

Evidence-Based Management:

A Cornerstone of Quality

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Why Smart Executives Fail

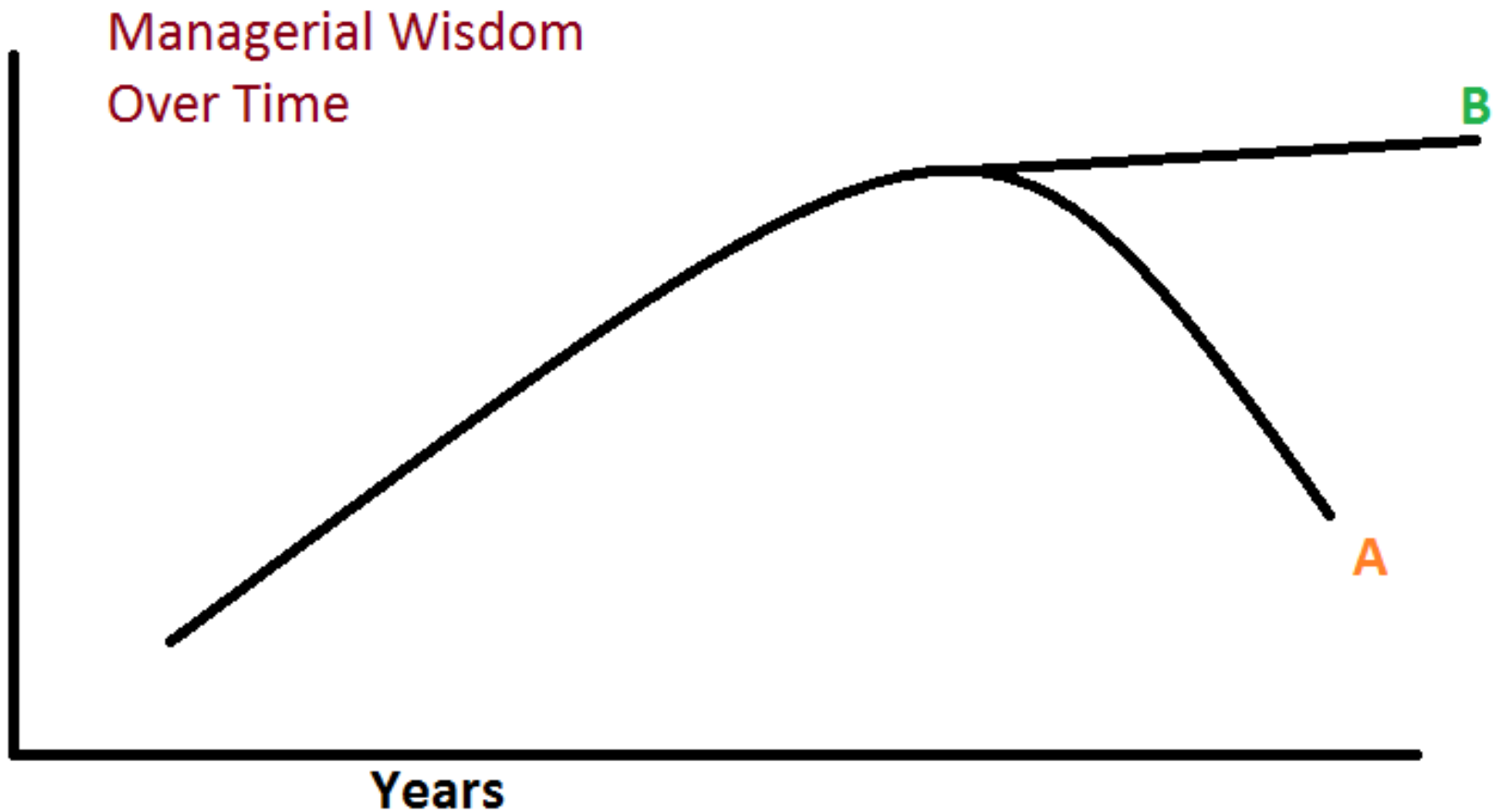
- Wrong strategy
- Wrong scorecard
- Continuing to use yesterday's answer
- Failure to see and act on vital information

Why Smart Executives Fail

In other words . . .

What we “know” is false, outdated,
irrelevant to context, misinformed.

Is Our Knowledge Relevant?



What's Your Source of Knowledge

- School
 - Mentors
 - Experience
- or -
- Experience plus reflection plus feedback (evidence)

How Has Transit Changed?



