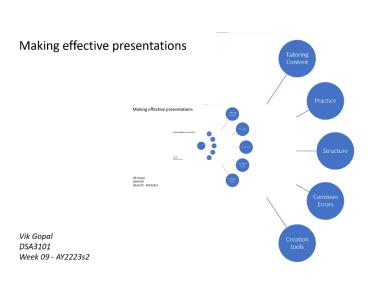
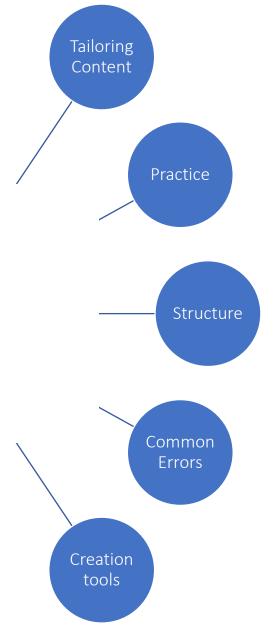
Making effective presentations





Vik Gopal DSA3101 Week 09 - AY2223s2

The main players in a data science project

Project sponsor

- Represents the business interest
- Champions the project

Client

- Represents the end-user
- Domain expert

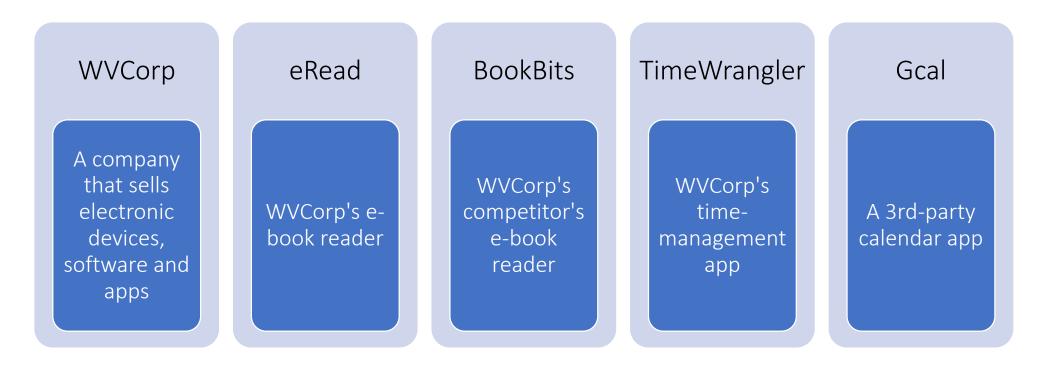
Data scientist

- Carries out analytics
- Communicates with sponsor and client

A fictitious scenario for demonstrating targeting presentations

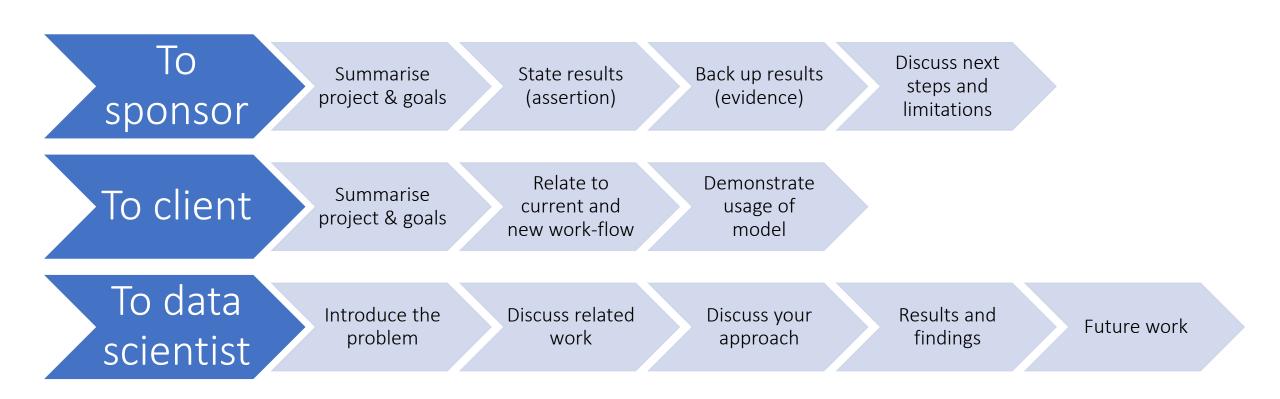
WVCorp eRead BookBits TimeWrangler Gcal A company WVCorp's WVCorp's that sells competitor's electronic WVCorp's e-A 3rd-party timecalendar app book reader e-book devices, management software and reader app apps

A fictitious scenario for demonstrating targeting presentations



WVCorp would like to monitor forum pages to pick up "buzz", to identify new features and issues.

