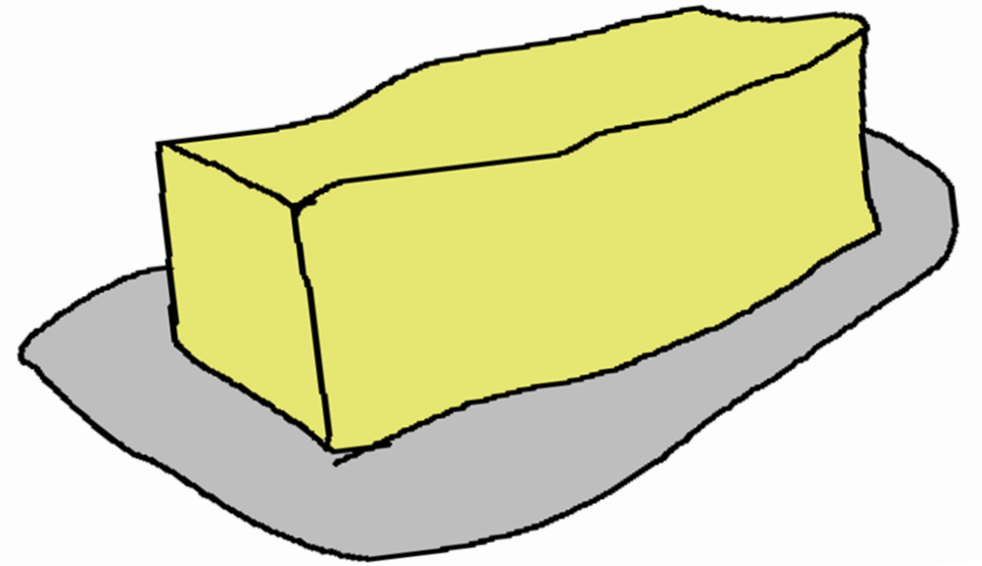


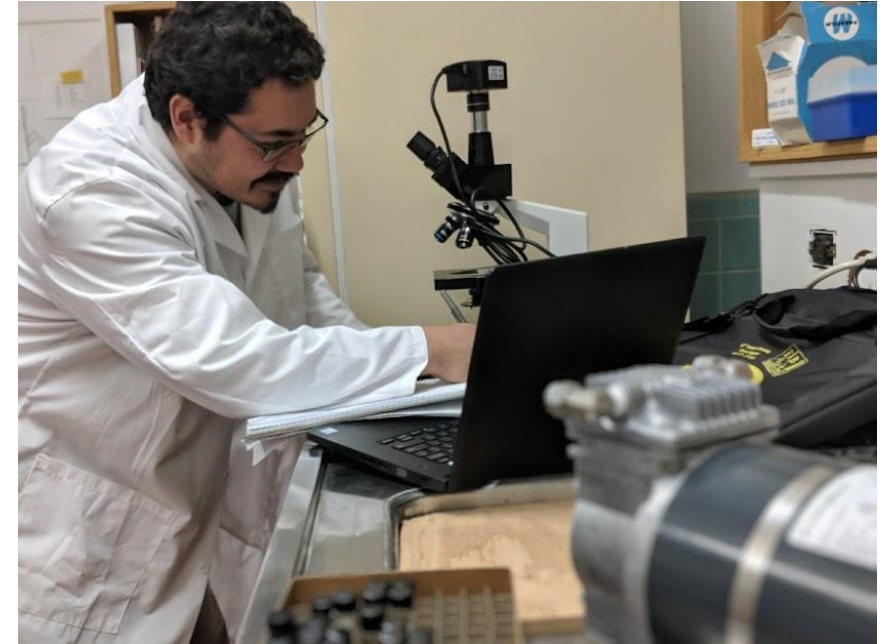
# Better Butter Making

By Sebastian Ramirez



Oregon State  
University

# Who am I?



My name is Sebastian Ramirez.

I like to hunt things, cook things, build things and science things.