- Finances
- Demographics

- Politics
- Processes, equipment, technology



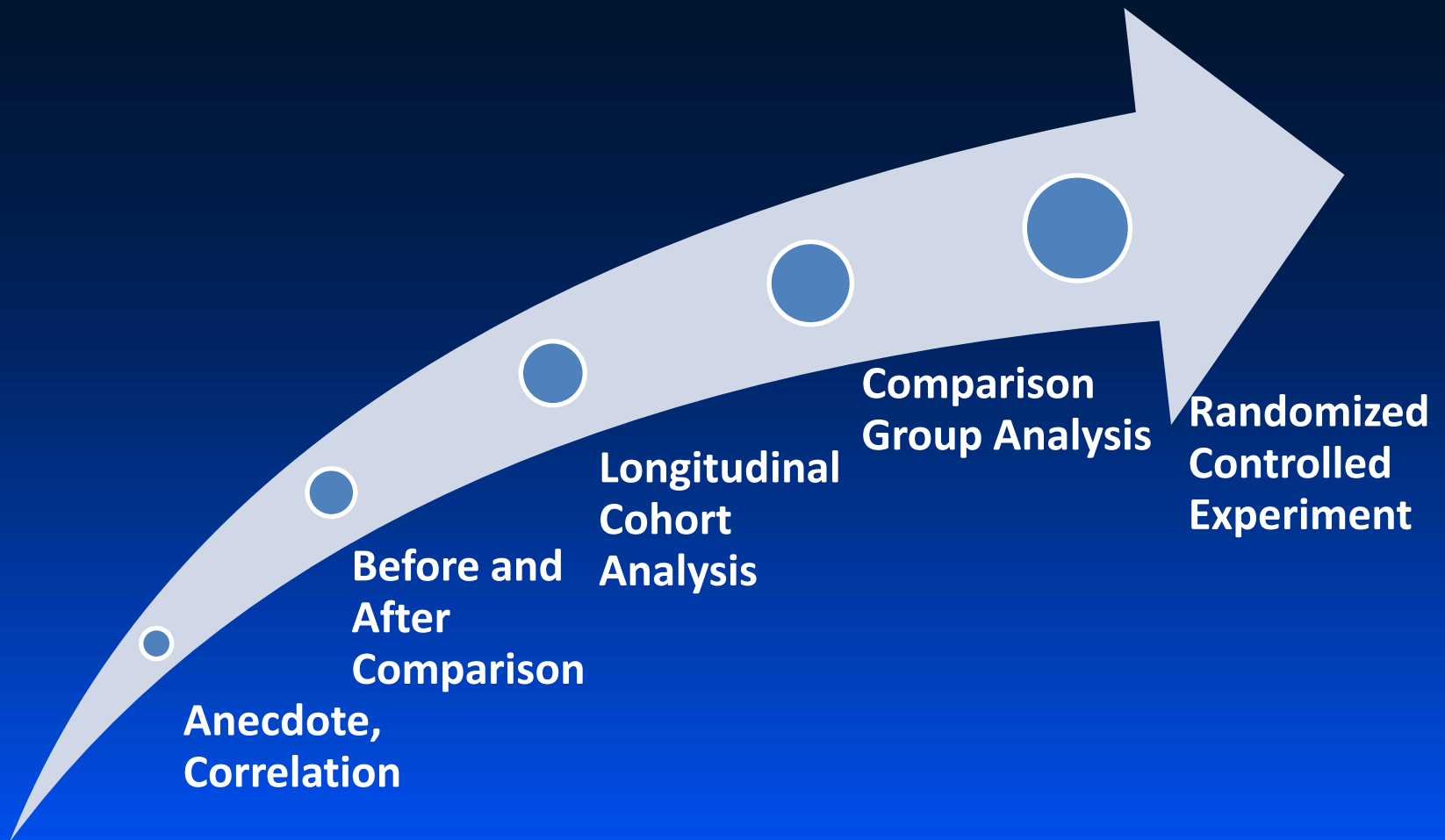
Table Discussion

What are some truths I have learned that are no longer true?

Evidence-Based Management

Evidence-based management is about making decisions through the conscientious, explicit, and judicious use of information.

