

Communication of Technical Results to Senior Management: The Art of Storytelling

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Motivation. This paper was written in response to a 'Call for Papers' on Communication of Technical Results to Senior Management

Method. This essay relies on personal experience which has worked for me

Conclusions. Structured and brief communications are key to communicate with senior leadership as time may be limited

Keywords. Communication, Structured Thinking

As we progress in our careers as actuaries, our first challenges are exams. After this accomplishment, we may move into mentoring other actuaries, training them on actuarial principals, and managing a team of actuaries is a potential. Eventually, some actuaries will find themselves in front of the market-facing leaders and senior management of their company. Senior management may have a different background than actuaries and haven't spent years agonizing over ELF's/ILF's, tail factors, GLMs, and other 'technical' details that actuaries thrive in. Sharing actuarial insights is crucial for an insurance company's success. Effective communication should impart knowledge, nudge/influence decisions, and assist senior management come to the conclusion that betters the company. In my opinion, the ability to do this differentiates a good actuary from a great actuary.

Communication to senior management can come in many forms. While the details of how a slide deck, an email, or a document differs, they generally follow a similar format. There should be an **Executive Summary, Context/Background, Analysis of Finding, Recommendations, and Next Steps**. A slide deck provides the best format for communication with senior management. It allows one to use visuals and bullets to create an effective communication both in person and when senior management wants to view the information on their phone or tablet.

Structure	Description
A Executive summary	<ul style="list-style-type: none">• First slide of a presentation• Use to clearly and concisely summarize the main takeaways for the audience• Order of main points and bullets should match the flow of the rest of the document
B Context / background	<ul style="list-style-type: none">• Ensure the audience knows what you are talking about and why you are discussing it• Example items to include: The problem you are trying to solve, the facts that demonstrated there was an issue and the objectives of the analysis
C Analysis and findings	<ul style="list-style-type: none">• Explain the key findings from the analysis• Support each finding with facts
D Recommendations	<ul style="list-style-type: none">• Deliver your recommendation (and rationale)
E Next steps	<ul style="list-style-type: none">• Clearly articulate next steps, including due dates, owners and dependencies

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An executive summary should be able to summarize the entire communication into something senior management can read in a minute or two and understand. This could be a couple of paragraphs in a document, a three to five bullet email, or one slide in a slide deck (e.g. PowerPoint). The executive summary should cover three points: **Situation, Context, and Resolution**. The rationale to start with the situation is simple, senior management is busy. They may or may not recall the history, why this is pertinent for them (and the company), and why they should dedicate time from their busy calendar. Context provides an outline to why this is a problem and how the company is currently dealing with the said issue. The resolution is the action that the communication is putting forth. An email may only contain an executive summary with the details attached as a slide deck or a document. While the executive summary is the first part of a communication and guides the audience, you may choose to write this last.

