

**Setpoint Systems, Inc.**

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# For Success, Adopt Setpoint's Proven Project Management Strategy



**S E T P O I N T .**

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SETPOINT.

*Setpoint provides lean industrial automation equipment customized for specific manufacturing processes.*

## For Success, Adopt Setpoint's Proven Project Management Strategies

If you answer yes to at least four of these questions below, you will benefit from using the Setpoint system for tracking projects.

1. Do your projects go to 90% complete and hover there forever?
2. After your project is completed, does it usually take more than 30 days to figure out if you made or lost money, and then does the accounting department adjust it at least once more after that?
3. Does the rate of change exceed the rate of progress on your projects?
4. Have you ever lost money on a sure-thing project and you have no idea why?
5. Have you ever been over budget on a project?
6. Have you ever missed a deadline on a project?
7. Is scope or feature creep a part of every project and you can't figure out how to charge for it?
8. Does a carelessly planned project take three times as long as you thought, and does a well-planned project take twice as long?
9. Have you never completed a project that you would be willing to put down on your resume for a reference check?
10. Have you been too embarrassed to review a project's schedule and budget after it has been completed?
11. Does every member of your team know the status of your project budget, schedule, and time at any given moment, and do they care?

12. Does your project team think scope is just a mouthwash?
13. When a project is completed, do you look for someone to blame?
14. Are blind hope and wishful thinking your two most commonly used project tools?
15. Have you ever been told to “find a way” to “get ‘er done”?
16. If you had to live off the profitability of your projects, would you have starved a long time ago?
17. Have you ever been congratulated by management after a project was completed only to be “ripped” by the accounting department after they figure out how much money was lost (you know, the Delayed Sorrow Syndrome)?

If you did answer yes to four or more of the above questions, take the time to review this information on our project-tracking steps. This white paper covers the history of, and philosophy behind, our system as well as the results we have recognized with it.

### **History of Setpoint: Business Structure First—Product and Sales Second**

Setpoint Systems, Inc. had its beginnings in the early 1990's when two engineers – Joe Cornwell and Joe VanDenBerghe—decided they wanted to start their own company. They were frustrated with their current employer and decided it was time to go out on their own and do things “differently.” They approached the new business idea as only two engineers would by developing a very detailed plan on how the company would run philosophically and structurally before they had any idea of what they would sell. They carefully thought through what they would and would not do with their new business.

The two Joes met weekly in a public library and planned. They formed a corporation, found an accountant, came up with a way to track their work, and developed a philosophy for developing and treating their employees (although they had no employees).

After more than a year of planning, they found an opportunity to build an automated assembly machine for the potato chip maker Clover Club. Setpoint went on to build automated machinery for Morton, an airbag supplier to the automotive industry (later acquired by Autoliv), and several medical companies. As the company grew, it was clear that this was a unique business built from the inside out. In other words, the structure in the business came first and the actual sales and product were secondary.

On the employee philosophy side, the two Joes wanted to make sure that all of the employees would understand what was going on in the business. They wanted to treat their employees like partners in the business. This goal became a challenge as they started working with their accountant. They did not like the way accounting worked to track their projects. Furthermore, it appeared that they really would not understand how their projects were doing using the traditional accounting approach. They couldn't tell if their projects were doing well until the projects were complete. Since they wanted to keep their employees updated as the projects were progressing, they decided they needed to figure out a way to track projects more often than monthly as suggested by their accountant.

They disagreed with accounting for costs of goods sold on the income statement. Joe C. never understood why any labor would be considered part of the cost of goods sold. He felt that all labor should be part of operating expenses and cost of goods should only include the hard material costs required to make the machine they were building. One evening, Joe C. asked another Joe, Joe Knight, a financial consultant at the time, to come into their small office and discuss their problems with the traditional Generally Accepted Accounting Principles (GAAP) approach touted by their accountant.

During this meeting, Joe C. explained that all he wanted to measure weekly was how much Setpoint earned in sales minus cost of goods sold, which by his definition was just material costs associated with making the machine they had sold. He then wrote this on a whiteboard:

**Joe C's Financial Formula**

$$\begin{array}{r} \text{Stuff We Sold} \\ \text{Minus Stuff We Buy} \\ \hline \text{Equals Aggregate Remainder} \end{array}$$

Joe C. said, "All I care about is a number I call 'aggregate remainder,' which is how much we earned in terms of the stuff we sold (sales) on our project less the stuff we bought (hard materials to build our machine). The higher the aggregate remainder, the better the business. I don't understand why my accountant has to make this simple concept so confusing."

