

Improving Decision Making in an Organization

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= Agenda

☐ **Major Learnings**

☐ **Background/Introduction**

☐ **Current state of Process at Powertrain**

☐ **Conclusions**

= **Implementation of a sound common decision process across an organization has high value**

❑ Following a common decision process

- ◆ Saves time and effort
- ◆ Enables person to learn how to do it on their own
- ◆ Improves communication and learnings across the organization

❑ People are willing to adopt a new decision process if:

- ◆ They see value in it
 - ❖ Understandable
 - ❖ Saves them time and/or effort
 - ❖ Increases the quality of the decision
- ◆ They maintain control

= **Decision Methods personnel are available to assist any Powertrain organization**

☐ Benefits

- ◆ Common structured process
- ◆ Pace and level of support decided by decision makers
- ◆ Transfer of knowledge of how to use process

☐ Service Available

- ◆ Decision education
- ◆ Project management
- ◆ Meeting facilitation
- ◆ Model building

☐ For help call John Palmer 8-237-1032

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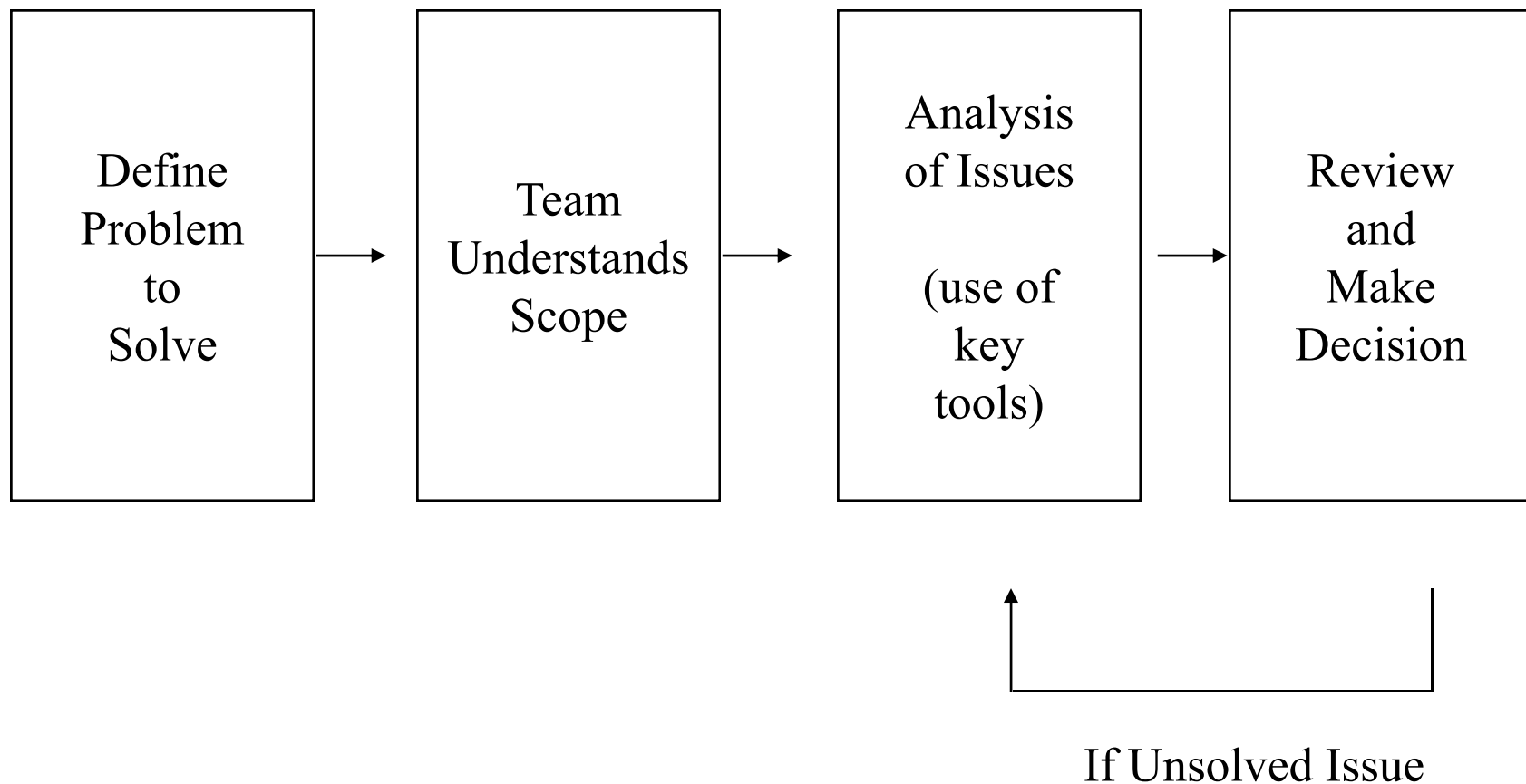
☐ Major Learnings

