



GLG

[HOW WE HELP](#)

[CLIENTS](#)

[INSIGHTS](#)

[COUNCIL MEMBERS](#)

[CAREERS](#)

[SOCIAL IMPACT](#)

[ABOUT US](#)

[LOG IN](#)



# The World's Insight Network

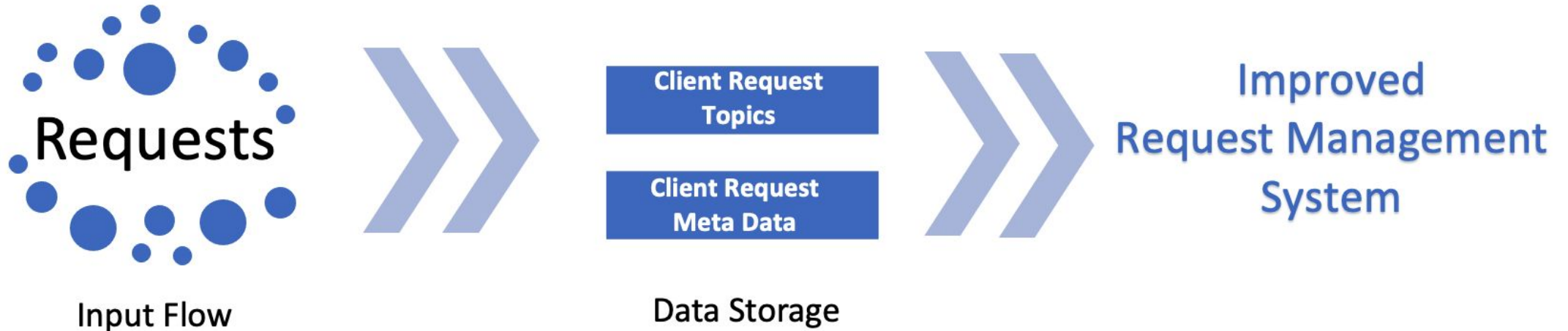
Get ahead with the expertise you need to make smarter decisions.

## GLG Generalists

Team members:

Tatiana Chebonenko, Milan McGraw, Divyanshu Murli

# Why, What and How about the project



## Industry Topic:

- From:** CPrudhomme@glgroup.com <CPrudhomme@glgroup.com> on behalf of Caitlin Prudhomme <CPrudhomme@glgroup.com>  
**Sent:** Tuesday, July 18, 2017 9:31 AM  
**To:** Milan McGraw <mccgraw@uchicago.edu>  
**Subject:** GLG Project Opportunity: Appliance Retail | Overview

I hope you're doing well. I'm writing to introduce the below opportunity on the appliance retail space. My client is hoping to discuss the challenges that online retail presents to the space. Given your background, I thought you might be able to add value here.

~~[https://services.glgresearch.com/crm\\_accept/accept?  
cpid=24649801&jwt=eysnbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJyb2xILWdsZyLlNCwiYWYiOiQsImlkcyLl6W3sicGVyc29uaWQiOiE0ODF0ODUsImNtaWQiOiEwMjEzMVY5XSwiY21pZC16MTAyMTMwNSwiY21pZC1wZXJzb25pZC16MTQ4MTQ4NS.wiamtjhovVzNzaWNHVnjlMjl1YvDraU9qRTBPReUwT0RVc0ltTnRhV1FpT2pFd01gRXpNRfY5WFE9PSlsmlhdC16MTUwMDM4ODI2OSwiZXhwIjojNTAwNTYxMDY5fQ.Eu09z\\_i7DdlHGEuJaY-WeTElf8hdaKeMpMRUQxH4C4](https://services.glgresearch.com/crm_accept/accept?cpid=24649801&jwt=eysnbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJyb2xILWdsZyLlNCwiYWYiOiQsImlkcyLl6W3sicGVyc29uaWQiOiE0ODF0ODUsImNtaWQiOiEwMjEzMVY5XSwiY21pZC16MTAyMTMwNSwiY21pZC1wZXJzb25pZC16MTQ4MTQ4NS.wiamtjhovVzNzaWNHVnjlMjl1YvDraU9qRTBPReUwT0RVc0ltTnRhV1FpT2pFd01gRXpNRfY5WFE9PSlsmlhdC16MTUwMDM4ODI2OSwiZXhwIjojNTAwNTYxMDY5fQ.Eu09z_i7DdlHGEuJaY-WeTElf8hdaKeMpMRUQxH4C4)~~

One of our clients, an analyst at an investment management firm, would like to speak with a Council Member who is familiar with the appliance retail space. More specifically, the analyst would like to discuss the challenges that online retail faces in the space.