Suggested presentation structures for the different players



Scenario Description

- WilCorp has over former and discouries bounds for each of that produces, what continues on discouries on the states.
 Wash's about a region of the state has a way high activity load. I consider all notification for some former has a way to discouries.
- * Aud W/Corp. door water protect
- * Timeliferagion WWCoop's sina, managamant ago. Boolifies of managation's about resolar product

Predicting Buzz

WVCarp Data Science Tears National Project Science Presentation

A Lost Opportunity



Could we Have Caught This?

- Starting a basis with a group of triands (first-come first-serve).

- There was Born second this local flor we ignored in Dr.

Goal: Catch it Early

Predict which topics on our product forums will have persistent buzz

- Features pustomers want
- · Existing features users have trouble with
- Persistent bust: real, angoing customer
- · not epherneral or trendy issues

Pilot Study

- Colleged from made of data from bruse.
- Trained model on Winds I so identify which supin will have in Winds 202

Pilot results promising



How it Works



Buzz Model

- · Randore Forest Model
- Many "experts" voting
- · Runs efficiently on large data
- Handles a large number of input variables
- Few prior assumptions about how variables interact, or which are reast relevant
- Very accurate.

Example: Catching An Issue Early

- Topic TimeWrangler +GCal Integration
 if discounters up since GCal s.7 release
- · DEsignate net consistents standard as middelets
- TimeWhatgler take going to energy Claimster
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 support logs

- Tenen univity reggered the model new days after ECologolese
- + Catamor support didth nation for a week

Next Steps

- Named if the union activity is granting thrinking, and hour less. Why do now force users join! What question did thay some no old!"
- Cond First WK of impossing base, 125-bits positive rate
- Bifolomly reacts base inform relieune Product Managers, Plantening and Customer Support groups

Thank You

Scenario Description

Client

- WVC-up has one forces and discussive boards for each of their produces, where necessary on discuss income and features
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- a sharifWCorpl about water protein
- * Time/Hougher WWCoph sine-management age Busilities of compatitor's about reader product DCal's driet purey circuit insuch colorider inframeror Time/Hougher and imagenes sold.

Using The Buzz Prediction Model

Our Goal: Catch User Needs Early

Predict which topics on our product forums will have persistent butz

- Features puscomers want
- · Existing features users have trouble with
- Persistent bucz: real, angoing customer
- · not opherneral or trendy issues



With The Buzz Prediction Model



Find Information Faster # Plan Souly Submar effort on monitors from the part by a Summer of 6 Summer o Principle St. of shown on. International Conference on the Conference on th

Example: Catching an Issue Early

- Topic Time/Wrangler +GCal Integration
- + EEst events not constraintly sharing up middels TimeWhatgler tasks going to among S.Calismian
- Het an farure liefere het in sustamer support legs
- . Consent support 6000 ratios for a week
- Forum univity reggered the model new days after ECul-system

Metrics we Look At

- (Consumerbook
- . #Displays of topic to force users
- . Average Characteristics to a discussion in the tapts
- How other a discovation in a topic is forwarded to social media.

Using the Buzz Model

- Salacrito scrito produce snagery or sanger in this you were so manker.
- The links will lead practic the relaxative polyies are the larger to place on the larger.
 Replaced.
- 6. Add epiroldicumions of interest, to poor marries, or seed We will movine which region you muck to assum how affection our predictions are (from such integrate to you).

Step 3: Email Notifications STATE OF THE PERSON NAMED IN COLUMN NAMED IN C EVEL BOXES

Your Feedback Will Help

- . Better ways to get the information to you
- . Dashbaard! Browser statist is email fine? . Additional metrics we might add to the model
- Advice on what is sed len't valuable. How can we become distinguish?
- Any other insight that coress from using the model

Thank You

Scenario Description

- WC-up has used forward and discussion bounds for each of their products, where constrains our discuss insues and features their producting which incomment can them is soon and fundament.