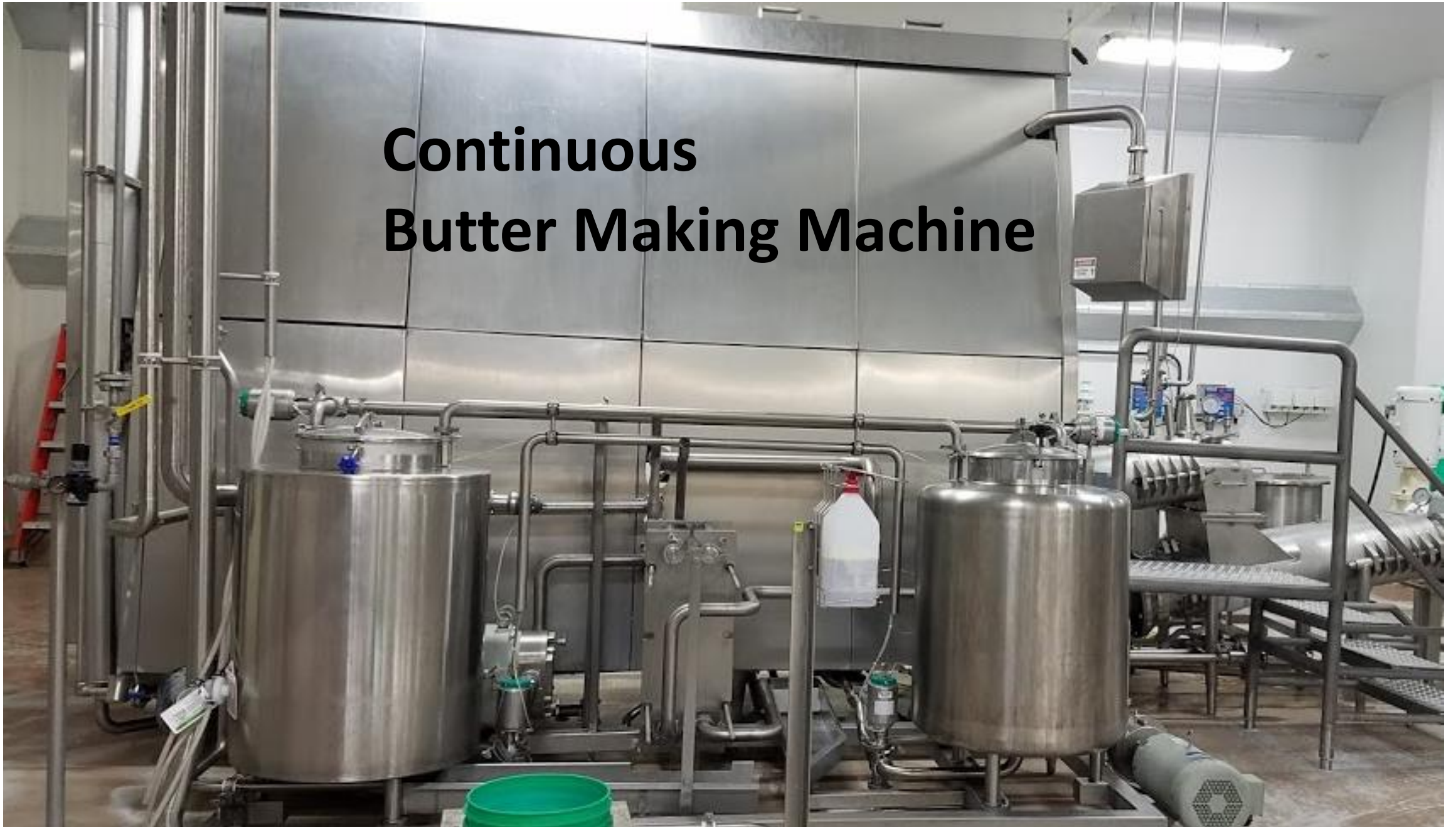
I have a passion for food, dairy, and problem solving.

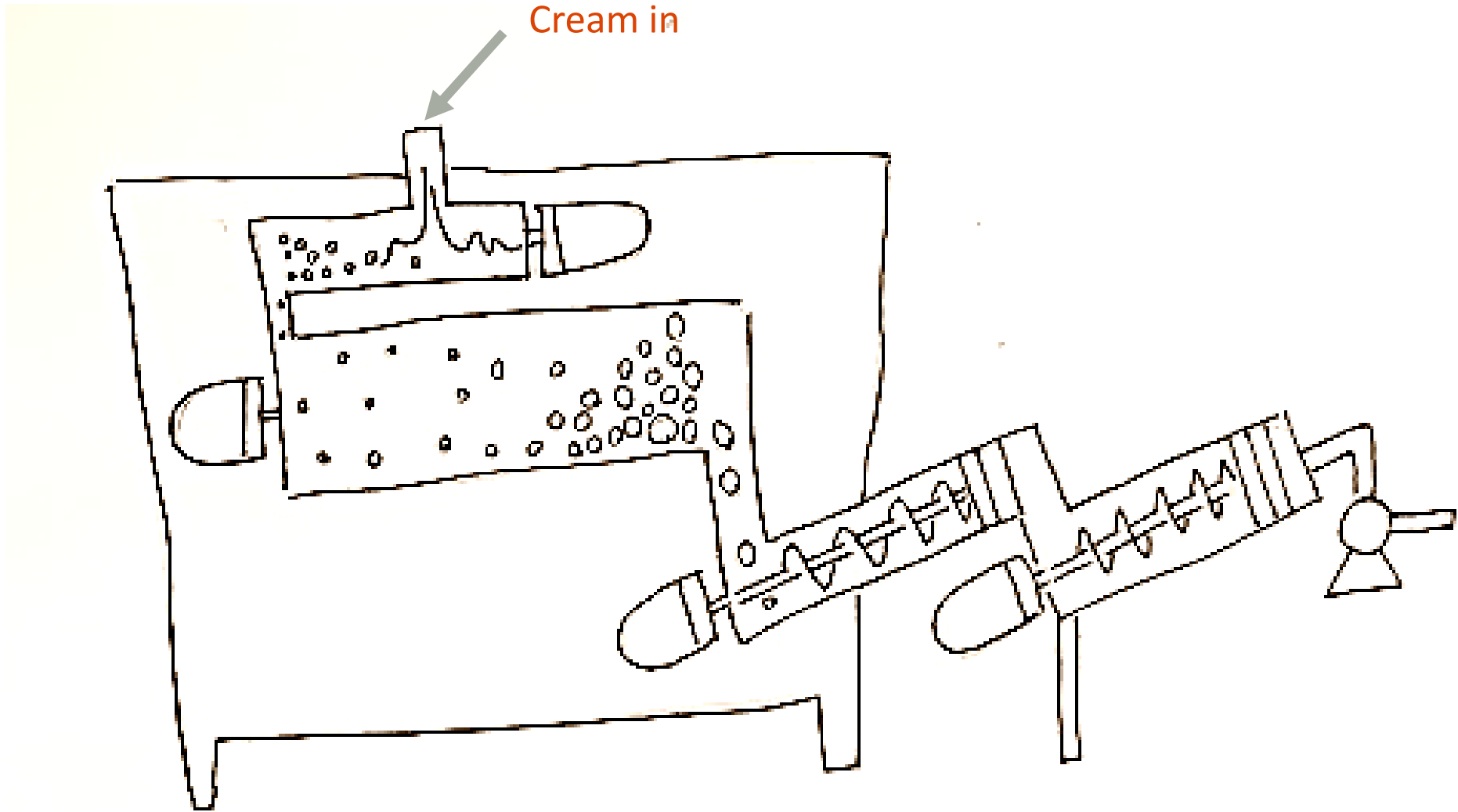
What I am doing.

