



### Monitoring Technologies that provide Actionable Real-Time Data from Manufacturing Equipment allowing Manufacturers to Adapt and Adopt Innovative Technologies



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CEOCFO Magazine

**CEOCFO:** *Mr. Hogendoorn, would you tell us the idea behind FreePoint Technologies?*

**Mr. Hogendoorn:** The idea behind FreePoint Technologies is to help manufacturers adapt and adopt innovative technologies such as IIoT technologies, in their plant floors now rather than waiting for a future state of manufacturing. FreePoint's products let manufacturers take advantage of new IIoT technologies with their existing equipment and their existing workforce.

**CEOCFO:** *In general, are many manufacturers skeptical that it works or are they leery of change and the possible problems that seem to loom when you change a system?*

**Mr. Hogendoorn:** I think manufacturers are all aiming for the future state and they know there are big changes ahead. For instance, the majority of the workforce is older and is retiring and leaving, and many manufacturers have already experienced difficulty attracting and retaining a younger workforce. These manufacturers are aware that they have to change the use of technology and the role of technology on the plant floor. They are not hesitant to do so, but since their primary focus is on what they have to do today, this week and this month, they defer these questions until they get time, or get caught up. They want to do those new things but they just cannot get around to it now. FreePoint is addressing this time constraint issue by making it very easy to now, which helps them in their efforts to attract and retain the younger workforce as well..

**CEOCFO:** *Would you walk us through an engagement?*

**Mr. Hogendoorn:** Right now on a typical plant floor, workers measure three things. They measure how many hours they are on the job, how busy they are, and whether or not they 'do good work'. The first measurement is the only objective measurement – the time they are at work; the other two are subjective measurements – how busy they are and the quality of their effort. Most workers believe they do good work, and they do. They also believe they are busy, and they usually are. They content themselves with being there for forty hours (or however long they are paid), and they content themselves with doing good work and they content themselves with being busy. That does not mean that they are productively engaged. What FreePoint does is we gamify the actual manufacturing processes in a way that draws attention to when they are adding value to the product and when they are not. In other words, there is a fourth measurement, and that is value; how much value have they added to the product or to the company today and what percentage of my their day is value-adding activity and what percentage are they just 'busy' doing 'quality work'. We gamified it and created a set of metrics that are unique to the operator. All the current measurement metrics on the plant floor are designed for management and designed for engineers and accountants, but none of the metrics on the plant

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floor are really designed for employees by engaging them with the value of the work they do. We have created a new metric and then we use new technologies to display that metric back to them right away, in real-time.

**CEOCFO: *How do you pique interest from potential customers?***

**Mr. Hogendoorn:** There are three ways that people come to us. The first way is they come to us looking for traditional production measurement technology (“APM”, or Asset Performance Measurement software). They are looking at measuring the performance of their fixed assets or their machines. They come to us asking if we have products that measure the efficiency and uptime of their machines, and our answer is “yes we do”. After we get involved in the conversation with them then we will start to change the conversation a little bit and help them understand that their biggest asset is not their machines, but rather its their people. The biggest recurring cost is also not their machines but their people. Then we challenge them and ask them what they are doing to measure or monitor or to improve the engagement level of their people. The second way people come to us is when they hear us speak at a more 30 thousand ft. level about the ideal workforce and about what the relationships should be on the plant floor between worker and management. There is a good percentage of company owners and managers that believe we should be changing the plant floor paradigm but struggle with ways to achieve it. In those cases, the conversations immediately goes to employee engagement, and how our platform can be used to put everyone on the same page, changing the whole communication landscape.

The third way we are brought in is when it is actually the workers themselves have seen or heard of our products installed in another company or plant, or have friends that have told them about it. It is ironic there are some work places where people say the workers will never allow our technology on the plant floor but it is the workers themselves that have come across our product and ask about it. They say “management measures us every week and month, and everybody else knows how we are doing, how come we do not know how we are doing, or if we do, how come we only find out when it’s too late?”

In short, we pique interest from potential customers in one of three ways: through middle management looking for overall equipment efficiency measurement devices, through the corporate level where the company really desires a strong relationship with their workforce, or through the workforce itself, where people want to measure themselves and not feel like they are always measured by someone else.