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Predicting Buzz on User Forums

WVCarp Data Science Team National Part Presentation

Buzz is Information

- Frotures outcomers want.
- Pershamit lease med, angoing container need.
- · not spheneral or trendy bases

Related Work

- · IMDB forums, Bux Office Mojo website
- Fredicting saset value (stock prices, esc) through Teitzer

· Time series analysis on pre-chasen hapwords

Model Variables

- Pilot Study
- TRO copies, No cariables
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 TRI capies in What I of the sizes and ausomine What is 2/2.
- Trained Sendom Force on Wasts I on identify which region will four in Photo 20 Base + Surgicul Incress of 1999 series discussions in replicing relation to Winds 1, Day 1
- Vite spread with more to closely
 more designed by press.
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Random Forest Model

- Few prior assumptions on variable distribution/ interestions
- 100 nativalnes maximum
- Material park size 20

- + 84% result, 82% presistant
 + Reduced manual sace of finances by over a house of 4

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Results

Variable Importance

Example Discovery

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- TondWhargler take going to arrang S.Extendor
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 support logs
- Some satisfy riggered the model time days after ECol update · Customer support district nation for a week

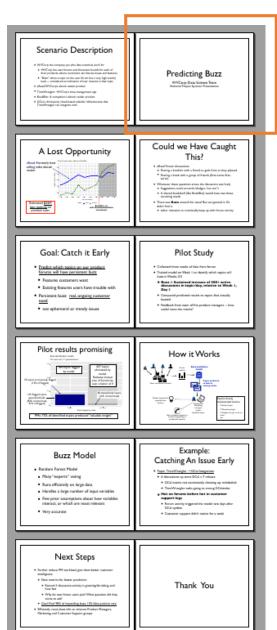
Future Work

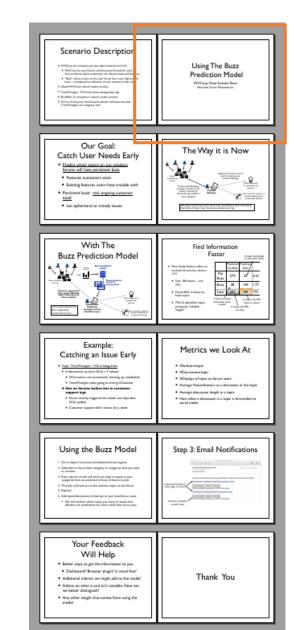
- · Shape and velocity nursibles How quickly Sauthors growshirteles · Haw much Tissais simpleys in creases identerance.
- · Information about new forum statues What questions do first time visitors come to wid?
- · Research optimal model retraining schedule

