



FreePoint's Paul Hogendoorn shares his ShiftWorx technology with Fanshawe's Michael Feeney
Submitted photo

Bringing gaming to the manufacturing floor

ShiftWorx technology enhances productivity through gamification

BY MAUREEN SPENCER GOLOVCHENKO

WITH A SIMILAR GOAL to Fitbit devices that encourage people to track steps, exercise and sleep en route to a healthier lifestyle, London-based FreePoint Technologies Inc. and Fanshawe's School of Information Technology (IT) are collaborating to bring gaming technology to the manufacturing floor to generate greater employee engagement and productivity.

Using its proprietary technology called ShiftWorx, FreePoint is already a proven leader in the collection, monitoring and visualization of data for advanced manufacturers, putting vital analytics into the hands of management and shop floor workers alike.

According to FreePoint president Paul Hogendoorn, what gets measured gets improved, "Rather than measuring downtime, inefficiencies and waste, FreePoint focuses on the positive – proving productivity will increase – if you measure, analyze and immediately share outcomes with those operating the machinery. Then, based on real-time information, the respective workers can instantly assess, tweak and improve their manufacturing process."

Now, with innovative ShiftWorx applications operating in 70 production locations worldwide, FreePoint aims to further enhance its technology to engage and motivate a younger generation of workers – through gamification. Appreciating that millennials were raised on interactive games that provide

constant stimulation and continuous feedback, Hogendoorn believes applying typical game-playing elements to traditional manufacturing roles will hold significant appeal to younger staff.

"In my day, the only feedback we received at work was a pay cheque," notes Hogendoorn. "Today, young workers require continuous feedback in order to feel engaged because they are accustomed to gaming technology that provides instantaneous results – whether they are competing as an individual or collaborating as part of a team."

To this end, FreePoint is partnering with Fanshawe on a yearlong research project to gamify continuous improvement on manufacturing floors, beginning with welding processes. Supported by a one-year grant through the Ontario Centres of Excellence (OCE), this private-public partnership team aspires to attract and retain younger staff – for whom gaming is second nature.

Tasked with discovering the best gaming applications possible for skilled trades, in consultation with a cohort of his savviest students, Fanshawe IT researcher Michael Feeney is excited to be working in uncharted territory.

"This project is different from game simulation and other projects we've done. And, so far, there is no Fitbit technology for your job," observes Feeney. "So, using a company's key performance indicators (KPIs) of efficiency and productivity as a foundation, we're developing a game engine capable of accommodating sin-

gle and multiplayer games among manufacturing staff."

In addition, Feeney sees potential for instilling even greater engagement, friendly competition, camaraderie and teamwork through access to large computer screens that can be viewed by staff throughout the workspace, which would update individual and team scores, like games within a game.

"Regardless of the work environment, game success will correspond to increased output on the part of the individual worker at his/her station as well as the collective output of distinct cells or teams in the manufacturing workplace," says Feeney. "This ensures participation, gratification and accountability for all."

Looking ahead, once the IT research team finalizes its gaming prototype using welding KPIs, the plan is for ShiftWorx technology to be customized to gamify different industries. And, in its goal to stay ahead of the curve, FreePoint's further commercialization of its technology will provide manufacturers with a competitive edge and an advantage in attracting skilled, young workers to a traditional sector that is redefining itself with the integration of leading-edge technology.

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For more on FreePoint Technologies Inc. and ShiftWorx, go to getfreepoint.com and for Fanshawe's School of Information Technology, check out www.fanshawec.ca.