Caitlin Prudhomme  
CPrudhomme@qlgroup.com | 737-208-2458

*Terms and Conditions: If you have not already done so, you will be required to complete an online tutorial about confidentiality and sign the current Terms and Conditions of Council Membership ("Terms and Conditions"), before you can accept this project. We may also ask you a few questions to help determine your suitability for this project. Acceptance is complete once you acknowledge that your GLG profile is current and that your participation in the project is bound by the Terms and Conditions, which provide, among other things if you are employed, you may not speak on behalf of or about your employer. To encourage you to err on the side of caution during your participation as a Council Member, you may submit a payment request for the full time you set aside for any project you discontinue in order to comply with your obligations and the Terms and Conditions.*



# How big?

Results	Filter
<div>MM</div> <div>Milan McGraw</div> <div>&gt; GLG Project Opportunit... (2) 4/9/2018</div> <div>Cecle, so sorry, I am out on vac... <span>Inbox</span></div>	
<div>MM</div> <div>Milan McGraw</div> <div>&gt; GLG Project Opportun... (2) 3/28/2018</div> <div>I can speak to this but out on va... <span>Inbox</span></div>	
<div>EI</div> <div>Emily Irwin</div> <div>Profile Questions -- E-Com... 3/13/2018</div> <div>Hi Milan, Please take a moment ... <span>Inbox</span></div>	
<div>JF</div> <div>Jacob Flax</div> <div>GLG Project Opportunity: Req... 3/6/2018</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>EI</div> <div>Emily Irwin</div> <div>GLG Project Opportunity: E-C... 3/6/2018</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>PP</div> <div>Prasad P</div> <div>Urgent GLG Call Request on ... 3/3/2018</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>PP</div> <div>Prasad P</div> <div>Urgent GLG Call Request on ... 3/2/2018</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>AP</div> <div>Aishvarya Pandit</div> <div>GLG Project Opportunity: BP... 2/26/2018</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>AS</div> <div>Angela Shang</div> <div>*Follow-up* GLG Project Op... 2/15/2018</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>MR</div> <div>Mary Winston Richardson</div> <div>&gt; GLG Project Opportun... (3) 2/14/2018</div> <div>No problem, I have removed yo... <span>Inbox</span></div>	
<div>BB</div> <div>Britney Billstein</div> <div>GLG Project Opportunity: Sup... 2/7/2018</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>MN</div> <div>Molly Novatt</div> <div>Houseware Products   Lifetim... 2/1/2018</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	