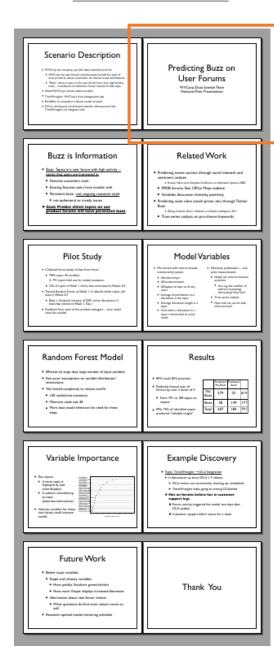
Thank You

Sponsor Client

Data Scientist

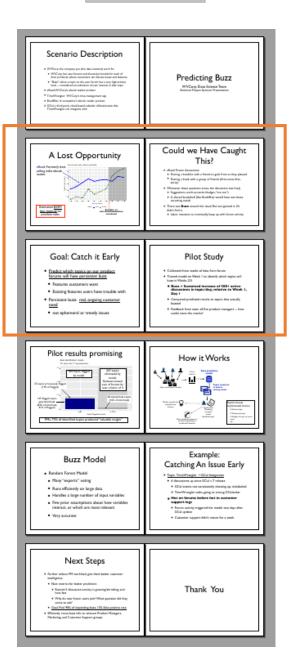


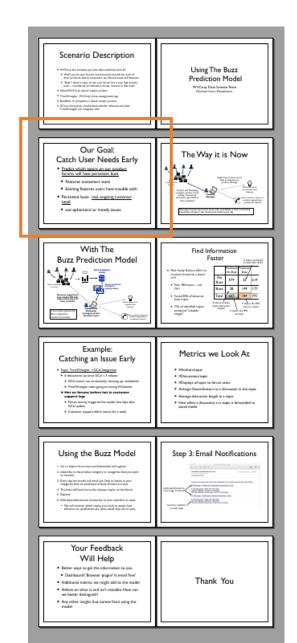


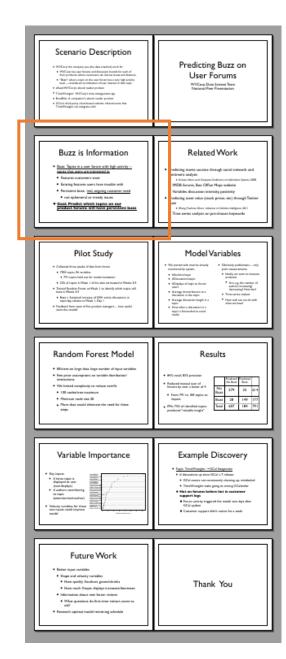


Customised titles

Sponsor Client Data Scientist



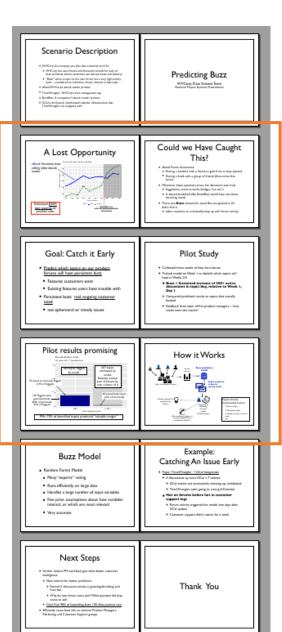


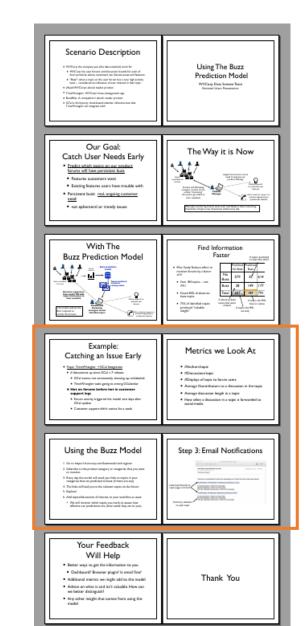


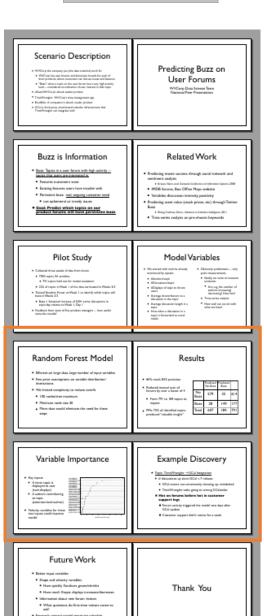
- Customised titles
- Summarising the problem

Sponsor Client

Data Scientist



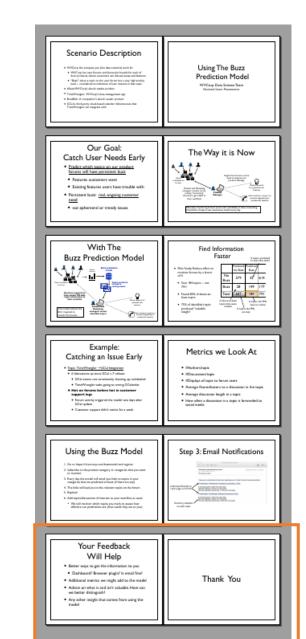




- Customised titles
- Summarising the problem
- Slides unique to each group

Sponsor Client Data Scientist

Scenario Description WilCorp has one forum and discussion insuch for such of that produce, whose natures on discussions on baseins Man of the produce of the nature of the series, but a complete of anticone day of the or to be produced in the controller of anticipation of their insuch in the copie. Predicting Buzz WVCarp Data Science Team National Prince Spanner Programming Audi W.Corji simir nate proter Traditingler W.Corji sina mengenan nga Emilificação W.Corji sina mengenan nga Emilifica di compatenti sinais rander proter Could we Have Caught A Lost Opportunity This? Bayestian, end-anach, bidge, 'na un's Bahard leabhal jilo Bedilles) und ben me tone transing made There was Burns sensed this issued that we ignored in Dr Goal: Catch it Early Pilot Study forums will have persistent butz Trained resolution Winek I so identify which replies will have in Windo. 202 . Features purpopers was: Buss it Suntained increase of 180+ active discussions in topic/day, relative to Week I. · Existing features users have trouble with Persistent butz: real, angoing customer · not ephaneral or trendy issues. Pilot results promising How it Works `**A** Example: Buzz Model Catching An Issue Early Randore Forest Model Many "exports" voting · Runs efficiently on large data + TimeWhangler trades going to armong S.Calinellar · Handles a large number of input variables Met an farures liefere het in sustamer support legs . Few prior assumptions about how variables interact, or which are reget relevan Forum seriety triggered the model new days after DEathgrown Next Steps Thank You A Good Pool MK of Impossing boxs, I McGala position rate Missionly recent boxs into on relievest Product Managers, Plankering and Commer Support groups