Executive Summary

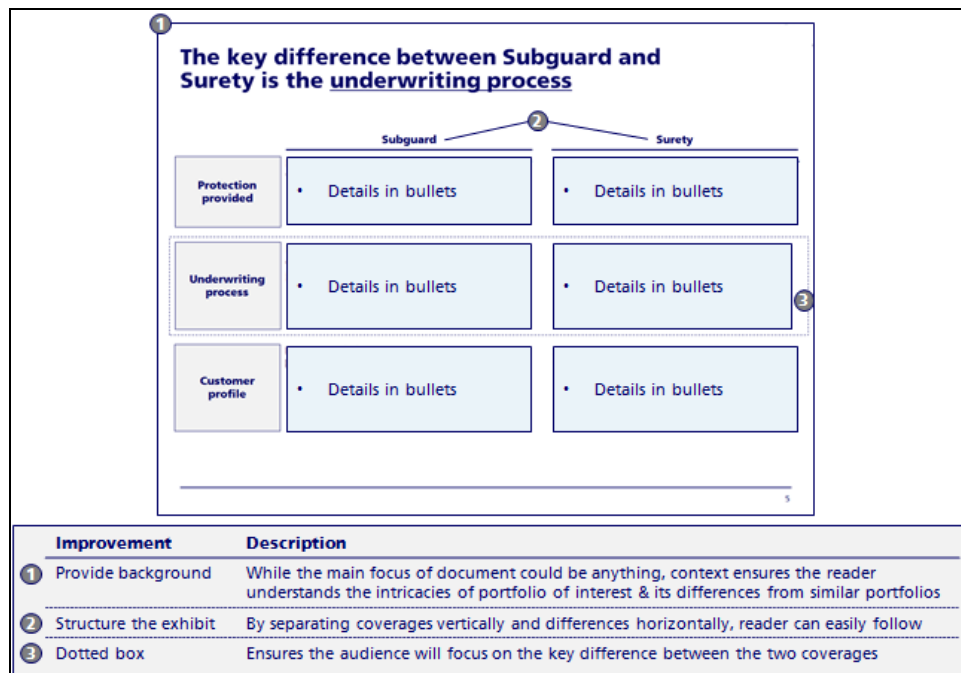
- **Actuaries generally present information in a technical manner, which may not be the most effective way our audiences prefer to be communicated towards**
- **Senior actuaries generally present to non-actuaries**
 - ② • Non actuaries do not have the same background and training as actuaries
 - To become an effective partner, one should communicate in the language of the audience
- **Actuaries can improve communication with senior management by adjusting our communication methods and structure**
 - Summary slides allow the main points to come across in an easy to read manner
 - A well organized communication allows for smoother meetings and less need for follow up meetings
- **Additional recommendations include**
 - Put yourself in the audience' shoes to understand how to position the presentation
 - Keep communications clear, concise, and simple

Improvement	Description
① Main points	Clearly summarize the main 3-5 takeaways you want the audience to leave with
② Supporting facts	Provide facts that substantiate each main point
③ Flow of summary	The order of executive summary matches the flow of the rest of document, which makes it easier for the audience to follow along with the presenter

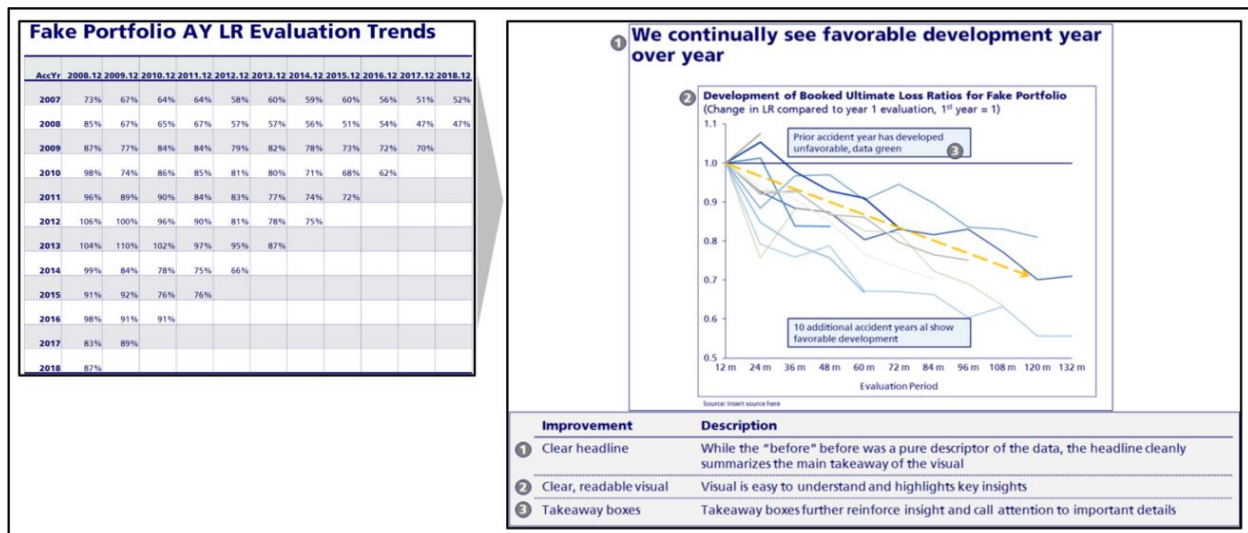
After the executive summary, the following sections include additional details. To ensure engagement of senior management, there should be a mix of visuals and well-organized bullets. Formatting content with call-out boxes, flow-charts, chevrons, and so forth will make a 'wall of text' much easier to comprehend. Further, when one creates visuals/graphs, be sure they are purpose-built and not merely screenshots of already existing visuals; making effective communication to senior management requires additional care. Keep principals of data visualization in mind, such as clean graphics are better than overly complex ones. Creating organized text and bespoke graphs will direct management's attention and allow you to drive the conversation. Finally, the lead on a slide should be an active lead. It assists in telling the story and guides the recipient of the communication.

