



RobotStudio™

Case Study: The Abbott Development Shop – healthcare engineering and manufacturing solutions

Q1/2003

The Abbott Development Shop, a business support service of Abbott Laboratories (a Fortune 100 health company), provides automation solutions to manufacturing units within the group as well as to external organizations. The Abbott Development Shop used RobotStudio to demonstrate their capabilities in a fun way.



Burgerbot – up-and-flipping

Burgerbot – a flippin’ good idea.

Bob Slager, head of robotic systems/3D simulation at the Abbott Development Shop, first got involved with ABB and RobotStudio a year ago. Late last summer, Bob and his team wanted to put on a show for customers invited to the annual cookout at the Abbott facility just north of Chicago.

“We sent invites to the people who buy our equipment and services in this area. I felt we needed a real crowd-puller.” Bob talked to the local ABB account manager, and luckily there was a robot in the pipeline.

“Technology can be fun”

The idea behind Burgerbot was that Bob and his team wanted to demonstrate a fun way of working with engineering tools that could attract a large audience. And what’s more, to do it quickly – from idea all the way to a working cell in four weeks or less.

“We started out with 3D solid modeling software,” says Bob, “transferring that information into RobotStudio to help with cell development and offline programming.” The result? The team created a robot that flips perfect burgers, showing customers an exciting application of current technology – all in less than a month. “The

technology is right there and applicable to any project,” Bob points out.



Bob Slager, the Abbott Development Shop, and his star chef.

Sold on RobotStudio

The moment of truth came when Bob inserted the program in the real robot. He asked it to grab the saltshaker – and the robot did so without hesitation. At this point Bob was totally sold on the RobotStudio software: “You can reliably build a virtual work cell using engineering tools and get a known result.”



The first time Bob ran RobotStudio, he was off by a few millimeters. But that was soon rectified: “All it took was a 30 second touch-up with the teach pendant!”

“Taking telephone support to a higher level”

Bob frequently uses RobotStudio and the controller for phone support, “as a means of seeing the same interface as on the client’s factory floor.” By loading the customer’s application into his virtual robot, he is able to walk them through teach pendant menus and which buttons to push without actually being on site.

“Often,” Bob explains, “a customer needs help with a fairly simple problem, but is unable to relay enough detailed information to resolve it over the phone. Thanks to RobotStudio, I can readily create an identical representation of the client’s system. This takes telephone support to a new level.”



The perfect complement to Burgerbot...

RobotStudio – a fast, flexible addition to the sales force

Bob highlights three main areas that have benefited him and his team. Firstly, since RobotStudio is highly adaptable, risk reduction is considerable. As Bob states: “By working on a computer screen, engineering time is all that’s involved. Nothing is committed to purchase order at this stage. And anything we find out early in the process can be adapted and tweaked as you go along.”

Furthermore, RobotStudio allows Bob to “compress the deployment schedule,” not least because the software precedes the robot, enabling him to reduce the system development life cycle. “What might have taken 6 to 8 weeks in

the past,” Bob explains, “takes no more than 3 weeks with RobotStudio. This has great impact for a company that needs to be first to market.” Finally, what Bob calls “selling an idea” is key. He believes the software falls under the saying ‘a picture is worth a thousand words’. “What better way to show prospective customers the power of the product than by creating an animated video of it in action?

Visualizing does a lot more than anything I could write, making it easier for people to grasp what the program can do.”

“Differentiate or die”

“RobotStudio gives me a competitive edge. I can rely on it not to crash or perform under par, and the costs are predictable, which ultimately means it’s leaner on the margin.” Bob, whose words echo a tough marketplace, sums up: “Not only does RobotStudio offer consistent results, it’s also a morale booster. This software simply represents the latest and greatest in technology.”



“We’ll do hot dogs next year”

FACTS AND FIGURES ABOUT THE ABBOT DEVELOPMENT SHOP SOLUTIONS:

RobotStudio:	Version 1.1.1
No. of copies of RobotStudio:	1
Robot models in use:	4 IRB 2400/16
Controller versions:	S4Cplus
Payback time:	Approx. 1 to 2 projects