How to Make a Good Scientific Presentation

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Outline

- What the presentation is
- Your presentation
- **Oral presentation and the powerpoint**
- Tips for other program used in presentation
  - Excel
  - PDF
  - …
- Tips for poster presentation

What the "Presentation" Is

- A kind of communication
- With / without visual aid
- Explaining, or demonstrating topics , $\pm$answering the questions
- Various objectives: scientific, marketing, daily living, etc.
- Presentation ≠ Powerpoint
- Powerpoint is a popular presentation software

Making PowerPoint Slides

Avoiding the Pitfalls of Bad Slides

Slide courtesy of Dr. Achara Teeraratkul

And Dr Ram Rangsin

Tips to be Covered

- Outlines
- Slide Structure
- Fonts
- Colour
- Background
- Graphs
- Spelling and Grammar
- Conclusions
- Questions

Outline Slide

- Make your 1st or 2nd slide an outline of your presentation
  - Ex: previous slide
- Follow the order of your outline for the rest of the presentation
- Only place main points on the outline slide
  - Ex: Use the titles of each slide as main points

Slide Structure – Good

- Use 1-2 slides per minute of your presentation
- Write in point form, not complete sentences
- Include 4-5 points per slide
- Avoid wordiness: use key words and phrases only

Slide Structure - Bad

- This page contains too many words for a presentation slide. It is not written in point form, making it difficult both for your audience to read and for you to present each point. Although there are exactly the same number of points on this slide as the previous slide, it looks much more complicated. In short, your audience will spend too much time trying to read this paragraph instead of listening to you.

Slide Structure – Good

- Show one point at a time:
  - Will help audience concentrate on what you are saying
  - Will prevent audience from reading ahead
  - Will help you keep your presentation focused

Slide Structure - Bad

- Do not use distracting animation

- Do not go overboard with the animation

- Be consistent with the animation that you use

Fonts - Good

- Use at least an 18-point font
- Use different size fonts for main points and secondary points
    - this font is 24-point, the main point font is 28-point, and the title font is 36-point
- Use a standard font like Times New Roman or Arial

Fonts - Bad

- If you use a small font, your audience won't be able to read what you have written

- CAPITALIZE ONLY WHEN NECESSARY. IT IS DIFFICULT TO READ

- **Don't use a complicated font**

ชนิดตัวอักษรไทย

- ✓ FreesiaUPC   **กขคง การทำงาน 24 ชั่วโมง**
- ✓ Cordia New   **กขคง การทำงาน 24 ชั่วโมง**
- ✓ Cordia UPC   **กขคง การทำงาน 24 ชั่วโมง**
- ✓ Dillenia UPC   **กขคง การทำงาน 24 ชั่วโมง**
- ✓ Tahoma   **กขคง การทำงาน 24 ชั่วโมง**
- ● Angsana New   **กขคง การทำงาน 24 ชั่วโมง**

Size 28 ตัวหนา

ชนิดตัวอักษรไทย

- ✓ FreesiaUPC   **กขคง การทำงาน 24 ชั่วโมง**
- ✓ Cordia New   กขคง การทำงาน 24 ชั่วโมง
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Size 36 ตัวหนา

Colour - Good

- Use a colour of font that contrasts sharply with the background
  - Ex: blue font on white background
- Use colour to reinforce the logic of your structure
  - Ex: light blue title and dark blue text
- Use colour to emphasize a point
  - But only use this occasionally

Colour - Good

Text on Background

- Black on white
- Dark blue on white
- White on dark blue
- Yellow on dark blue
- White on black
- …

Basic Rules I

- Typo errors are not acceptable
- For *high power* LCD projectors use light background and dark letters
- For *low power* LCD and Slide, dark background and light letters are better.
- Dark blue background and yellow or white letter are widely used

Colour - Bad

- Using a font colour that does not contrast with the background colour is hard to read
- Using colour for decoration is distracting and annoying.
- Using a different colour for each point is unnecessary
  - Using a different colour for secondary points is also unnecessary
- Trying to be creative can also be bad