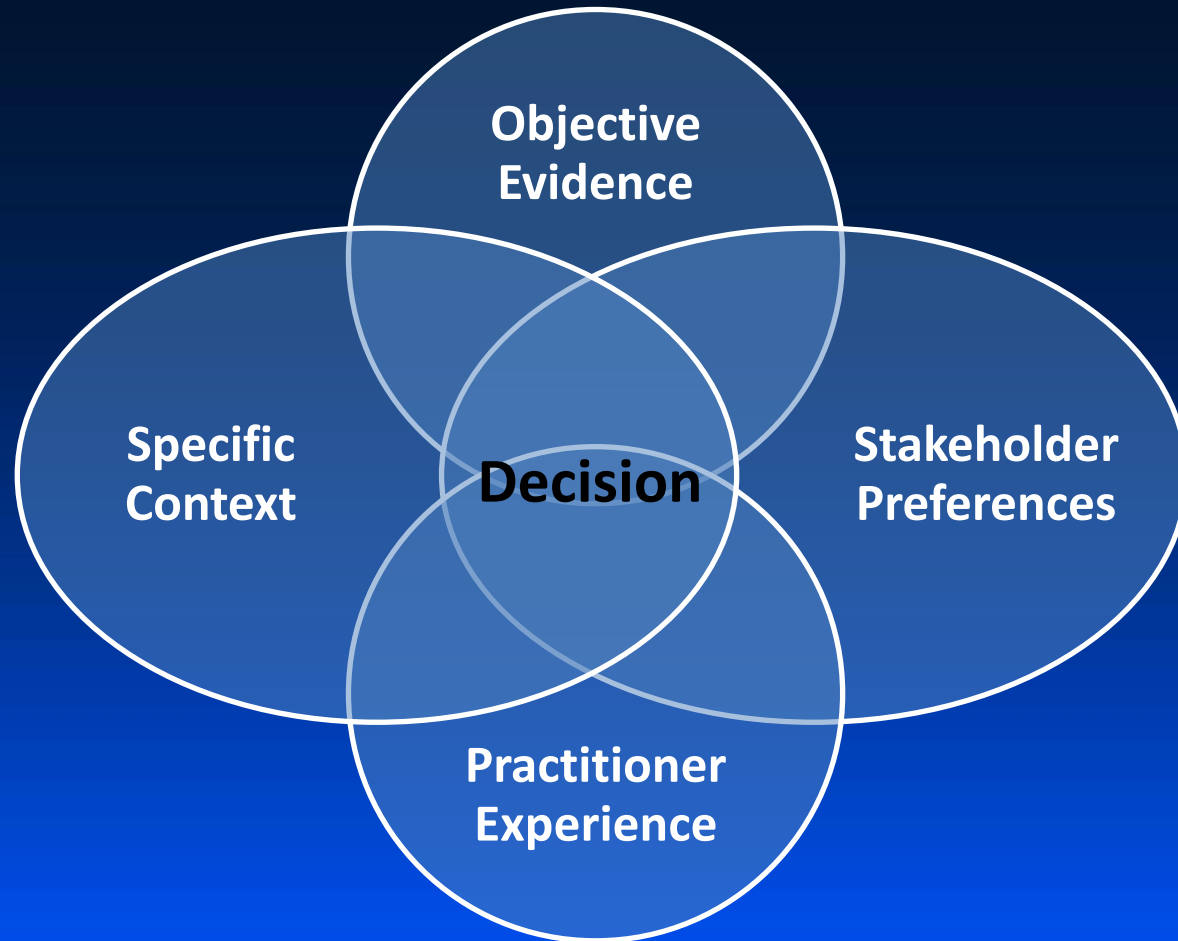
How Good is Your Evidence?



Evidence and “Best Practices”

- Cool ideas
- Story from colleague
- Published research findings
- Contextualized analysis of factors producing of top level performance (benchmarking)

From Evidence to Actionable Information



Evidence About What?

Strategy

- Agency goals
- Community outcomes

Programs & Projects

- Project, program outcomes
- Cost/benefit, customer input

Process

- Standard work
- Process outcomes

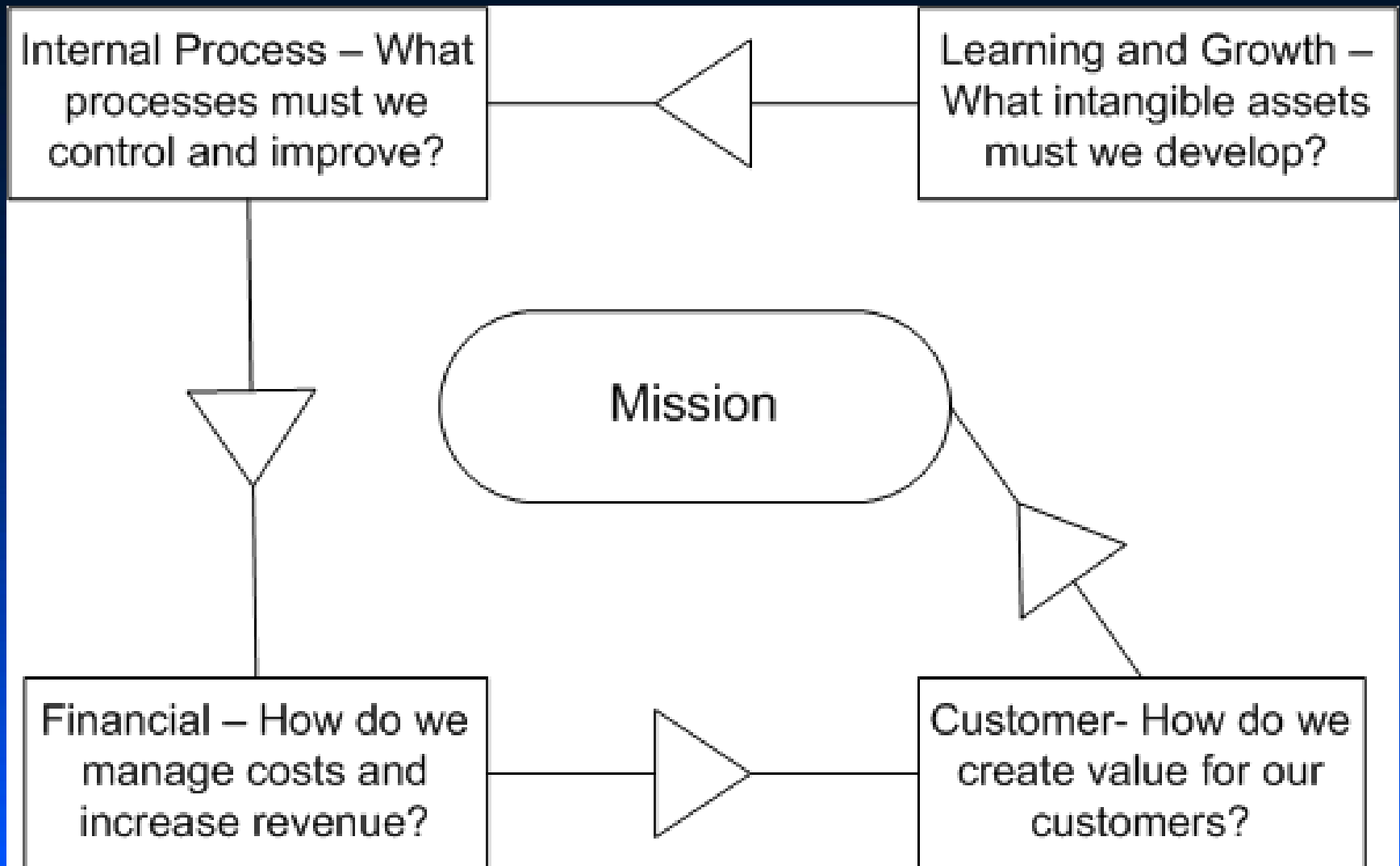
Treat Your Strategy and Major Programs as Hypotheses

