



JAN BOTTIGLIERI
jbottiglieri@tappi.org

What We Really Need from AI (Both Kinds)

What do you think of when you hear the term “AI”? You may know that it stands for Artificial Intelligence, though the data involved are very real. I think the word “Artificial” makes some people nervous; they imagine a dystopian robot uprising straight out of the *Terminator* movies.

Those of us in manufacturing have a different idea of what AI can mean and what it can do. For years, we’ve had sensors and monitors to gather the tens of thousands of data points generated by our complex systems. AI takes the next step: interpreting that data to proactively manage, schedule, maintain, and improve our machines and processes to maximize efficiency. Machine learning can accurately and reliably guide operator decision-making—this the “highest purpose” for Artificial Intelligence in manufacturing. After all, what employee can know a thousand things about a dozen processes all at once ... in the blink of an eye?

Actually, I’ve met a few who can. These very real industry veterans run on a different kind of AI; let’s call it “Acquired Intelligence.” They’ve spent 30 years or more around paper and packaging machines. They say “pulp runs in my blood” and call the aroma downwind of a kraft mill “the smell of money.” They’re happy to regale today’s emerging professionals with tales of their own early careers: 80-hour weeks and long weekends at the mill. Those experiences have given them almost superhuman insight into the machines they help run. They earned their AI and their mills are lucky to employ them ... for now.

Which brings me to my point: many benefits of Acquired Intelligence are now the fruits of Artificial Intelligence—and those who possess the first are rapidly retiring, making way for those with the tech savvy to use the second. We need to be okay with that.

Perhaps it’s time to adapt our industry culture to put both kinds of AI to their highest purpose. Young professionals have AI tech tools that can help them make solid, data-driven decisions without accruing a year’s worth of Sundays at the box plant—so let’s give them the work-life balance they need. For our seasoned leaders, let’s build job roles that help them share their own AI—Acquired Intelligence—as mentors, sponsors, trainers, career coaches, and course instructors, passing along that acquired “human learning” that no machine can capture.

Do you have a place in your production facility for both kinds of AI? **561**



EDITORIAL STAFF

JAN BOTTIGLIERI
Editorial Director
jbottiglieri@tappi.org

LARRY N. MONTAGUE
President & CEO, TAPPI
lmontague@tappi.org

GLENN OSTLE
Editor Emeritus

MARK RUSHTON

Senior Editor
mrushton@tappi.org

TOR IDHAMMAR

Section Editor, Reliability & Maintenance
t.idhammar@idcon.com

MONICA SHAW

Editorial Director, *TAPPI Journal*
mshaw@tappi.org

NAYLOR STAFF

PUBLISHER

Ben Hopper
ben.hopper@naylor.com

MANAGING EDITOR

Leslee Masters
leslee@naylor.com

INTEGRATED MEDIA SPECIALIST

Shane Holt
sholt@naylor.com

DESIGN AND LAYOUT

BK Publication Design