The example below takes lots of information and structures it in a clear manner so senior management can easily gain context, even if they're not familiar to the details of the subject in question. The active lead provides clear details of the takeaway message.

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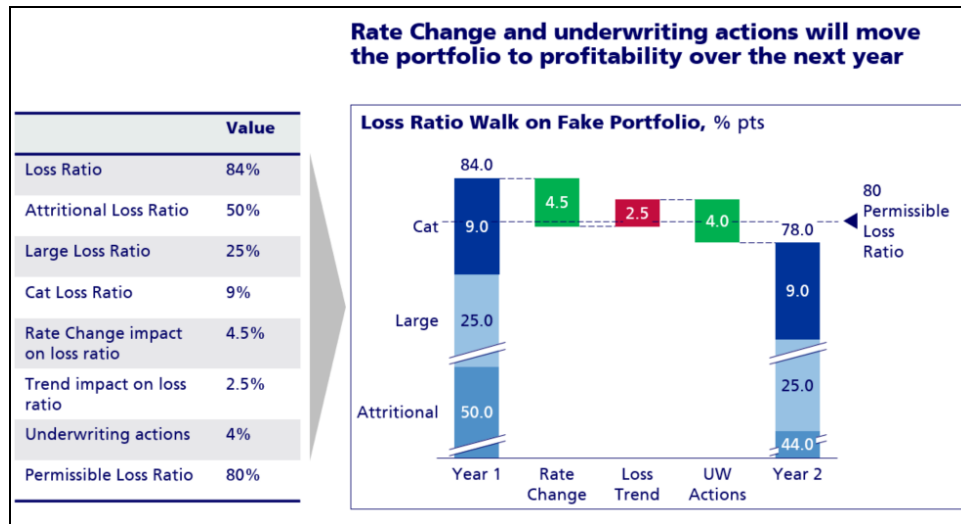


Senior leadership now has a base level of knowledge and is ready to proceed to the analysis and findings. Generally, senior management's interests are in the conclusions and the rationale behind the conclusion rather than all the details of the analysis. When working with senior management, an actuary may need to shift how they think about data and try to create visualizations to depict a finding. Instead of a chart, visualizations could easily be cleaner and more descriptive. Below are a couple of examples. The first one starts with a loss ratio triangle. A triangle is full of useful details, however more than senior management needs. Also, the lead does not provide any explanation. By creating a bespoke graphic, the conversation will naturally move toward the consistent favorable development in each accident year's loss ratios, which the lead corroborates.