Background - Good

- Use backgrounds such as this one that are attractive but simple

- Use backgrounds which are light

- Use the same background consistently throughout your presentation

Background – Bad

- Avoid backgrounds that are distracting or difficult to read from
- Always be consistent with the background that you use
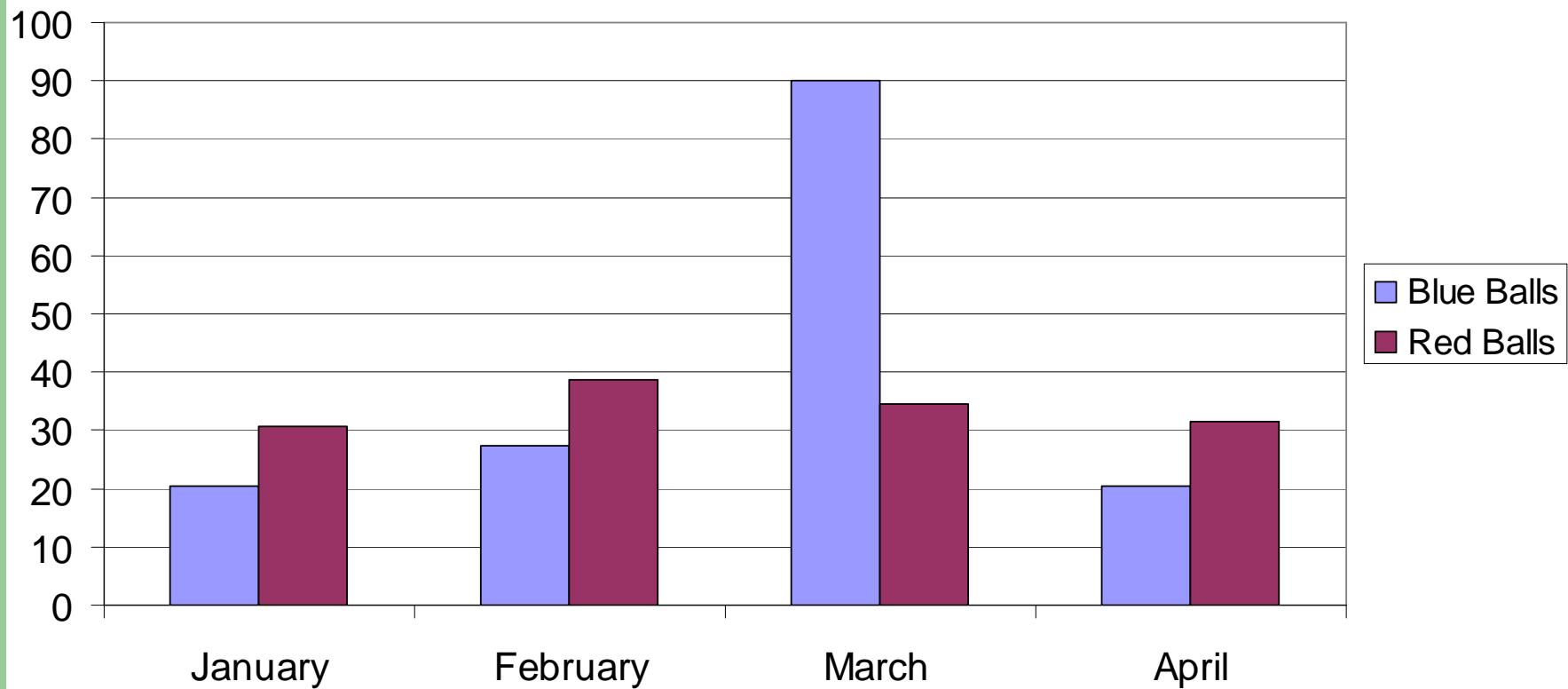
Graphs - Good

