

Collaborative Innovation: *Driving Value in Instrument Development and Implementation*

Marty Hoskins

Business Development Manager – Pulping

PAPTAC Bleaching Committee Meeting
Fall of 2016
Hinton, Alberta



“For good ideas and true innovation,
you need human interaction,
conflict, argument, debate.”

Margaret Heffernan

The process of translating an idea or invention into a good or service that creates value or for which customers will pay.

To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need. Innovation involves deliberate application of information, imagination and initiative in deriving greater or different values from resources, and includes all processes by which new ideas are generated and converted into useful products. In business, innovation often results when ideas are applied by the company in order to further satisfy the needs and expectations of the customers.



Invention vs. Innovation

- Invention is the creation of something.
- Innovation is the creation of something that has value.
 - May be the implementation of an invention in a unique way that gives it value.

Innovation always involves the creation of



“Necessity is the mother of invention.” – Author Unknown

Maybe, but.....

Necessity IS the mother of innovation!

Sometimes we do not know what we need.

Most people did not know that they “needed” a smart phone until the iPhone came to market.

Evolutionary innovations (continuous or dynamic evolutionary innovation) that are brought about by many incremental advances in technology or processes.

- iPhone
- iPod

Revolutionary innovations (also called discontinuous innovations) which are often disruptive and new.

- Skype
- Facebook

<http://www.businessdictionary.com/definition/innovation.html>



Why is Innovation Important?

“One of the symptoms of an absence of innovation is the fact that you lose your jobs. Everyone else catches up with you. They can do what you do better than you or cheaper than you. And in a multinational corporate-free market enterprise, it is the company's obligation to take the factory to a place where they can make it more cheaply.”

Neil deGrasse Tyson



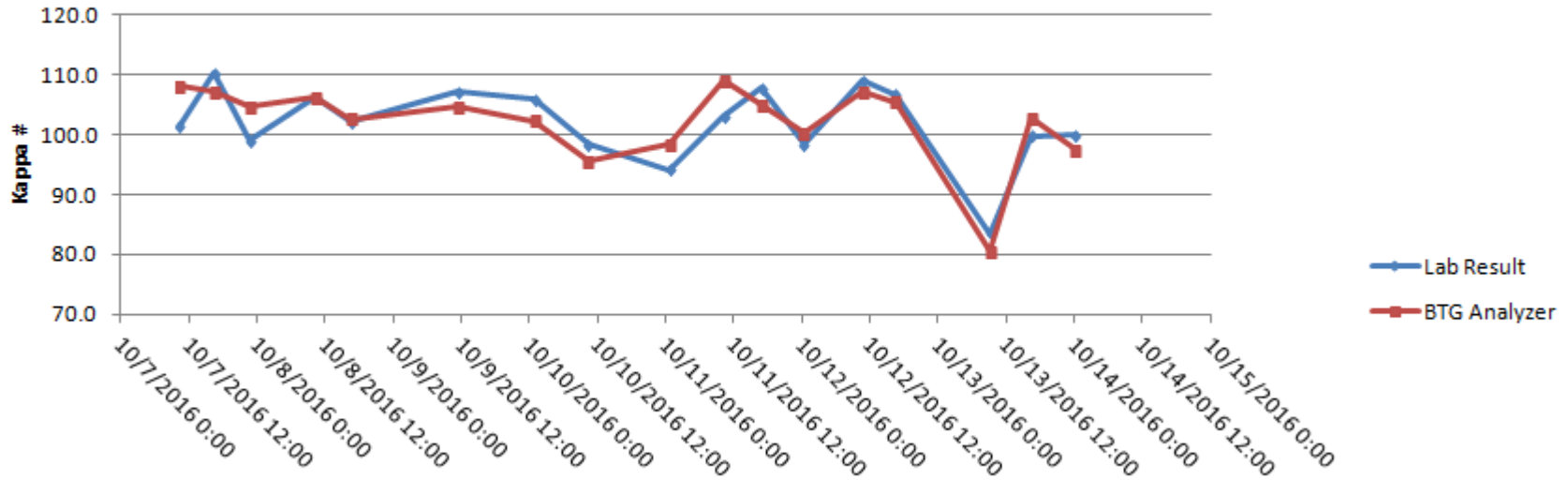
Examples of Collaborative Innovation

Single Point Kappa Analyzer



- Concept instrument for smaller bleached mills
- Designed with low kappa (<50) in mind
- Potential for High Kappa digester control

