Here’s a **tight 5–10 minute talk track** you can use to present the SFAM tool effectively — addressing skepticism from the Capital and Risk Analytics teams while subtly asserting your expertise and support:

**🗣️ Opening Tone (Supportive but Strategic)**

"Thanks everyone for joining. I know there’s been some healthy skepticism about this tool. I get it — we’ve all seen tools come and go. But I wanted to quickly walk you through **what SFAM is**, **what it does**, and **why it might be worth your attention**, especially if we want better answers — not just more numbers."

**🔍 Part 1: What is SFAM? (Core Capabilities)**

**SFAM** — the *Stressed VaR Factor Attribution Model* — is **not trying to replace Mars**. It builds *on top* of it.  
It **uses existing Mars outputs** — PnL vectors, Greek sensitivities, and market shocks — to answer questions Mars **wasn’t designed to answer** in real time.

Here’s what SFAM enables:

* **📊 Factor-Based Attribution**  
  It breaks down SVaR into *drivers*: sector, rating, region, curve, product — however you group it. You can finally ask:

“Which 10 groups are **driving 80%** of SVaR today?”  
Instead of staring at 50,000 positions.

* **⚙️ What-If Scenarios**

“What if I scaled notional on high-risk trades?”  
“What if I reduced beta exposure to a sector?”  
“What if I shorted an ETF instead of Treasuries?”  
You can simulate those *without* rebooking, waiting, or asking devs.

* **📉 Optimization Engine**  
  Let’s say you want to **reduce SVaR by $50M**.  
  SFAM tells you *which trades* to adjust, *by how much*, *under your constraints*: no CDS, no trading costs, keep DV01 flat, etc.

**📈 Part 2: What the Data is Already Telling Us**

In the initial pass, just looking at top SVaR dates and time series shifts — *before even touching Greeks or optimization* — the tool already gives insights like:

* **Treasuries offer little SVaR protection.**  
  But **equity ETFs** (SPY, QQQ) produce similar shock profiles with better hedge effectiveness.
* **CMOs**: Reducing exposure to *sequential tranches* matters, but **IO/IIO tranches** still drive large SVaR even on different windows — they don’t diversify away.
* **Commodities**: On some windows, they’re SVaR *savers* — reducing risk by $50M. On others, they become *risk sources*. You won’t know unless you run it.

**🔄 Part 3: Why This Isn’t Redundant with Mars**

Let’s be honest — Mars is great at computing Greeks, shocks, PnL. But:

* Mars **can’t test what-if scenarios** unless you rebook.
* Mars **can’t optimize across constraints**.
* Mars **doesn’t support fast attribution** across dimensions like region, product, or sector — not at scale.

SFAM doesn’t replace Mars. It answers the **next question** after Mars.

**🧠 Smart Questions to Demonstrate Nuance**

If we have time, I’d love to align on a few things:

1. **Risk Factor Selection**

How are we selecting factors? Are they stable across windows, or shifting? Should we beta-weight them?

1. **Tail vs Average Behavior**

Are we optimizing for *expected SVaR* or *tail SVaR* on specific stress dates? Different decisions might emerge.

1. **Greeks vs Notional Scaling**

Do we simulate changes in Delta/Gamma or just notional? Some products don’t even use Greeks — like distressed bonds. How do we handle those?

1. **Capital View**

Currently SFAM looks at SVaR — not capital. Any appetite to link it to Capital 2.5 or GVAR in future phases?

1. **Conflict with Granularity Push**

If the goal is to go more granular (sector/region/rating), how do we avoid contradicting that with overly smoothed factor models?

**🤝 Close – Positioning Yourself**

I’m personally excited about where this is going — even if I can’t be on it full-time. The nuance here is fascinating, and I’m looking forward to learning from each desk's complexity.

I’ll contribute where I can, especially when we start combining this with Greeks, optimization, and risk stories. Until then, I’m happy to keep giving feedback and helping shape this with you.

Would you like a **slide** to go with this talk? Or should I format this as a **follow-up email** as well?

Here’s a **summary of the SFAM meeting on 20-Aug-2025** covering three main pillars:

**🔹 1. Marginal Impact Analysis**

* **Objective:** Quantify how each position contributes to total SVaR (SVar = Stressed VaR) by shocking each trade’s notional by 1% and measuring the change in SVaR.
* **Method:**

Marginal Impact=SVaRnew−SVaRoriginalΔNotional\text{Marginal Impact} = \frac{\text{SVaR}\_{\text{new}} - \text{SVaR}\_{\text{original}}}{\Delta \text{Notional}}

* **Insights:**
  + On May 30, 2025, **total SVaR** = **−$452M**
  + **Top contributors:** SPG, Credit, and Commodities desks
  + FX and Equities were *positive* contributors (SVaR-reducing)
* **Breakdowns:**
  + By desk, portfolio, and product type (e.g., US Credit – Preferreds, HY Bonds, Corporate Bonds)
  + Commodities:
    - Crude Oil: **−$4.7M** SVaR
    - Agriculture: **+$5.6M** SVaR
* **Scenario Tool Example:**
  + If FX, Equity, and Commodity notional sizes are doubled, SVaR reduces from **−$452M to −$332M** (i.e., $120M benefit)