- Use graphs rather than just charts and words
  - Data in graphs is easier to comprehend & retain than is raw data
  - Trends are easier to visualize in graph form
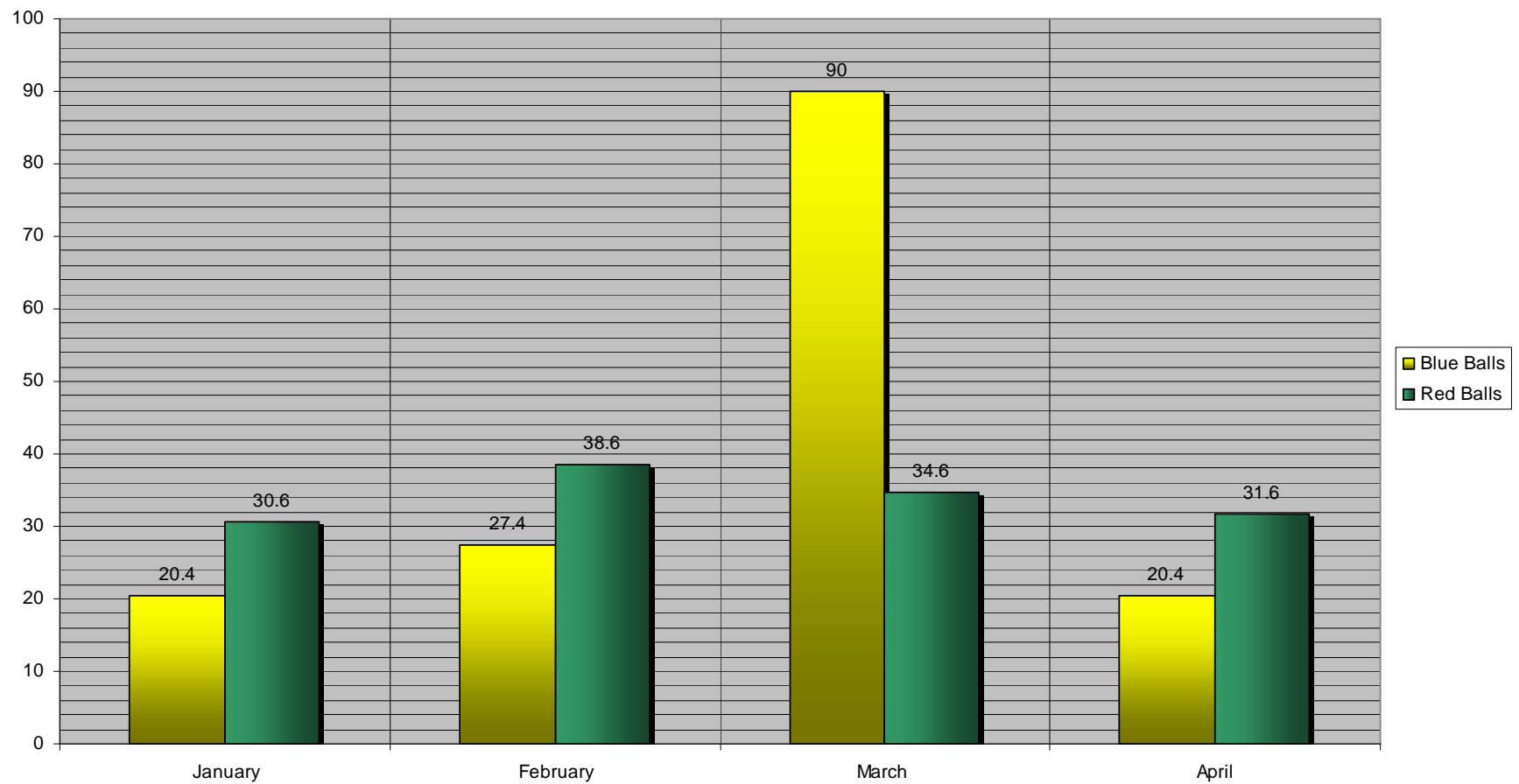
- Always title your graphs

Graphs - Bad

	January	February	March	April
Blue Balls	20.4	27.4	90	20.4
Red Balls	30.6	38.6	34.6	31.6

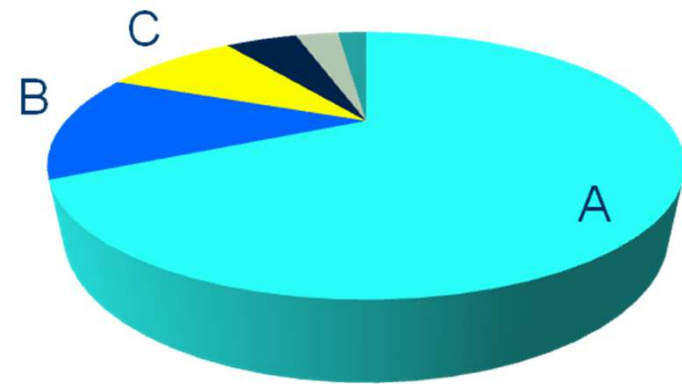# Graphs - Good

Items Sold in First Quarter of 2002

Graphs - Bad

Graphs - Bad

- Minor gridlines are unnecessary
- Font is too small
- Colours are illogical
- Title is missing
- Shading is distracting

Spelling and Grammar

- Proof your slides for:
  - spelling mistakes
  - the use of of repeated words
  - grammatical errors you might have make

- If English is not your first language, please have someone else check your presentation!

