Lessons Learned: Viewpoints on Increasing Analytical Capabilities in an Organization

Predictive Modeling Projects from a Company Perspective

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Westfield Insurance

- Founded in 1848
- ~$1.5 Billion Direct Written Premium
  - $0.9 Billion Commercial / Surety
  - $0.6 Billion Personal
- Produces business exclusively through independent agencies

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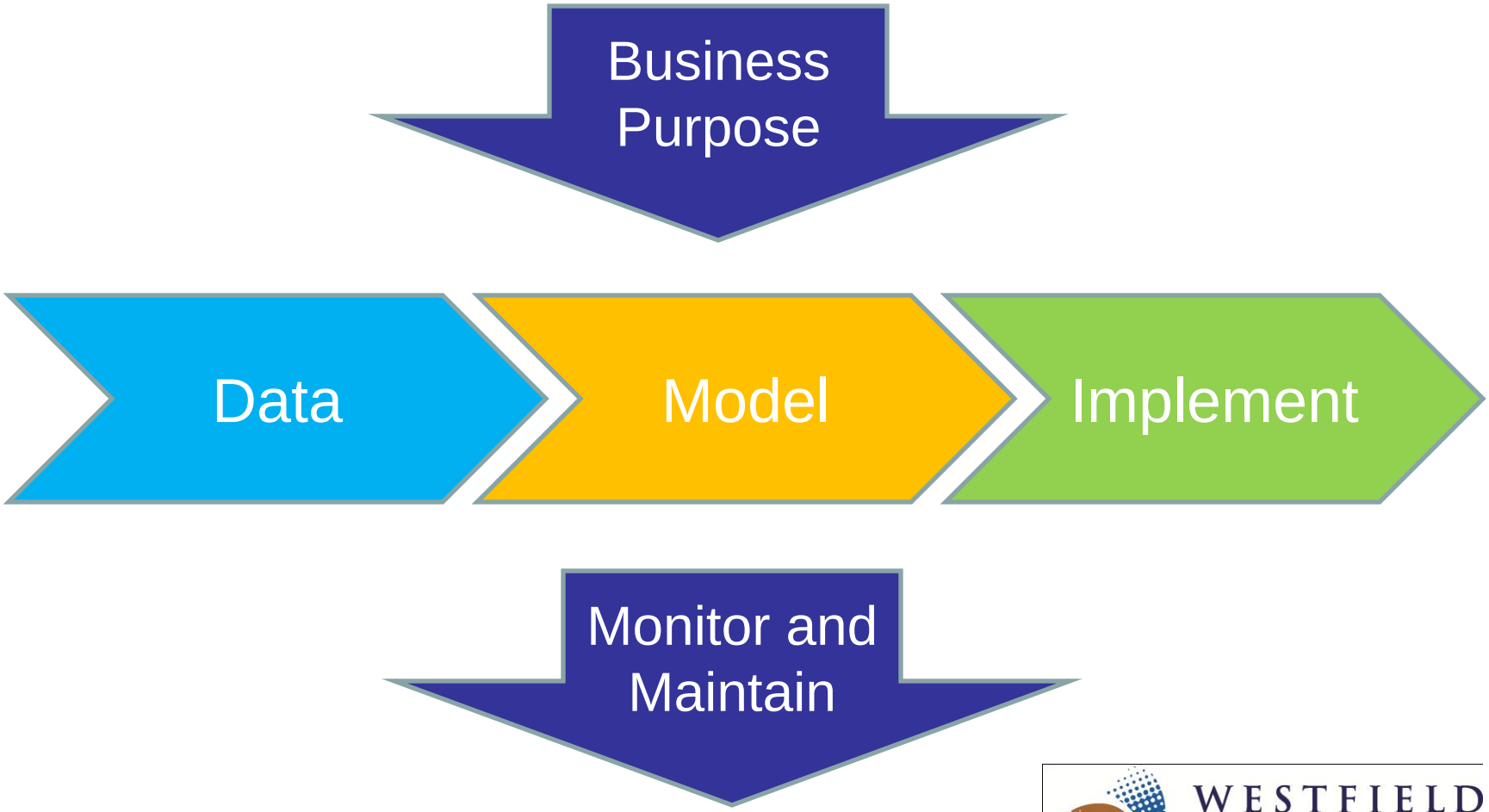
A Basic Modeling Process