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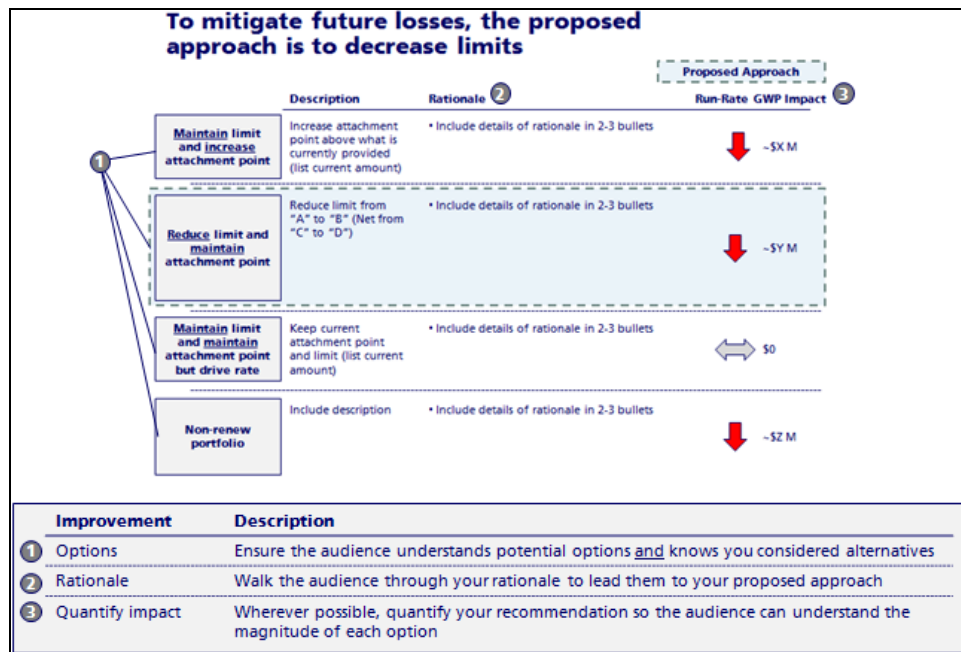
In another example, the presentation of key financial metrics is in a chart. By creating a clear visualization and a descriptive lead, one can direct senior management to see the changes proposed in the portfolio. Follow up slides, perhaps in the appendix, will explain rate achievement and other assumptions built into this projection.



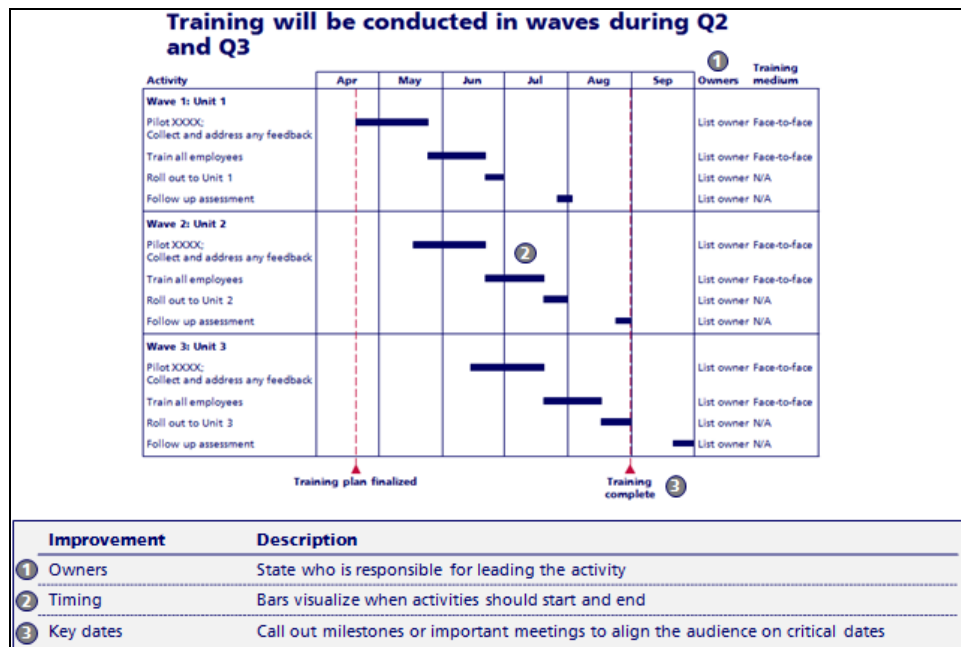
Now that senior management understands what your analysis concludes the logical next question is: “What do we do next?” The next slide or two outlines a set of recommendations. Senior leadership wants to know that their actuaries reviewed all reasonable scenarios before they propose a recommendation. As such, communication to senior management should demonstrate that you (and your team) analyzed multiple options to make your proposal. All scenarios tested should include a description, have a rationale for inclusion to explore, and provide a projected impact on financial metrics.