Oral Presentations

- Present you recent works to the scientific community within 10 minutes

- Only one main idea is enough

- Stick to your most important point or results and stress that

- Go slowly, clearly

Preparing a Presentation

- Be proud of what you are going to present!! / Be confident

- Remember that you are the one who collected the data, so already you know more than anyone in your audience…. so don't be nervous!!!!

Preparing a Presentation

- Readable

- Each slide for one main point

- No more than 6 bullets, each page

- Use graphics and pictures to illustrate your point

Types Of Health Systems And Their Determinant

Economic Level (GNP Per Capita)	Market intervention			
	Entrepreneurial & Permission	Welfare - Oriented	Universal & Comprehensive	Socialist & Centrally Planned
Affluent & industrialized	United States	West Germany Canada Japan	Great Britain New Zealand Norway	Soviet Union Czech Republic
Developing & Transitional	Thailand Philippines South Africa Ghana	Brazil Egypt Malaysia India	Israel Nicaragua	Cuba
Poor Resource				China Vietnam
Rich	Bangladesh Nepal	Burma Libya	Sri Lunka Tanzania Kuwait	

Preparing a Presentation

- Not overdo the color effects
- To many fancy colors ruin the presentation
- Consistent use of color
- **Consistent use of text style**
- ∗ Consistent use of bullet

Disaster Planning

- Consider what could go wrong and plan accordingly.

- Always have a backup.

- Bring a handout that covers all of your slides. Make sure they are legible.

Common Components

- Title, Authors, Affiliation

- Motivation & Background

- Materials & Methods

- Results

- Discussion & Conclusion

- Acknowledgements

Introduction

"A bad beginning makes a bad ending"

- Tell them why you were interested in the study

- How important was the study?

- What will you add more information into the present knowledge?

- Answer the question,
    " Why should I listen to you? "

Materials & Methods

- **Type of study**
  - **Descriptive**
  - **Cross-sectional / Survey**
  - **Case-control**
  - **Cohort**
  - **Trial**
  - **Evaluation**
- **A diagram may be helpful**

Results

- Keep it dry

- Tell them only what you have found

- Do not put any idea or discussion in this section

- Tables & Graphs are always helpful

Bad Table

Percentage of Health Insurance Coverage by Scheme, 1991-1998

Health Insurance scheme	Coverage, percent					
	1991	1992	1995	1996	1997	1998
1. Medical care for the poor and the Supported groups	16.6	35.6	43.9	45.93	45.47	45.06
- The poor	16.3	20.7	15.5	20.18	19.72	13.45
- The elderly	-	6.2	4.6	5.46	3.83	5.487
- Children aged 0-5	-	-	7.1	14.5	14	7.28
- Primary and secondary school Children	-	9	8.9	14.5	14	11.1
- War veterans	0.3	-	0.4	0.23	0.34	0.35
- Community leaders and volunteer	-	-	5	3.55	5.3	5.38
- The disabled	-	-	1.8	1.51	1.79	1.52
- Buddhist monks and novices	-	-	0.6	0.5	0.49	0.5
2. Medical services for civil servants and state enterprise employees	10.2	11.3	11	13.1	13.09	10.85
- Civil servants and family members	8.7	9.9	9.6	11.7	11.7	9.42
- State enterprise employees and family members	1.5	1.4	1.4	1.4	1.4	1.43
3. Compulsory health insurance	3.2	4.4	7.3	7.61	7.33	8.47
- Social security fund	-	4.4	7.3	7.61	7.33	8.47
- Workers' compensation fund	3.2	-	-	-	-	-
4. Voluntary health insurance	2.9	3.9	9.8	10.4	14.77	13.95
- MoPH health insurance	1.7	2.3	7.8	9	14.77	13.95
- Private health insurance	1.2	1.6	2	1.4	-	-
Total- people with health insurance	32.9	55.5	72	77.04	80.66	78.33
Total- people without health insurance	67.1	44.5	28	22.96	19.34	21.67

What was wrong?

- Too many lines. Limit to six or seven rows of data. If you want to give more details, use a handout.

- Use effective headings with the table.

- Test the table for readability in a real-world setting, e.g., a large lecture hall.