Executing strategy X will produce outcome Y.
Improving on-time reliability will increase ridership at no additional cost.

Implementing program/project A will produce outcome B.

Implementing Commuter Rail Line will increase ridership and facilitate transit-oriented development.

Strategy Map



Scientific Method

- Define question or problem.
- Gather information.
- Form an explanatory hypothesis.
- Test the hypothesis in a manner that rules out plausible rival hypotheses.
- Analyze the data.
- Interpret data and draw conclusions.

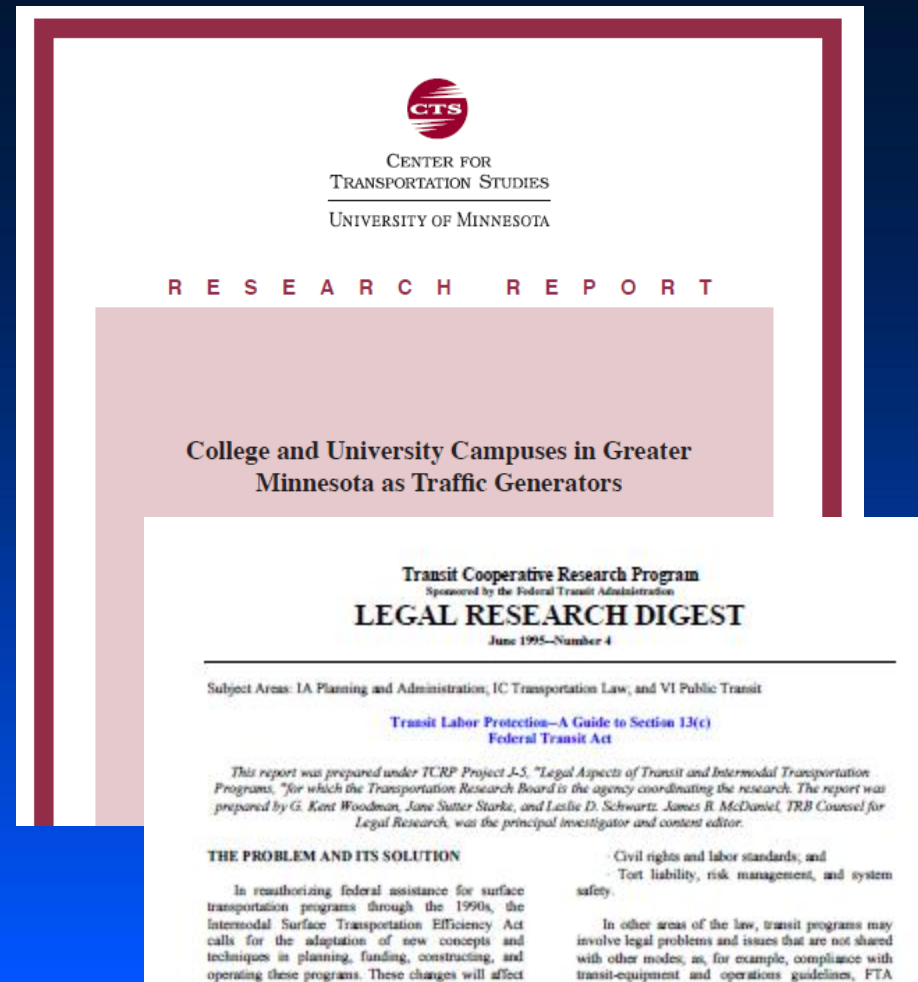


Building an Evidence-Based Organization

- Understand and isolate cause and effect in complex systems
- Create a culture of research and evidence-based decision making
- Use information-sharing communities to reduce overuse, underuse and misuse of specific practices
- Build decision supports to institutionalize validated practices

Incorporate Published Research

- TRB/TCRP
- Academic Research
- Partner with local universities



Quality Tools Support Evidence-Based Management

- ISO 9001 – “*Principle 7: factual approach to decision making.*”
- Lean – “*embrace scientific thinking.*”
- APTA Quality Service Handbook – “*research customer requirements . . . measure, analyze & improve.*”
- Benchmarking Groups – “*standardized KPI’s point to best practices.*”

Evidence in UTA Quality Management System

Strategy

- Evidence about customer values and requirements.

