

# Analytics Innovation Club @ UW Tacoma



## Faculty Advisory Team



**Haluk Demirkan PhD**  
Milgard Professor & Director of The Center for Business Analytics and Master of Science in Business Analytics.



**Michael Helser PhD**  
Manager of the Center for Business Analytics



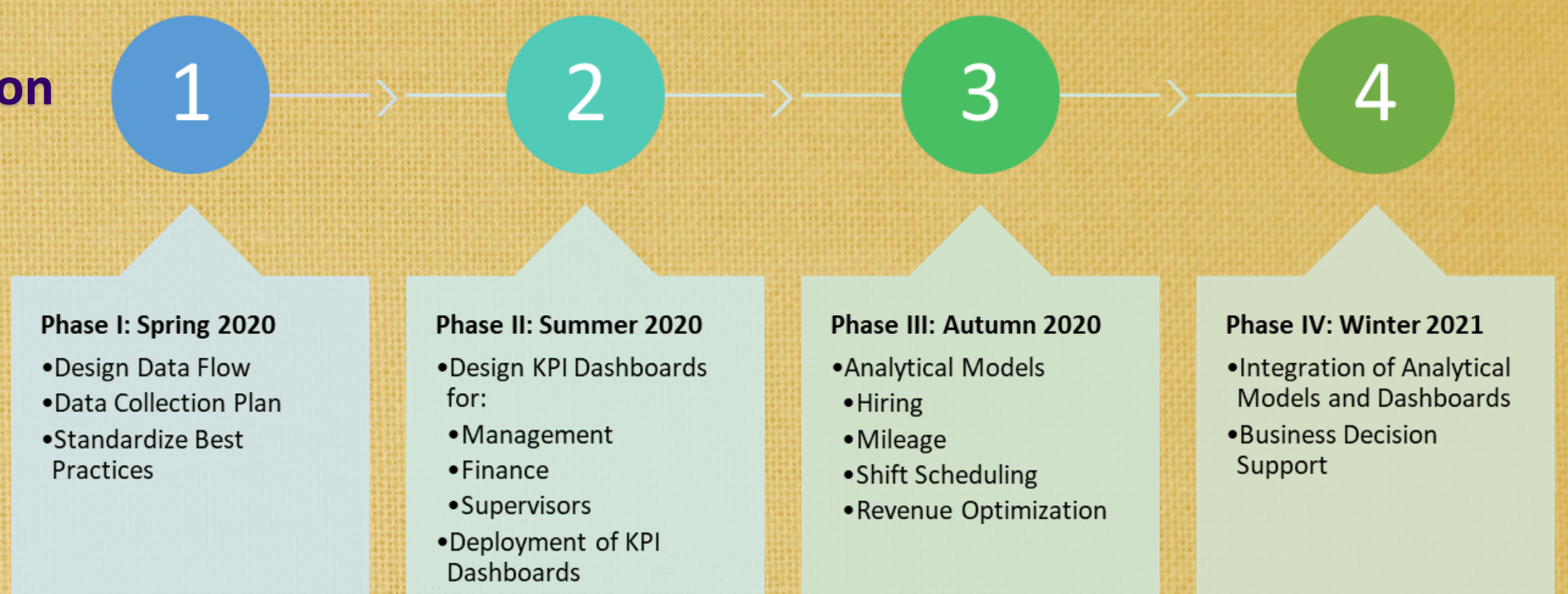
**Margo Bergman PhD**  
Senior Lecturer  
Milgard Fellow in the Center for Business Analytics



**Luna Zhang PhD**  
Assistant Professor of Business Analytics

## KWA PROJECT 1: Korean Women's Association

- Established early 1970's as a Korean Cultural advocate, the KWA is a Social Enterprise with 1,500 employees in Western Washington focusing on:
  - Cultural Programs, Housing, Legal/Immigration Services, Food Insecurity Services
- Primary Business:**
  - In-Home Care, Medicare Billing
- Business Problem:**
  - New Implementation of In-Home Care Enterprise System
  - Inaccurate/Out of Date Data
  - Current Data not useful for Business Intelligence



### Project Team Members:

**Dr. Luna Zhang**-Faculty Team Member, **John Cannon**-Project Manager, **Drew J. Gordon, Bo He, Chao Zhang, Paul Monhollen**, MSBAs Class of June 2020

## Project 2: Washington State Economist

The arrival and sporadic spread of COVID-19 has caused many local governing bodies to enact reactionary regional policies, thus breaking state and national level tools used for writing policy.

### Business Problem:

In the case of our project, the Washington's Advanced Planning Committee is seeking a replacement for the national Consumer Confidence Index to assist with the phased economic reopening plan.

