



# Emerging Trends in Analytics

**Molly Engleking**

*Supervisor, Data Analytics*

# A Brief History...

DMNS Opened its doors to the public on July 1, 1908, named the **Colorado Museum of Natural History**

By 1958, our Museum had more than 1 million visitors... and a new name appeared: the **Denver Museum of Natural History**

In 2000, the Museum celebrated its centennial with a new name: the **Denver Museum of Nature & Science**

By 2014, the Museum debuted its most modern and technologically advanced wing to date- **The Morgridge Family Exploration Center**... and the need for more relevant information on our guests appeared.

# In 2015, we hit 66,230 Membership Households!

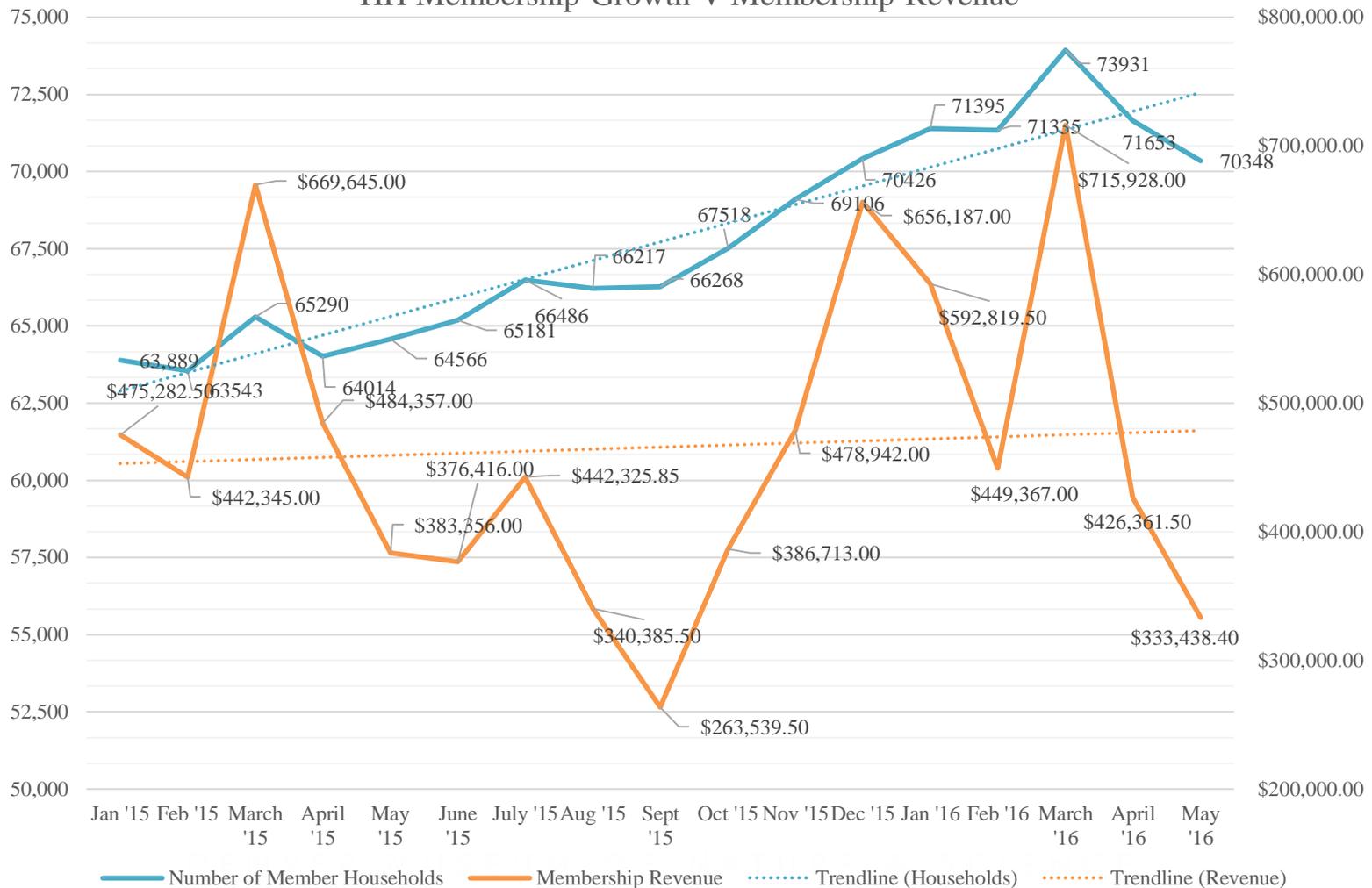
## What we were tracking about our members:

- Membership card scans (when someone came on site)
- Spend at the ticketing lanes and gift shop (didn't aggregate)

## Challenges we were experiencing:

- Data lives in disparate systems
  - POS System (Galaxy) housed:
    - Member spends, reservations, gift shop and online sales
  - Donor database (Raiser's Edge) housed:
    - Gift information
    - Prospect data
    - Actions on donors/members
    - Proposals
- Data Integrity Issues:
  - Response channel tracking
  - Solicitation channel tracking
  - duplicates

## HH Membership Growth V Membership Revenue



## January 1, 2017: New Membership Prices Emerge!

- Membership household average dropped from roughly 70,000 in 2016, to 64,000 households... a roughly 8% loss in households
- Revenue hit an all time high for membership!
  - Increased membership revenue by 6%, when typical revenue gains were 3-4% in years past
  - Response rate on our acquisitions exceeded 1%, something we haven't hit in years
- Membership Retention increased, we saw an increase in overall usage as well with our membership base
  - Renewal rates exceeded 50%



Dear Friend,

October 2017

Meet *T. rex*'s biggest, baddest, newest distant relatives in *Ultimate Dinosaurs*, coming to the Denver Museum of Nature & Science in October. This immersive experience goes beyond familiar dinosaurs to showcase the most terrifying families the dinosaurs had: the long-necked sauropods in Africa, South America, and Madagascar; the feathered theropods over the

You will (old) curiosity star.



# 2018– The Year of Data!

## We introduced a Pan-Institutional Data Team:

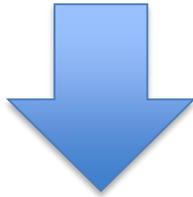
- Build the capacity of a cross-departmental Data Team
- Develop a data strategy
- Identify new digital technologies including business analytics and machine learning that enhance the quality, quantity, and types of data DMNS is able to capture about guest behavior; and
- Use data to make better informed business decisions and develop personalized approaches for engaging the community.

## We starting learning, too:

- R Programming Language
- Google Analytics
- UTM Tags
- Solicitation Source Reporting
- Dashboards!



We're priced right, now what?



## OUR OBJECTIVE

Increase the number and diversity of people who connect with the Museum around nature and science in ways that are meaningful to them.

### PROJECTS AND INITIATIVES





# Final Takeaways:

Data is only as good as it comes in... learn from your mistakes!

- Make sure you have a data integrity initiative – and that everyone is on board with how data flows in and out of systems

If someone has a hunch...

- Less than 50% of hunches actually are true, remember to ask questions when being asked to analyze data

Test EVERYTHING

Get Pan-institutional buy in for every intuitive

Don't Suffer from BTTWWADI!

# Lets Stay in Touch!



[Molly.Engleking@dmns.org](mailto:Molly.Engleking@dmns.org)

303.370.6381

[www.linkedin.com/mollylovesdata](http://www.linkedin.com/mollylovesdata)