Scenario Description Predicting Buzz on Which you can be seen as the case of the seen and of their posts on the case of their posts of the User Forums * Tinythrogie: WVCop) sins mespenenup Buzz is Information Related Work • Steam Topics in a new forum with high activity— Frotures customers want. · Excepting features, some have trouble with . IMDB forums, Bas Office Mojo website Personne busic real anguing customer need. · Variables: discussion intensity positivity Producing seast value (stock prices, esc) shrough Teitze · Time series asolysis on pre-shapen keywords Pilot Study Model Variables 1900-mpin, Miracialia. 271 sapin hald our for model evolution. 205 of region in Week 1 of the sizes serious after Weeks 23. Airsung du santar al sation including demaning Hamilani Time arise analysis Trained Sendon Force on West: I so like ity which copins will have in West: 23 Bourge discussion largels in a taple Flournitum of decusion in a supicire formacidad or acticil madia * Hear wall our are through rather was bound Random Forest Model Results Fee prior unumptions on variable distribution/ interestions . We limited complexity to reduce over? Montage made size 20 . More than would eliminate the need for these Variable Importance Example Discovery + DEal resets not consistently sharing up mislabeled Het an fanans liefere het in sustamer support legs · Cutumer square (60%) nation for a week Future Work · Share and velocity notables Thank You · Harry result. Thereis obsolers to a reasonables · Information about new forum statues What questions do first time values come.

- Customised titles
- Summarising the problem
- Slides unique to each group
- Tailored conclusions

Relation to our class project personas

Project	Persona	Video presentation target		
Airplane delay	Terry	End-user		
S16	Science Dean's Office	Potential Project Sponsor		
Course deadlines	Doug	Project sponsor		
Rain modeling	Amy	End-user		
	Other data scientists	Data scientists		

Consider the purpose and duration of your presentation as well.

- Is the purpose of the presentation to get stakeholder buy-in?
- Is the purpose of get comments/ideas/feedback from the sponsor/client/fellow data scientist?
- Is it a weekly update meeting?

- Whatever the purpose, don't plan to fill up all the time in the meeting. Leave ample time for discussion and feedback.
- You can always circulate the slides before/after the meeting, or provide handouts with more details?

Summary

For project sponsor

- 1. Keep it short.
- 2. Focus on business issues, not technical ones.
- 3. Your presentation might be re-used.
- 4. Introduce results early in the presentation; no need to build up to it.

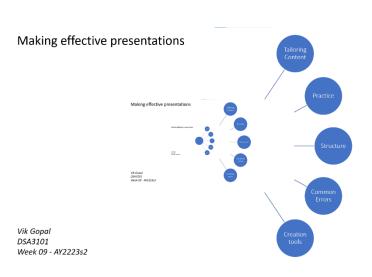
For end-user

- 1. Purpose is to get users' buy-in.
- 2. Focus on how model affects their day-to-day work.
- 3. Describe how to use the model and how to interpret the output.

For fellow data scientists

- 1. Motivate through the modeling task.
- 2. Focus on the technical details.
- 3. Be frank and honest about the shortcomings of the model, and the assumptions made in the analysis.

Making effective presentations



Tailoring Content Practice Structure Common Errors Creation tools

Online news popularity

E-commerce

Vik Gopal DSA3101 Week 09 - AY2223s2

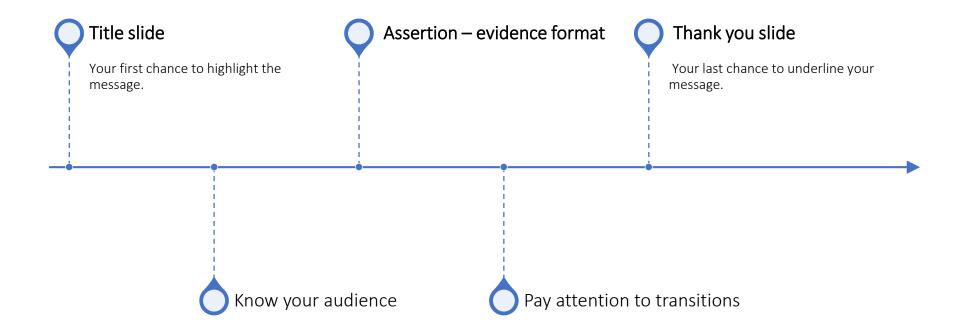
What makes a good presentation?



Hans Rosling's 200 Countries, 200 Years, 4 Minutes

Respond at http://pollev.com/vikgopal

Structuring your presentation well ensures that your audience understands your message