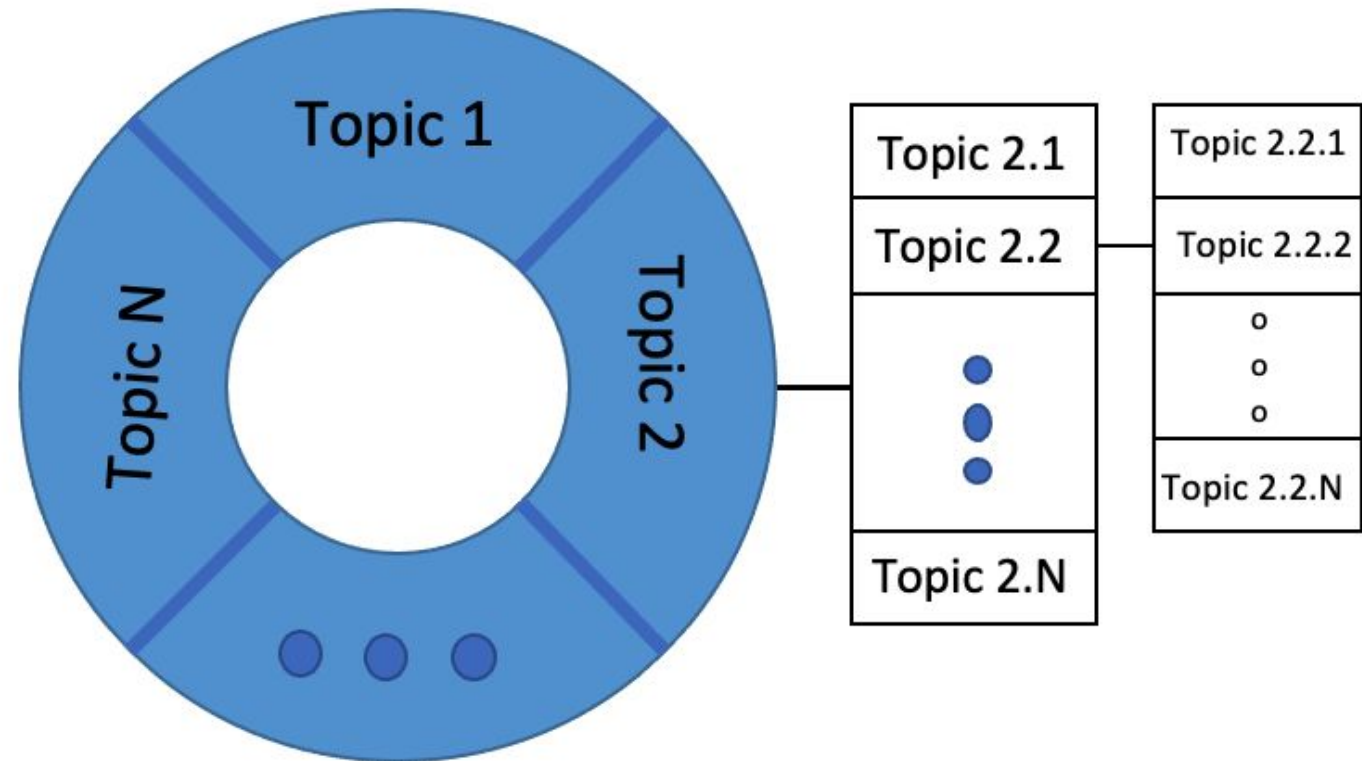
Results	Filter
<div>SR</div> <div>Shelly Reynolds</div> <div>GLG Project Opportunity: *F... 11/14/2016</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>MP</div> <div>Melissa Polinsky</div> <div>Follow up on GLG project o... 11/10/2016</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>MP</div> <div>Melissa Polinsky</div> <div>I have a GLG project opport... 11/9/2016</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>MP</div> <div>Melissa Polinsky</div> <div>*URGENT* GLG Project Opp... 11/9/2016</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>M</div> <div>mhart@glgroup.com</div> <div>Request for Referral -- Foam ... 11/4/2016</div> <div>Hi Milan, I hope this note finds ... <span>Inbox</span></div>	
<div>MR</div> <div>Morgan Romey</div> <div>GLG Project Closed: E-Com... 10/10/2016</div> <div>Milan, I wanted to let you know ... <span>Inbox</span></div>	
<div>JE</div> <div>Jonathan Ennis</div> <div>Follow up on GLG project op... 10/8/2016</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>JE</div> <div>Jonathan Ennis</div> <div>I have a GLG project opport... 10/6/2016</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>JE</div> <div>Jonathan Ennis</div> <div>GLG Project Opportunity: Kit... 10/6/2016</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>MR</div> <div>Morgan Romey</div> <div>Follow up on GLG project op... 9/27/2016</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>MR</div> <div>Morgan Romey</div> <div>I have a GLG project opportu... 9/26/2016</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>MR</div> <div>Morgan Romey</div> <div>GLG Project Opportunity: E-C... 9/26/2016</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	