Optimizing continuous butter manufacturing  
by reducing variability within human machine  
interactions.

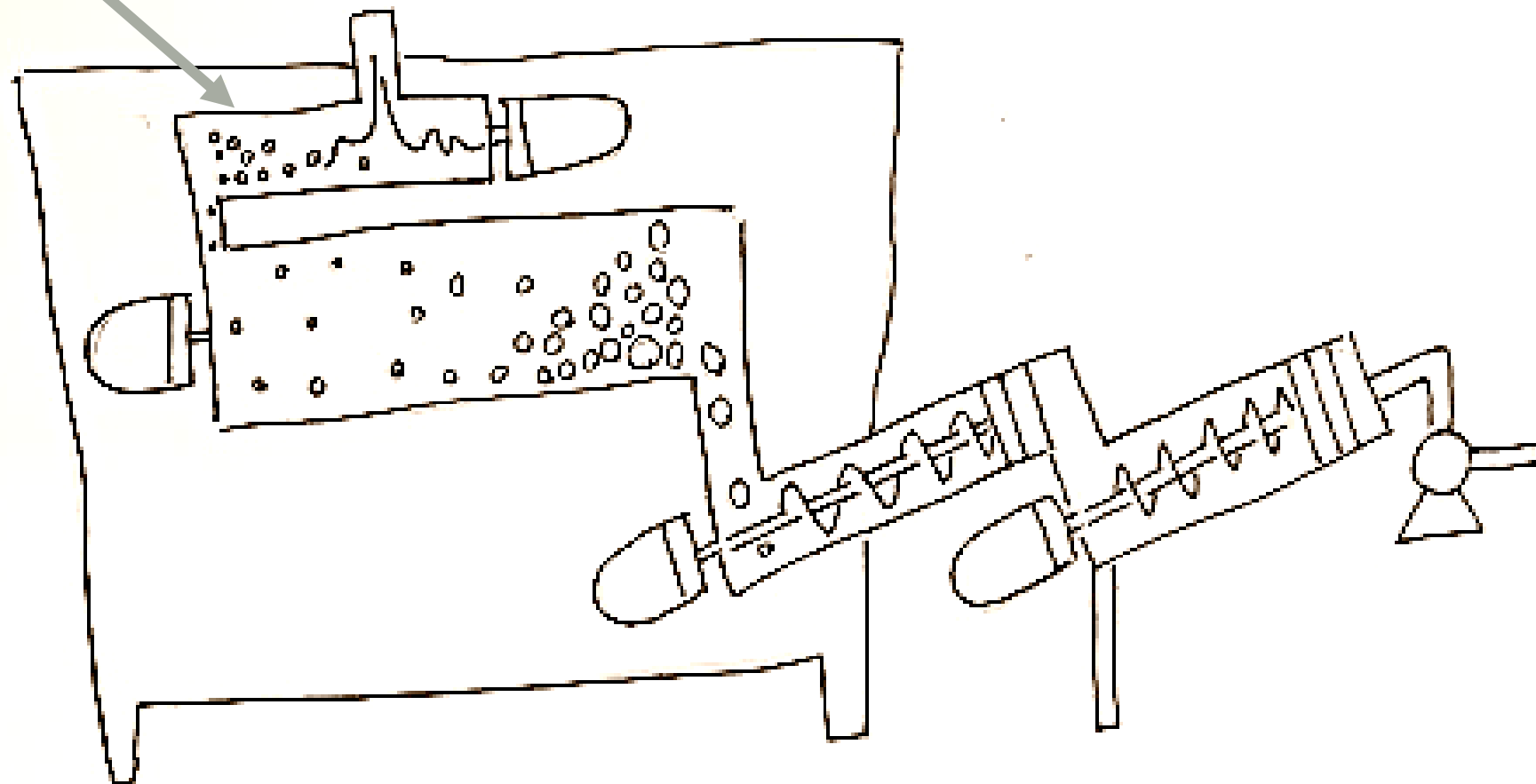
Optimizing **continuous butter manufacturing**  
by reducing variability within human machine  
interactions.