Pay attention to the opening of your talk

A good title slide

Discovering Where Mercury Goes After It Depletes from the Atmosphere

Katrine Aspmo Torunn Berg

Norwegian Institute for Air Research

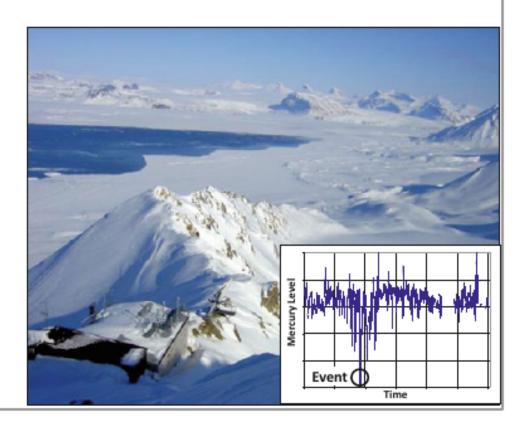
Grethe Wibetoe

University of Oslo, Dept. of Chemistry

June 16, 2004







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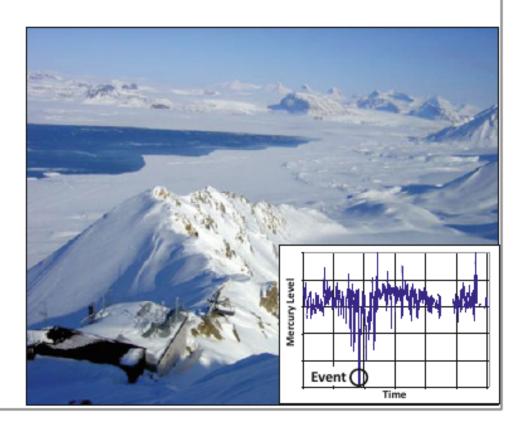
Grethe Wibetoe

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June 16, 2004



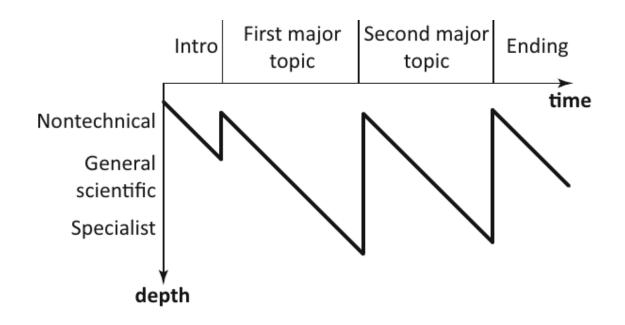




Common errors at this stage

- 1. Giving the wrong speech.
- 2. Losing your audience from the start.
- 3. Boring your audience.
- 4. Not anticipating the audience's bias.

Earlier, we discussed how we can tailor content; sometimes, we just can't do that.

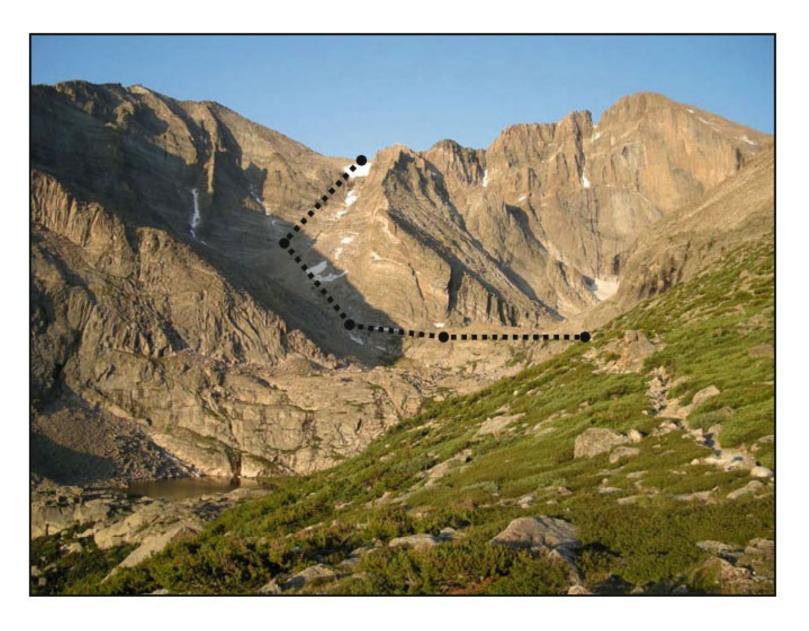


It may be impossible to satisfy the entire audience throughout the presentation.

But it may be possible to satisfy the entire audience by the end of the presentation.

At transitions, re-emphasize the main points.