Results	Filter
<div>JS</div> <div>Jacqueline Schindler</div> <div>GLG Project Closed: iRobot 1/26/2017</div> <div>Milan, I wanted to let you know ... <span>Inbox</span></div>	
<div>RW</div> <div>Robert Wijk</div> <div>GLG Project Closed: Electric ... 1/17/2017</div> <div>Milan, I wanted to let you know ... <span>Inbox</span></div>	
<div>LB</div> <div>Lauren Bledsoe</div> <div>&gt; I have a GLG project oppo... 1/12/2017</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>LB</div> <div>Lauren Bledsoe</div> <div>GLG Project Opportunity: S... 1/12/2017</div> <div>Dear Milan, I hope you're doing... <span>Inbox</span></div>	
<div>RW</div> <div>Robert Wijk</div> <div>Follow up on GLG project op... 1/10/2017</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>RW</div> <div>Robert Wijk</div> <div>GLG Project Opportunity: Ele... 1/9/2017</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>GT</div> <div>Gretchen Tietge</div> <div>GLG Project Opportunity: Auto... 1/5/2017</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>MS</div> <div>Michaela Stuessi</div> <div>GLG Project Opportunity: Ty... 12/30/2016</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>JS</div> <div>Jacqueline Schindler</div> <div>GLG Project Opportunity: iRo... 12/7/2016</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>LB</div> <div>Lauren Bledsoe</div> <div>GLG Project Opportunity: H... 11/25/2016</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>SR</div> <div>Shelly Reynolds</div> <div>GLG Project Opportunity: *F... 11/14/2016</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>MP</div> <div>Melissa Polinsky</div> <div>Follow up on GLG project o... 11/10/2016</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	

Results	Filter
<div>TK</div> <div>Terrance Kennedy</div> <div>I have a GLG project opportu... 11/8/2017</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>TK</div> <div>Terrance Kennedy</div> <div>GLG Project Opportunity: A... 11/8/2017</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>MM</div> <div>Mitchell Morton</div> <div>&gt; GLG Project Opportunity: ... 10/10/2017</div> <div>Thanks Milan, Would you be in ... <span>Inbox</span></div>	
<div>MM</div> <div>Milan McGraw</div> <div>&gt; GLG Project Opportunity: ... 10/10/2017</div> <div>Mitchell, I answer the same ... <span>Sent Items</span></div>	
<div>LC</div> <div>Lauren Cameron</div> <div>Follow up on GLG project op... 10/5/2017</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>LC</div> <div>Lauren Cameron</div> <div>I have a GLG project opportu... 10/3/2017</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	
<div>LC</div> <div>Lauren Cameron</div> <div>GLG Project Opportunity: Am... 10/3/2017</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>SH</div> <div>Sydney Hood</div> <div>GLG Project Opportunity: Elec... 9/27/2017</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>MF</div> <div>Morgan Franklin</div> <div>GLG Project Opportunity: Ov... 9/26/2017</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>ZI</div> <div>Zubin Iyer</div> <div>GLG Project Opportunity: Cat... 9/20/2017</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>EJ</div> <div>Erica Jackey</div> <div>GLG Project Opportunity: Rob... 9/6/2017</div> <div>Hi Milan, I hope you're doing w... <span>Inbox</span></div>	
<div>JD</div> <div>Justin Duck</div> <div>Follow up on GLG project op... 9/1/2017</div> <div>Hi Milan, I wanted to follow up ... <span>Inbox</span></div>	

# System Design-Topic hierarchical clustering

- Client requests sent through pretrained LDA model
- Leading topics with probability  $\geq 20\%$  after first level LDA defines TOP hierarchical cluster the Client Request falls in
- The 2nd level has separate LDA model for each cluster in the TOP level
- The 3rd level has a separate LDA model for each cluster in the 2nd level
- Requests that have leading Topic probability  $< 20\%$  form Miscellaneous cluster on any level



# System Design-MetaData

- Named Entity Recognition is used to extract Request's metadata
- Meta Data: Request key elements for further data analysis
- Primarily, target in this version is health care



Source: <https://monkeylearn.com/blog/named-entity-recognition/x>

# Ethical considerations

None to consider:

- Given we are using public news and healthcare data sources, the intended outcome is a summary or LDA modeling of the proposed text. Future use case, could potentially involve use of more PII or Medical data use cases.
- Need to be aware of cultural biases that arise by country.
- We did not modify our strategy based on these assumptions.
- Currently we do not anticipate any issues that can potentially arise.

# Timeline