Better Table

Clinical condition	Number (%)
Wasting syndrome due to HIV	15 (23.1)
Pulmonary tuberculosis	12 (18.5)
Pneumocystis carinii pneumonia	11 (16.9)
Cryptococcal meningitis	11 (16.9)
Chronic diarrhea	7 (10.8)
Penicilliosis	2 (3.1)
Toxoplasmosis of brain	2 (3.1)
Enteric fever	1 (1.5)
Malaria	1 (1.5)
Mycobacterium tuberculosis, lymph nodes	1 (1.5)
Recurrent pneumonia	1 (1.5)
Total	**65 (100)**

Clinical Condition of AIDS Patients from Medical Records

Prevalence of Hypertension comparing between Hill-tribe and Hanoi area, 2001

Area	HT Prevalence %
Hill tribe	10
Hanoi	20

Prevalence of Hypertension comparing between Hill-tribe and Hanoi area, 2001
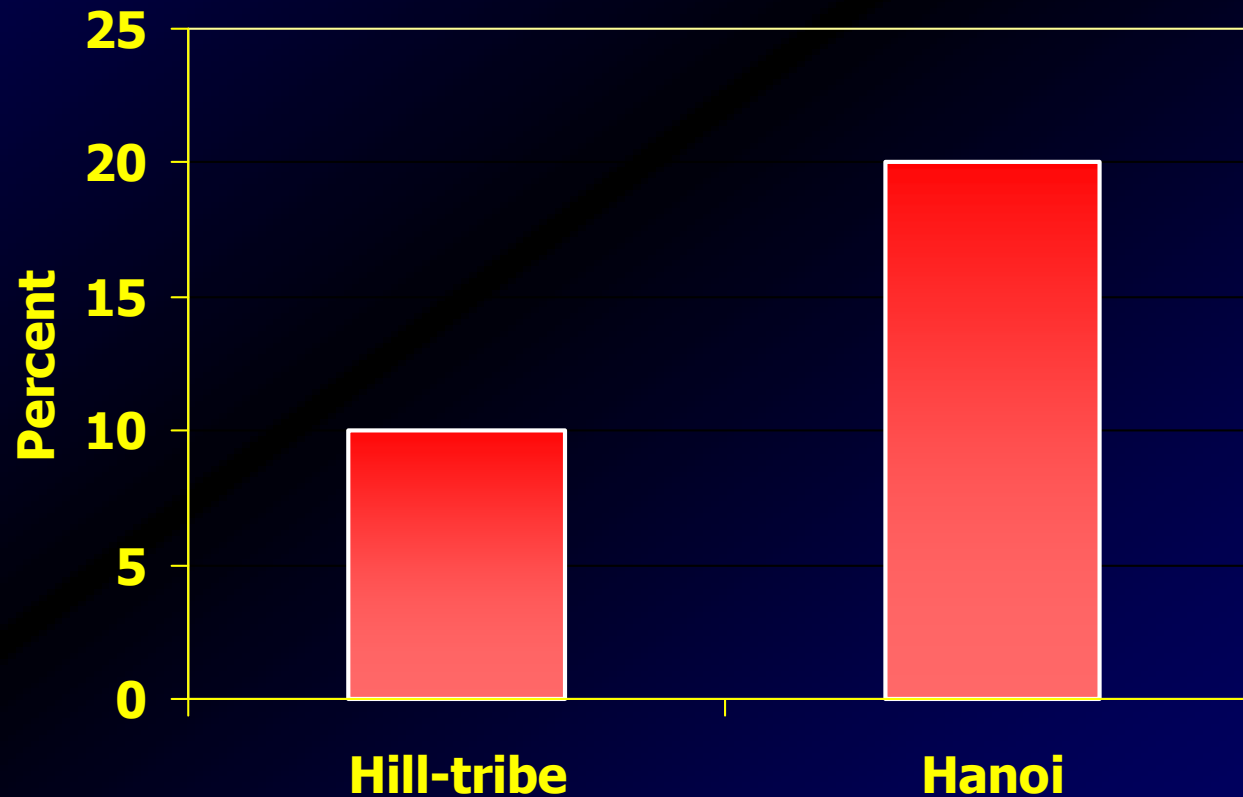
Graph is usually easier to understand than table

Discussion & Conclusion

- The most important part
- What is the meaning of your results?
- Show the relationship among observed facts
- What is your limitation?
- Comparison to the previous studies
- What is the implication of your work?