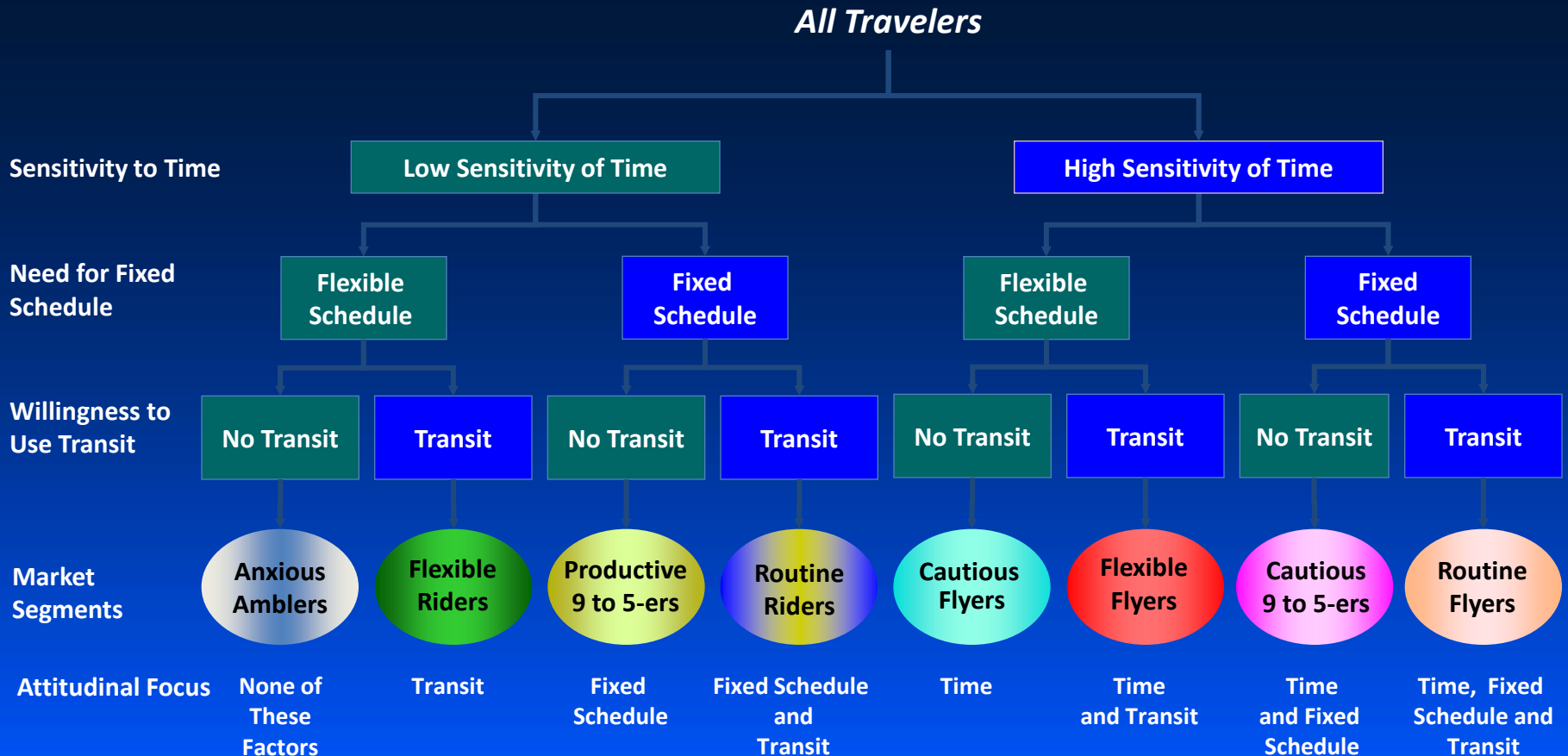
Programs & Projects

- Equipment technology.
- Net promoter score.

Process

- Visual workplace.