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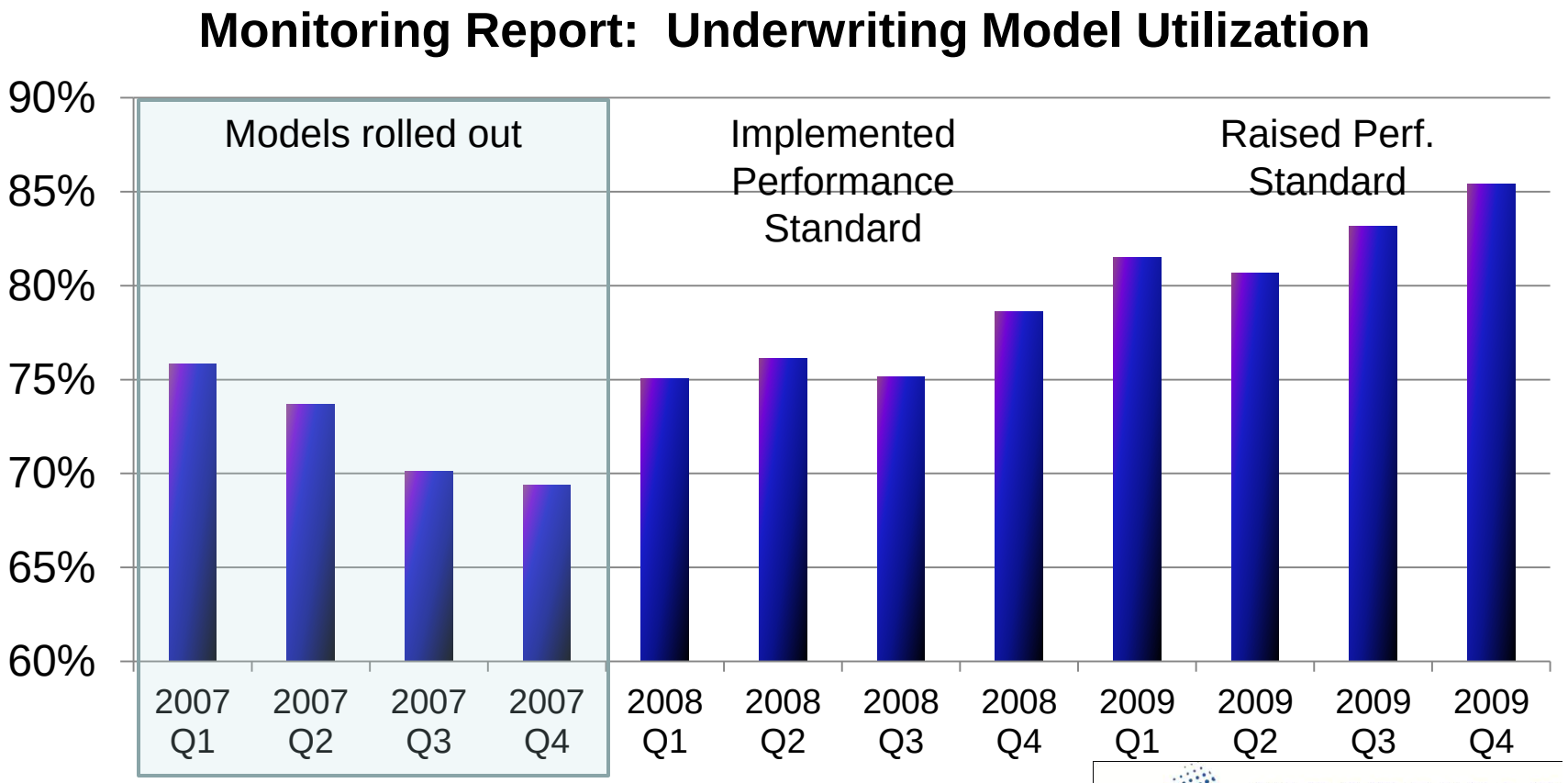
Lesson One