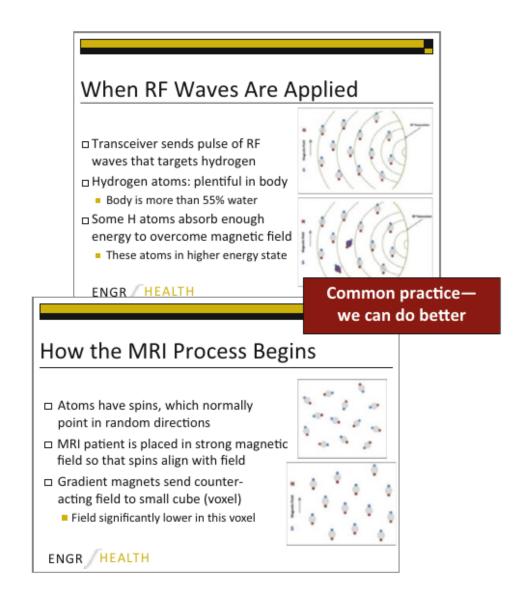
The purpose of a presentation is to inform, persuade, and/or inspire.

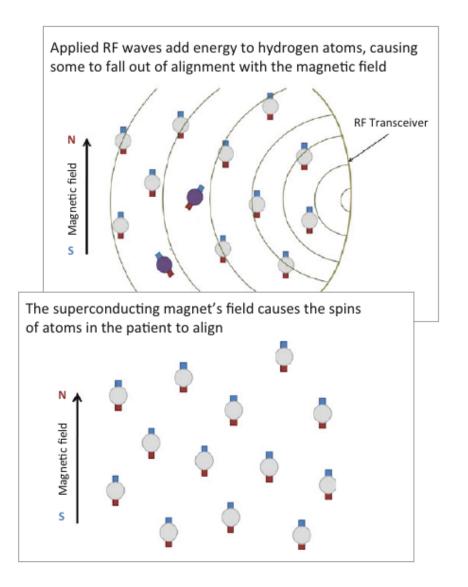


Common errors at this stage

- 1. Trying to cover too much.
- 2. Losing your audience on the trail.

The assertion-evidence slide structure is more powerful than bullet points.





The assertion-evidence slide structure is more powerful than bullet points.

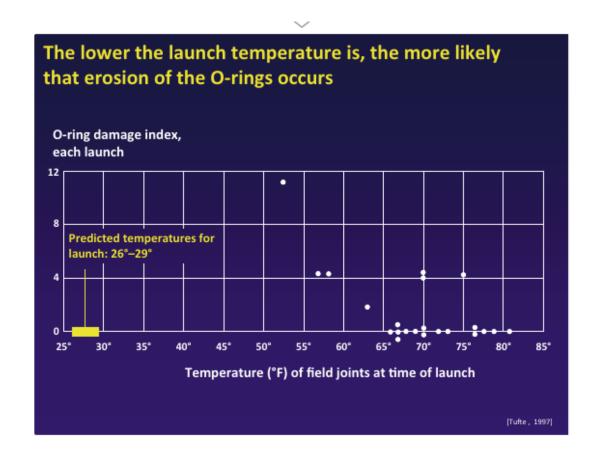
HISTORY OF O-RING DAMAGE ON SRM FIELD JOINTS									
		Cross Sectional View			Top View				
	SRM No.	Erosion Depth (in.)	Perimeter Affected (deg)	Nominal Dia (in.)		Total Heat Affected Length (in.)	Clocking Location (deg)		
61A LH Center Field** 61A LH CENTER FIELD**	22A 22A	None NONE	None NONE	0.280 0.280	None NONE	None NONE	36° - 66° 338° - 18°		
51C LH Forward Field** 51C RH Center Field (prim)***	15A 15B	0.010	154.0 130.0	0.280 0.280	4.25 12.50	5.25 58.75	163 354		
51C RH Center Field (sec)*** 410 RH Forward Field	15B	None	45.0	0.280	None	29.50	354		
410 KH Forward Field 410 LH Aft Field* 410 LH Forward Field	13B 11A 10A	0.028 None 0.040	110.0 None 217.0	0.280 0.280 0.280	3.00 None 3.00	None None 14.50	275 351		
STS-2 RH Aft Field	28	0.053	116.0	0.280			50		

^{*}Hot gas path detected in putty. Indication of heat on O-ring, but no damage.

Clocking rotation of leak check port - O deg.