Joe Knight said, "In finance and accounting, we have a name for aggregate remainder. We call it gross profit (GP)."

"That's so great that you guys have a name for that," said Joe C., and Joe Knight became part of the team and they set out to develop a system where Setpoint could accurately measure project and company profitability on a weekly basis. Furthermore, they developed a way to share these results with their employees.

**System Development**

Joe C. drove the system development philosophy and approach, Joe K. established a practical financial analysis approach, and Joe V. engineered a tracking database system that enabled weekly project tracking. The balance of this white paper briefly describes the project tracking/financial system developed by the three Joe's for Setpoint.

To explain this system, we'll do a little project accounting 101. GAAP accounting allows a company to recognize revenue on project completion based on cost: For example, if you estimate that it will cost \$4 million to complete a \$5 million project in revenue, and you have spent \$2 million on the project to date, you then can recognize \$2.5 million in revenue showing a \$500,000 profit on the project. The problem with this method is that you are assuming that the actual project will really

cost \$4 million dollars to complete. In reality, projects rarely come in on budget, and, therefore, that \$500,000 profit shown after \$2 million is spent is theoretical and may not be accurate. The real challenge with GAAP-based project accounting is to measure accurately the cost to complete a project as it progresses.

Based on Joe C.'s philosophy, Setpoint did not want to use the traditional GAAP method for tracking projects. First, Setpoint decided to include only material costs in costs of goods sold in its income statement. Second, Setpoint decided to measure progress on its projects for revenue recognition by labor completed as measured by hours or earned value rather than costs. They wanted to do this on a weekly basis and to make it simple so it could be presented easily to all their employees.

To accomplish these goals, Setpoint developed an in-house database system that would track labor hours by labor type (for example mechanical assembly, electrical engineering, etc.) and material costs by Purchase Orders (PO's) on a daily basis. This database with its custom reporting made it possible for Setpoint's project managers to make more accurate estimates on the labor required to complete a project in progress and thus provide more accurate percentages complete. The project manager could also review all the open PO's for material on a project to make it possible to track and estimate these total costs on a project on a weekly basis.

With a system that closely tracked hours and material on a project and enabled weekly estimates to complete a project based on this information, Setpoint could measure a better estimate of its revenue earned on its active projects. This was tracked weekly by the project managers.

With this tracking system in place, Setpoint developed a weekly dashboard to measure companywide profitability. We hold the Setpoint "huddle" every Monday at 1:00 P.M. In this meeting, we measure all active projects for progress using the Setpoint hours database and measure earned GP for the week.

## Setpoint's Equation for Measuring Earned GP

|   |  |
|---|--|
|   | Total project's PO revenue   |
| – | The project manager's up-to-date estimate of material costs using the Setpoint material database                   |
| x | The projects' progress using labor hours complete as a percent of estimated total hours or the earned value method |
| = | Total GP earned in the week for a project  |

When we total the weekly GP, we compare that total to Setpoint's total operating expenses (OE), which includes all labor. Setpoint then calculates GP-OE for the week and GP/OE to see how the company performed in the week. We use GP-OE to pay a monthly and annual bonus to our employees.

## System for Staying on Top of Project Schedules and Budgets

Our system has been in place since the mid-1990's, and has been a key factor in keeping us alive. When the numbers are down, the team can adjust and react quickly to control costs. Because this is done weekly, we can make adjustments to get the project back on track. Because we base the numbers on reality, there is no place to hide or hope that it will "somehow" get back on track. We really believe that "bad news doesn't get better with time" and that finding out where you really stand with a project as soon as you can is beneficial to the company. Our weekly tracking system keeps us on top of our projects financially and by schedule.

The Setpoint tracking system is the most important tool that contributes to the company's success. More on this helpful system and our earned value method will be available soon, as well as a book on project management.

*Setpoint is the leader in lean automation equipment from concept to functioning completion. Following the Toyota Production System, Setpoint has successfully created custom solutions for a broad variety of industries for more than 18 years.*