Evidence About Strategy: Market Segmentation



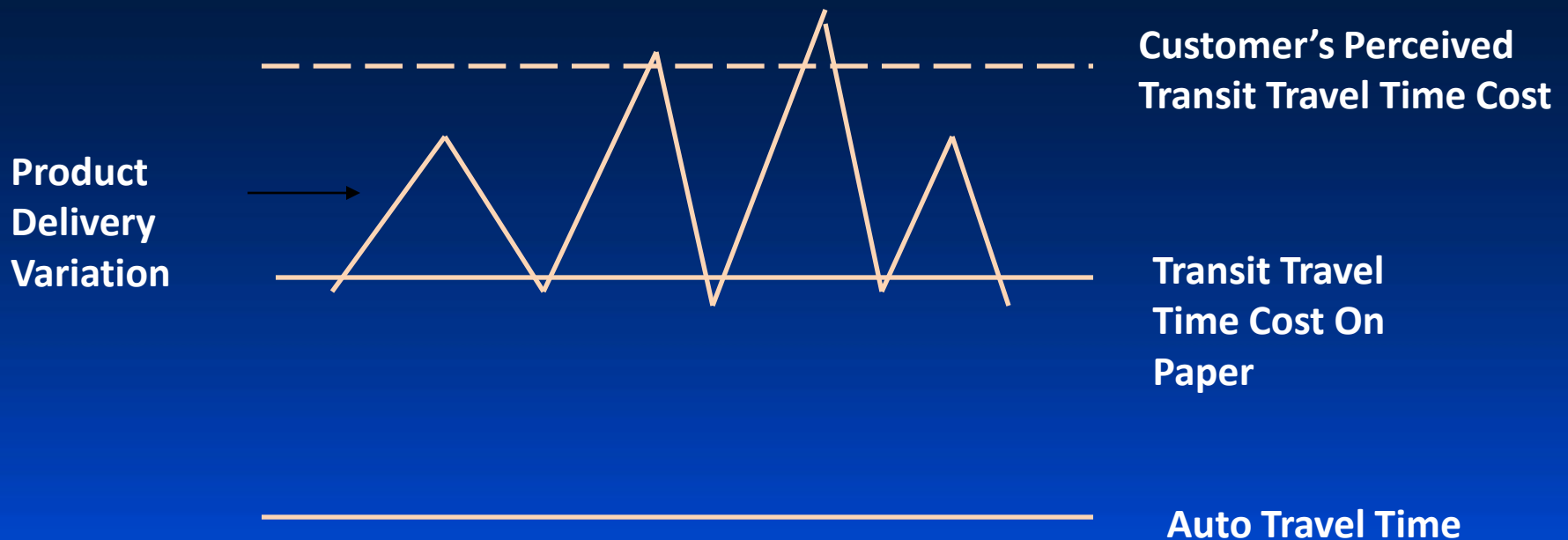
Routine Riders

Lower sensitivity to time
Fixed schedule
Travel during rush hours
Willingness to use transit

- Most have one car per household
- Employed full-time or part-time
- Lower income
- Half are married
- Two-thirds are male
- Your typical college student is representative of this group

