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Assess and Communicate the Risk or Business Impact

Report

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Information Design Assurance Red Team

Section Four Exercise

- The red team has analyzed risk(s); how should the risk(s) be communicate to the homeowner?

  (✳) *(Assess and communicate the risk or business impact)*

- The homeowner wants to know – how secure their home is, and how that impacts their business question in terms of exposure to loss.

  (4) *(Understanding the customer's business questions)*

- **Exercise: In your group, use the handouts from SecurITree and determine the best method to communicate risk to the homeowner.**

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Assess Risk

- Simply identifying the risks is not always sufficient

- The RED TEAM LEAD must also assess the risks within the context of the effort

- Illustrative methods of assessing adversary risk include:

  - ad hoc judgment,

  - expert judgment,

  - decision analysis,

  - modeling and simulations, and others.

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Communicate Insights

- Communicating insights can be challenging

- The RED TEAM LEAD must communicate the results of the risk analysis to the customer

- The goal should be to communicate the problems and tradeoffs well; desirable traits include:

  - completeness, consistency, clarity, simplicity, and traceability (within the red team assessment and risk analysis)

- Technical content may not be appropriate

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Communication Techniques

- Raw data

4.23	11.06
12.12	28.91
5.97	7.52

- Risk matrices
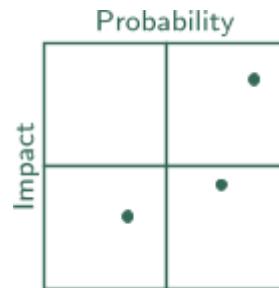
- Scenario risk distributions (spider charts, annotated attack graphs)

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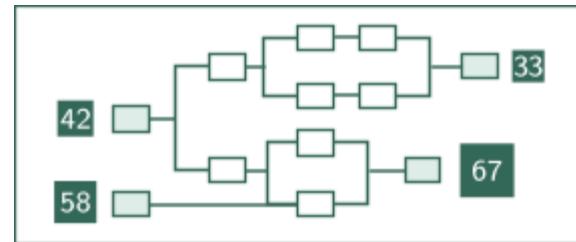
Scenario Risk Distributions

- **Develop custom charts to show how risk**
  - is distributed by adversary,
  - might shift or change if a countermeasure is implemented, and
  - results are sensitive to one indicator or another.

- **Highlight or emphasize key scenarios with**
  - notational risk "dashboard,"
  - line or spider charts, or
  - on the red team attack graph.

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Notional Risk "Dashboard"

- The dashboard aggregates risk information, showing
  - each adversary's indicators,
  - flags each adversary can achieve by case, and
  - the percent of the total scenarios that the adversaries can achieve.

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Spider Chart

Case 0
All scenarios included
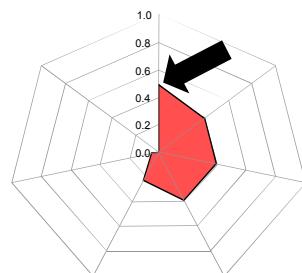
Case 1
One scenario removed from consideration
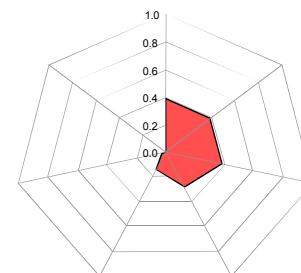
Case 2
Two scenarios removed from consideration
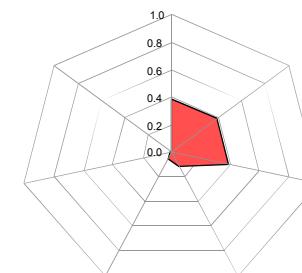
Evil Genius
Lots of money, time, skill