- Modeling projects don't begin with modeling. They begin with:
  - A business question / strategic goal
  - Research / data collection
- Modeling projects don't end with a model. They end with:
  - IT implementation
  - Business implementation
  - Monitoring and Maintenance
    - (a.k.a. "living with the models")

Business Implementation



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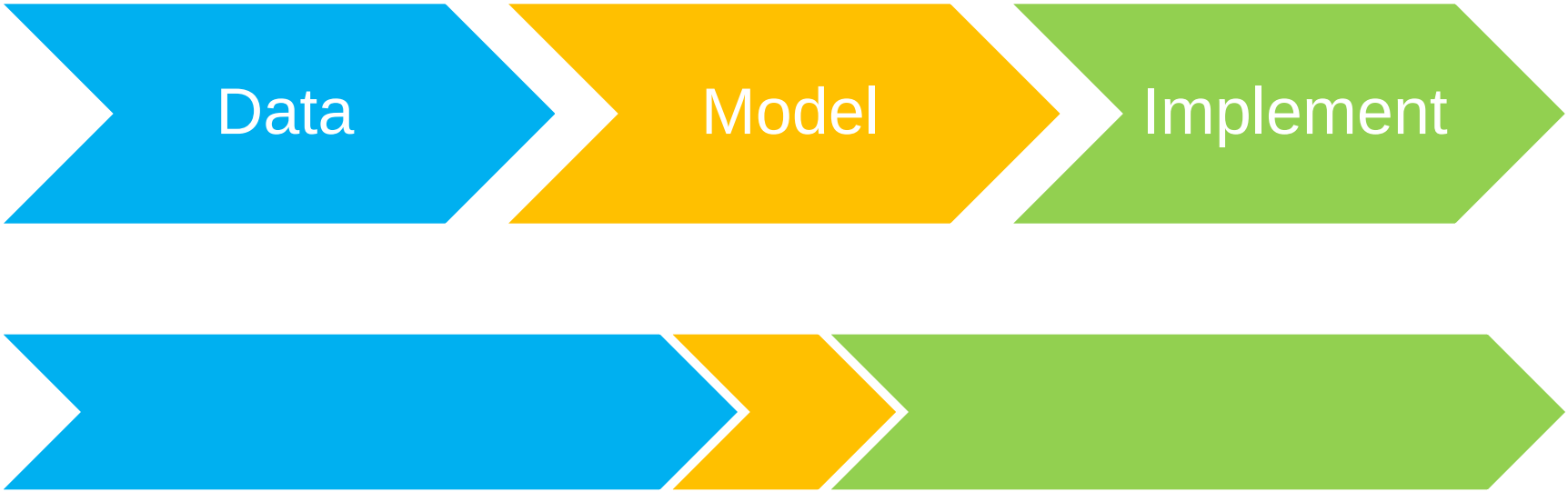
A Basic Modeling Process



Scaled to Actuarial Effort

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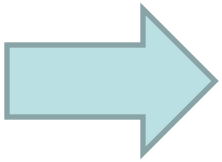
Lesson Two