Single Point Kappa Analyzer



- Customer took significant informed risk
- Instrument modifications required to process longer, stiffer fibers

Innovation Means Value

	Before	After
Target Kappa	90	104
Kappa COV	9%	<4%

	% Change
EA to Wood Ratio Changes	-45%



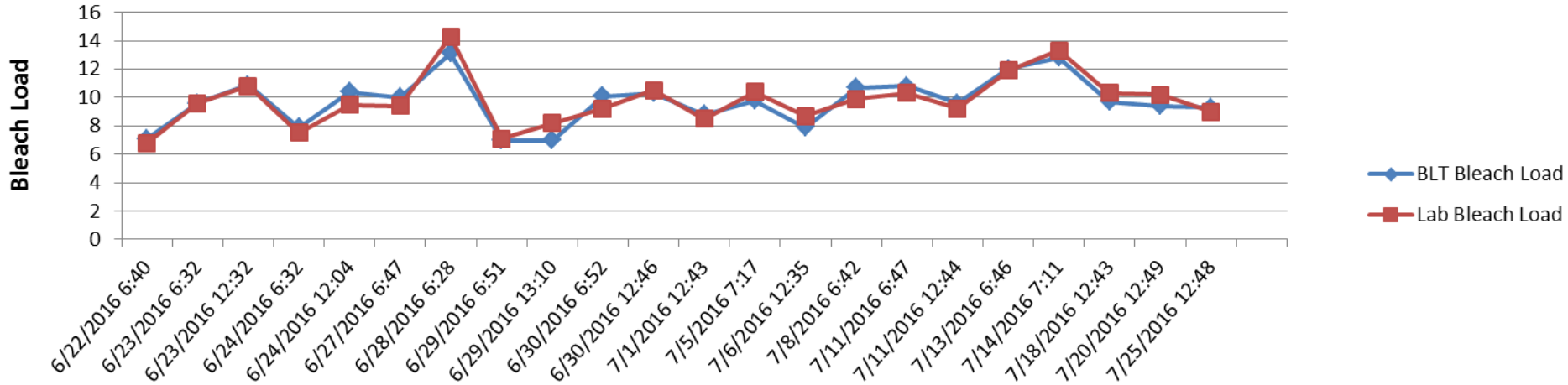
Bleach Load Transmitter

- Designed to measure total lignin entering bleach plant
- Potential to use as a brightness meter for feed forward control

