

# Technical Writing & Presenting 2.0

CSCI 373

Mike Heroux

# Labels and Citations

- Labels:
  - `\label{label_name}` and `\ref{label_name}`
- Use `~`:
  - In Smith and Jones`~\cite{2014SmithJones}`, we see that ...
  - In Section`~\ref{intro}`, ...
  - In Figure`~\ref{fig1}`, ...

# Figures

- Figures:
  - Clearly labeled: Units, legend, title.
  - Captions: Should explain the figure in summary.
- Spreading a figure across two columns.

To spread a figure across two columns:

Use the `figure*` environment. So instead of

```
\begin{figure}[ht]
\centering
...
\end{figure}
```

you should use

```
\begin{figure*}[ht]
\centering
...
\end{figure*}
```

This also works for tables (i.e. `table*`).

# Writing Rules

## **Rule #6:**

- Use pictures, charts and graphs,
- But keep in mind #4 (Simplicity).

**Rule #7:** Use examples to explain complex ideas.

## **Rule #9:** Use:

- Headings (Chapter, Section, etc.).
- Bulleted Lists.
- Numbered lists.

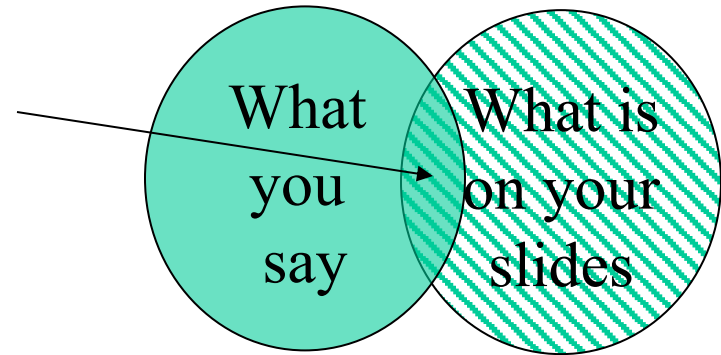
to provide structure, clarity and conciseness to your document.

## **Rule #10:** Provide guidance :

- Table of Contents.
- List of Figures, list of Tables.
- Index and Glossary.
- Abstract.
- Note: LaTeX provides these!


# Slide Guidelines

1. Let us read the data.
2. Use diagrams, charts, figures.
3. Intersection: minimal.
4. Prepare for disaster.
5. If slides are big notecards, don't have slides.



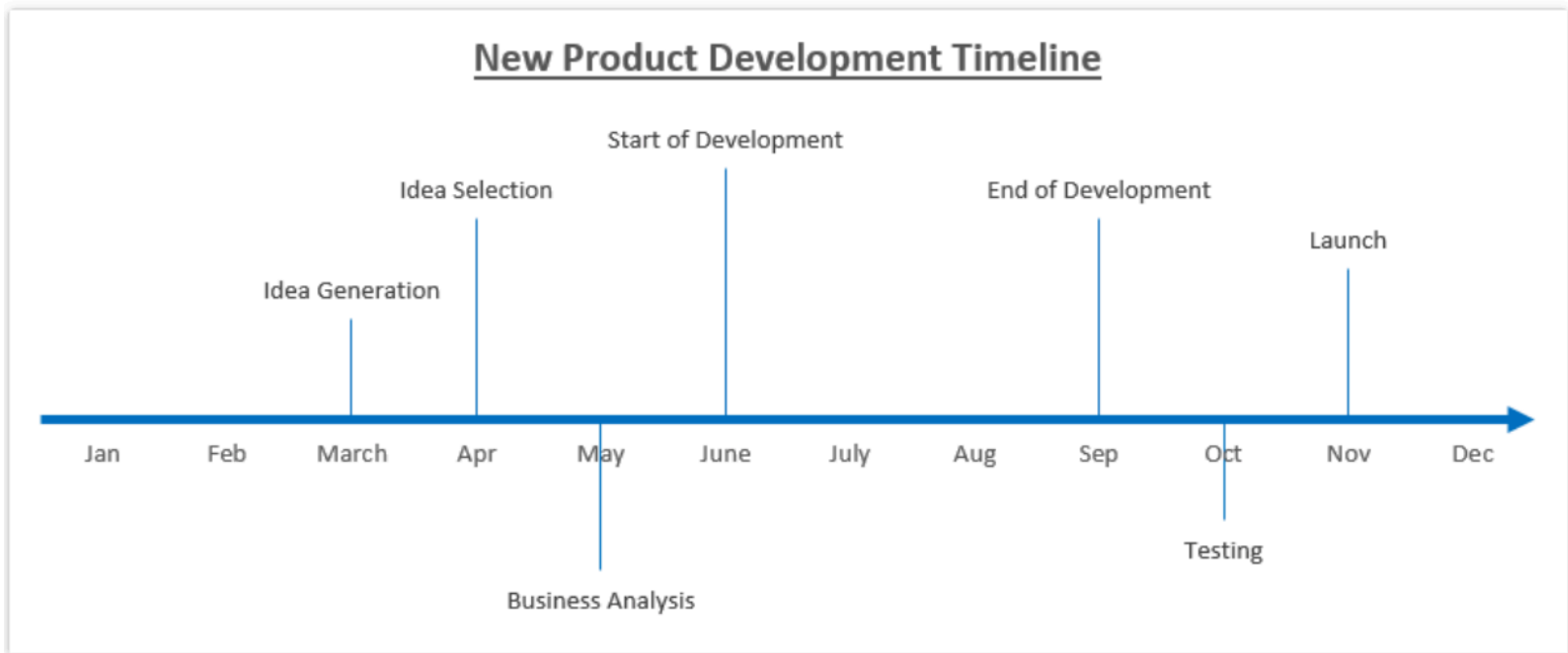
# Put Details on Slides

## DOE Oak Ridge Exascale System Frontier Specs.



Peak Performance	> 1.5 EF
Footprint	> 100 cabinets
Node	1 HPC and AI Optimized AMD EPYC CPU 4 Purpose Built AMD Radeon Instinct GPU
CPU-GPU Interconnect	AMD Infinity Fabric Coherent memory across the node
System Interconnect	Multiple Slingshot NICs providing 100 GB/s network bandwidth Slingshot dragonfly network which provides adaptive routing, congestion management and quality of service.
Storage	2-4x performance and capacity of Summit's I/O subsystem. Frontier will have near node storage like Summit.

# Create Timelines



<http://www.excel-board.com/how-to-create-timeline-chart-in-excel-quickly-and-easily/>

# PowerPoint Defaults

- The default format for PowerPoint is:
  - Outline Format.
  - Brief statements.
  - Slide is a big notecard for the speaker.
- This is BAD:
  - Credible argument:
    - Problems with space shuttle O-rings were known.
    - Poor PowerPoint hid the issue.
    - NASA Challenger exploded in 1986.
  - The best default for a new PowerPoint slide?