# Continuous Butter Making Machine

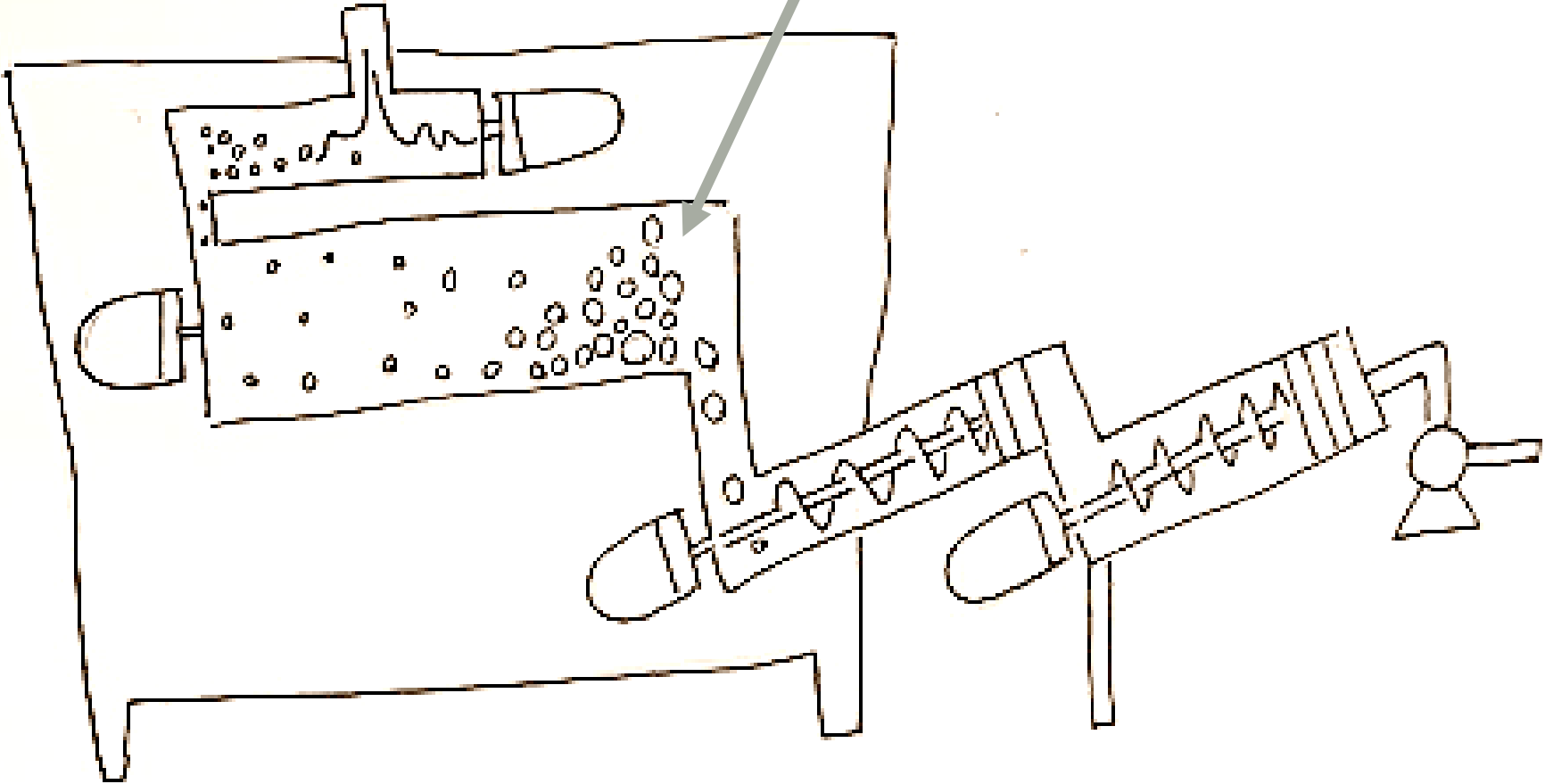




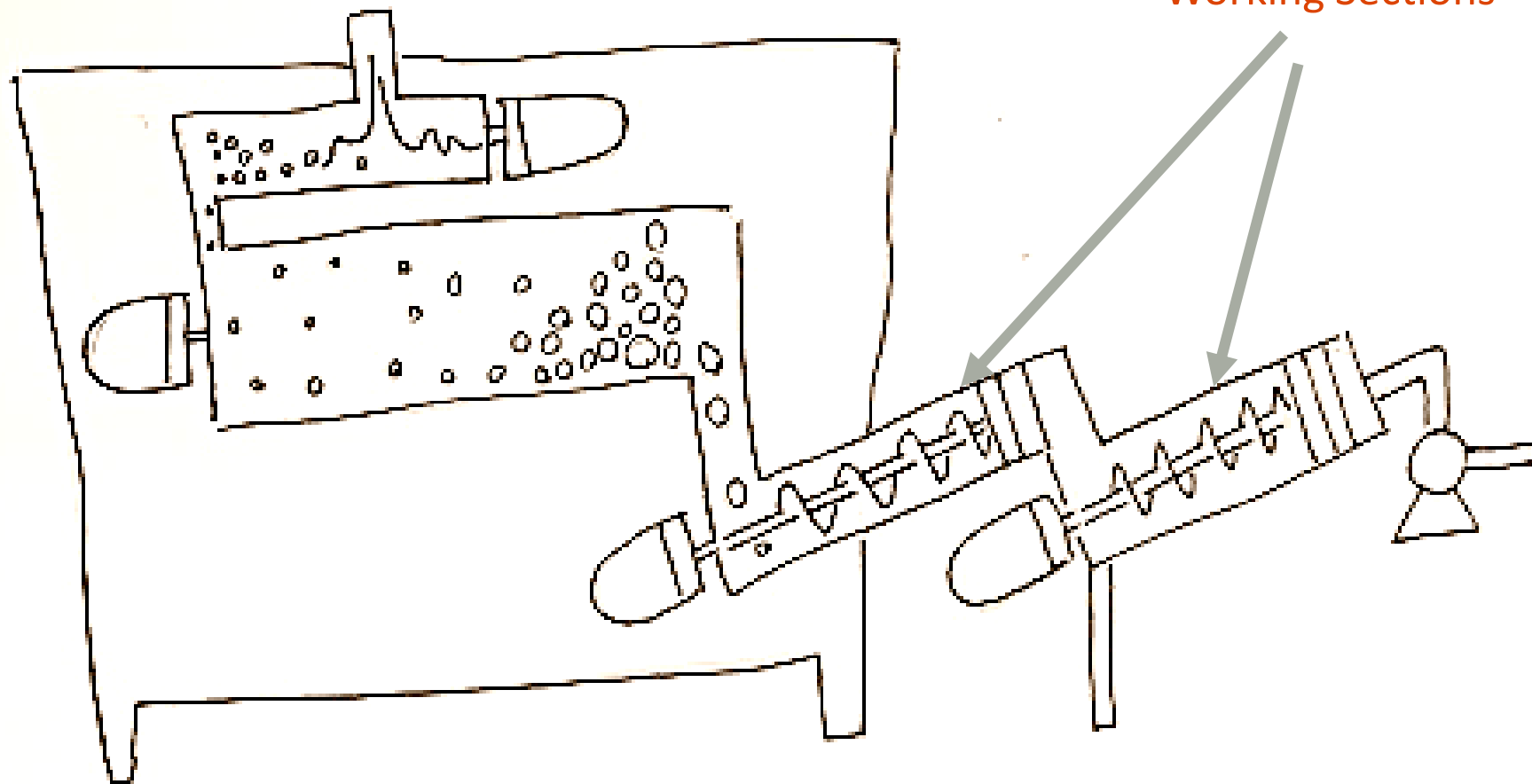
Churning section