OTHER SRM-15 FIELD JOINTS HAD NO BLOWHOLES IN PUTTY AND NO SOOT HEAR OR BEYOND THE PRIMARY O-RING

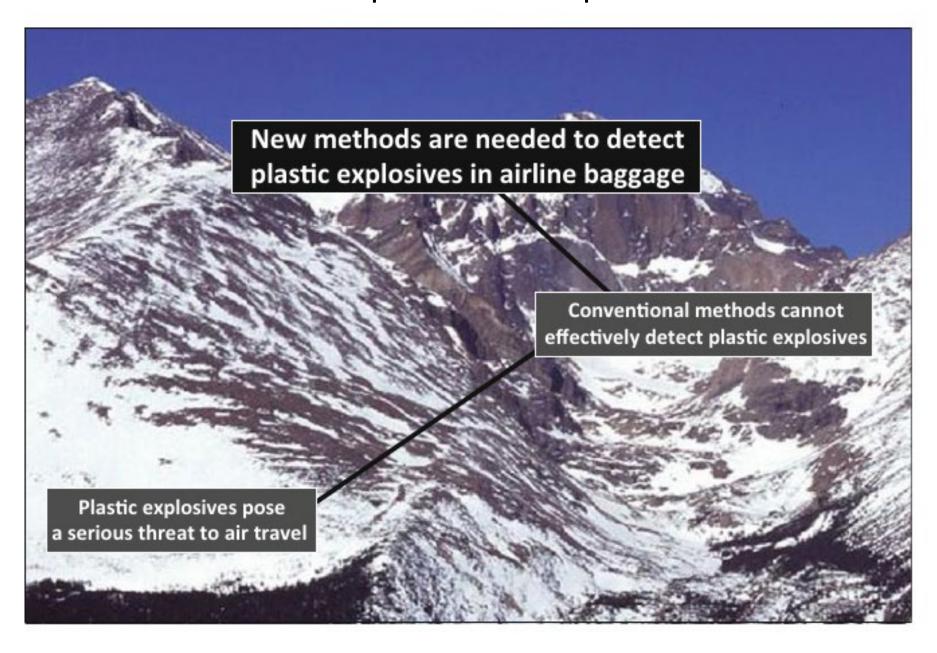
SRM-22 FORWARD FIELD JOINT HAD PUTTY PATH TO PRIMARY O-RING, BUT NO O-RING EROSION AND NO SOOT BLOWBY. OTHER SRM-22 FIELD JOINTS HAD NO BLOWHOLES IN PUTTY.



^{**}Soot behind primary O-ring.

^{***}Soot behind primary O-ring, heat affected secondary O-ring.

Create sub-assertions to build up to the main point.



Somehow PowerPoint became the de facto method of creating slides

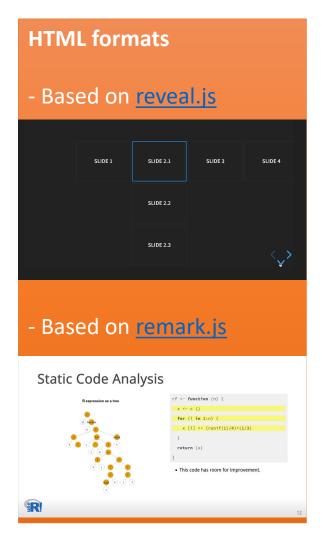
PowerPoint is evil: https://www.dmu.edu/wp-content/uploads/PowerPoint-Is-Evil.pdf

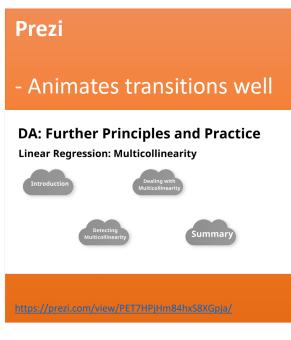
Absolute PowerPoint: https://www.newyorker.com/magazine/2001/05/28/absolute-powerpoint

Research points the finger at PowerPoint:

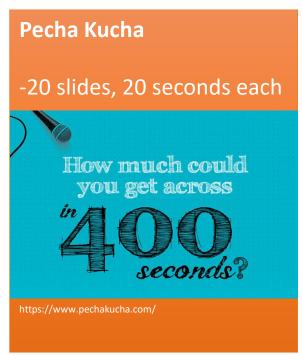
https://www.smh.com.au/technology/research-points-the-finger-at-powerpoint-20070404-gdpu3u.html

Alternatives to PowerPoint Style









Take advantage of the medium you have.

In-person presentation

- Hear audience views and learn new things
- Can react to audience expressions and feedback
- Ability to use/bring physical props

Video presentation

- Ability to rehearse and perfect the talk
- Ability to reach a wider audience
 - captioning
- Ability to include several delivery modes.
 - Khan-style, focus on video areas.

Delivery



Keep your composure.

Before

- Prepare your material
- Rehearse
- Know yourself

During

- Clarify and answer honestly
- Remember the goal of the presentation

After

- Reflect on how things went
- Improve

What's the best way to improve our presentation skills?

Study others':

- Speech
- Structure
- Visual aids
- Delivery

Practice!

 Develop your own style.

Maintain a keen awareness of:

- Your audience (bias)
- Your physical surroundings
- Your composure, timing

Capitalise on your presentation format.

Focus on the advantages

References

- Practical Data Science with R, Nina Zumel and John Mount
- The Craft of Scientific Presentations, Michael Alley