**🔹 2. Factor-Based SVaR Decomposition**

* **Challenge:** Too many risk factors (~50,000), making attribution hard
* **Approach:**
  + Select **30 key economic risk drivers** per desk (e.g., FX/Yield curves for FX desk)
  + Use **regression mapping** to link those to the full factor set
* **FX Desk Example:**
  + Regress 30,000 FX risk factors onto 30 economic drivers
  + Model explains **37% of SVaR volatility**
  + Reported SVaR: **−$8.2M**; Reconstructed SVaR: **−$7.6M**  
    → Only **7.4% delta**, showing strong alignment
* **Result:** Correlation between reconstructed and actual PnL time series is high

**🔹 3. SVaR Optimization Tool (In Development)**

* **Goal:** Suggest trades/hedges to reduce SVaR exposure while meeting constraints (e.g., max notional size)
* **Example:**
  + Optimize top 10 high-impact trades (with max hedge of 5× notional)
  + Potential SVaR reduction: **−$452M to −$397M**  
    → ~**$55M reduction**
* **Stability Testing:** Apply hedge across stress windows  
  → Shows **robustness of reduction effect** across scenarios

**🔸 Additional Discussion Points**

* **Differences from past work:**
  + Prior efforts (e.g., from E) focused only on hedging via high gamma trades—not marginal impact or factor decomposition.
* **Cautions:**
  + Relationships between risk factors may not be static across time.
  + Importance of identifying **stable structural exposures** (e.g., long Credit/MBS in Rates).
* **Next Steps:**
  + Consider applying this framework across different windows.
  + Include more days to validate risk structure across scenarios.
  + Coordinate with Equities, Rates, and Middle Office to identify high-tail-risk trades.

Let me know if you want this turned into a Word summary or want to draft a follow-up email to the SFAM team.

Let’s explain the **SVAR Factor Model** in very simple terms — like you’re a high schooler who understands money, risk, and the idea of simplifying things.

**🔍 What is SVAR?**

**SVAR = Stressed Value at Risk**

It’s a way for banks to answer this question:

"If something really bad happened in the markets — like in 2008 or during COVID — **how much money could we lose** on our investments?"

It’s not just a guess. It uses real past **stress periods** and **math models** to calculate the worst-case losses.

**🧠 The Problem With Regular SVAR**

* Banks have **tens of thousands of risk drivers** (interest rates, stock prices, credit spreads, etc.)
* To calculate SVAR, they apply past "shocks" to all of those drivers.
* It’s like trying to explain your whole school’s behavior by tracking **every student’s mood** — too much data!

➡️ So it’s **hard to understand**, **hard to explain**, and **hard to fix** if SVAR is too high.

**🎯 Enter: SVAR Factor Model**

The **SVAR Factor Model** says:

"Instead of tracking 50,000 individual things, let’s summarize them using just **20 to 30 important 'factors'** that really move the market."

**🔑 A "Factor" is:**

* Something simple and economic that we can understand
  + Like **S&P 500 (stocks)**
  + Or **10-Year interest rate (bonds)**
  + Or **USD/JPY exchange rate (currencies)**

**🧰 How It Works (Simple Steps)**

1. **Pick your factors**  
   Choose 20–30 things that really matter to your portfolio.
2. **Link everything to those factors**  
   Use math (regression) to find out how each risk driver (like a bond or stock) moves when the factor moves.
3. **Use factor shocks instead of 50,000 shocks**  
   Apply stress-period shocks (like from 2008) to just the factors, not everything.
4. **Estimate SVAR again**  
   Now the loss is modeled using a simpler formula:
5. SVAR = Sensitivity × Factor Moves + Second Order Terms

**🛡️ Why Is This Useful?**

| **Benefit** | **Why It Matters** |
| --- | --- |
| ✅ **Simpler** | Easier to understand and explain to regulators |
| ✅ **Actionable** | You can hedge (protect) the portfolio by using instruments tied to the same factors (like futures, swaps) |
| ✅ **Saves Capital** | Lower SVAR = Less capital banks must hold = More money available to invest or lend |
| ✅ **Smarter Decisions** | You can say: “60% of our SVAR comes from interest rates — let’s hedge that!” |

**📚 Summary**

* **SVAR Factor Model** helps banks estimate risk from stress events in a **simpler and smarter** way.
* It **shrinks** 50,000 messy pieces of data into 20–30 important and hedgeable **factors**.
* It helps banks **understand, reduce, and manage** their capital requirements and financial risk.

Would you like a **visual story**, a **Python demo**, or a **real-world example using stocks and interest rates** next?