Separating Section







Working Sections

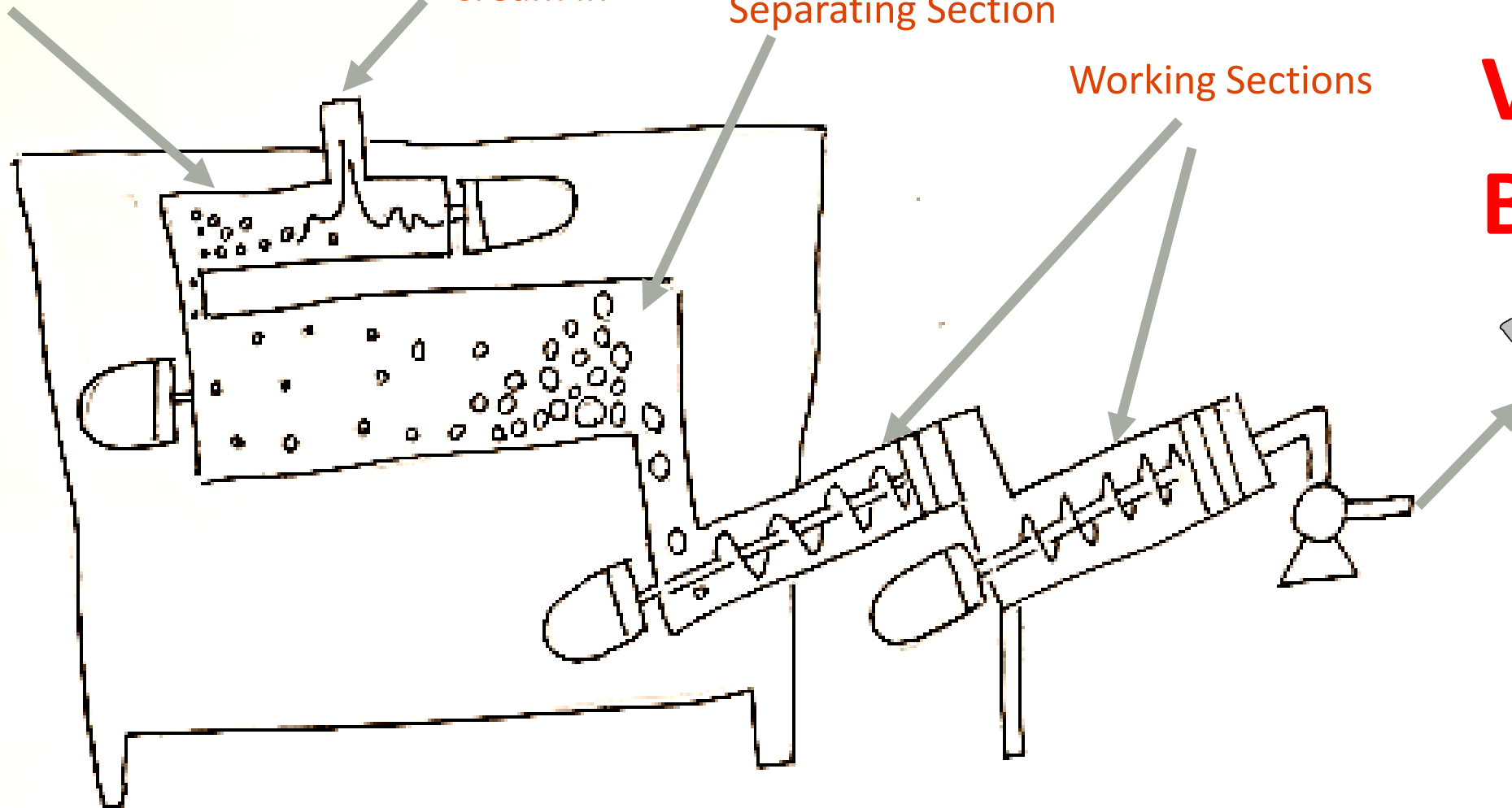
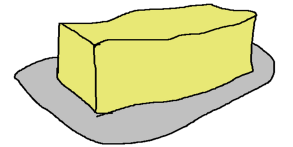
Churning section