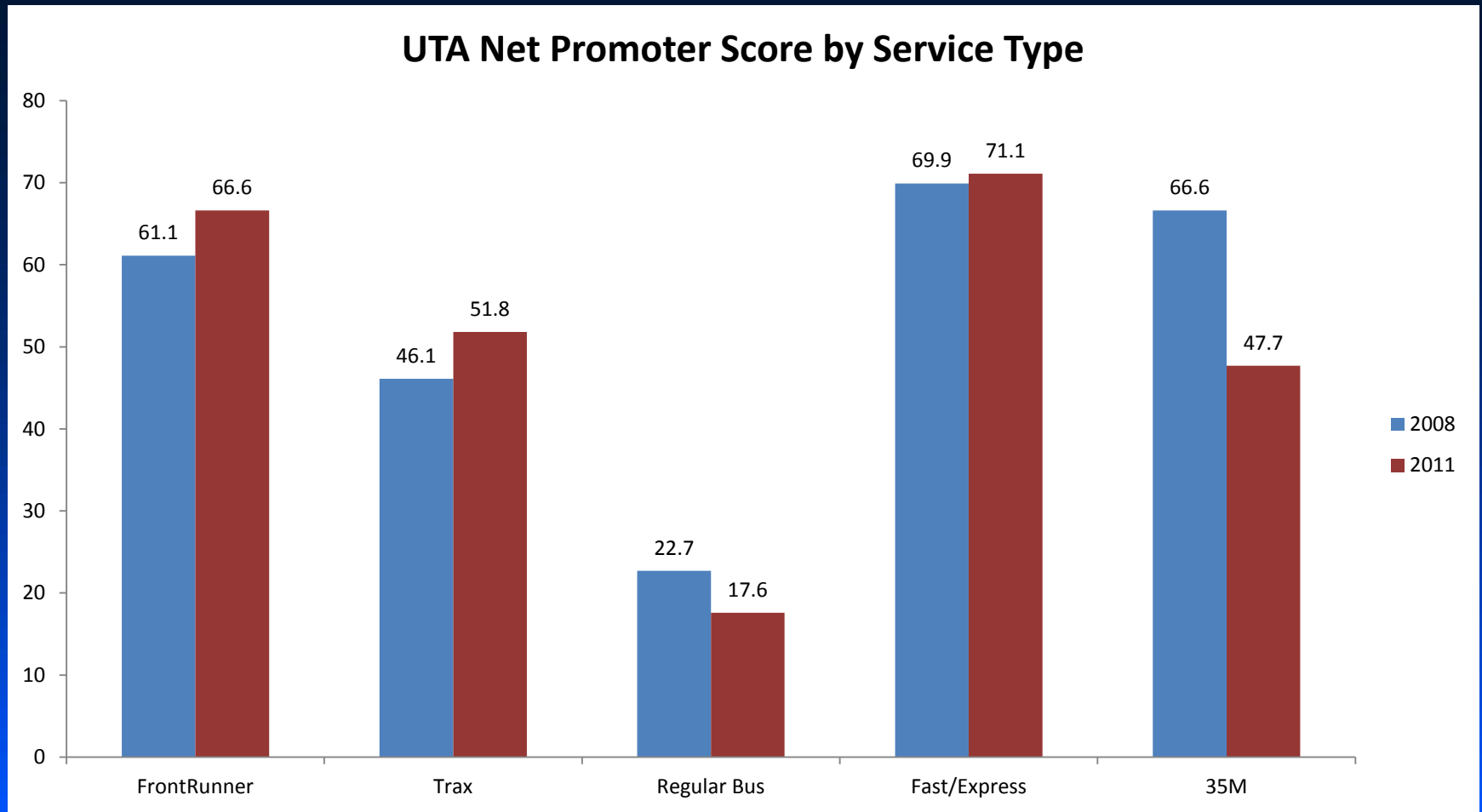


Customer View of Reliability



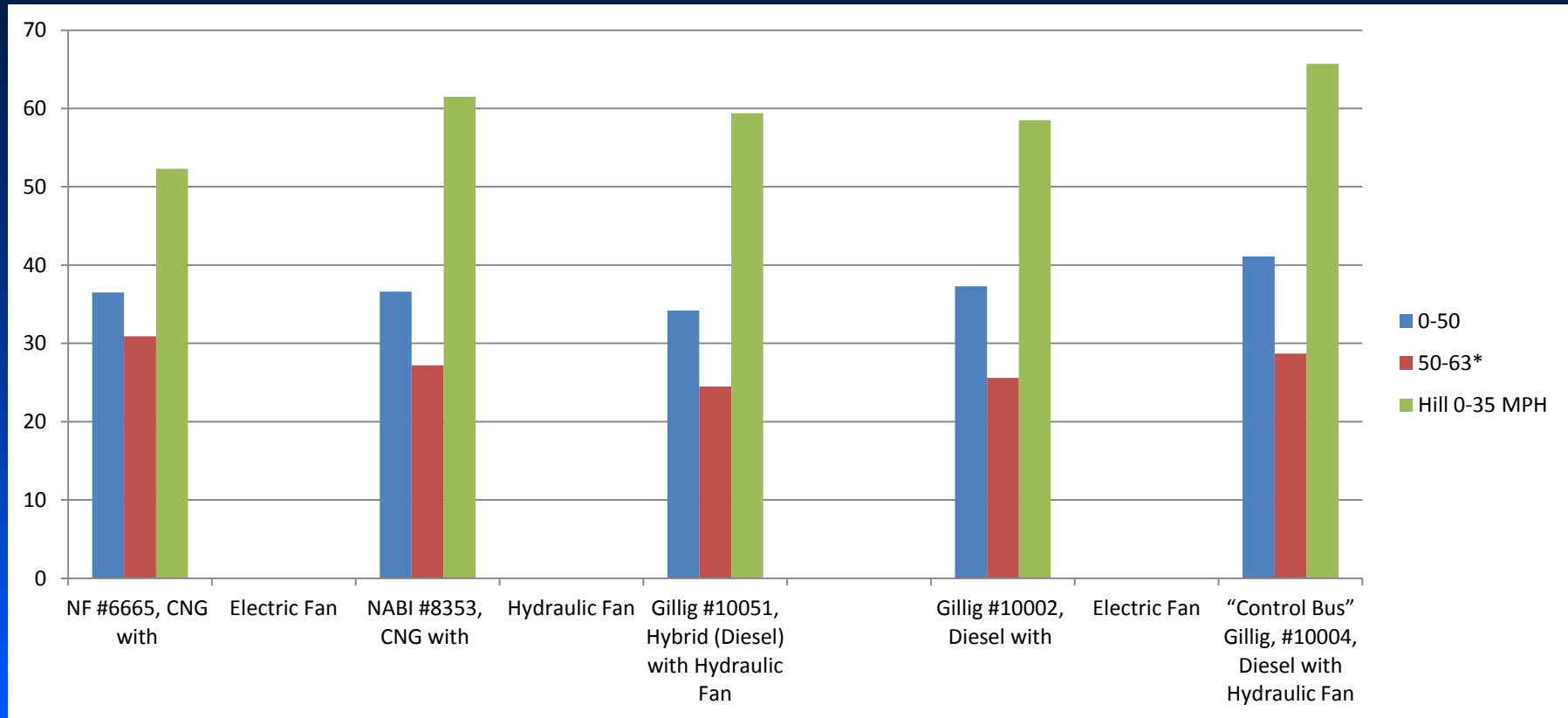
Based on Psychographic Research, Focus Groups and Literature Research in Behavioral Science

