contractors and employees may forget to record their hours or expenses, or they might make mistakes while logging them, resulting in under-billing or over-billing. These discrepancies not only distort the actual cost of projects but also negatively affect the accuracy of future project estimations. Addressing these issues requires the adoption of robust time and expense management systems that can automate and streamline these processes, ensuring accuracy, timeliness, and transparency.



### **Delayed Invoicing:**

Invoicing is often viewed as an administrative task, but its importance in cash flow and profitability cannot be overstated. Delays in generating invoices and consequently collecting payments can adversely affect a firm's cash flow, impacting its ability to invest in future projects or meet operational expenses.

Addressing these inefficiencies requires a comprehensive understanding of the quote-to-cash process, as well as strategic planning and the implementation of advanced technological solutions. By streamlining this process, engineering firms can mitigate these challenges, improve operational efficiency, and ultimately increase their profit margins.

# **Streamlining the Quote-to-Cash Process: the Levers**

# Streamlining the Quote-to-Cash Process: the Levers

## Automating the Sales-to-Service Delivery Hand-Off

In the quest to streamline the quote-to-cash process, automation of the sales to service delivery handoff emerges as a potent solution, particularly in addressing issues of inaccurate quotes and delays in the estimation process. This automation, achieved through the integration of Customer Relationship Management (CRM) and Professional Services Automation (PSA) software, essentially facilitates a seamless transition of pertinent information from the sales team to the service delivery team.

When a CRM system, which houses client requirements, project scope, and other necessary data, is integrated with a project management module, it ensures that all the requisite information for accurate quoting is readily available and effectively utilized. The elimination of manual data transfer **reduces the risk of miscommunication, data loss, or interpretation errors that often result in inaccurate quotes**. Furthermore, with data automatically flowing between these systems, the **time taken to collate and analyze information for quote generation is drastically reduced**, thereby accelerating the quote and estimation process.

The enhanced accuracy and speed not only improve the overall efficiency of the quote-to-cash process but also contribute to client satisfaction and increased profitability for the engineering firm.

## Taking Control of Change Requests

The management of Project Scope Creep — unplanned and uncontrolled changes or continuous growth in a project's scope — presents a significant challenge in the engineering industry. The utilization of professional services automation software with the ability to automate the intake of change requests, however, can offer a strategic solution to this pervasive issue.

When PSA software is configured to automatically intake and process change requests, it provides a systematic and efficient method for managing potential scope alterations. Upon receiving a change request, the system can automatically log it, notify the relevant stakeholders, and initiate an evaluation process to assess the potential impact on the project's timeline, cost, and resources.

This automated system **fosters improved transparency, ensuring all changes are thoroughly documented and evaluated before implementation.** It also provides stakeholders with a clear understanding of the request's implications, helping them make more informed decisions. Consequently, the automation of change request intake can **mitigate the risk of Project Scope Creep, promote better control over project execution, and maintain the alignment of the project with its predefined objectives**, thereby enhancing the overall efficiency of the quote-to-cash process.

## Improving Resource Allocation

Inefficient resource allocation is a common issue that many engineering firms encounter, which can lead to delayed project delivery, increased costs, and compromised project quality. These inefficiencies can significantly hinder the quote-to-cash process, directly impacting a firm's profitability and client satisfaction. However, the advent of PSA software, particularly those equipped

with robust resource management capabilities, provides an effective solution to this prevalent problem.

A high-quality PSA software presents a **unified view of all available resources, from personnel to equipment, along with their current levels of utilization**. By accurately aligning the right resources with appropriate projects based on various parameters such as skill sets, availability, and project requirements, **the software can drastically reduce instances of resource under-utilization or overburden**.

Furthermore, predictive analytics integrated into the software can **assist in forecasting future resource needs**, thus enabling proactive and efficient resource planning.

The use of professional services automation software, therefore, significantly streamlines the project execution phase of the quote-to-cash process. This results in fewer project delays, improved cost management, and superior project quality, ultimately accelerating the revenue realization cycle and enhancing profitability for engineering firms. Therefore, **a strategic investment in a potent PSA software can substantially optimize the quote-to-cash process and catalyze business growth**.

## **Creating a Single Source of Truth for Time and Expenses**

The tracking of time and expenses is a vital component in managing engineering projects, yet the common practice of utilizing spreadsheets or a combination of disparate tools often renders the process tedious and error-prone. The consolidation of data from these various sources can lead to inconsistencies and inaccuracies, causing billing discrepancies, cash flow issues, and potential disputes with clients. In certain companies, it can introduce delays of weeks or even months.

In such a context, Professional Services Automation software, developed with the express purpose of automating and streamlining these administrative tasks, emerges as an indispensable asset.

PSA software can offer advanced time and expense management features that **allow for real-time, accurate tracking and validation of employee and contractor hours and expenses**. These features simplify the recording process, encouraging timely entries and minimizing the potential for human error. **Built-in approval capabilities ensure that all entries are swiftly reviewed and approved, thus preventing delays in invoicing and ensuring that all billable work is accurately captured.**

By enhancing the accuracy and efficiency of time and expense tracking, PSA software can significantly streamline the billing and invoicing phase of the quote-to-cash process. This leads to faster invoicing, improved cash flow, and reduced disputes, all of which contribute to a smoother quote-to-cash cycle. Moreover, **accurate tracking provides invaluable data for future project estimations and resource planning, reinforcing the overall efficiency of the quote-to-cash process.**

## **Speeding Up Billing and Invoicing**

Engineering firms often grapple with the challenge of manually calculating appropriate rates for their services—a process that is not only time-consuming but also prone to errors. This can lead to inaccuracies in invoicing, which in turn can cause disputes, delay payments, and ultimately disrupt the quote-to-cash cycle. This is where Professional Services Automation software with robust and flexible billing capabilities, including the use of rate cards, comes into play.