☐ Background/Introduction

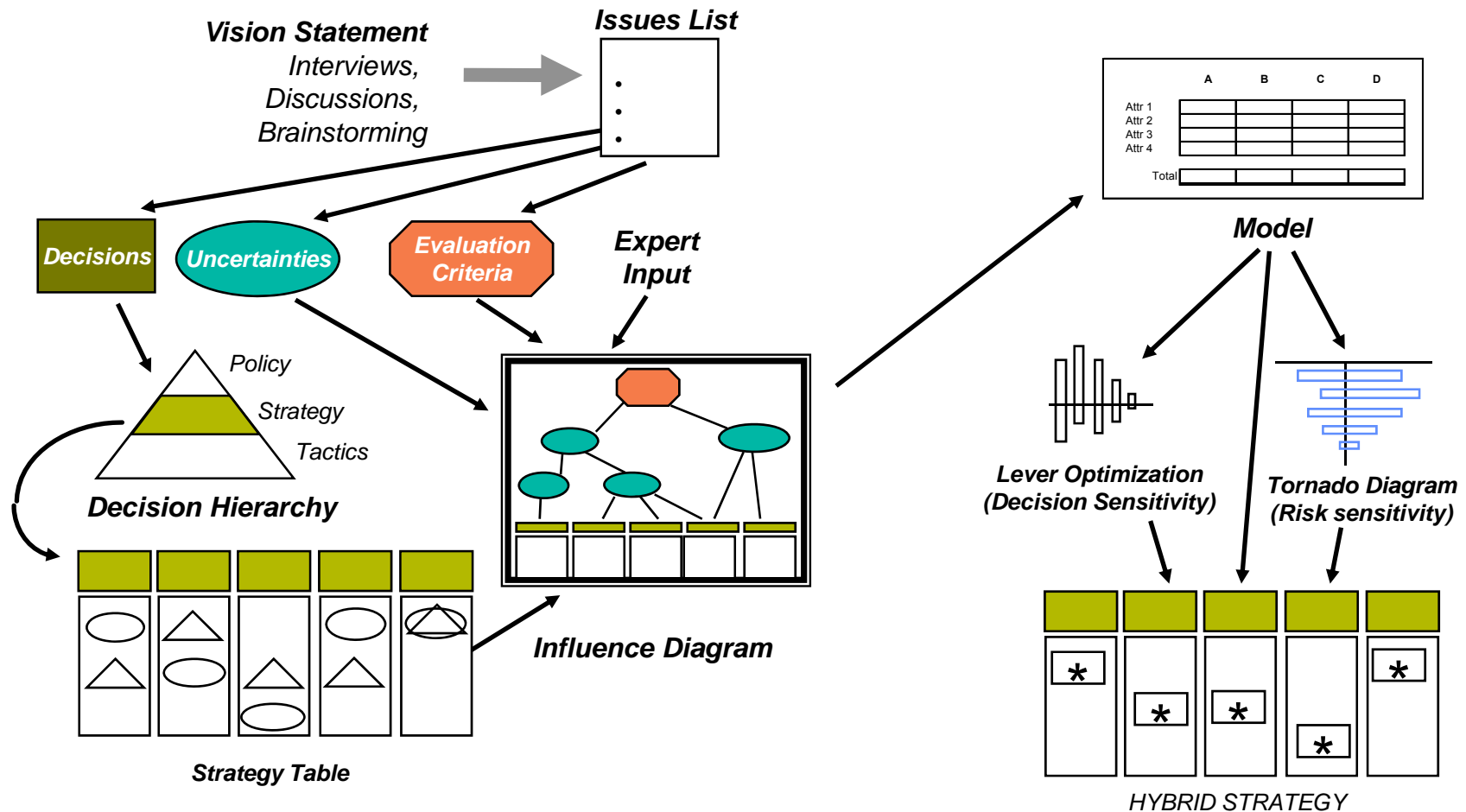
☐ Current state of Process at Powertrain