Using the mnemonic **SMART** when creating your recommendations will ensure proposed actions meet best practices. SMART was first coined by George Doran in a 1981 issue of *Management Review* and it remains a useful tool. Recommended actions must be **specific** in activities and who is participating, without any ambiguity. There must be a way to **measure** the expected impact (e.g. GWP, NWP, loss ratio, operating profit...). The action must be **achievable** within the resource and time constraints. Recommendations must be **relevant** to solve the problem. And the actions must be **time bound** with a timeline on completion of the objective.

The example below shows four recommendations on a portfolio. Different scenarios test potential actions on attachment points and limits; each scenario has a description, rationale, and projected impact. This communication shows all scenarios and identifies the proposed go-forward approach with a box to highlight. Details on the four scenarios are not in the main deck but in the appendix.



Next, the communication discusses operationalizing the recommendation. The ‘next steps’ section will walk senior management through the actions needed to operationalize the proposed recommendation. Instead of a series of bullets, a Gantt chart, per the example below, can show the tactical steps needed to execute. Whatever method of communicating the next steps, one should always include the activities, owners, and timelines.



Finally, one may need an appendix and other supporting files (such as a data visualization tool like PowerBI, Tableau, or R Shiny). The appendix houses all the additional details, including some of

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the more technical actuarial work; generally, it includes work necessary to create the recommendations to senior management. Details included here most likely isn't what senior management will dig into, though you should prepare to talk about the details if need be. After all, this analytical work is why senior management hires actuaries. They value actuaries who can translate the analysis and distill easily digestible actionable intelligence.

The visual below includes a quick guide of best practices when structuring your communications to senior management. Following the structure described above and the best practices below will aid you in creating effective communication.

Structure	Best Practice
O Pre-Work	<ul style="list-style-type: none">• Identify the "key questions" you will need to answer• Create a shell on a piece of paper, focusing on the storyline before doing design work
A Executive summary	<ul style="list-style-type: none">• This is the "embodiment" of your narrative arc• Try not to go any smaller than 16 point font (14 if absolutely necessary)• Use bolding to identify key points (your bolded sentences should read clearly)
B Context / background	<ul style="list-style-type: none">• Try not to clump text together – use spacing and divider to break up the flow• Use callout boxes to hone in on key messages
C Analysis and findings	<ul style="list-style-type: none">• Visuals should be clear, well labeled, and sourced• Limit the insights/takeaway messages per slide, too many makes it difficult to focus
D Recommendations	<ul style="list-style-type: none">• Recommendations should always be accompanied by a rationale and an impact within a certain timeframe – in other words they should be SMART actions – <u>S</u>pecific, <u>M</u>easurable, <u>A</u>chievable, <u>R</u>elevant, and <u>T</u>ime bound
E Next steps	<ul style="list-style-type: none">• A next steps page should always be included, even if it is only a bullet-point list

Executive communication syndicates information and helps senior management to make strategic decisions. Structuring a story as previously described, one shares the correct level of detail with a healthy mix of visuals. The advice above will refine your communication to leadership. Content is key and good structure alone won't make effective communication. Finally, if a communication is effective in one hundred words, don't say it in five hundred as brevity will allow you to retain the attention of senior management (or any business professional).

Biography of the Author

Jonathan is VP and Emerging Solutions Director at Zurich North America and Innovation lead for Technical Underwriting. His responsibilities include identifying emerging risks, evaluating potential solutions, and working with cross-functional teams to bring new products to market. He has held multiple roles of increasing responsibility across a variety of actuarial and non-actuarial functions across both the USA and Australia.

Jonathan volunteers with the CAS as the vice-chair of the Automated Vehicle Task Force, CAS Media spokesperson, Learning Enhancement Process Mentor, and additional engagements; from this he has presented at multiple industry events both on a national and international platform.

Jonathan holds a Bachelor of Science in Mathematics and a Bachelor of Science in Biology from Illinois Wesleyan University, is a Fellow of the Casualty Actuarial Society (FCAS), Member of the American Academy of Actuaries (MAAA), and a Certified Program Leader (CPL).