A PSA software allows for the implementation of **rate cards, which can standardize and automate the calculation of service rates**. By automatically pulling data from these rate cards, the software **ensures accurate application of rates based on various parameters, such as the type of service, client, project, or resource involved**. This can significantly streamline and enhance the accuracy of the invoicing process. The software can also support a variety of billing scenarios, from fixed price and time and materials to milestone-based billing, allowing for greater flexibility in accommodating the unique requirements of each project.

By automating the calculation of rates and streamlining the billing process, a PSA software can mitigate the issues caused by manual errors and inefficiencies. This results in **more accurate and timely invoicing, leading to quicker revenue realization, improved cash flow, and greater client satisfaction**. Therefore, the adoption of a PSA software with robust billing capabilities, including the use of rate cards, is a strategic imperative for engineering firms aiming to optimize their quote-to-cash process and enhance profitability.

# **Case Study: How Hatch LTK Saved \$300,000 per Year by Improving its Quote-to-Cash Process**

# Case Study: How Hatch LTK Saved \$300,000 per Year by Improving its Quote-to-Cash Process

## Background

Hatch LTK is a professional services engineering firm delivering technical and strategic services to the infrastructure sector, with a focus on Passenger Rail. The organization provides highly specialized technical and management expertise to meet its clients' toughest vehicle and systems engineering challenges across the globe.

Hatch LTK was using a combination of spreadsheets and Deltek Costpoint ERP system to manage its processes. As a result, the overall quote-to-cash workflow was not optimal. The management team has pinpointed several areas of inefficiency that require attention and improvement.

- Sales process: the business development group was creating proposal plans manually and using emails to coordinate and follow up on workflows. It took team members hours of valuable time that, instead, could be spent on more important tasks.
- Project financial health: there was a team of project accountants who manually compiled static data and Excel-based reports from multiple systems, which was very labor-intensive. As a result, the team had version control issues in addition to the manual burden of maintaining that data each month, which often lagged by a couple of weeks.

It was also difficult to create portfolio-level reports summarizing data across the enterprise.

- Resource utilization: the team wanted to improve visibility into its resource utilization and availability to project future resource demand and make timely hiring decisions.
- Lack of a single source of truth: to support effective business decisions and reduce business risks, the team needed to integrate all of its business systems into one enterprise system.

## **Solution and Results**

The company has decided to implement professional services automation software to address all current issues. It took Hatch LTK almost a year to find a perfect solution to meet all of their organization's needs. The main reason the company chose Birdview PSA (formerly Easy Projects) was the software's ability to integrate with all business systems to achieve a single source of truth. It was also simple and easy to use for the end user.

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With Birdview PSA, Hatch LTK achieved the main objectives originally set out.

- Birdview PSA helped to standardize the entire project lifecycle in one central location, starting with the opportunity intake process. Instead of creating proposal plans manually, the team was now able to leverage project templates.

It helped to create efficiency across Business Development and PM teams, facilitate getting proposals out the door and meet tight deadlines. **As a result, it allowed the team to save approximately 500 hrs and \$100K per year.**

- Hatch LTK improved its resource management and utilization, project management, and business intelligence reporting. Thanks to the improved resource management, the team gained early insight into resources in real time to support hiring decisions, increase utilization by leveraging underutilized resources and relieve overloaded resources and respond quickly to short-term work.
- The team was also able to build cost estimates directly in the system as well, which provided early insight into resource loading.
- Centralizing all of the data in one single source of truth allowed Hatch LTK to align a variety of metrics at the project, resource and portfolio level to fit business needs and leverage the power of business analytics. This also streamlined the team's ability to collaborate on the evaluation and decision to pursue new work. Besides, **Birdview helped to reduce manual ad hoc data and manual creation of monthly reporting resulting in approximately 1,200 hrs and \$200K saved per year.**

Ultimately, Birdview PSA helped Hatch LTK to improve project management delivery processes and procedures throughout the entire quote-to-cashflow life cycle and **saved 1,700 hours and \$300K per year.**

# **Conclusion - A Case for PSA Software**

# Conclusion - A Case for PSA Software

As we conclude this exploration of the quote-to-cash process within the engineering industry, it is important to reiterate the crucial role of Professional Services Automation (PSA) software. This modern technology solution encompasses effective project and resource management tools, both of which are fundamental to streamlining operations within an engineering firm. Effective resource management within a PSA system ensures the optimal deployment of resources, minimizing wastage and promoting productivity. Similarly, the project management module in a PSA system oversees project timelines, budgets, and scope, ensuring timely and cost-effective delivery.

By facilitating a streamlined quote-to-cash process, PSA software can dramatically enhance an engineering firm's profitability. From accurate project estimation to efficient resource allocation, from real-time tracking of time and expenses to automated and precise invoicing—all these crucial stages of the quote-to-cash process are effectively managed within the PSA software. Therefore, implementing such an integrated system can substantially bolster profit margins, foster operational efficiency, and enhance client satisfaction.

For decision-makers within engineering firms, prioritizing the adoption of robust PSA software should be a strategic imperative. The challenges associated with traditional, disjointed processes can be mitigated by the automation and streamlined workflows offered by these advanced software solutions. As leaders in your organization, you have the opportunity to leverage these cutting-edge tools and drive your firm towards greater profitability and growth.

Prioritizing the implementation of robust PSA software is not just a strategic move—it's an investment in your firm's future success and a testament to your commitment to continuous improvement and efficiency.



## Professional Services Automation Platform

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