Measuring Innovation in Carver County

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Prepared on Behalf of
Carver County

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Measuring Innovation in Carver County

MBA 6220: Operations Management
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Section I: Overview

Introduction

As part of this year’s Resilient Communities Project (RCP)\(^1\) partnership, Carver County (Minnesota) collaborated with the Carlson School of Management’s part-time MBA Operations Management class\(^2\) under the direction of Professor Scott Martens\(^3\) to produce a series of reports and recommendations. The purpose of the exercise was to allow the students of the part-time MBA program to engage in “real world” operations management that would inform Carver County’s efforts to track and evaluated their innovation and continuous improvement efforts.

The mission of the Resilient Communities Project is to connect communities in Minnesota with the wide-ranging expertise of University of Minnesota faculty and students to address pressing local issues in ways that advance sustainability and resilience.\(^4\) The 2015–2016 academic year partnership with Carver County encompassed 30 projects in the areas of Energy and Environmental Stewardship, Housing Opportunities, Alternative Transportation, Human Services, Community Engagement and Education, Community Identity, and Administration.

Executive Summary

This project was initiated early in the Spring 2016 semester as part of the Thursday evening section of MBA 6220: Operations Management in the Carlson School of Management at the University of Minnesota, taught by Professor Scott Martens. The specific purpose of this particular initiative fell under the administration category of projects through the RCP partnership. The project was titled Measuring Innovation, with the stated goal to “Evaluate the impacts and outcomes of Carver County’s continuous improvement and innovation programs. Specifically, the County is interested in methods for evaluating outcomes of LEAN/Kaizen events, explaining innovation outcomes to the public, and developing more intentional approaches to outcomes measurement going forward.” The project was sponsored by the Carver County Administrative Services Department, and Lorraine Brady, business analyst with Carver County, served as the project lead.\(^5\)

The project was broken into nine subprojects, with three subprojects focused on tactical issues related to answering the question “How can Carvery County measure the impacts of innovation?” and the remaining six subprojects focused on strategic/programmatic issues related to the question, “What are the best tools to evaluate the innovation program?”

The key findings of the tactical issues sub-project can be summarized as follows:

\(^1\) [r http://rcp.umn.edu/]
\(^2\) [Course number: MBA6220_090S16]
\(^3\) [https://carlsonschool.umn.edu/faculty/scott-martens]
\(^4\) [http://rcp.umn.edu/]
\(^5\) [http://rcp.umn.edu/carver-county-projects/]
1. Improve on identifying, measuring, and reporting financial and non-financial metrics based on project goals and solid baselines to demonstrate project impact
2. Standardize a streamlined results capturing process and train the staff to use it
3. Follow a more specific methodology of recording, evaluating and tracking innovation opportunities

The key findings of the strategic issues sub-projects can be summarized as follows:

1. Create a strategy map and scorecard to identify efforts that contribute to achieving the strategic objectives of the organization, and map progress the organization is making towards its goals
2. Implement a closed-loop Strategic Operating System to provide reinforcement and a framework to test and measure progress against Carver County's strategic goals throughout the year.
3. Develop CC human capacity plan (resourcing, training and leadership) that supports an ongoing commitment to innovation
4. Implement a 4-level innovation model that incorporates voice of customer insights
5. Develop Internal measurement of Carver County's Culture of Innovation, coupled with timely response to the data received to allow for, measure and track the long-term success of the program
6. Provide mechanisms for managing the change that surrounds innovation is imperative to its success
Section II: Tactical Projects 1–3

Overview

The central focus of the tactical projects is to answer the question, “How can Carver County measure the impacts of innovation?” To that end the three groups where tasked with related areas of investigation.

Group 1 tackled questions of project impact and benefits. They assessed how projects are chartered, the current state of knowledge capture and transfer, and recommended systematic improvements for realizing lean/kaizen impacts and benefits across Carver County. Their main goal was to improve on how Carver County identifies, measures and reports metrics for project goals so as to be able to demonstrate the impact of projects.

Group 2 focused on standardizing a streamlined process for capturing results of projects and efforts, and training the staff based on lessons learned from those efforts. Their main focus was ensuring that Carver County could know if stakeholders are satisfied with the work performed, how the results are shared internally and externally, and how knowledge is retained for future use.

Group 3 examined how lean/kaizen events are identified, prioritized, selected, and captured as valuable opportunities. This group developed a more specific methodology of recording, evaluating and tracking these innovation opportunities so that Carver County could have a systematic selection and evaluation process in place for innovation.
Project 1: Project Impact and Benefits

By Scott Martens

Executive Summary

One of the keys to a successful innovation program is the ability to measure its impacts. It is critical to measure and communicate both financial and nonfinancial impacts to the organization and key stakeholders or customers. Successful programs not only have a way to measure these impacts but have a structured approach to capture or realize these benefits and then use a portion of realized benefits to reinvest in furthering innovation within their organization. In other words, a highly functioning, self-sustaining innovation program not only will measure, report and communicate benefits but they will have a disciplined approach to capture and reinvest those benefits so innovation can take hold in the culture and exponentially grow as success is realized.

The paper will discuss the current state of the Carver County, MN innovation program with regards to measuring impact. After a review of current state there will be recommendations that touch the following four areas:

- Chartering projects – critical components
- Engaging finance in determining benefits
- Establishing standard ways for calculating benefits
- Establishing standard ways to report, review and realize benefits

Finally, the appendix provides multiple examples on measuring benefit impact and provides areas of financial opportunity that manifest themselves in most organizations.

Overview

Successful innovation programs must measure impacts. It is critical to measure and communicate both financial and nonfinancial impacts to the organization and key stakeholders or customers. In addition to having a way to measure these impacts, there must be a structured approach to capture or realize these benefits. A portion of the realized benefits should then be reinvested to further innovation. In other words, a highly functioning, self-sustaining innovation program not only will measure, report and communicate benefits but they will have a disciplined approach to capture and reinvest those benefits so innovation can take hold in the culture and exponentially grow as success is realized.

The paper will discuss the current state of the Carver County, MN innovation program with regards to measuring impact. After a review of current state there will be recommendations that touch the following four areas:
• Chartering projects – critical components
• Engaging finance in determining benefits
• Establishing standard ways for calculating benefits
• Establishing standard ways to report, review and realize benefits

Finally, the appendix provides multiple examples on measuring benefit impact and provides areas of financial opportunity that manifest themselves in most organizations.

Observations & Recommendations

Observations: Carver County, MN—Current state of measuring the impacts of innovation

Given the number of FTE resources aligned to Carver County innovation and the length of time they have been focused on innovation, the county is doing a good job of driving projects that have impact to the organization and its residents. Carver County leadership understands if they want to mature the innovation program and move it to the next level there will need to be an additional people resource commitment and the ability to capture, communicate and realize better the financial and non-financial impacts of the work.

Capturing impacts all begins with the project charter. Currently most innovation work at Carver County is chartered and contains solid goal statements. Recommendation 1 below will discuss ways to create more comprehensive and standardized charters in three specific areas that will have an impact on the ability to capture, realize and communicate project impact. Those three areas discussed in recommendation 1 are: the business case, goal statement and project scope.

Although there is an appetite in the county for measuring the impact of innovation, the current state shows they are in the infancy of being able to execute on this challenging component. I’d assess the will by innovation leaders to move in this direction as high. There needs to be the same commitment from Carver County’s senior leadership team and the engagement and ownership from finance to make the capturing, communication and realization of project impact a reality – a process unto itself. In recommendations 2 through 4, I outline how this can come together.

Recommendation 1: Establish robust project charters for all innovation/improvement projects

• Strategic Outcome (3–5 years out): Establish a data repository of all innovation/improvement documentation for each project. This documentation should include: project charter, storyboard, benefit/impact calculations, supporting data, an on-going measurement/evaluation plan, a list of additional
opportunities discovered, and a discussion of lessons learned. This documentation serves as the foundation for a knowledge repository so future teams and leaders can leverage learnings so the pace and magnitude of future innovations can be improved.

- Short Term Next Steps (0–2 year horizon): Ensure each improvement/innovation project has a project charter signed off by the project sponsor (champion). At a minimum, the project should contain the following five core elements: business case, goal statement, scope, timeline, and team. All five elements will be discussed below with more depth being provided on the first three elements. It is important to remember that the structure or format of the project charter is fairly consistent/standardized around these five core elements. It is also critical to realize that a charter is a living document and that as additional information is learned about the opportunity, the charter can change or evolve. A charter can be initially drafted with missing elements. These elements are then filled in as more data/information is gathered around the issue/opportunity. Evolution of a charter is normal but requires a discussion and agreement between the project sponsor (champion, project lead and the project team. Any change to the charter requires a corresponding discussion and revised agreement around timeline, budget, and resources.

Let’s discuss the five charter elements described above in more detail.

- **Business case:** The business case is designed to build a sense of urgency which is critical from a change management perspective. It establishes the burning platform – the pain - the impetus for moving from the status quo. The business case seeks to answer two basic questions: “why this project” and “why now”? The two questions building that sense of urgency can be supported by the following information:

  - **Process metrics:** How is the process currently performing (baseline metrics). Describe the current pain of the process. If we are to gauge the impact of a project, it is imperative to understand baseline performance (where we started from). If baseline performance is unknown and only final performance is known, there is no way to determine the change and therefore no way to determine project impact. Examples of process metrics:
    - Xx% of applications in the zzz process contain missing or incorrect data.
    - Grant proposal success rates for the time period X to Y have fallen from A to B.
    - Cycle times/hold times/processing times in the xxxx process for the time period X to Y are currently ddd (or have increased from A to B).

  - **Internal/external Voice of the customer (VOC):** How is the urgency or pain being expressed by your customers? Examples:
Raw comments from feedback sources (e.g., surveys, focus groups, audits, engagement, complaints, etc.).

Citizens identified X as the Number 1 quality-of-life issue for the past Y quarters.

Satisfaction rates for Xx process/area have decreased Y percent for the time period A to B.

- **Financial Impact:** Financial impact of the issue is the most universal, compelling way to build the sense of urgency described in the business case. When we put things in financial terms it gives the opportunity a common frame of reference for everyone. Examples:

  - *What is the cost of excessive cycle time?* This could be the time value of money because receipt is delayed. It could be the cost of a person's time because they are waiting for something.

  - *What is the cost of poor performance?* This could be the cost of having to reprocess some number of applications, requests, travel claims, expense reports, etc. because of missing or incorrect information.

  - *What is the cost of a lost sale?* Has the performance of a process caused an impact to topline revenues?

  - Note: see appendix for an example of a financial business case.

- **Determine what “best-in-class” performance looks like.** Find out who is ranked or considered best in the relevant group (other governmentals, businesses, non-profits, etc.) and how they are dealing with the same issue. Example:

  - In the xxx process, our current performance is aaa (defects, sales, cycle times, etc) while comparable government units are at zzz and the best in class of industry is performing at ddd.

- **Note:** The benefits case, to a large extent, is “boiler plate.” In other words, it has a standard look, feel, and rhythm to it. Once you have identified a problem, you can begin to create the business case, even if you do not have all of the information required in the items described above. If you have information about only one item, include it along with space for the other areas. You will then know that your team’s first task is to gather data to complete some or all of the other sections of the business case. It is also important to note, if once the information is gathered, a compelling business case cannot be articulated, then close the project and move on.

  - **Objectives/Goals:** A project objective is often referred to as the goal. The project objective serves as the marching orders or charge for the project leader and team. It provides information as to what, where, and when, as well as information about
how much improvement or change needs to occur. At the completion of the project, any person should be able to refer back to the project objective and determine whether the project was successful. The project objective allows the team to focus on what needs to be accomplished. It serves as the “exit strategy: once accomplished, a team’s primary work is complete.

Project objectives should be SMART (figure 1): Specific, Measurable, Attainable/actionable, Relevant/realistic, and Time-bound. Specifically, project objectives (goal statements) should include: the process (name it), progress measure (cycle time, hold time, returns etc), direction (increase, decrease), target (new desired state), deadline (by when)—S-M-A-R-T.

Notes:

- A goal of increasing employee morale or customer satisfaction is NOT an example of a good SMART goal. These goals are not advised since there are too many factors (x’s) that drive satisfaction; therefore any change would generally not be specifically traceable to the changed outcome.
- Relevant or realistic: For a goal to be relevant or realistic the baseline or starting point must be known. Without a known baseline there is no way to understand if the goal is both challenging (a stretch) yet doable.

### Goal Statement Examples

<table>
<thead>
<tr>
<th>Goal Stmt that needs work</th>
<th>Issue</th>
<th>Good Goal Stmt</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the A/R process, decrease the current cycle time of 37 days for the receipt of payment by June 30, 20xx.</td>
<td>How much should the cycle time be decreased?</td>
<td>In the admissions process, decrease the current cycle time for the admittance decision process from 37 to 10 days by June 30, 20xx.</td>
</tr>
<tr>
<td>Decrease the number submitted without signature from 10% to 1% by August 15, 20xx.</td>
<td>What process are we dealing with? Decrease the number of what submitted?</td>
<td>In the expense management process, decrease the number of expense reimbursements submitted without signatures from 10% to 1% by August 15, 20xx.</td>
</tr>
<tr>
<td>In the accounts payable process, improve the number of payments made on time to 99% by May 31, 20xx.</td>
<td>What is our starting point, or baseline? How do we know if this is realistic and achievable?</td>
<td>In the accounts payable process, improve the number of payments made on time from 90% to 99% by May 31, 20xx.</td>
</tr>
<tr>
<td>Improve overall satisfaction with the bookstore from 72% to 85% by July 31, 20xx.</td>
<td>Project objectives should not be tied to increasing or improving overall satisfaction. There are too many variables driving satisfaction. It would be wise to focus on some or all of the underlying elements.</td>
<td>In the checkout process of the bookstore, reduce the average customer wait from 5 minutes to 30 seconds by July 31, 20xx.</td>
</tr>
</tbody>
</table>

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**Scope:** Appropriately defining the scope of a project is a challenge. The analogy of a camera zoom lens is useful: How much do you need to zoom in or out in order to create the ideal picture?
The benefits of defining project scope are:

(1) Everyone is clear about the task at hand

(2) It's easy to identify when pressures are pushing the project off course

In other words, if the scope of your team's project expands (scope creep), the team has a sound case for bringing it back into alignment with the original intent or for seeking relief through a new deadline or additional resources.

It is important to list what is in scope as well as what is out of scope. A simple framing tool (figure 2) can help with the scope discussion. The team can make a list of all potential scope issues via a brainstorming session. Draw a blank picture frame. Place ideas generated from brainstorming in one of 3 places: in the frame (in scope), outside the frame (out of scope), or on the frame (unsure). Take your completed picture frame to you project champion (sponsor) and have a discussion to gain agreement of in frame and out of frame. Seek resolution about any issues “on the frame”. Your finished product will be a clear picture of: in frame, out of frame and nothing remaining on the frame.

![Project Chartering – Scoping: Framing Tool “In / Out of Scope”](image)

Figure 2: “In Frame/Out of Frame” framing tool (call center improvement example)

**Team Composition:** If the project requires a team, ideally it should be comprised of between 4-8 members to ensure the benefits of synergies are realized yet the pitfalls of complexity are avoided. If additional skills or insight are required beyond the core 4-8 members, it is best to add people as subject matter experts (SME’s) on a temporary, ad-hoc, as needed basis. Additionally, when assembling the team, first identify skill sets and expertise required. Next identify people that have those skill sets. This will help prevent the issue where the same people continually get asked to serve on teams. Also it is wise to get diversity of experience on the team so seek not only to have people who have been in the organization for a period of time but also
seek out new members of the organizations who will be bringing perspectives from other organizations.

— **Timeline:** The final of the five critical charter components is the timeline. Your project objective (goal statement) contains the target end date for the project. The timeline needs to break the project up into phases by which progress can be measured. If your organization is using a methodology like six sigma (DMAIC: Define, Measure, Analyze, Improve, Control) or a general methodology (PDS/CA: Plan, Do, Check/Study, Act), these make for ideal phases to split the project timeline into. The bottom line is you need to measure and monitor progress of the project along its way to ensure timely completion.

**Recommendation 2: Engage Finance as a key partner in determining benefits of innovation/improvement projects**

- **Strategic Outcome (3–5 years out):** As part of annual goal setting, business operating reviews and performance reviews establish innovation/improvement benefits (financial and non-financial) that the county board and senior leadership are measured and rewarded upon. This ensures that all levels of leadership are aligned and incented on driving predetermined, quantifiable results for innovation and improvement.

- **Short-Term Next Steps (0–2 year horizon):** Ensure finance is engaged on all projects to provide support to the innovation team in determining: the financial opportunity, projected, and actual impact of innovation projects.

**Benefits of Having Finance Fully Involved**

- **Integrity.** By having a different entity (finance) calculating the benefits, it is possible to avoid the temptation by a project team to record potential benefits instead of real benefits. With integrity embedded in the process, the organization is confident that the results are real. It also allows teams to focus only on improving the Key Performance Indicator (KPI), without worrying about financial results. If the KPI improves, by definition the bottom line will be impacted.

- **Standardization of calculation method.** Sometimes inconsistencies can be generated because different people have different ways of doing things. Insistence on a single process which makes sure every area calculates the benefits in the same manner creates results that are always comparable.

- **Avoidance of recording incorrect benefits.** When the calculation of benefits resides with process owners, they might fail to take into account other processes outside their project, which are affected by their actions.

- **Results available for being audited.** As with any other activity in finance, project benefits are subject to audit. Operations units are encouraged to have internal audits as well as to invite other groups within the company to review benefits calculations.
• **Budget mechanism.** Any improved process has to be embedded in the next budget or financial forecast. This is the only way to make sure those improved KPIs will be as permanent as possible.

• **Finance with a pro-active approach.** Effectively, there is one finance member away from his desk, working in the field. In organizations that devote large efforts and resources from the finance department in the accounting-to-reporting process, this becomes an important leverage for both understanding the organization better and influencing its results.

• **Accountability.** Finance becomes responsible for calculating and reporting benefits.

**Where and when should finance be engaged?**

There are 3 primary places where finance should be engaged in a project: During the chartering phase, prior to change implementation, post change implementation.

- **During the chartering phase:** In many methodologies this is part of the “Define” or “Planning” phase. At this part of the process, we say this is determining the “cost of poor quality” (COPQ) or alternatively it is referred to as “quantifying the opportunity” (QTO). As described in recommendation “A” above, as part of building the sense of urgency in the business case of the charter the current (baseline) performance (or lack of performance) needs to be articulated in financial terms. What is the issue, whether it is a defect, excessive cycle time, lost revenue opportunities that pain needs to be expressed financially. This phase answers the question “what is the overall opportunity facing us.”

- **Prior to change implementation:** Finance once again has a major role to play prior to selecting a solution for implementation. The overall opportunity has now been narrowed by the project team to focus on the vital few critical x’s driving the overall issue. Solutions are then developed to address root causes of the vital few issues. This second area of engagement is often referred to “pre implementation Cost-benefit-analysis (CBA)”. Finance will cost all the various solution options (i.e. cost of technology, training, resources, consultants, etc) to implement, any on-going costs to maintain, and the expected benefits (i.e. defect reduction, cycle time reduction, revenue increase) to be realized. This phase answers the question: “What gain is EXPECTED if we implement the change.”

- **Post Change Implementation:** This phase, often referred to as post implementation CBA, verifies the actual benefit realized by the change. It adds verification and credibility to the work done. answers the question, “What was the ACTUAL benefit achieved?”

It is important to note that COPQ/QTO will be greater than Pre-implementation CBA which in turn will be most likely than post-implementation CBA (figure 3). Why is this? COPQ/QTO represents the entire opportunity. Pre-implementation CBA represents best estimate of the cost to implement a change and the estimated benefit gained for NOT the
entire opportunity but the vital few critical x’s that the team has focused upon. Pre and post implementation vary because overall costs realized and benefits gained vary from what was estimated (often times actual costs incurred will be higher while actual benefits realized will be less than those estimated in pre-implementation CBAs).

Quantify the Opportunity Through CBA

Figure 3: Represent the flow and narrowing of the opportunity from QTO/COPQ through CBA and its relationship to the DMAIC process.

- The three phases described above: QTO/COPQ, Pre-implementation CBA and Post-implementation CBA should be incorporated into whatever methodology your organization uses to drive innovation and improvement (figure 4).
Recommendation 3: Establish standard ways to calculate benefits of improvement and innovation projects

Establish standard protocols for calculating benefits including hard savings, cost avoidance, revenue generation and soft benefits.

Costs and quality overview

The cost of poor quality (COPQ) can manifest itself in many ways. Below we will explore how poor quality or waste is thought of in the lean world, how Genichi Taguchi an early pioneer of costing quality revolutionized loss and quality, and finally examples of various defects that drive costs.

- **Cost in the lean world**: In the world of lean, costs are associated with waste and waste is called “muda”. The lean profession has developed seven buckets of muda that are often referred to by the acronym of TIMWOOD. These Seven wastes provide a framework for finding or identifying muda.
  
  - T – Unnecessary Transport (moving material/product/info from one place to another)
  - I – Excess Inventory (extra material/product/information waiting to be processed)
  - M – Unnecessary Motion (excess movement and/or poor ergonomics)
  - W – Waiting (idle time caused by the structure of the job or by shortages, approvals, downtime)
  - O – Overproduction (producing more than is needed – the worst form of waste)
• **O** – Over/Incorrect Processing (using more steps than necessary to create a product)

• **D** – Defects (production of defective material, rework)

• **Genichi Taguchi and loss due to poor quality**: Taguchi revolutionized how we thought about quality and the cost associated with loss. The traditional view stated that if a product or service had a customer or engineering specification associated with it then as long as the product was produced or the service delivered within the specification then it was “ok”—or there was no loss (figure 5). The traditional view recorded loss only when a product or service was outside specification. This traditional view is similar to a field goal analogy in football—as long as the product or service was delivered within or between the specification “uprights/goal posts”, then all was well—no loss. Taguchi proved that there was loss anytime you deviated from product or service specification until a point when you were outside specifications. At that point, outside specification, total loss occurred.

*Figure 5: Traditional thinking and Taguchi’s thinking as it relates to loss on a two-sided specification.*
• **Defect and costs**: Calculating costs associate with poor quality is both an art and science. Part of the art is being able to recognize and articulate how costs of poor service delivery or product delivery can manifest itself both inside and outside the organization (figure 6).

![Quality costs can take many forms](image)

*Figure 6: Various situations of poor quality that would have one or more cost factors associated with them*

**Cost savings and the relationship to cycle time reduction**

Many times in an organization we have a need to drive a project around the reduction of cycle time (i.e. the time to deliver some service or the time to produce some product). These processes for delivering a service or producing a product have an overall cost associated with them. A large percentage of the overall process time is comprised of non-value added waste (muda) in the form of wait time. For the most part, wait time comprises a very large part of our process time however it does not have a significant cost to the organization. Wait time does have an overall cost to the customer. Therefore, many times we may make a significant reduction (improvement) in cycle time (generally wait times) the corresponding financial savings to the organization is not as great (i.e. a 50% reduction in cycle time of the process almost never equals a 50% savings in cost of the process. In fact, the process cost savings for the organization is general a fraction of the cycle time savings).

**Categorizing costs for financial reporting, tracking and communication**

Generally ALL projects should have a financial impact or benefit associated with them. The primary benefit of a project should not be the soft non-financial benefit but rather a traceable element that ties to hard savings, cost avoidance or revenue generation. The soft non-financial benefit should be secondary or tertiary.

• **Hard savings**: hard savings results from reducing any spending/cost that is in the forecast, budget, or incurred in a prior year. Examples here
include material costs (think purchasing and usage) or labor costs (think reducing the number of issues/complaints handled, reducing the time to do a process/task).

- **Cost avoidance**: Cost avoidance is also referred to as “soft financial savings”. Cost avoidance is cost that would have been incurred but are not in actual results, forecast, or budget and are avoided because of the project. One classic example of a soft financial savings is a productivity gain. Example: Last year a process cost $100,000 to process 1,000 items with 10 FTE. This year the budget was the same $100,000, volume doubled to 2,000, FTE remain unchanged. This would be classified as a soft financial savings/cost avoidance related to a productivity gain since no budgeted or forecast dollars were saved. We had a doubling of productivity because normally we’d have expected FTE’s to have doubled to cover the volume increase assuming volume is a proportional cost driver to FTE’s needed in the process.

- **Revenue generation**: Changes in a process or introduction of a new product or service that results in new revenue streams.

- **Soft or non-financial benefits**: Benefits/impacts that do not have a direct, traceable financial benefit resulting from an innovation or improvement. Examples could include: customer satisfaction, employee morale/satisfaction/engagement, complaints. It is important to list, report and communicate soft non-financial benefits as they are part of the entire picture of the impact of an innovation. Many times you can tie soft savings back to the VOC information from your project charter business case (see recommendation 1). VOC changes can often be captured via a customer/resident survey.

**Examples**

The Appendix contains several examples of calculating benefits. The examples include a scenario to calculate both COPQ and post-implementation CBA for an accuracy (defect) improvement (reduction) and a cycle time reduction. Please note that in the cycle time reduction example you will see the scenario play out where the cost percentage savings is NOT on par with the percentage of cycle time reduction.

**Recommendation 4: Establish standard ways to report, review and realize benefits**

Establish structures and stand policies and procedures so project benefits can be captured, reviewed and reported upon.

**The role of the organizational leadership team**

The senior leaders need to come to consensus and articulate their philosophy and reason for engaging in improvement/innovation. Assuming one of those reasons is
to drive financial (top and bottom line) impact, then they need to ensure all leaders have quantifiable shared targets in their goals and that progress is being reviewed periodically. Leadership should charge finance with the assistance of the innovation team for establishing the standard and protocols by which benefits can be captured (see discussion under recommendation 3).

Capturing or Realizing Benefit

Recommendation 3 and examples in the appendix provide examples of calculating financial benefit. It is one thing to calculate the impact of improvement and a much more complex and often political challenge to actually capture and realize benefit (savings). There are some primary factors that lead to this challenge:

- **Savings realized are rarely clean.** You may have savings of a “partial” FTE, or the savings could be layered or marbled between multiple processes or divisions. In other words, very often it is not one chunk of savings realized but rather many small pieces in many disparate areas.
- **Savings realized are often immediately consumed by additional work.** Once a person’s time is freed up, many times they are immediately consumed by “new” work that almost seems to magically appear.
- **Areas are not incented or motivated to drive out costs.** If all savings are immediately captured and removed from their budget, leaders and their work force have little incentive to drive innovation/improvement.

Finance needs to take the lead in establishing the capture protocol. To overcome these challenges and deal with the complexity of benefit capture, I recommend the following:

- **Establish shared goals – One wins, ALL win:** There should be shared financial benefit targets between all leadership. This prevents one division from not working across organizational boundaries to help another. It fosters collaboration. Additionally, one division may have greater opportunities than another due to the nature of their work or the maturity of their operation.
- **Make it a business financial goal NOT an innovation/improvement goal:** The goal should be to make some financial bottom line goal. That goal can be achieved by reducing costs or increasing revenues. That goal can be achieved using innovation tools, techniques and methods or by other traditional means (i.e. gapping positions, reduction in FTE, changing org structures, increased selling/marketing, etc.).
- **Establish savings goals on the front end:** If there is a 10% savings target, reduce ALL budgets on the front end by 10%. Leave it up to leadership to determine HOW to achieve the goal. Innovation is a means to the end; it is not the end. If the money is never there, it can never be spent. Let the creativity up to your leadership and work force.
- **Establish an innovation seed fund:** Take a percentage of the financial savings and plow it back into an innovation reinvestment or seed fund. For example if the target is 10% savings take 5% of the savings and put it toward seed or investment funding for innovation. This reinvestment model
approach helps break down resistance to innovation and serves to reward or incentivize those who drive innovation. Once established, a seed fund becomes self-sustaining and can increase the pace of innovation.

**Reporting**

Once again finance has the lead role here. As mentioned in Recommendation 2, finance provides integrity and accountability; without finance, the fox is guarding the hen house. A robust reporting function provides many useful functions

- **Accountability**: reporting provides accountability regarding progress of the innovation program and its financial goals to senior leaders and the governing board.

- **Marketing**: Success breeds success. People want to be part of a winning team so as you can report and communicate on your financial impact and the stories of impact to people affected by the innovation more people want to be on the innovation train. Solid financial reporting on innovation benefits when coupled with the actual success stories of the work, provide a great avenue to gain and build momentum with your innovation program as you communicate both internally to the organization and externally to you citizens (customer, shareholders, etc.).

**Conclusion**

Carver County, MN has a solid foundation to begin to measure, report and realize project impacts in its innovation program. Carver County should move forward with the following four recommendations:

- Chartering projects – critical components (business cases, goal statements, and scoping)
- Engaging finance in determining benefits
- Establishing standard ways for calculating benefits
- Establishing standard ways to report, review and realize benefits

If these recommendations are implemented, the county will not only have a way to measure impacts but have a structured approach to capture or realize benefits and then use a portion of realized benefits to reinvest in furthering innovation within their organization. In other words, Carver County will be on the path to a highly functioning, self-sustaining innovation program that not only will measure, report and communicate benefits but will have a disciplined approach to capture and reinvest those benefits so innovation can take hold in the culture and exponentially grow as success is realized.
Appendices

A. Calculating cost savings

- Example 1: Building the financial business case & QTO
- Example 2: Accuracy - QTO & Post Implementation CBA
- Example 3: Cycle Time - QTO & Post Implementation CBA

*Example 1: Building a Business Case & COPQ/QTO*

The example below demonstrates how to build a financial business case (sense of urgency) for potential health care savings in an organization based upon an offering from a company outlined in the business section of the *Star Tribune* newspaper.

**NWA seeks to clean up health rolls**

*By H.J. Cummins and Liz Fedor, Star Tribune, March 25, 2005*

Northwest Airlines is on a quest to eliminate freeloaders -- not from its airplanes, but from its company health plans.

With rising medical costs a growing problem for U.S. businesses, employers are looking for every possible way to save money. Catching freeloaders -- grown children and ex-wives, for example -- is a recent and growing tactic that has culled an average of 10 to 15 percent of the dependents from company health plans.

Already, Northwest has removed 1,400 disqualified dependents since January. And starting today, it'll begin a "dependent audit" to weed out the rest. If the airline comes up close to the average, it could disqualify 3,700 dependents, according to a recent internal memo to employees. That's similar to Ford Motor Company's experience, where the automaker stripped about 60,000 from the 610,000 on its medical plans across the country -- including its St. Paul truck plant -- in the past five years.

"Health care is so expensive nobody wants to cover anyone they don't have to," said Scott Keyes, senior consultant in the Bloomington office of Watson Wyatt Worldwide, a benefits consulting firm.

Automakers, airlines and city governments are among the employers using such dependent audits. And as long as the audits are handled diplomatically, many employees can be convinced of their value.

The audit could save Northwest about $8 million a year, the memo said. That's out of the $400 million in Northwest's medical and dental costs this year -- $61 million of that being paid by its workers and retirees.

"Health care continues to be one of our most rapidly growing costs," Tim Meginnes, Northwest's vice president of employee benefits, said in the memo. "Covering ineligible dependents is expensive for you as a plan participant and for NWA."
More mistakes than fraud

Budco, based in Highland Park, Mich., is handling the audit at Northwest. It’s an area of the consulting firm’s business that has doubled or tripled every year since 2003, according to Vice President Michael Watson. Budco works for a fee or a percentage of the savings, Watson said.

Dependent audits are smaller than typical medical plan audits, which check everything from enrollment lists to claims processes to dollar payouts.

The process at Northwest is typical for Budco. An initial random audit indicated problems. Then the company scheduled a two-month amnesty period, when employees could remove any relatives without penalty. By the end of the period on March 10, about 1,400 dependents had been cut, the company said.

Starting today, employees and retirees will have to provide documentation for every dependent. That could be marriage licenses, birth certificates or college enrollment forms -- because young adults still in school are allowed to stay on their family plans. This audit period goes through June.

If employees are found to have ineligible dependents, they may have to repay the company for all the medical costs of these dependents, and even lose their jobs.

"I don't think there's going to be an epidemic," said Bobby DePace, a union official who represents Northwest ground workers. He doubts the percentage of ineligible dependents will be very high.

Instead, he said, many employees simply will "send Northwest proof that you are married, and proof that you have kids."

Most problems are misunderstandings, Watson said, "and when given the rules, and they understand the rules, most people do the right thing."


"In 2004 we provided health care benefits to about 550,000 people in the United States -- employees, retirees, dependents and surviving spouses," Evans said. "That's a lot of people.

"Since the audits started we have removed roughly 60,000 ineligible dependents," she said. "That's why we're so committed to continuing the random process."

Like big automakers, big airlines see saving money as a matter of survival. American and Delta have used dependent audits.
Eagan-based Northwest has lost $2.5 billion on its operations since early 2001. All its cost-cutting strategies so far have reduced its annual expenses by $1.7 billion.

**Good policy**

Every U.S. employer should be auditing its health plans anyway, said Stephen Gottschalk, co-chairman of the employee benefits section of the Dorsey & Whitney law firm in Minneapolis.

"The law requires that every plan define who is covered, and employers have a legal duty to make sure the plan is covering the right people," Gottschalk said. Soaring health care costs are probably motivating more employers to fix any bloated plans, said Rick Nelson, head of the employee benefits group at the Faegre & Benson law firm in Minneapolis.

"If you discover somebody who recorded 'single' on the income tax forms and has four children on the health plan, you're going to start asking questions," Nelson said.
Blue Cross Blue Shield of Minnesota took a similar call from one of its client companies, spokeswoman Jan Hennings said.

"A few months ago an employer called about a student, supposedly full time and still single, which allows her to be on the rolls" as her parent's dependent, Hennings said. "But now she was bringing in a book of her wedding pictures to share with everyone."

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**Building the business case & Quantifying the opportunity (QTO):**

**Typically eligible:**
- Spouses
- Children under 19 (Biological, adopted or stepchildren)
- Children under 23 if full-time students
- Disabled children into adulthood

**Typically ineligible:**
- A divorced spouse
- A parent

**It depends:**
- Domestic partners
- Grandchildren

*Business Case: $3.88M - $5.8M opportunity*

**Assumptions**
- employees 15,000. Assume 30,000 dependents
- cost per participant: $100/month health, $20/month dental; TOTAL - $120/month or $1440/yr
• Vendor cost to recover: assume nothing (assume 10% of savings)

Given:
1. 10-15% of dependents from company health plans are invalid (from article data)

Opportunity
# of potential invalid dependents: 10-15% of 30,000 = 3,000 – 4,500

Annual cost savings
• Low: (10% dependents): 3,000 X $1,440 = $4,320,000
• High: 4,500 (15% dependents): X $1,440 = $6,480,000

Annual Net savings
• Assumes 10% to vendor
• Low: $4,320,000 X 90% = $3,888,000
• High: $6,480,000 X 90% = $5,832,000

Example 2: Accuracy - COPQ/QTO and post-implementation CBA

The following is an accuracy issue example of a company that produces payroll for other companies.

COPQ/QTO:
Given: In 20xx our company produced 150,000,000 checks. 8% of the total checks produced represented both billable and non-billable reruns. 54% of all rerun checks in 20xx were non-billable.

The average cost to produce a check (time, materials, labor) is $0.29.

Additionally, the six sigma team has determined that each service request (SR’s) for a non-billable rerun cost $60 to process. After conducting a sample, it is estimated that 8,640 non-billable SR’s were processed in 20xx.

COPQ:
Cost of Non-billable reruns: $1,879,200 (150,000,000 X 8% X 54% X $0.29)
Cost of Non-billable SR’s: $518,400 (8,640 X $60)

Non-Financial soft costs:
• Customer satisfaction (High)
• Customer retention (High)
• Customer penetration (Medium – high)
• Customer growth (Medium – high)

TOTAL OPPORTUNITY COST: $2,397,600 + non-quantifiable soft costs.
COST BENEFIT ANALYSIS:

Given: After three months of dedicated work, the team is ready to present its recommended solutions to the executive team.

The impact of the improvement is as follows:

The team focused its efforts on the 3 largest reason codes for non-billable reruns which accounted for 70% of all non-billable reruns. After brainstorming root causes and testing their hypothesis, the team has agreed to 4 actions which will eliminate 80% of the 3 largest reason codes they have focused on.

Additionally, these 4 solutions are expected to have a proportional impact on the number of service requests (SR's) processed/received for non-billable reruns.

In order to accomplish these 4 actions (solutions) the following will be required:

- Training of 80 employees @ $1,000/employee
- Updating & distributing the customer reference manual (CRM) and implementation set-up guide (ISG) $200,000
- Payroll scheduling software: $60,000

Post-Implementation CBA

Net Annual Benefit: $1,002,656 + non-quantifiables

Benefits: $1,342,656 + non-quantifiables

A. Non-billable rerun reduction: $1,052,352 ($1,879,200 X 70% X 80%)
B. Non-billable SR reduction: $290,304 ($518,400 X 70% X 80%)
C. Non-quantifiables (soft impacts)

- Customer satisfaction (High)
- Customer retention (High)
- Customer penetration (Medium – high)
- Customer growth (Medium – high)

Costs: $340,000

A. Training $80,000 (80 X $1,000)
B. CRM/ISG Materials: $200,000
C. Software: $60,000
Example 3: COPQ/QTO and post-implementation cycle time example

Scenario is an example of a two-tiered customer service process that needs to reduce its cycle time for handling calls. Note: in this example you will see the scenario play out where the cost percentage savings is NOT on par with the percentage of cycle time reduction due to the cycle time being driven by wait time (waste/muda) which has no organizational cost.

QUANTIFY THE OPPORTUNITY/Cost of Poor Quality:

Given: Surveys and customer complaints clearly demonstrate that customers are not satisfied with the time it takes to get issues resolved when dealing with first and second level call center support. Retention is a huge issue within our company. The process is comprised almost entirely of personnel costs. Currently, on average, issues/incidents take 90 minutes to resolve. In 20xx, 450,000 incidents were opened.

Assume a FTE works 8hrs/day, 5 days a week and 48 weeks per year. Rate is $57/hr.

Initial analysis using the “cycle time/value add matrix tool” by the BB and team have revealed:

- 50% of the 90 minutes is comprised of wait time (time NO company personnel are working the incident)
- 30% of the 90 minutes is comprised of non-value added work time
- 20% of the 90 minutes is comprised of value added or value enabling activities

Quantify the opportunity:

- FTE hrs worked per year: 1,920 hrs (8 X 5 X 48)
- FTE salary & benefits per year: $109,440 (1,920 hrs X $57/hr)
- Process hrs (non-wait time) per year: 337,500 hrs (450,000 X 50% X 1.5 hrs/issue)
- FTE’s consumed per year: 175.78 (337,500/1920)

Cost of process: $19,237,500 (337,500 hrs X $57/hr)

Cost of non value add work: $11,542,500 ($19,237,500 X 30%/50%)
Cost of value add & enabling work: $7,695,000 ($19,237,500 X 20%/50%)
Cost of wait time: Unknown

Soft Non-financial costs:

- Customer satisfaction
- Customer retention
- Customer retention
- Employee satisfaction/retention
COST BENEFIT ANALYSIS:

Given: After four months of dedicated work, the team is ready to present its recommended solutions to the executive team.

The impact of the improvements is as follows:

- Reduction in call volume by 10%
- Reduction in average time to resolve by 50% (now 45 minutes)
  - 25 minute reduction of wait time; now 20 minutes
  - 20 minute reduction of non value add time; now 7 minutes
  - 0 minute reduction of value add/enabling time; now 18 minutes
- Training cost: 100 employees @ $2000/employee
- Material cost: $150,000
- Programming cost: $375,000
- Personnel hires (salary & benefits 1920 hrs X $57 per hr): 3 @ $109,440

Net Annual Benefit: $8,565,429 + Non-quantifiables

Benefits: $9,618749 ($1,923,750 + $7,694,999) + Non quantifiables

A. Call volume dollar reduction: $1,923,750
   - 10% = 45,000 calls
   - Dollar savings of 45,000 calls: $1,923,750 (45,000 X 1.5 hrs per call X 50% process time X $57 per hr)

B. Dollar reduction in time to resolve: $7,694,999
   - Yearly calls = 405,000 (450,000 – (10% X 450000)
   - New process work time savings = 20 minutes (Nonvalue time: 27 minutes – 7 minutes)
   - Dollar reduction = $7,694,999 (405,000 calls X 0.33 hr per call X $57 per hr)

C. Soft non-financial savings/Non-quantifiables
   - Customer satisfaction
   - Retention
   - Growth
   - Employee morale/retention

Costs: $1,053,320

A. Training: $200,000 (100 X $2,000)
B. Material: $150,000
C. Programming: $375,000
D. Personnel hires: $328,320 (3 X $109440)
B. Generic Opportunities for cost savings in most organizations

- Example 1: 10 cost opportunities for organizations.
- Example 2: Capital Leasing: Reducing equipment costs through leases.

**Example 1: Ten Rocks For Cost Saving Opportunities And Increased Revenues**

*Paper written by Scott Martens for the American Society of Quality (ASQ) education Division in April 2010. Examples were for higher education, but most can be readily applied to all organizations.*

*ASQ Higher Education Brief, [www.asq.org](http://www.asq.org), April 2010*

Non-profit is a tax status NOT a business philosophy!

“In my work with nonprofits, I find they’re in desperate need of greater discipline – disciplined planning, disciplined people, disciplined governance, disciplined allocation of resources.” … “What makes you think this is a business concept?” Most businesses have a desperate need for greater discipline. A culture of discipline is not a principle of business; it is a principle of greatness.”

—Jim Collins, *Good to Great and the Social Sectors*

When we look at cost saving opportunities in higher education, we are really concerned with examining how, where and why our financial resources are being used and can our financial resources be used more efficiently and effectively. We must focus on the “disciplined allocation of resources”.

Below, I expose ten rocks you should look under for cost saving opportunities. Over my 20 years of experience in driving strategic and tactical agendas to improve service, reduce costs and increase revenues at the U.S. Navy, General Electric, American Express and most recently the University of Minnesota, I have learned that the disciplined allocation of resources is not a principle of business, but rather a principle of greatness. In today’s challenging economic times, it is a principle of survival.

Ten rocks for cost saving opportunities and increased revenues

1. Do we have the right spans of control? Spans of control deal with the management structure of an organization.

   a. How many people should a manager be managing?
   b. How many people should a director be directing?
   c. How many people should a VP be VP’ing?
   d. How many people should an adviser be advising?

   Positions freed up by right-sizing the leadership structure, can be dedicated full time to leading other cost reduction opportunities. You can up-train your people in skills such as quality methods, facilitation, project management, team leadership and change management. Often times, improvement efforts are stalled because of the
lack of resources ----- people and money. When you lead with a span initiative, it frees up both people and money ---- in other words, you can get the snowball rolling & we all know that success breeds success (Jim Collins’ fly wheel concept).

2. Where are we spending the money? Has your organization done a deep drill spending analysis lately? The results of this work will help shape where your cost efforts should focus. It’s time to torture the data and make it tell you where the opportunities lay. Do a spend analysis over the last 3 – 5 years across the organization. Look at spend in raw dollars, changes in raw dollars, percentage of total spend and percentage change of total spend. Analyze things from multiple perspectives -- by campus, by college, by department, by administration by faculty etc. Keep spinning the data until it talks to you and screams “look here, something needs further exploration”. Does your spending and percentage of spending reflect where your strategic plan is trying to take you? If not – you have opportunities.

3. Are we benchmarking and employing best in class purchasing/sourcing practices? The beautiful thing about purchasing is that it is almost pure dollar cost savings—virtually no reductions in headcount are involved.

• “Do we have the right people on the bus”, as Jim Collins asks. Look at the purchasing spend in your organization and compare it to a similar best-in-class company in the private sector? Where is their purchasing department aligned? Who do they report up through? Do they have a chief procurement officer reporting directly to the CEO or CFO? How are their purchasing/sourcing organizations structured & what skills do their employees have?

• Have we fully examined (rationalized) and exploited all outsourcing opportunities? Remember outsourcing is NOT the same as off-shoring. Is this something that our college or university should be doing or can a private company do it better/faster/cheaper?

• Are we leveraging our buying power? Are we so decentralized in our buying practices that we can’t drive and negotiate best-in-class rates/prices for an organization of our size? Not big enough for leveraging power? Join with other colleges and universities; partner with the city the county/the state. Why are you buying paper, computers, beakers, hotels from so many different vendors? Variation can lead to quality issues and so many suppliers dilutes your ability to leverage price.

• Are we paying on terms and conditions? I know some organizations that pride themselves on paying bills immediately upon receipt? Are you monitoring (measuring) payment cycles so you take full advantage of your terms and conditions. Have we negotiated most favorable terms based upon our spend volume?
• Is travel and expense management under control? Have we negotiated preferred rates for certain hotels and airlines? Do we use an agency to book travel to gain favorable rates? Are we using the latest expense management techniques so expenses do not need to be re-keyed and can flow paperless? Are we able to get good analysis from the quantity, type, and amount of expense spending going on?

• Is technology spending rationalized? Has your organization set a standard for the type desk tops and laptops which are acceptable to buy or lease? Do you have standard configurations or load-outs for computers? What is the standard replacement cycle? Do you buy or lease technology on a one by one scenario or do you do bulk buys to take advantage of additional discounts?

• Does your organization consciously examine the lease versus buy options on purchases? See additional article from D R Sholem in this Higher Education (HE) Brief for a more detailed opportunity discussion.

• When you contract do you have adequate competitive bidding in the process to increase the probability that you are getting best price? D R Sholem was able to achieve a 5% savings on a capital equipment purchase at one university by reopening the bid process, making a couple phone calls and getting 3 versus one bidder into the process. The 5% savings on this $10MM purchase: $500,000! And the original bidder ended up with the contract (they lowered the bid $500,000—go figure!). See additional HE Brief article from D R Sholem for a more detailed discussion of this opportunity.

4. Why are we printing this? Does it need to be printed? If so, print it two-sided. Set all your software and printers to default to two-sided printing/copying. Make single sided the exception – not the rule. How many calendars do you and the alumni receive a year? Can it be sent electronically or better yet, rationalize all your reporting. Is it even needed? How many resources are tied up on unnecessary reports? Have a rule -- for every report added, one must be taken away. Hold off on doing a “standard” report and see if anyone notices --- or how long it takes them to notice. Can it be done electronically? Why do we allow faculty or staff to purchase magazines or newspapers when our libraries provide all employees electronic access? At the 2009 UM Quality Fair, a number of these grass-roots ideas were surfaced and captured as “working smarter” ideas.

5. Do we have a print strategy? How many printers, copiers, faxes, multi - functional devices do we need for an area based upon demand and usage? What is the best location and lay-out? Why do we have so many different brands of these devices? Do you have any idea how much an ink jet printer costs to operate? How about a color one? Why are we not using larger, generic ink cartridges and refills?
6. Why do a lot of our employees and dorm rooms need land line telephones? How about technology ports? Do all offices and rooms need to have land line phones? What are the correct amount and type of technology connections to rooms and offices?


The article states that pursuing this opportunity finds 10 to 15 percent of the dependents from company health plans are ineligible. Two friends I have at fortune 500 companies are required to verify benefit eligibility EVERY year -- it is the standard. I ran an analysis in 2005 like the one depicted in the article for a university and the estimated opportunity was between $3.8 million and $5.9 million dollars annually. When was the last time you were asked by your college or university to verify or re-verify dependents?

8. Have we rationalized our use of consultants? We are so decentralized that many times a consulting firm has multiple contracts with various departments, colleges, centers, administrative units etc. When you aggregate the spending for any one consultant does it exceed the contract threshold that would require a contract for services to be bid? How many years have we had contracts with certain consultants? Would it just be cheaper to hire these skill sets? Legally, are they really consultants or have they become de facto employees?

9. What is the right model for our back office support services (i.e. HR, IT, finance, admin, communications, etc.) decentralized, regionalized or centralized? What is the right back office structure to provide a given level of service most efficiently? Does every center, department, unit, or college need its own support staff?

10. When are we going to get started? If you don’t start down the road, you will be in the same place tomorrow; the worst action is inaction and the worst decision is indecision.

As Robert F. Kennedy said: “There are those who look at things the way they are, and ask why... I dream of things that never were, and ask why not?” Hopefully, after reflecting upon the questions above, you can become more disciplined when peering under your organization’s rocks and ask “why not?” And remember, “non-profit” is a tax status NOT a business philosophy!
Example 2: Reduce Equipment Costs Through Leases

Paper written by Dan Sholem for the American Society of Quality (ASQ) education Division in April 2010. Although leasing has additional tax advantages in the for profit sector, leasing is also an important strategy to consider in the non-profit (tax-exempt) sector.

Reduce Equipment Costs Through Leases
By Dan Sholem, equipment finance consulting

As many higher educational institutions are faced with limited resources and higher performance demands, it’s a no brainer to increase equipment usage or return on assets (ROA) and reduce equipment cost through horizontal integration of decision making.

Using resources more efficiently is often the responsibility of university purchasing departments. The mere existence of a purchasing department gives management the sense that the university is achieving the best price for any piece of equipment, supplies, commodity, hardware or service. The existence of a purchasing department should provide all constituencies confidence that funds are well spent and that every dime is squeezed out of the budget.

For purchasing departments to achieve the next marginal improvement in capital efficiency, however, they must integrate their decision-making practices, procedures and processes along with those of the university’s finance department, academic departments and facilities management departments that use and operate equipment.

Increased integration of vertical decision making increases ROA. For example, there are 100 aging desktop computers at a state university’s medical campus. For the last six months, the four-year-old units have required more and more maintenance hours, software patches and memory upgrades, all translating into money being put into old equipment. The medical school’s IT director submits a purchase request to replace the computers. In a good year, with sufficient budget space, the purchase is approved, the purchasing department negotiates a reasonable price, and the equipment is installed.

Or is it? What could be wrong in this scenario?

- How long and how many maintenance dollars did it take to finally prompt a decision to purchase new computers? If the IT team integrated decision making on a proactive basis with the department head and informed him that three years is the likely lifespan in which patching old gear is a no-win game, money could have been saved.

- It costs money to dispose of old equipment. Meeting sustainable standards in disposing old computer equipment requires an integrated maintenance action.

- Conducting a legal review of lease documents from the lessor is essential, and including legal representation in the vertical integration permits the university
to know what constraints must be considered prior to starting the process. Discovering this too late is a waste of time and money.

- Was the same mistake being repeated by purchasing equipment university leaders are 95% certain will only be used for three years? Have lease options been considered?

**Considering an operating lease**

Traditionally, a lease was considered any type of finance arrangement in which the lessee or user takes possession of the equipment at the end of the finance period. Today, the Financial Accounting Standards Board (FASB) defines an operating lease as an arrangement in which:

- The present value of the payments is less than 90% of the equipment cost.
- The length of the lease runs for less than 75% of the equipment’s useful life.
- The lease does not provide a discounted purchase option at the end of lease.
- The lessor maintains ownership of the equipment.

The operating lease allows the lessee to expense any periodic lease payments and allows the lessor to take any depreciation benefits associated with the lease. Today, several gray areas have developed in lease pricing scenarios and end-of-lease options. Suffice to say, if a lessor is willing to take on the ownership risk associated with the possibility of having the equipment returned at the end of the lease, and these terms are reflected in a lease agreement, using the operating lease for equipment you are 95% certain of only using for three years—such as the desktop computer equipment—saves at least 10.1% of the 100% price negotiated by the purchasing department.

A bright mind in the finance department may object to using an operating lease because:

- The university is not a taxpayer and cannot use the additional expense from operating lease payments to reduce net income.
- The university borrows money at very low rates, typically through tax-exempt bonds.
- When calculating the all-in interest rate using the operating lease payments plus an end-of-lease fair market value buyout, the inherent interest rate is higher than the tax-exempt rate the department could have used.

By talking with all departments and administrators involved, everyone would have concluded they don’t want to own the equipment for more than three years. The finance vertical team would have been able to identify a competitive equipment lessor with the appetite to assume the ownership risk of a returned piece of equipment and
provide operating lease financing that, essentially, requires the university to pay only 89.9% of the equipment cost and return those computers at the end of the three-year term.

This process requires dynamic decision making—the finance department must consult the end users on where, when and how much the equipment will be used so return conditions and other operating lease terms can be optimally negotiated to match usage requirements. The players must have periodic, if not continual, dialogue to manage accordingly. Certainly, as individual employees come and go, a database of terms and conditions applying to various equipment must be maintained to secure institutional memory.

Considering tax-exempt equipment

According to the Dorm Authority State of New York (DASNY), the public authority is charged with “providing financing and construction services to nonprofit higher education and healthcare institutions, certain state agencies and nonprofit organizations specified by law.”

In 2008, DASNY claimed $220 million in low-cost loans using a tax-exempt equipment leasing program that enabled 24 hospitals and higher education institutions to acquire critical high-tech equipment. Tax-exempt bonds prove to be a vital option. The low cost of funds is below the public-market rate, which saves money in comparable situations.

But, how is each lessee using the equipment? Is the institution saving a few basis points on their lines of credit but paying for equipment value that is not needed? Public universities enjoy low-cost funding through tax-exempt bond offerings. The trend is to use this low-cost debt no matter the equipment, the expected equipment use in relation to the equipment’s long-term value and what cash is available for outright purchase.

Why borrow money at about 2% to fund 200 patient-monitoring devices and own the equipment after three years when it will be obsolete and you will have an inventory of outdated gear and hospital staff requesting additional funds? Why borrow and create a debt obligation plus end-of-term ownership risk when a lessor may offer true operating leases and assume that ownership risk?

Let’s blur those vertical decision-making lines through implementation of a continual review of economic and technological issues concerning leased equipment usage. Technology and economic issues work together in drafting an optimal solution.

Johns Hopkins University School of Medicine in Baltimore analyzed computer use—including desktops, laptops and patient-monitoring devices—throughout its facilities. The university concluded it had been wasting funds by using tax-exempt bonds or paying cash for the full price of the equipment rather than using operating leases to finance and pay for less than 90% of the equipment cost. The school also concluded that to use this leasing structure, a disciplined equipment tracking and lease notification system must be in place, or additional costs would be incurred.
For example, a university may lease computer servers for three years to match the length of a research project and a related funding grant. One year into the lease, the researchers may ask for additional, faster computing power with memory upgrades that have recently become available from the manufacturer. With communication between decision-making verticals, a lease extension with upgrades could be negotiated with the lessor and implemented prior to the original lease termination date. Certainly, it is possible to keep the lease payments at the same level by extending the lease term beyond the expiration date.

Other examples of midterm solutions achievable through integrated decision making are: early equipment returns, economic reengineering of lease structures, midterm lease extensions, equipment remarketing assistance and logistics support. These are all matched through early, ongoing evaluation and will add value to the initial lease transaction.

**Operating lease vs. lease**

Until you integrate the decision makers, it is surprising to see how semantics can cause problems. Too often in financial arenas, “lease” is used to define finance mechanisms used to acquire equipment. Most often, the term is defined locally by the ingrained pattern of equipment acquisition so a single finance structure is defined as a lease throughout the entire university system.

Because of the infrequent use of the operating lease structure, a lease becomes problematic due to the nature of budgeting. While a department may make periodic lease payments from an operating budget, the lease structure provides for ownership at the end of the term because the lessor has no residual interest remaining in the equipment. These structures are often end-of-lease $1 buyouts. In corporate and higher educational arenas, this semantic game is used to acquire equipment using a departmental operating budget under misleading terms.

By focusing on asset allocation rather than asset use, institutions limit their ability to actually do more, despite the current budget size. The goal should be using the equipment, not owning it, and certainly not budgeting for it. Due to the extreme verticality of decision making, budget and asset ownership becomes more important than operations and use.

Implementing a continual review of economic and technological issues concerning leased equipment usage is not mutually exclusive. Whether in the higher education or corporate setting, matching these is the key to a successful proactive approach.

Each lending or leasing entity has its own appetite for risk. Whatever the firms mandate, each lessor develops and brings a specific appetite for risk. While financial risk is typically not a significant concern for colleges and universities acquiring equipment, a specific nuance when doing business with any not-for-profit and especially state operated institutions is in place. That nuance is the appropriations clause in master lease agreements (MLA) in which public universities permit the lessee to return the equipment and stop making lease payments if funds are not appropriated by the institution.
Most public institutions use an annual budgeting process. If that budget does not include funds to pay a lease for medical imaging equipment, for example, the institution can stop payment and return the equipment no matter how many months remain on the lease. This goes against the grain of equipment finance standards in which the lease typically has a hell-or-high-water clause holding the lessee responsible for the lease payments in any event. This additional risk—while proven not to be statistically material—is a fiduciary risk a lessor’s credit committee must consider prior to entering the public higher education equipment finance market.

**Keeping track with RFID**

Knowing where and how much assets are, when and how each unit is being used (and possibly who is using the asset) and tracking maintenance requirements are fundamental to managing equipment and equipment cost.

Most institutions have an asset identification strategy that uses simple, standard serial number plates on the bottom of each asset. Simple tagging provides a base level of security and manual inventory opportunities. Radio frequency identification technology (RFID) takes asset management to a modern level. RFID tags the size of a small fingernail can be affixed to assets as they are deployed.

These tags are entered into a database that can be customized to coordinate with financial, inventory, operational or other software used in any particular working environment. With this database, lease terms and maintenance provisions outlined in a MLA are easily monitored, changes in use are identified prior to a periodic mark, and budgets are met, maybe even reduced.

With RFID tags, labor-intensive annual inventories become a thing of the past because real-time inventories are performed by using hand-held readers or permanent readers mounted in strategic locations. Theft is reduced, maintenance is improved, usage awareness is increased, and the amount of equipment required is reduced as systematic identification is cemented in the management process.

Surplus equipment is an ownership risk, and RFID technology can be used to track it. But maintaining, storing, securing, and selling surplus assets all cost money. By recognizing these potential costs during the acquisition decision-making process, a university will be in a position of strength when determining and negotiating the optimal funding mechanism. If the equipment is likely to become surplus prior to the end of its marketable life, arranging a true operating lease—in which the lessor assumes ownership risk—makes logical sense.

Twenty-first century higher educational institutions find many academic disciplines interacting with one another. Engineering students take finance classes, and fine-arts students study biology. The students refine their understanding of their core disciplines by using concepts from others. That is where breakthroughs in knowledge happen.

Managing the equipment acquisition process in an optimal fashion requires the same pattern. Risk managers, supply chain experts, finance staff, purchasing managers and
operational management Six Sigma gurus should cross-coordinate their efforts to achieve breakthrough performance levels.

Dan Sholem is an equipment finance consultant in Champaign, IL, who has served a variety of clients, including Advanced Micro Devices, Cypress Semiconductor and ESCO Technologies. Before consulting, Sholem was the portfolio manager for Comdisco Electronics Group in San Jose, CA. He is also an adjunct lecturer at the University of Illinois, where he teaches equipment finance and leasing. Sholem earned a bachelor’s degree from Southern Methodist University in Dallas and an MBA from St. Louis University.

References and Additional Supporting Information

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Project 2: Lessons Learned, Satisfaction and Communication

By Prachi Bawaskar, Jack Liang, Jared Sawatzky, David Wagle

Executive Summary

The key focus of this group is to review the current Kaizen learnings/follow ups, and rewards/recognition. We want to make sure that Kaizen participants and stakeholders are satisfied, future participants can learn from past participants and that idea generators as well as participants are fairly rewarded so that future innovation is driven.

By implementing a standard follow up process, Kaizen changes and improvements can be realized and maintained on a consistent basis. Also future groups completing Kaizen events will be able to learn from previous participants on what works and what could have been improved in the process. Employees who feel like there is an extra incentive for participating in innovation will be more likely to drive progress forward.

Overview

Current state on participation surveys

Currently the county uses a 15 question survey to capture satisfaction from Kaizen participants. We feel this is very important and recommending a slightly shorter and standardized version. With standardized answers, trends will be able to be tracked. We are adding a Net Promoter Score. There was a previous question that hinted at this metric but putting a score of 10-1 will help the Innovation team see show is a true promoter of them and how is a detractor.

Current State for follow-up

Currently once a Kaizen event is complete there is a report out and then everyone moves on. We are recommending that the innovation team implement a 30, 60, 90-day check-in with the participants. One participant from the implementation team should be placed in charge of tracking the Kaizen recommendations. The “Check-in form” fig. 1 is concise and to the point. It captures what changes have been successful, what hasn’t, what the group needs help with, other notes/feedback and finally a Net Promoter Score. The last question, “How likely are you to recommend a Kaizen event to others in the county?”, is the most important question on the follow up form. This will tell you if the participants are satisfied with the results and if they think the hard work paid off. Keeping this form concise will make it easy for the assigned person to fill it out and communicate important items. It will also make it easy for the Innovation team to tally results
Strategic – point of arrival (3–5 years out)—insightful

With a 3 to 5-year horizon, that should be enough time to accumulate enough long term feedback to see trends and identify outliers.

Operational Short Term Focus

In the short term, Carver county should be focused on getting employees familiar with the new template and the process. One way to do so is to convert some of the existing documentation to the new format. Make sure that people that is in the process know and understand their responsibility. Make sure that the event lead knows how to file out the document and where to upload it. Make sure that the management is also involved in the comment section of the document. The lead should also be in charge of the follow up.

Recommendations

Lessons Learned

Capture and Retention

Establish a standardized process ensure that lessons learned are captured. We recommend that Carver County adopt a common template to be used for to using a standardized format.

Currently all CI events the results are captured in a PowerPoint presentation. In appendix, we have attached a sample template that could be used to capture learnings. After every event or project, the business lead is entrusted to fill out this form to be reviewed by the management. After the lead documents the lesson learned and key finding, this file needs to be uploaded to the CI SharePoint site.

At the 90 Day mark or the completion of the CI project, additional finding or summary should be filled out by the business lead and forwarded to their manager for review and sign off. And this document will be again saved in a SharePoint repository.

This will ensure not only that any key findings are captured, they are also documented. When the project is over, any additional findings can be added and sent for review by a manager. In the future, all events can be reviewed and key personnel can be identified for follow up questions.

3 to 5-year Strategic Horizon

Carver County would have a library of past kaizen events and CI meeting that current employee could refer to and build on if needed. They can see the past results and recognize attributes that make these event more successful and
attributes that make them fail. They can also use these results to establish a standard event format that has the most likelihood to succeed depending on scope.

**Operational Short Term Focus**

In the short term, Carver county should be focused on getting employees familiar with the new template and the process. One way to do so is to convert some of the existing documentation to the new format. Make sure that people that is in the process know and understand their responsibility. Make sure that the event lead knows how to file out the document and where to upload it. Make sure that the management is also involved in the comment section of the document. The lead should also be in charge of the follow up.

**Rewards and Recognition**

**Rewards Program**

Establish an Innovations Rewards program by transforming part of Innovations savings into a rewards fund. Practice employee recognition by implementing awards such as innovator of the quarter and year. Communicate and highlight innovation stories to stakeholders - county employees, senior leadership and the taxpayers.

Rewarding and recognizing employees creates incentives to innovate and increases participation in the programs.

Currently, the Carver County shares innovation results internally through an intranet SharePoint site where reports for Kaizen/5S events are shared highlighting business challenges, the scope of the event, completed goals, future goals, management perspectives and achievements. While the County has excellent communications systems setup to reach citizens through their website, mainstream and social media, flyers and newsletters about programs, the Innovation success are not shared externally with county residents.

Carver County Innovation team rewards participants in innovation events by presenting a Mega Blok to recognize for each event and the annual Innovation Celebration. Recognitions for innovations are performed through a presentation to management and colleagues after completing a Kaizen/5S event where they are thanked for their contributions. The team also hosts a countywide Innovation Celebration annually, where employees are given a platform to share their achievements by describing the opportunity, how innovation was achieved and what were the outcomes. The employees are also encouraged by senior leadership such as county commissioners and administrator to continue their efforts towards innovation.
**Strategic 3 to 5-year Horizon**

Design a rewards program, recognize and follow up on successful behaviors (example template on design and behavior)

We recommend that the Innovations team make a substantial effort to establish an innovations rewards programs in the long run, despite budget constraints, by strategizing with senior management to transform part of innovations soft or hard savings into employee rewards funds. Reward employees according to the level of achievement with a personal note along with either gift cards, a small monetary amount or what is important to employee. For e.g.: some employees may value a designated parking spot while others may value an extra day off, discounts or a family outing with compliments of the county. We realize county is under a strict budget and this may conflict with the annual PEER awards, however we recommend that the innovation team create a small budget for rewarding and recognizing deserving employees as this can have a positive strategic impact on the County's cultural piece.

Research has shown that recognition programs boost employee engagement, morale, promoting a workplace, loyalty and also drive cultural change (HBR). Chief Innovations Officers in several government agencies also found innovative ways to reward and recognize employees during economic recession such as providing seed money for an innovative idea, paid time offs and other fun rewards such as candy, potluck picnics, etc. (Government Tech).

American Productivity and Quality Center underlined a balance of intrinsic and extrinsic motivations in designing a rewards and recognition program, where intrinsic motivation is internal drive to innovate itself seems rewarding and extrinsic motivation is external encouragement such as monetary rewards to drive innovation. Innovation Celebration Day and the Innovation weekend recommendation are important platforms to establish intrinsic motivations while rewards program will encourage participants with extrinsic motivations. Such a careful design will impact employee behaviors towards innovation. Follow up on recognized employees, evaluate successful behaviors and set expectations within certain job functions to reinforce innovation strategy throughout the organization by communicating and promoting internally the rewards associated with innovation to direct everyone in the organization.

**Operational Short Term focuses**

Practice recognition frequently, Innovator of the quarter or year awards, communication internally and externally. (Example newsletter)

Recognition can also spark cultural change by associating employee efforts and actions with organization’s innovation values. Eg: “Thank you Peter for recognizing the need to have a more organized tool facility, as you know, this has helped us reduce time spent looking for appropriate tools which directly impacts the organization’s goals of creating savings through efficiencies. So your contribution means a lot.” For team recognition, one way to recognize efforts is celebrating
multiple short term kaizen/5S goals through the process while communicating the rewards for completion of the event. Simple and powerful actions such as recognizing the efforts frequently and involving direct supervisor or manager in the process can also boost morale and participation.