Cream in

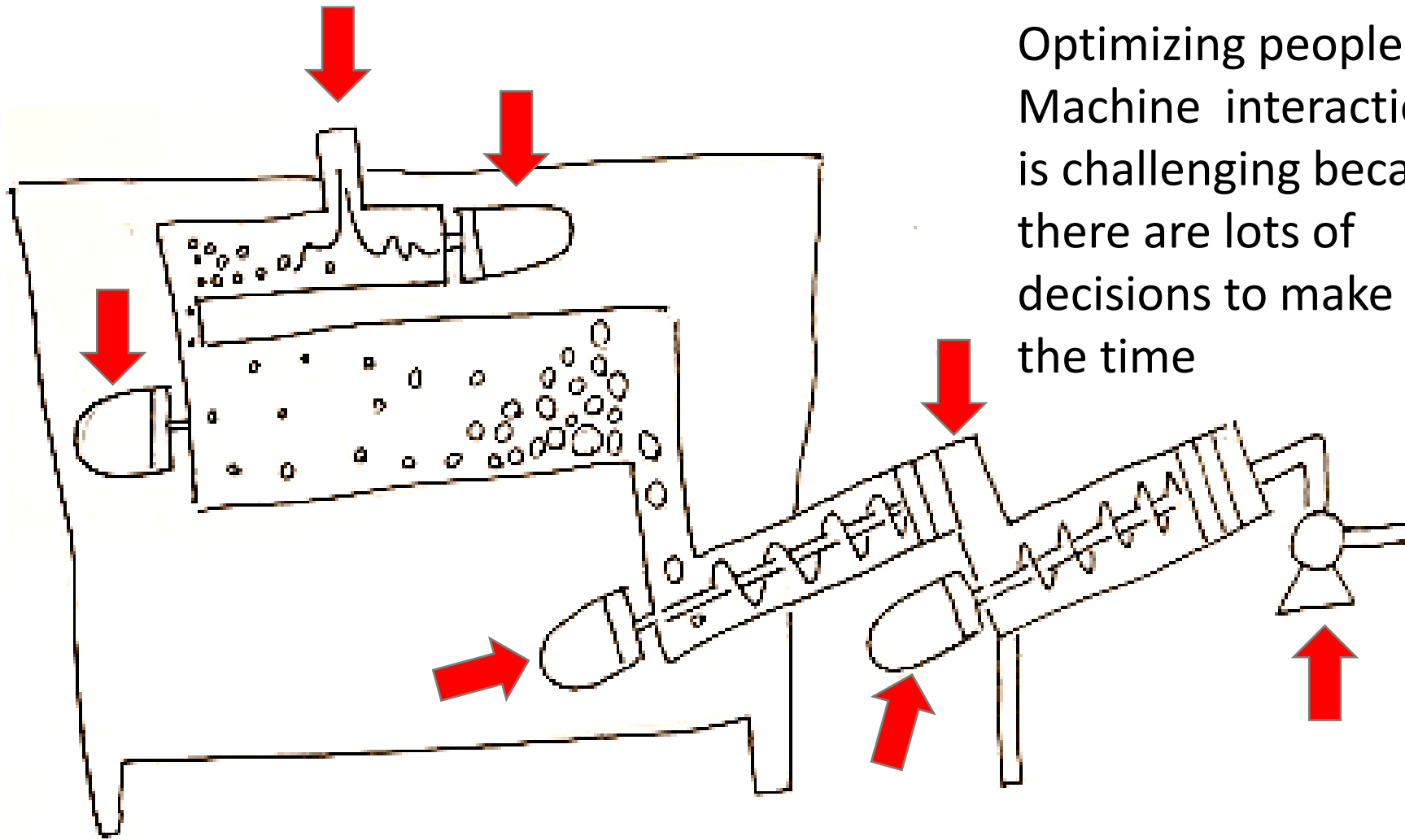
Separating Section

Working Sections

**Voilà  
Butter!**



Optimizing continuous butter manufacturing  
by reducing variability within **human machine  
interactions.**