Evidence About Programs & Projects



Evidence About Programs & Projects

CNG vs Diesel vs Hybrid



Evidence About Processes

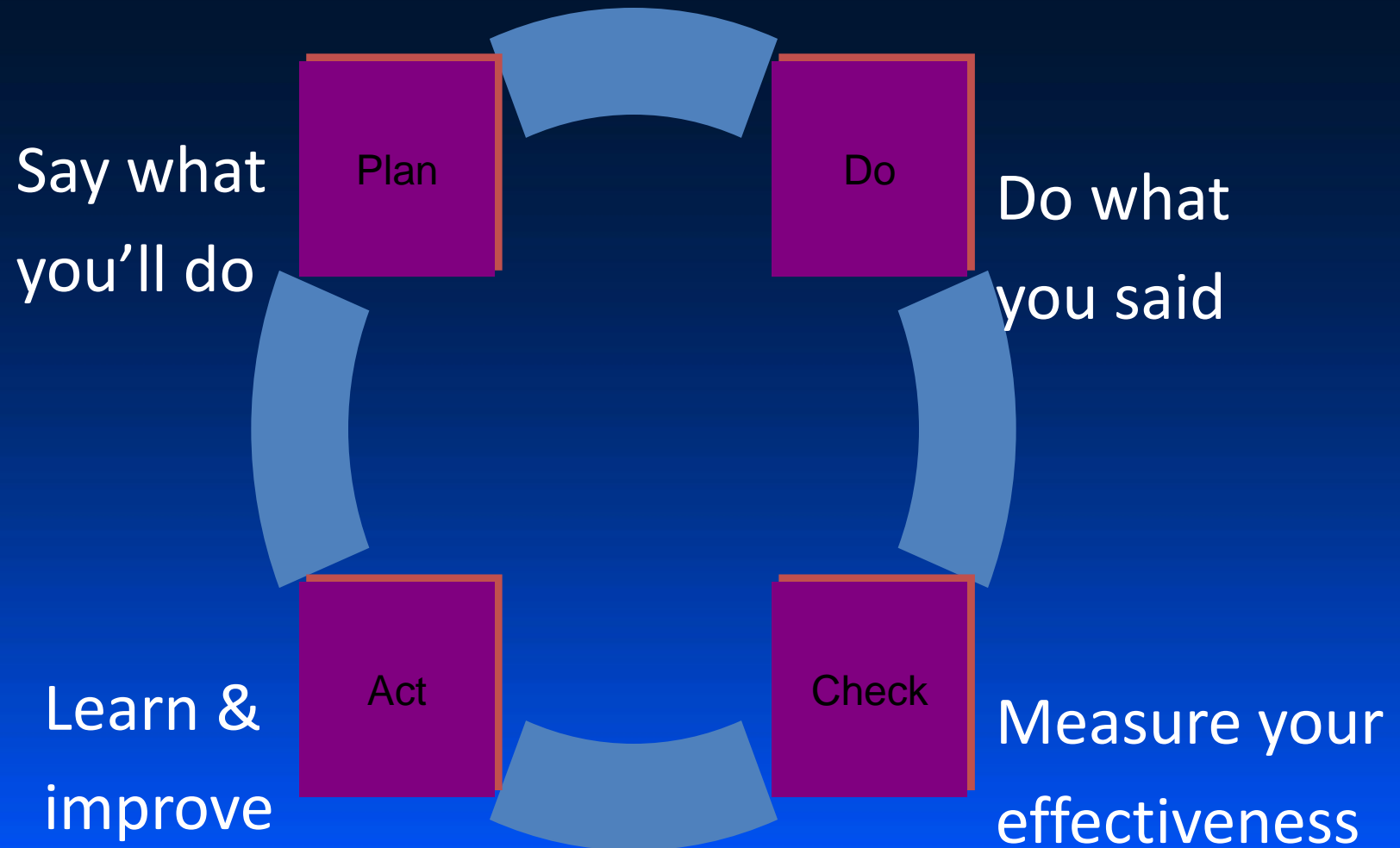
The screenshot shows the UTA MDC TransDat V Mobile Data Computer interface. The window title is "UTA MDC" and the date/time is "11/15/2006 16:30:34". The main display area shows the following information:

- TransDat V Mobile Data Computer**
- 16:30:34**
- Wednesday Nov 15, 2006**
- Bicycle (0)** and **Wheelchair (0)** counts with plus and minus buttons.
- A list of transit routes with times and locations:

16:24	SLCC RD...	REDWOOD RD @ 4439 S	5:54	Reset
***SALT LAKE COMMUNITY COL...				
16:33	MEDW BR...	3900 S @ 188 W	2.29	
***MEADOWBROOK TRAX STATI...				
16:52	MEDW BR...	3900 S @ 188 W		
17:01	SLCC BRUN	BRUIN BLVD @ 1750 W		
17:08	VALY FAIR	CONSTITUTION BLVD @ ...		

The right sidebar contains the following buttons: Send Message, Read Messages, Detours, Help/ Docs, MDC Control, Late Reports, Fare Collection, and Logout. The bottom status bar shows "05340 0663 D 4.1.2510".

Continuous Improvement Cycle



References

- Rousseau, D. M., *Is there such a thing as “evidence-based management”?*
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- Mann, D. (2010). Creating a Lean Culture.
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