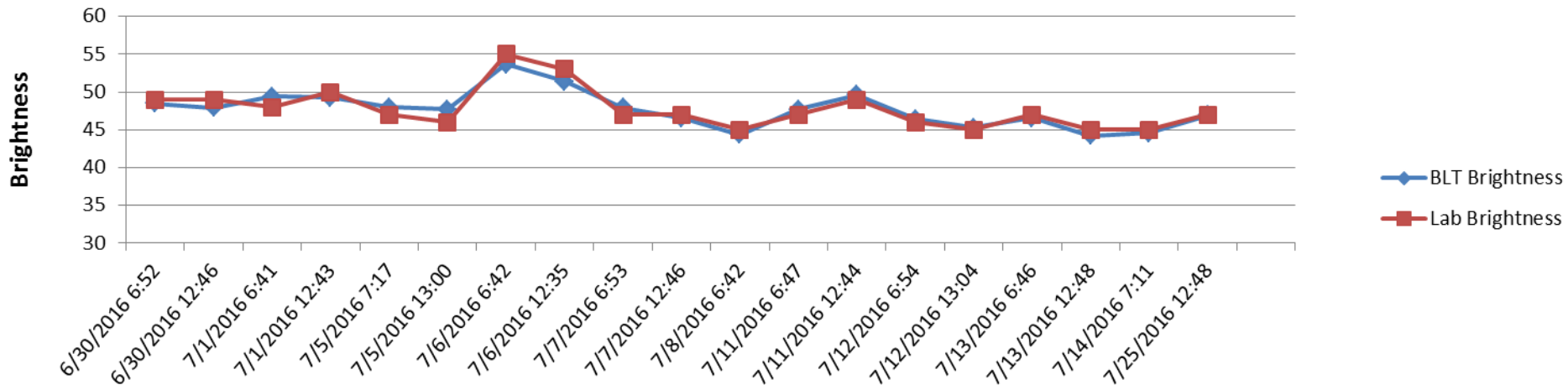


Bleached Load Transmitter

Bleached BLT Time Series Trend



Bleached BLT Brightness Time Series Trend

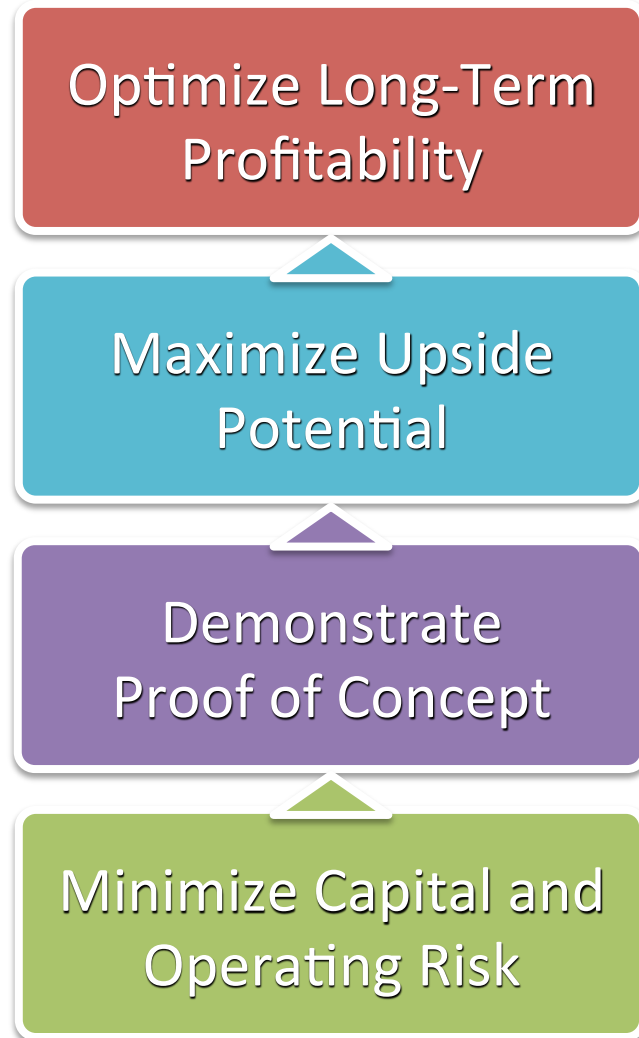


Innovation Means Value

- One instrument – two process parameters
- Bleach Load as a feed back for first stage ClO_2 control
- Brightness as a feed forward for further ClO_2 control for brightening



Unique Commercial Approach



Unique Commercial Approach

1. Identify a value based project
2. Develop a project scope and price
3. Develop a pilot price and pilot time period
 1. Pilot price paid to supplier from generated savings
 2. No savings – No payment!
4. When pilot price is paid – decision time!