- Modeling can be a small part of even the actuarial / modeling project



Expect to do a lot more than just modeling

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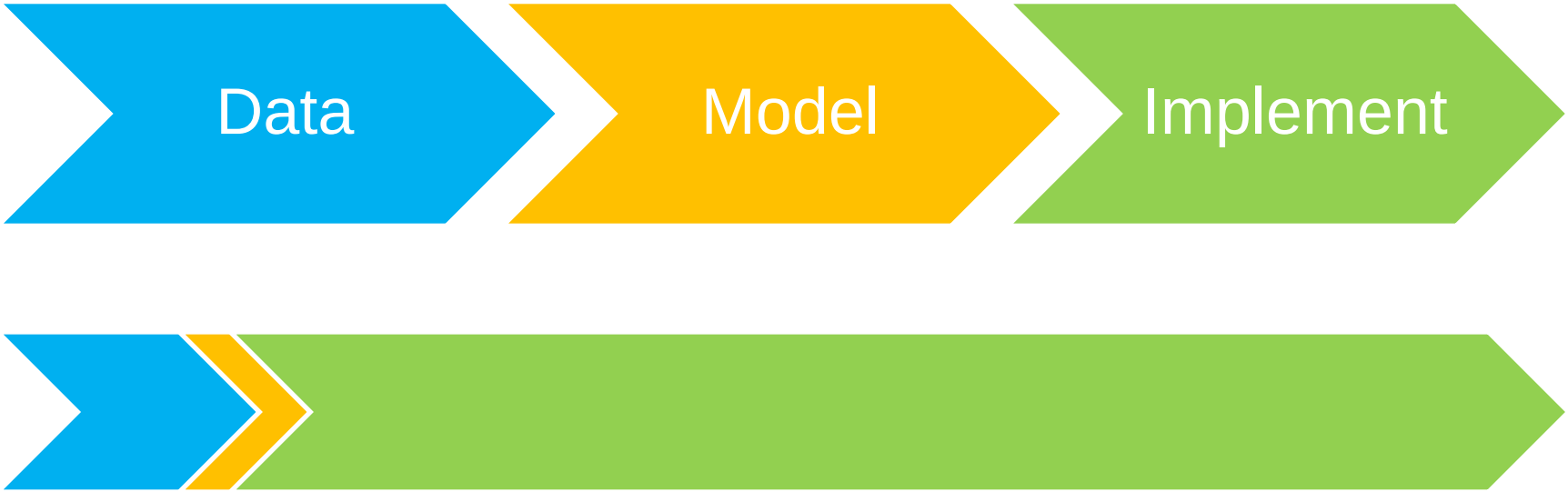
A Basic Modeling Process



Scaled to Total Project Effort

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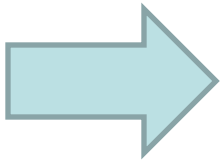
Lesson Three

- Modeling is a tiny portion of the total modeling project
  - Recent (large) project:
    - Estimated Actuarial Hours: 6,000
    - Estimated IT / Business Hours: 25,000



Make decisions based on the total scope of the project

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A Tale of Two Projects

- Two actual projects that I've managed over the last several years
  - Comparable scope
  - Comparable cost
  - Comparable expected business value
  - Both were ultimately successful
  - Biggest difference: time to complete