**CEOCFO: *Would you tell us the variety of products and services you offer?***

**Mr. Hogendoorn:** We have basically three different products. We have a black box device that can connect to any manufacturing machine regardless of age and type, without modifying the machine, and can be installed typically within an hour. It connects the machine to a local or remote (cloud) server quickly and effectively. Our second product is our cloud based data collection software to collect, store and analyze the data using our cloud based server; we call that product ShiftWorx. It is sold on a subscription basis – per machine, per year. And third, we have a suite of modules and products designed to help manufacturers engage their plant floor employees, as well as generate reports for managers and continuous improvement leaders. The custom modules are integrated with the ShiftWorx platform but are sold on a per module basis.

**CEOCFO: *Your site shows different levels of the ShiftWorx product. What are some of the features that are available if a customer would go with the Premium?***

**Mr. Hogendoorn:** Our premium package comes with features like automatic emailing and texting alerts that they can set up for various alarm conditions or maintenance purposes. If there is a process falls behind or if there is a problem on a machine, they can set it up to send out an email alarm or alert with people. They can take the pulse of their manufacturing process remotely. For instance, using a cell phone app, a manager can now to take a look at the overall health of the organization or plant, the status of a critical order, or even the status of a single piece of equipment. They can use the products to keep track of maintenance when maintenance is required on a machine. If maintenance is required - say after 20 thousand cycles or after 200 thousand cycles - they can set it up so that it automatically logs maintenance requests after that period of time. The system is very useful in operations where the end customer requires proof of critical performance characteristics; a machine’s temperature, pressure or whatever the end customer might want to keep track of. If there is a recall or if there is an issue where they have to assure certain standards were met, all that information would be in the database and can be used for those purposes.

**CEOCFO: *What have you learned as companies have started using your products?***

**Mr. Hogendoorn:** When companies first see their data through a different lens, it is often quite astonishing to them. We often hear the comment “I never saw our process this way”, or “the system has allowed us to see our processes in a way we’ve never been able to see before”. Some plants have been running the same processes for fifteen years and may be unaware of certain inefficiencies, and within the first day they will look at our dashboard and say “this cannot be right!”. They will talk to the people on the floor and their people will say “yes, that’s right – we’ve been doing it that way for years”.

The surprising thing is how often that example repeats. Almost every customer, within a couple of days, sees things in their process that they never saw before that suddenly becomes painfully obvious. Last week for instance we installed in a customer that started their lines every day at 6:30 in the morning, but were not aware that the first part was not actually produced until 8:15 that morning. They knew everyone was there on time and that everyone was busy, but didn't realize that they didn't produce a finished part until an hour and forty-five minutes later. With a simple schedule change, a few people now start earlier than the rest, and the first part is produced an hour earlier. By changing the basic metrics – from metrics that were only meaningful to managers, engineers or accountants – to metrics that are meaningful to everyone, everyone is on the same page aiming for the same goals.

**CEOCFO: Do you find that companies make changes or do they sometimes just figure it is good to know?**

**Mr. Hogendoorn:** Some changes start happening right away, and some changes need more time to analyze. Data driven decisions, for instance, require the analysis of a body of empirical data collected over a period of time. Other things are instantly obvious (like the example above) and changes are made right away. The other thing that happens right away is that people start making subtle changes all by themselves; they make sure their machine has been loaded and is running before they do the other tasks that may keep them 'busy' but not as 'productive' (helping a coworker, cleaning their area, ordering their tools or other administrative tasks for instance.) These are subtle examples of basic behavior modification just by helping people discern the difference between being busy and being productive.

**CEOCFO: What is next for FreePoint Technologies?**

**Mr. Hogendoorn:** In the first two years, we had to do a lot of missionary work. We had to do a lot of educating and convincing companies that this was the next new frontier and the next big thing that manufacturing needs to be doing. In the last year, we do not have to do near as much missionary work because word is getting out and success stories are spreading quickly from one company and into another. For FreePoint the next new thing is scaling up quickly.

**CEOCFO: Do you have plans you can share or is it on the drawing board?**

**Mr. Hogendoorn:** We received interest from all over the world such as Russia, China, and other areas, and that was pretty unexpected. I thought that this would be primarily just North American manufacturers and that was our target market. It surprised me how quickly the other areas became interested in this technology. The reason we started the company was to enable and equip North American manufacturers, but we cannot turn away from opportunities elsewhere. The goal is more than productivity improvement; the goal is to reconnect meaning and value with work.