Innovation Means Value

- Potential to develop proof of concept without capital
- Realize project savings much earlier by quicker approval and implementation



Elements of Innovation

- ✓ Culture
- ✓ Communication
- ✓ Conflict
- ✓ Courage

“For good ideas and true innovation, you need human interaction, conflict, argument, debate.” - Margaret Heffernan

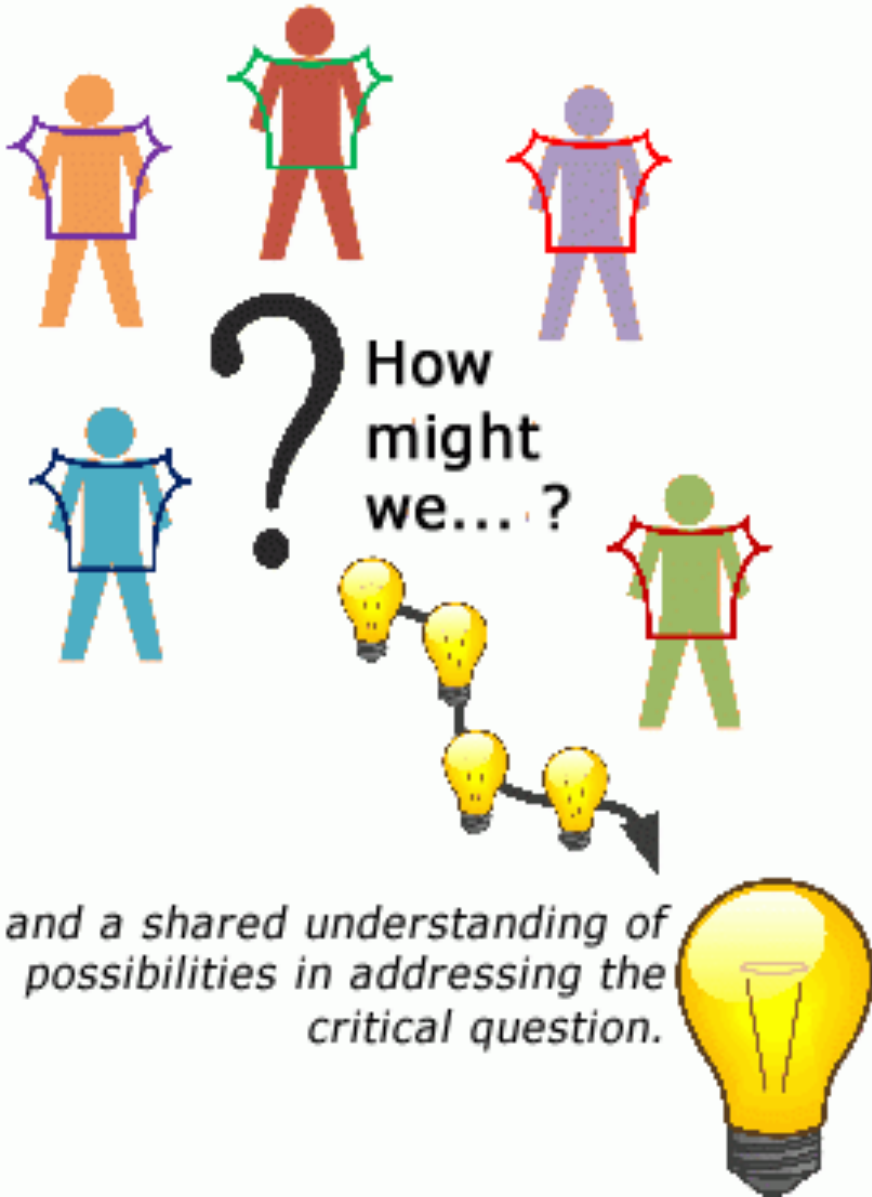
“I have not failed. I’ve just found 10,000 ways that won’t work.” - Thomas A. Edison

“Success is not final, failure is not fatal: it is the courage to continue that counts.” - Winston Churchill



Collaborative innovation

People with a diversity of views...



For true innovation, which drives value, we must be willing to fail!

Supplier and User must be willing to work together with the same goal – increased value.

Supplier must help user understand the risks.

Customer must have the courage to continue in the face of failure.

Closing Comments

- We could debate various definitions or key elements for innovation
- We cannot debate that collaborative innovation is critical to our future success

“Without tradition, art is a flock of sheep without a shepherd. Without innovation, it is a corpse.”

- Winston Churchill

“One who fears failure limits his activities. Failure is only the opportunity to more intelligently begin again.” – Henry Ford



THANK YOU!