Discussion & Conclusion

- **State your conclusions as clearly as possible!!!**

Acknowledgement

- **Thank everyone that make your works possible**
  - **Provide works**
  - **Provide ideas**
  - **Provide grants**

Conclusion

- Use an effective and strong closing
  - Your audience is likely to remember your last words

- Use a conclusion slide to:
  - Summarize the main points of your presentation
  - Suggest future avenues of research

Questions??

- End your presentation with a simple question slide to:
    - Invite your audience to ask questions
    - Provide a visual aid during question period
    - Avoid ending a presentation abruptly

Other Tips

Tips for other program used in presentation

- Demonstration
  - Powerpoint: export to word, advanced saving & option
  - Excel :
    - best way of copy & paste(Ctrl+drag), paste link
    - Using excel in presentation (zoom, multiple panes, link locations)
 - Zoomit
  - PDF: getting text, table, object

Poster Presentation

- Experience sharing
  - Objectives of poster presentation: clearly self explained, convincing
  - Size and style: portrait or landscape***[IMPORTANT]
  - Follow the topic guideline: background, method, …
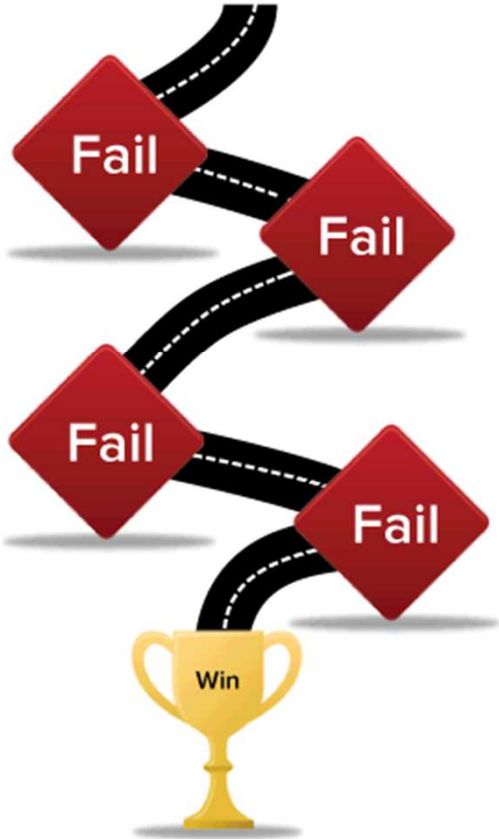- How to get the scholarship for a conference

Conclusion

- Presentation
  - Tell what you will say, Say it, and Tell what you said
  - Well prepared with rehearsal
  - Good AV support and clear explaination
- Adjusted to the audiences, place, & time
- **เนื้อหาดี มีสื่อพร้อม ซักซ้อมจนมั่นใจ**

What Most People Think
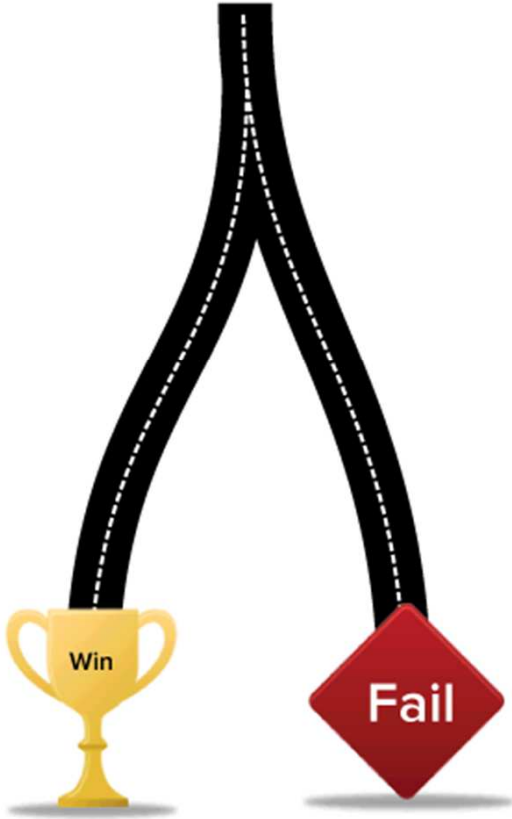
What Successful People Know

@douglaskarr

Thank You