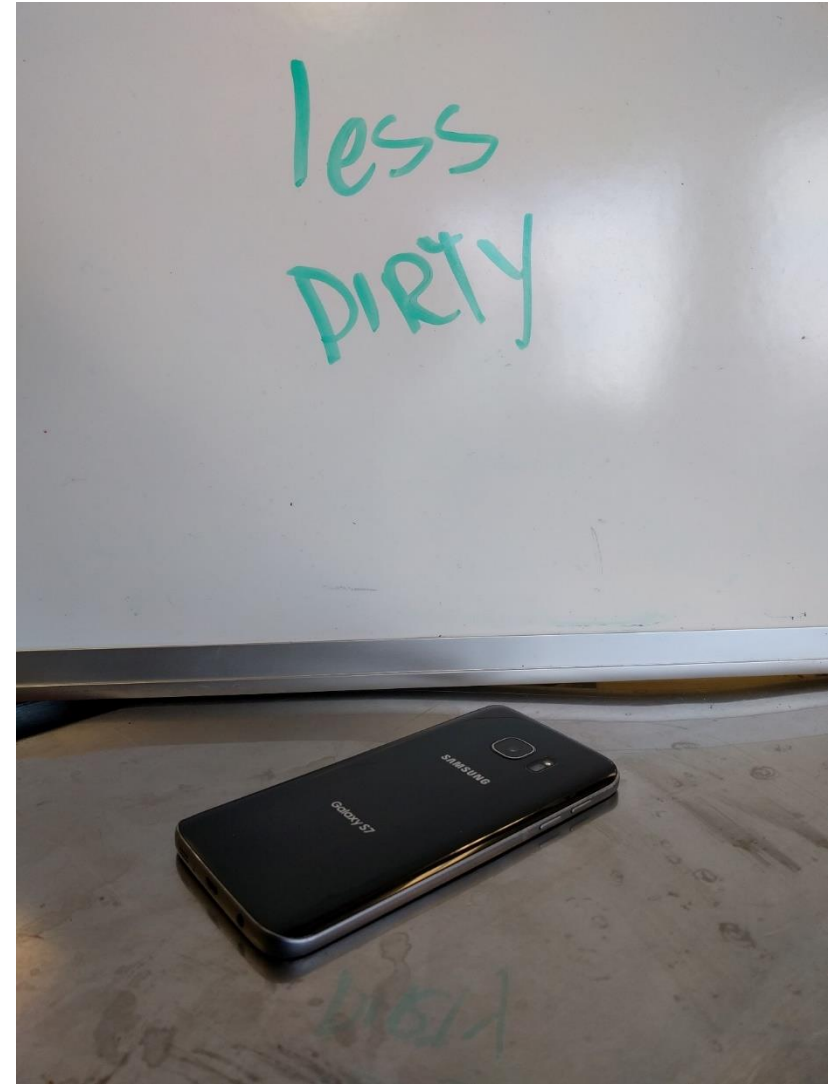
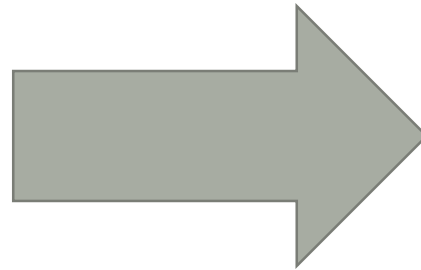
Optimizing people  
Machine interactions  
is challenging because  
there are lots of  
decisions to make all  
the time





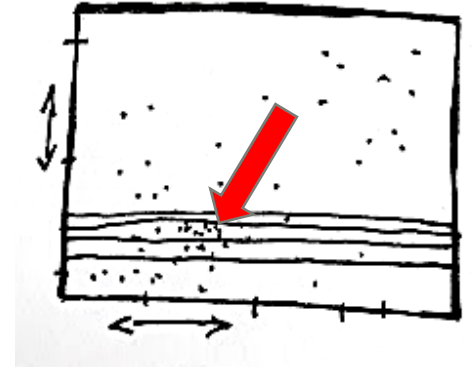
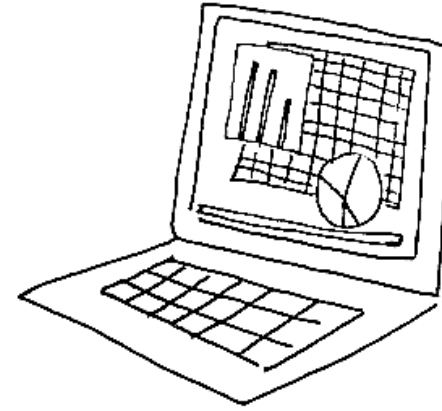
**Optimizing** continuous butter manufacturing  
**by reducing variability** within human machine  
interactions.

Better interactions come from better interfaces.



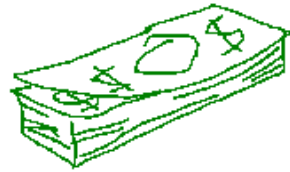
# How am I doing it?

1. Analyze existing data
2. Find optimum working parameters
3. Create a system that gives useable feedback to the operator





# Why I am doing it.



How can I Help?



# Tribal Knowledge

How does he not know how to help?