☐ Conclusions

= **Decision Methods at Powertrain uses a process that is ideal for problems having considerable uncertainty**



= Powertrain's Decision Method process utilizes the DDP principles



= One outcome of the process is a shared understanding for the team

At the beginning of the project, each person has their own implicit understanding of the issues.



By the end of the project, the group has an explicit, shared understanding of the issues.



= Agenda

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= **Powertrain has been the leader in GM in making a structured decision process part of people's "normal" job**

❑ DDPs in GM were primarily large strategic projects

◆ 3 to 12 months (medium of 4 months)

◆ Outside consultants

❑ Turbo DDPs were started at Powertrain in 1993

❑ Decision Methods approach began in 1996

◆ Process is applicable to all decisions (with significant benefit to decisions with considerable uncertainty)

◆ Length of process time based on the decision

❖ Range from 3 days to over a year

◆ Utilizes internal resources

◆ Added focus is to teach organization how to do process on their own

= The number of projects at Powertrain have increased significantly

DDP Project History

- Dilucar
- Spray Bore
- Worldwide P/T
- Powercube
- Two-Stroke Engine

1993

- Mass Efficient Eng Block

1994

- FASID
- PTX
- TiAl valves
- GMLOCS
- P/T Adv. Portfolio
- P/T Defiance

1995

- CRADA
- Lost Foam Layout
- Cylinder Bore
- L850 Sourcing
- Lost Foam VOC
- P/T Oil Change Intervals

1996

- Oil Pump Noise
- Steel Crank
- Valve Seats
- Laser Hone
- Manual Trans. Criteria
- L-850 Cam Rod
- Noise Test
- CDTS
- Test Technology
- 319/356 Alloy

1997

= **Process is being implemented by many Powertrain personnel as part of their “normal” job**

❑ Active users

- ◆ Tim Cyrus
- ◆ Steve Pruss
- ◆ Larry Byrnes
- ◆ Tom Mitchell
- ◆ Dale Gerard
- ◆ Paul Crepeau
- ◆ Mark Gillman

❑ Process basis for

- ◆ Advanced manufacturing process to start an R&D project
- ◆ Proposed BOM/BOP/BOD Deviation process