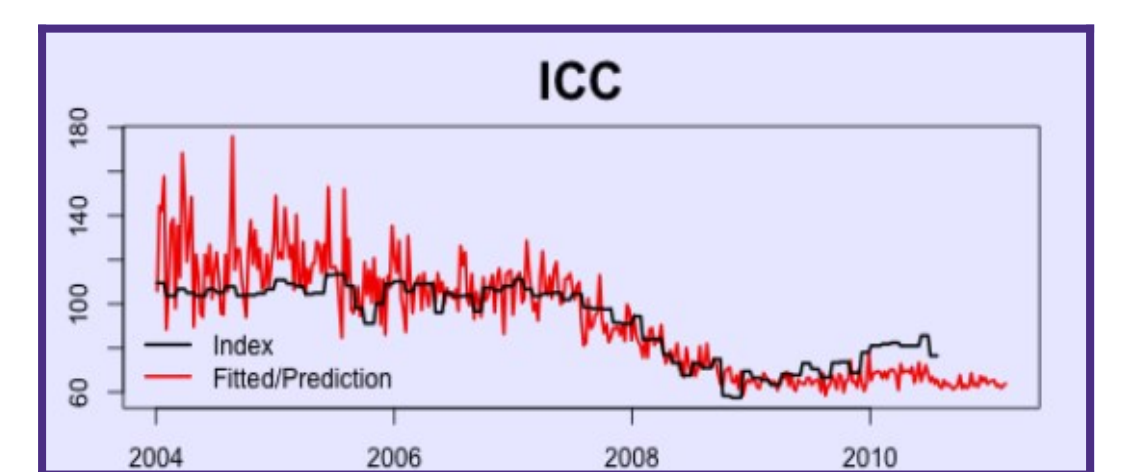
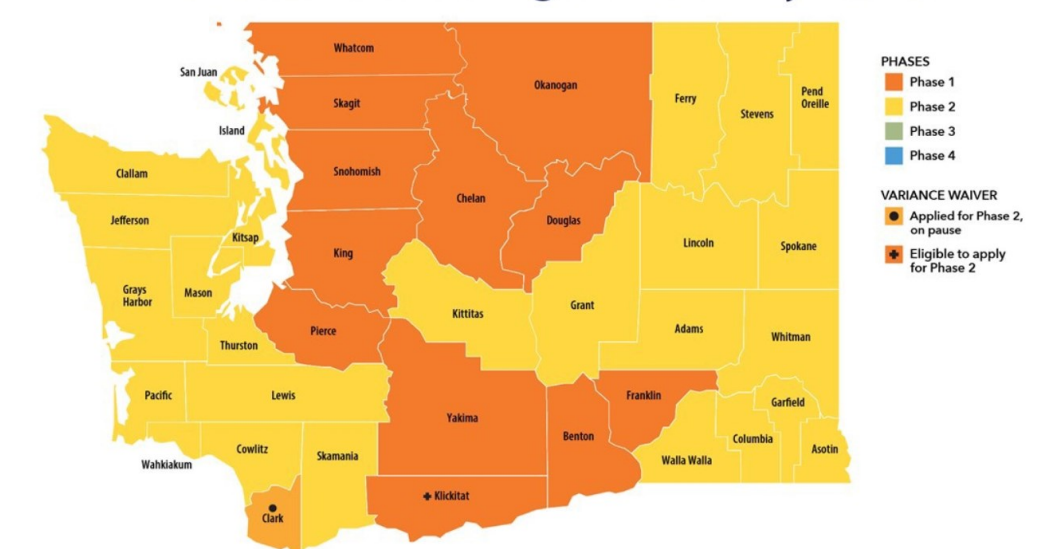
### Opportunity:

Our goal is to build a localized Index using. In our hunt for alternative data sources and methods we have turned to Twitter postings and Google Searches which have proved legitimate indicators in past economic crises.

### Project Team Members:

**Dr. Margo Bergman**-Faculty Team Member, **Drew J. Gordon**-Project Manager, **Megan Tan, Chris Dinsmore, Chao Zhang, Zhijun Ma**, MSBAs 2020  
**Avery Neims**-MSBA Candidate 2021

Safe Start Washington: County Status



## Project 3: Washington State Historical Society, Train Festival

WA State history museum holds an annual Train Festival around December 20th to January 1st which is its highest revenue generating exhibit, bringing in 500-1000 attendees per day. Attendance fluctuates widely year over year

### Problem Statement

- What are the primary drivers for attendance?
- What are possible causes for attendance fluctuation?

### The Data

- 100,000 rows of individual attendance transactions from 1/2012-3/2020
- Complete exhibit list from 2012-2019

### Analytical Approaches

- Data visualization
- Linear regression
- Permutation feature importance
- Forecasting through time series analysis

### Project Team Members:

**Dr. Luna Zhang**-Faculty Team Member, **Michael Turek**-Project Manager, **Jegan Selvaraj, Chao Zhang, Sugandha Gupta, Archana Guntala**, MSBAs Class of 2020