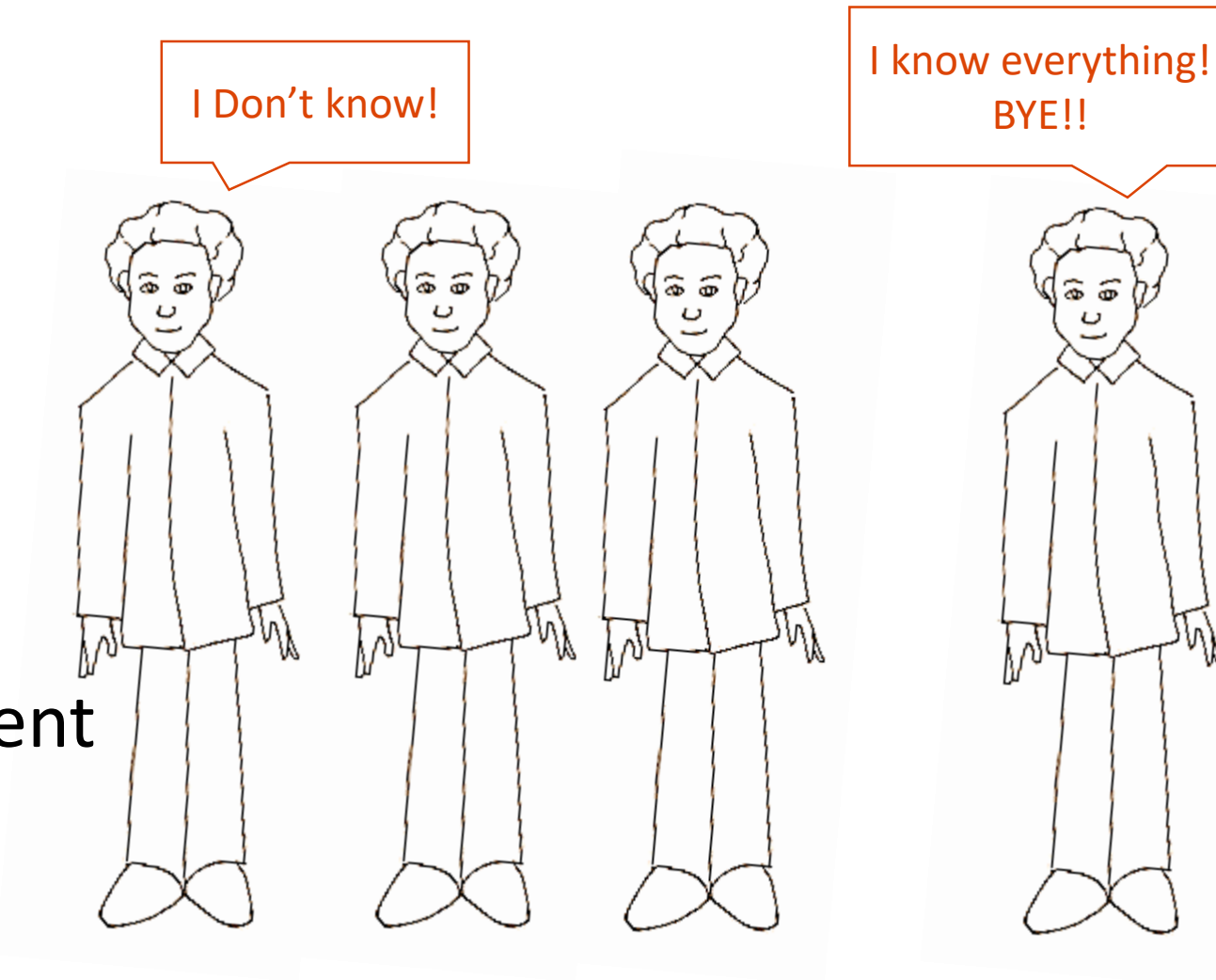
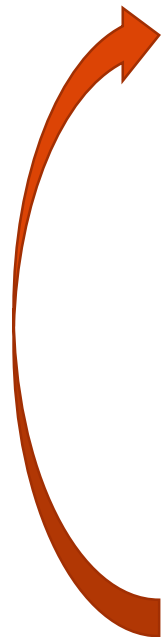
Newbieeee!!



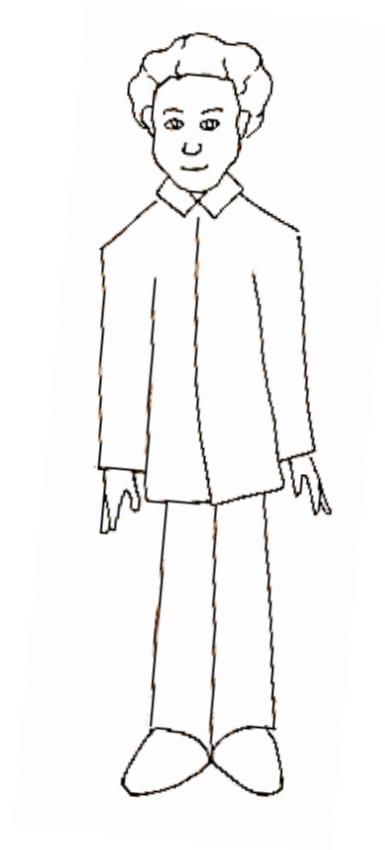
Hiring & Training costs money

Mistakes cost money

When someone leaves they take your investment with them.



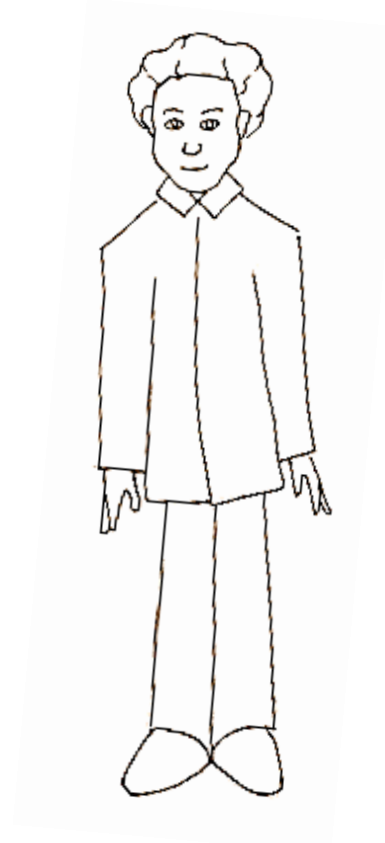
Using available data we can improve processes every day!



fixing a problem = Not losing money

continuous improvement = Making more money

When we improve  
processes we make  
better butter and  
more money!



# The End