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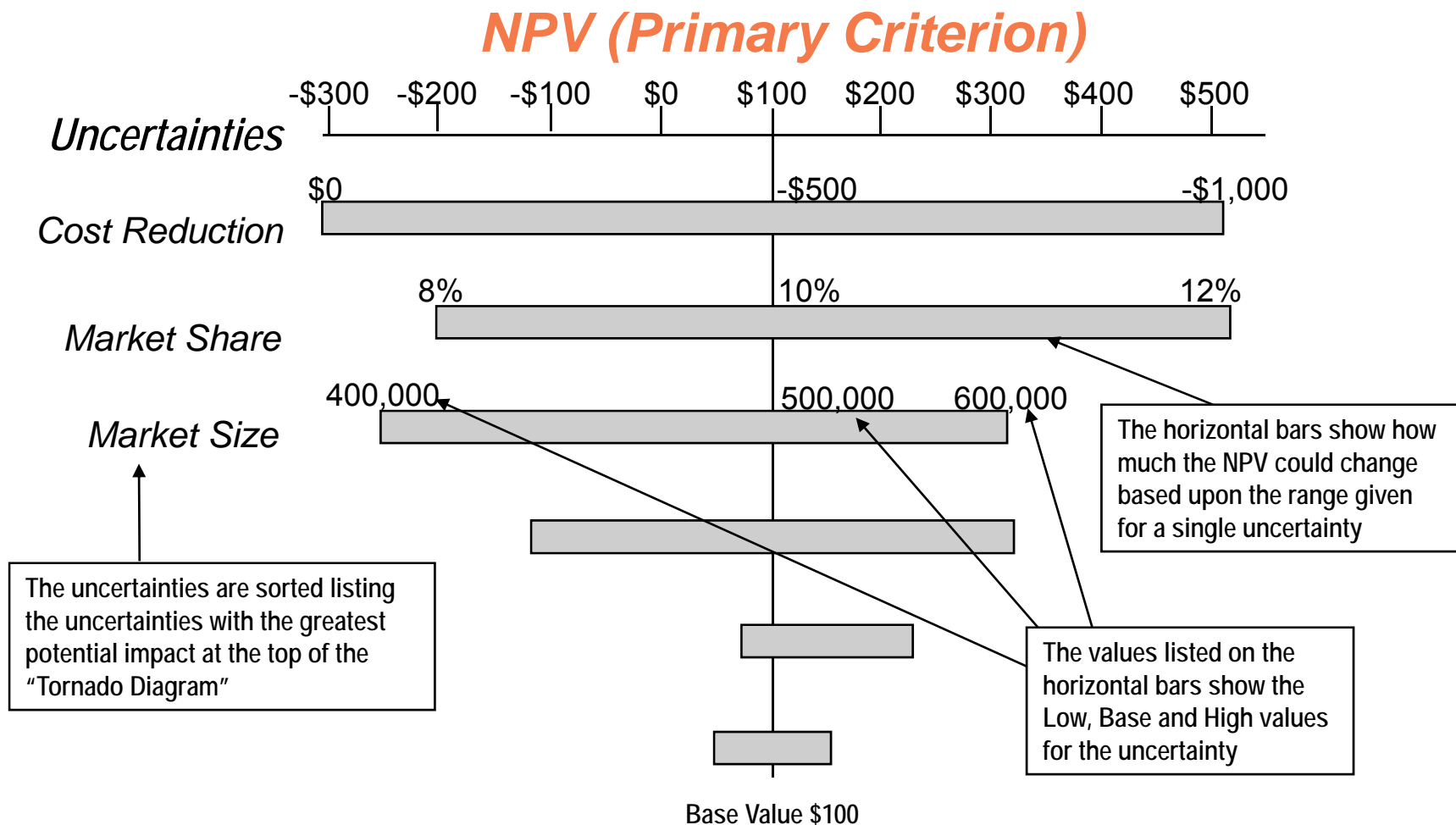
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- ☐ Conclusions

= Decision Methods is being accepted and willingly utilized by Powertrain personnel