Evil Madman
Medium amount of money, time, skill

Evil Bully
Low amount of money, time, skill

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Comparative Analysis

Baseline model

Model with counter-measure

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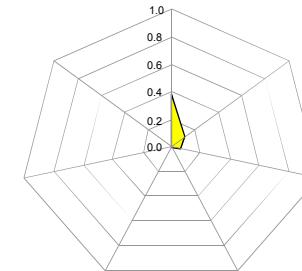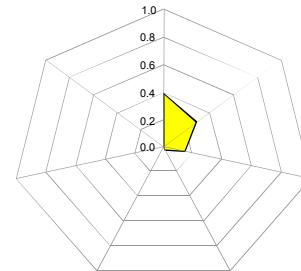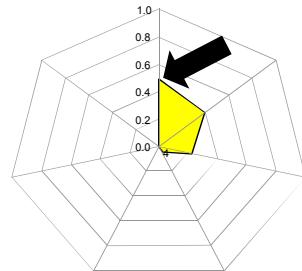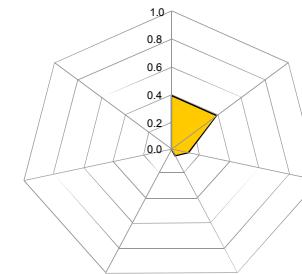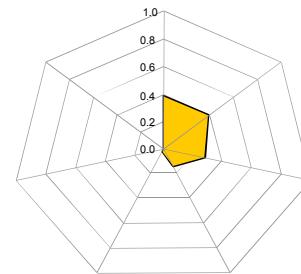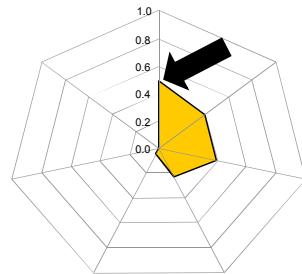
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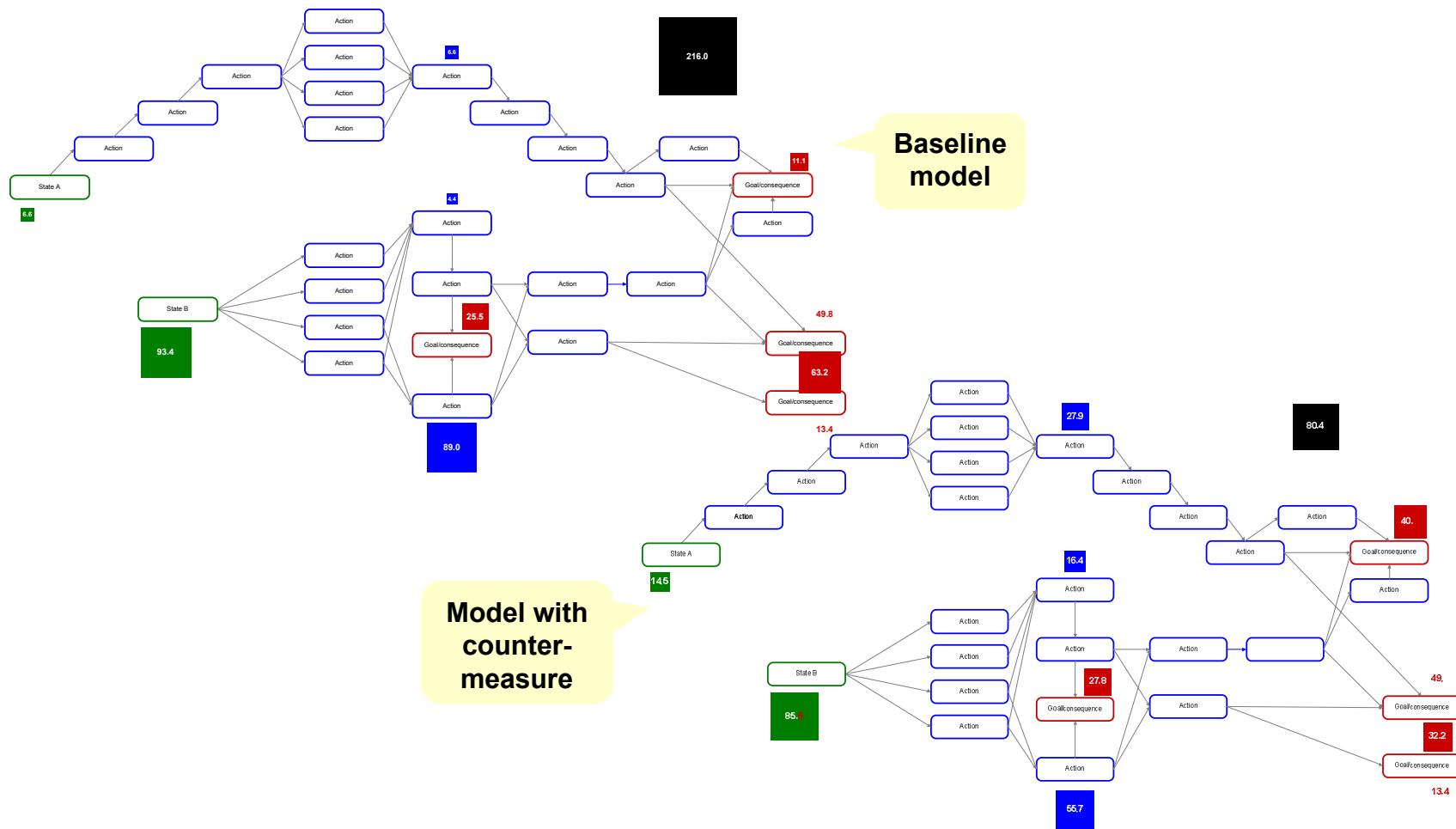
Translation to Business Impact

- Translate the risks into business impacts that are expressed in terms of the CUSTOMER'S key business questions and operations

Finances

Security

Scheduling

Opportunity

Legal and reporting requirements

Continuity of operations

- The RED TEAM and RED TEAM LEAD are not necessarily experts in any given area of business impact
- As appropriate the RED TEAM LEAD may work with subject matter experts to craft a more tailored interface with the CUSTOMER

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Questions?

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