

## Writing -Tech Blog

### IoT On The Factory Floor

Google glass. Remember those? All the rage for what seemed like a week, and then dead.

Or mostly dead.

Did you see them as a goofy PR stunt by a high-profile tech firm? Or a short (and admittedly awkward) peek at the future?

For manufacturers with employees working on a shop floor we think Google Glass was a glimpse of the future. Whether it was a PR stunt or not we'll leave to you to decide.

### Wearables

Google Glass was one of a class of devices known as "wearables" that attach to your body and connect to the internet. In addition to smart glasses, you're probably also familiar with fitness trackers and smart watches. But there's more "smart" tech you can wear:

- Jewelry
- Clothing
- Shoes
- Backpacks

### All Paths Lead to Wearables

So why are we convinced wearables have a place on the factory floor?

Evolution.

Think back 40 years.

If you were at a company big enough you might have had a mainframe computer in-house. It took up an entire room and only a few select employees interacted with it.

# Michael Boyink

## Portfolio

616-298-4606  
mike@boyink.com

Think back 30 years.

PCs showed up. Suddenly just about every desk in the office has a computer sitting on it. You probably got a new desk to accommodate the computer.

Think back 10 years.

Apple announced the iPhone in January of 2007. Smart phones and tablets have become common around manufacturers - both in the office and on the factory floor.

It only makes sense that wearables will be next.

### On Your Head

Smart glasses can free up operator hands by presenting documentation, work instructions, or help via video conference - away from a desktop PC or tablet.

Warehouse picking is an obvious role where smart glasses could improve performance - even SAP is getting in on that game.

Assembly jobs, training, and quality control are other jobs where smart glasses could help improve worker productivity.

### On Your Wrist

Smart Watches like the Apple Watch may find a home on the factory floor as well. Features like pedometers and GPS trackers could feed data into software that simulates your production environment, letting you optimize the process by minimizing movement.

Smart Watches could be used as scanners, reading QR codes on inventory and updating the system with the number of parts on hand.

Wearables could also improve safety, warning employees of moving vehicles or shutting down equipment if a person is detected in a place where there shouldn't be one.

Fitness trackers have a more limited featureset than a smart phone. However, they may still impact your workplace as part of an employee health and wellness

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program. Insurance companies are starting to look at using the data collected to calculate a more dynamic insurance premium.

### Are Wearables Secure?

As with any new technology security should be a primary concern.

The security of wearables is currently less of an issue for manufacturers than the custom applications you'll have to write in order to integrate the wearable into the current technology stack. Application security is a primary concern, and will need to be double-checked as the device firmware updates. You'll need to update any internal security auditing practices to include these new devices.

Employees are sure to have concerns about devices that never stop collecting data, even during breaks.

### Are Wearables Ready?

The market is young. Google has officially killed Google Glass, although rumors of it rebounding persist. There are alternatives, but no clear leaders in the market.

The Apple watch is not quite two years old, and there are already a number of alternatives available.

The biggest drawback of the currently-available devices is they are designed for the consumer market. How they will hold up in an always-on, multi-shift manufacturing environment is yet to be seen. It's possible we'll see manufacturers step up with new industrial-strength devices or aftermarket companies selling customized versions of the consumer devices.

### Don't Blink

While it may not be time to write that PO just yet, keep an eye on the wearable market. Like many aspects of the IoT market - it moves quickly. It could well be that you'll be piloting a wearables program in your company within the next fiscal year.

Budget accordingly.

### Learn More

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We found 10 ways manufacturers like you who are already using IoT technologies on their production floor. Subscribe to our weekly IoT newsletter and we'll ship you an eBook with all the details: