Enabling Lean Behavior Through Customer- Focused Metrics
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Company Background
Dell is the #1 PC manufacturer in the US and 2nd worldwide. Dell's Direct Model gave it an early competitive advantage by shortening Dell's supply chain. This advantage was temporary; competitors have now managed similar efficiencies. One of the industry's only differentiators is Customer Service. Michael Dell knows this. His 1999 book states: "We've found that pricing is only one-third or our customers' decision-making process; the other two-thirds represent service and support".

Project Background
Having recently overcome serious public criticism regarding its technical support, Dell is seeking ways to:
- Reduce Operational Expense on Customer Support, while
- Maintaining or increasing Customer Experience (measure as CSAT)

Historically, Dell has not been able to reconcile these two goals, engaging in a guardrail-to-guardrail switch in policies. These policies are summarized as Scenario A and Scenario B.

- Scenario A: "Buy" CSAT
  - Maximum resources are dedicated to giving the customers everything they want.
  - Pro: Customer Satisfaction will be high, and as a result so will the “Likelihood to Repurchase” (LTR)
  - Con: Expensive; selling PCs may not be profitable.

- Scenario B: Cut service levels drastically
  - Every customer contact is seen as a $ loss. Service levels are cut drastically.
  - Pro: Costs are low
  - Con: CSR's incentives are not aligned with those of customer; priority is on keeping calls short, not on truly resolving the customers' issues.

Internship Objectives
Find a way to reconcile the dueling objectives of CSAT maximization and cost minimization.

- Construct an unprecedented customer-centric view of Dell’s eSupport (online), telecom, and call-center journal data in terms that highlight the customers' actual end-to-end resolution experience during technical support contacts.
- Formulate new customer-centric metrics that capture the customer experience in terms of value-added contact time. This is in contrast to current agent-facing industry metrics (e.g., AHT) which obscure the customer experience and allow for significant gaming (transferred, repeat calls, etc).
- Create generalized waste-reduction recommendations for tech support contacts that maximize value-added contact time based on these new metrics.

Main Technical Activities
- Data mining of eSupport, Journal, and Telecom data.
- Mathematical formulation of customer-facing metrics.
- Value Stream Mapping (VSM) of end-to-end resolution experience for various technical support issues types.
- Digital articulation of current-state.
- Causal mapping of VSM current and future state call-center behaviors relative to OpEx and Customer Experience.

Main Technical Activities

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<thead>
<tr>
<th>Metric</th>
<th>Description</th>
<th>Formula</th>
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<tbody>
<tr>
<td>CTPR</td>
<td>Customer Contact Time (in minutes)</td>
<td>( \text{Customer Contact Time} \times \text{Customer Contact Time} )</td>
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<tr>
<td>CTPR</td>
<td>Customer Time per Resolution (CTR)</td>
<td>( \frac{\text{Customer Contact Time} - \text{TTR}}{\text{Customer Contact Time}} )</td>
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<tr>
<td>CSAT</td>
<td>Customer Service Availability Time (in minutes)</td>
<td>( \text{Customer Service Availability Time} \times \text{Customer Service Availability Time} )</td>
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<tr>
<td>CSAT</td>
<td>Customer Service Availability Time (CST)</td>
<td>( \frac{\text{Customer Service Availability Time} - \text{TTR}}{\text{Customer Service Availability Time}} )</td>
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<td>CTR</td>
<td>Customer Time per Resolution (CTR)</td>
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Conclusions
The CustFM metric targets high customer satisfaction by emphasizing value-added support time delivered to the customer. Because it is a Lean metric framework, it also emphasizes waste reduction, thereby also lowering cost.

This type of Lean metric is a powerful tool for fostering Lean behavior across a diverse, geographically dispersed customer service staff. By setting targets based on this type of metric instead of traditional, inward-looking call center measures, the call center is able to self-select behaviors that maximize value-added time delivered to the customer. The result is higher CSAT, with lower costs, and no money spent on Lean program development.