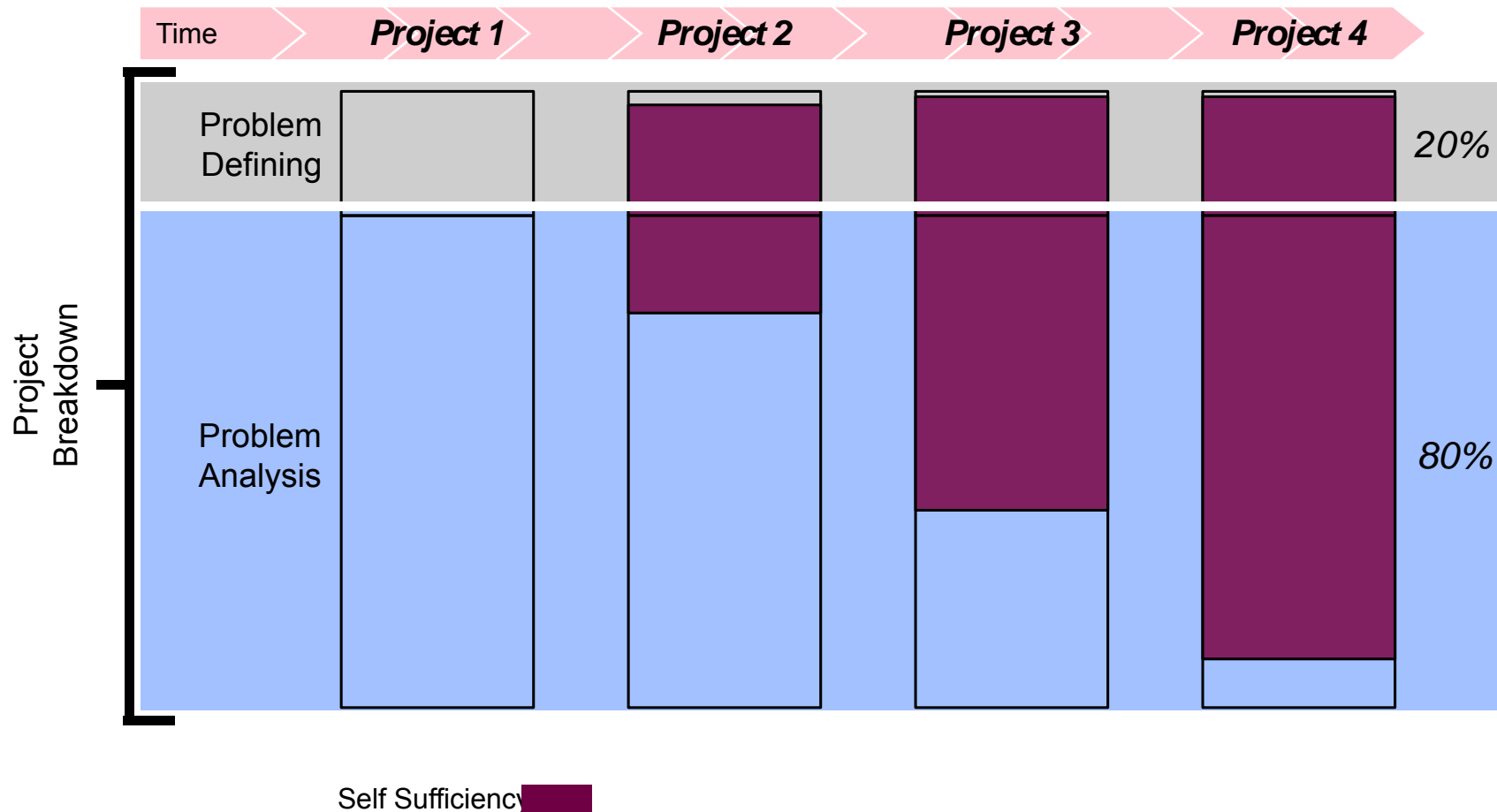
- ❑ Number of projects is increasing significantly**
- ❑ Powertrain personnel are learning to use the methodology on their own**
 - ◆ Less support needed with each project that a person does
 - ◆ At least 8 people are able to and actually using the process on their “normal” job
- ❑ Powertrain model is being implemented at Allison Transmission Division**
- ❑ For assistance, Powertrain personnel should contact John Palmer on 8-237-1032**

= Spares

= *Tornadoes are used to show the relative impact of the range of uncertainties of variables on the value of a strategy (Tutorial)*



= The level of self sufficiency increases with each project



= The level of self sufficiency to do process on their own increases with each project