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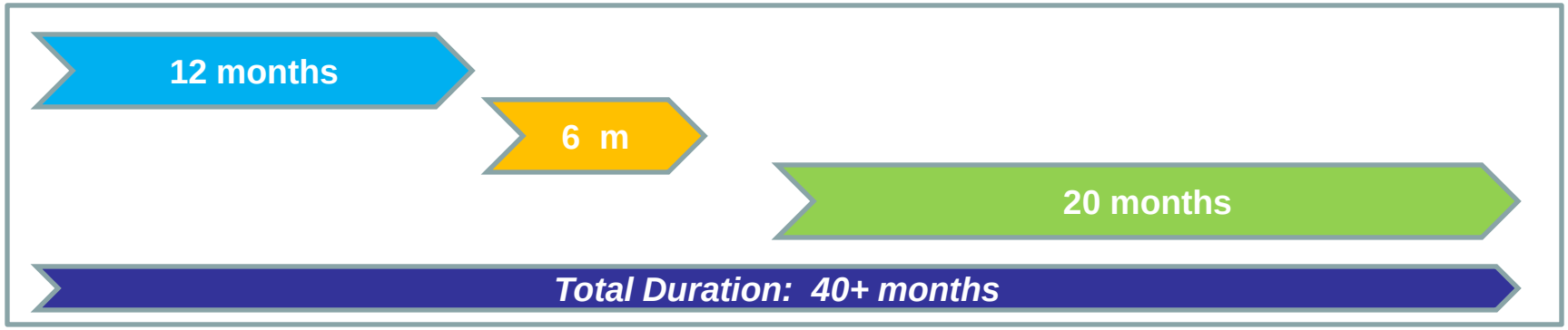
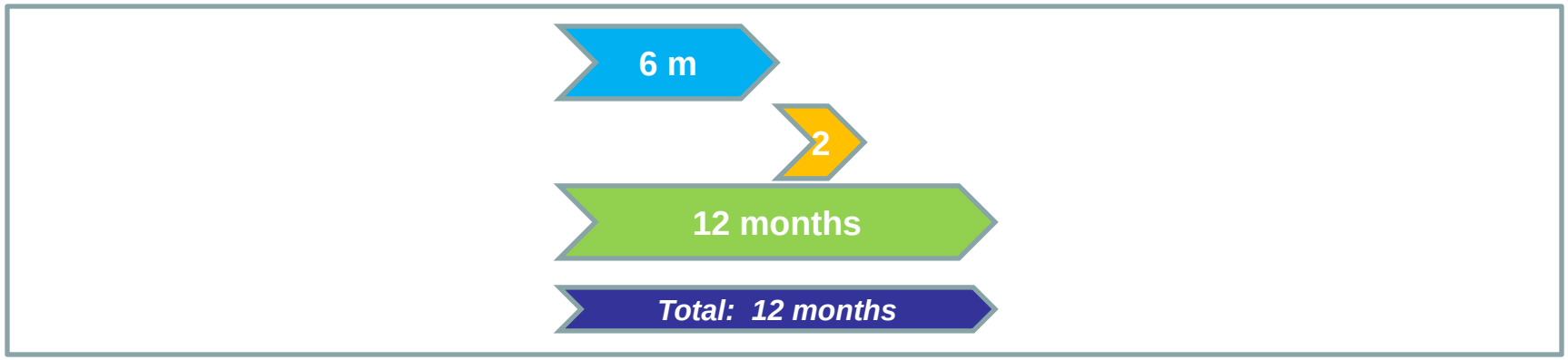
Project A



Project B



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Data Model Implement

Lesson Four

- Project A: Project manager not engaged until **after the model was built**
- Project B: Project manager engaged **before the project started**

Effective and timely project management is critical

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Lesson Five

- Project A: IT work did not start until **months after the model was built**
- Project B: IT work ran **concurrently with the model building process**

Begin communication between IT, modeling, and business units early

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Lesson Six

- Project A: Model was **built entirely in-house**
- Project B: Used **experienced consultants** with whom we had an established relationship

The right partners can help you get done faster (and better)

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Lesson Seven

- Project A: Model built “on the side” by **part time resources**
- Project B: Had **full time staff** from day one (on both the company and the consulting side)

Unless time is no issue, don’t try to build models “on the side”

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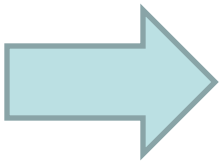
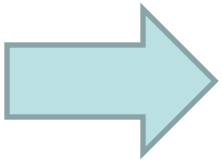
Lesson Eight

- Project A: The **first project** of its kind for our company
- Project B: The **fourth project** of its kind



It gets easier over time



Look for repeatable processes

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Lesson Nine

- Project A: Was **not a corporate priority** until the modeling portion was complete
- Project B: Was a **corporate priority** before the project started

Models should to be driven by a business purpose (see Lesson One)

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Closing Thoughts

- Don’t forget about culture change
  - Effective communication and reporting
- View wild claims of benefits with skepticism
- Building a model has different challenges than owning one
- Each project brings new challenges, new lessons