Rewards such as innovator of the quarter and innovator of the year for acknowledging idea generators during the Innovation Day celebrations should be implemented in the short term. Innovations team, employees and senior leadership should nominate peers and colleagues for the awards. Results should continue to be shared internally via email or SharePoint website. Share the Innovation Day celebrations externally to the county citizens via newsletters and social media highlighting soft and hard savings of taxpayer dollars and recognizing employee efforts. We recommend that senior leadership communicate innovations related news internally while recognizing employee and management efforts that have a direct impact on organization’s strategy and mission.

**Startup Weekend Events**

*Promoting Innovation*

To promote innovation across the county, we also recommend that Carver County start their own Startup Weekend type event. We have decided to call it Innovation Day. Organization that wants to innovate often does not have a visible or concrete way of getting all employees involved in the process of innovation. Employees often say that they have great idea but lack a platform to share it.

The design can be derived from any other startup weekend format, but we suggest to start with a simplified version by condensing the three days into one or two days. Gather employees from all different departments for the event and encourage anyone to participate. Usually the more the diversity in the background of the participants, the better the results.

**Format:**

- Start in the morning
- Each person get 60 seconds to pitch an idea, employees can pitch multiple ideas
- Record each idea and some details
- Everyone Vote for the top 4 ideas
- Form teams, everyone pick a project that they like out of the final 4. The organizer might have to shuffle people around to make even teams
- The goal of the team is to present to the judges at the end of the day
- The judges vote on the winning idea

An event like this could help an organization in a variety of ways. It gives employee the ability to engage in real time innovation work. They get a chance to work cross functionally, in an area that they are not familiar with. It creates engagement between the management team and the employees. And most importantly, it’s a
platform to build future project pipeline and help recognition and efforts to get the work out that the county is actively innovating.

**Long Term Goal**

The long term goal is that this could be a 2-day event with financial implications. People would gather on a Friday and pitch ideas and work on the project and present on Saturday morning. This gives them more time to refine their idea. And in the future the winning idea could get a certain financial investment to make it come into fruition. As an example, give $100,000 to the winner to make the idea go live. Participants would go through this agile, rapid innovation experience and then bring that experience back to their everyday work.

**Short term Goal**

Make the event and encourage as many people to participate as possible. Get buy in from the management team. If financial award cannot be accommodated, make sure that the winning idea gets recognition if it’s turned into a real project. Recognize the top teams in an external or internal newsletter to get the word out for future events. Capture the results and project into the pipeline as it come be useful down the road.
Project 3: Project Pipeline and Innovations

By Carly Bell, Lindsey Collins, Dan Grant, Mike Kinsella, Brendan Lonergan, Michaela Mueller, Marc Schober

Executive Summary

As part of the Resilient Communities Project with Carver County, the Spring 2016 MBA 6220 class at the Carlson School of Management had the opportunity to complete nine projects related to Carver County’s innovation program. This group was tasked to ensure Carver County develops and maintains a robust pipeline of continuous improvement opportunities, intending to answer the question "How can Carver County measure the impacts of innovation?" Specifically, the group focused on developing standards for inputting, evaluating and tracking pipeline innovation projects for Carver County, including opportunities outside of lean/kaizen events.

Three main recommendations are presented to Carver County regarding this topic:

1) A Project Pipeline tool for collecting and aggregating project data and ideas.
2) A Prioritization Rubric for scoring project ideas, ensuring alignment with operational abilities and strategic goals.
3) A Tracking Dashboard to quickly provide useful and relevant data on project statuses and completed innovation projects.

The following document outlines a number of tools and recommendations that Carver County can follow and use to ensure the pipeline success. Short-term and future-state of each recommendation is discussed in detail. Included as well is analysis of the current state at Carver County, industry and academic related best practices, and analysis of possible roadblocks and resistance with recommendations on how to reduce and eliminate these barriers.

Overview

The members of Spring 2016 MBA 6220 Group 3 would like to acknowledge the Carver County team for their efforts and involvement throughout this portion of the Resilient Communities Project. The group truly appreciates the Carver team’s engagement and enthusiasm. The group would also like to specifically thank our Carver County project sponsor, Lorraine Brady, for her insight, responsiveness, and willingness to answer questions and provide feedback throughout the project.

Since their first Lean/Kaizen event in May of 2012, Carver County has held 30 Kaizen events and many additional “continuous improvement” activities. Carver County is always looking for ways to increase operational efficiency, improve interaction with residents, and producing greater results for their taxpayers. With these goals in mind, Group 3 set out to answer the question “How can Carver County measure the impacts of innovation?” The
analysis and recommendations presented herein address this issue by way of creating a tool for ensuring a robust pipeline of continuous improvement opportunities.

Three main recommendations are presented to Carver County regarding this topic:

1) A Project Pipeline tool for collecting and aggregating project data and ideas.
2) A Prioritization Rubric for scoring project ideas, ensuring alignment with operational abilities and strategic goals.
3) A Tracking Dashboard to quickly provide useful and relevant data on project statuses and completed innovation projects.

Carver County currently follows a pattern for innovation tracking that is loosely related to the ideas presented in this proposal. The project aims, however, to formalize the selection process, grouping of ideas and criteria for Carver County’s project selection. The proposed Project Pipeline will be open-sourced via the existing Carver Innovation team site on SharePoint. Information can be collected, sorted, evaluated, implemented and tracked through a five-step process:

1) Customer (employee/stakeholder/taxpayer) inputs idea into pipeline.
2) Management regularly reviews pipeline projects, and considers projects submitted for implementation. Top priority projects are presented to innovation team meeting.
3) Project idea rubric is filled out with management and innovation team. The rubric helps in evaluating weights for project priorities based on key categories such as ease of implementation and project benefit.
4) Top projects are implemented per management and innovation team discretion.
5) Project is reviewed for success and innovation team tracks movement of projects through pipeline. Measure based on key deliverables, such as timely movement of projects through the pipeline, and impacts of projects in pipeline to county financial and human resources.

By following this more specific methodology of recording, evaluating and tracking innovation opportunities, Carver County can ensure that it has a more robust pipeline of continuous improvement projects.

The attached appendix provides additional context and supporting documentation for the recommendations made.

Current Assessment

Carver County’s current lean and Kaizen projects are generated in a very grassroots manner. An idea is typically initiated for lean or Kaizen efforts when a Carver County employee emails or calls Lorraine Brady with a suggestion.

Lorraine notes: “Another way that a project may be initiated is through management encouragement. Managers are tasked with pulling ideas from their staff, and we have them posted to our employee bulletin board on SharePoint. That input was directed to our Innovation facilitators and gathered informally.”
Based on conversations with Lorraine, the following steps describe the current state at Carver County:

**Pre-Kaizen Event**

1) Planning Session- A planning session with the event sponsor and others involved in the event is hosted by Mary Kaye Wahl and Lorraine Brady.
   a. Topics of Discussion
      i. Problem Definition and Discussion
      ii. Define project scope
      iii. Analyze potential impact of changes
      iv. Define resources required and available to ensure successful event
      v. Set realistic project goals
      vi. Employee project involvement
      vii. Event time frame
   b. Topics not in initial discovery consideration
      i. Difficulty of implementation
      ii. Funding
      iii. Recommended outcome

2) Innovation Team Recommendation- Following the planning session there may be follow-up tasks or a broader recommendation.
   a. **Project is formed** - If an idea formulates into a project, a group of invested staff will rank the project related to funding, human resources, impact and return on investment. The ranking is relatively informal and done within an ad-hoc decision member group consisting of key stakeholders.
   b. **Project is not formed** – if an idea does not formulate into a project, no further action occurs from the Innovation Team.

3) Pre-event Training- Before someone participates in their first Kaizen event, they are required to attend a LEAN/Kaizen training session administered by Lorraine.

**Post-Kaizen Event**

1) “Report Out” Document - Sent to key event stakeholders two weeks after the completion of Kaizen event.

2) Survey Event Participants- this happens most of the time, when Lorraine is able to follow-up: “After most Kaizen events, I sent a survey to the participants asking for their feedback on how the event went.”

3) Action Plan/To-Do Items – Deliverable from each Kaizen event, and maintained by Lorraine. Some follow-up items are assigned to the Kaizen event team, but some need to get escalated to management.

4) Realign Strategic Initiatives – Lorraine: “To a measurable yet minor extent we have some new external challenges that cause us to have to re-group, re-
strategize, re-rank priorities, and re-assign people and funds. They may constitute something like 10-20% of the tasks you see in that annual plan. An example would be the State’s new requirements for child protection workers, caseloads, and turn-around time. That brand-new requirement, along with new funding, required us to move quickly to hire new staffers and increase that program’s footprint to an extent not foreseen last March.”

Post Event Long Term Goal

Lorraine has shared with the team that ideally, she would like to revisit the Kaizen team six months or a year after the event, once follow-up tasks are fully implemented. At that point, one could find out if the success factors that were identified in the Kaizen event have actually come to fruition.

Lorraine: “A team’s success factors should be the measuring stick by which we evaluate whether or not the new process is adding value.”

Recommendations

By instituting three main recommendations, the group intends to formalize and document a process in which Kaizen and non-Kaizen events can be evaluated, ranked, prioritized, monitored, and measured for success.

Recommendation 1: Project Pipeline

In order to streamline the collection of information regarding innovation ideas from employees, Carver County needs a tool to aid in this process. Currently, Lorraine Brady receives e-mails about the project ideas and meets with the project sponsor to gather information about the project. The existing project collection process is not standardized, therefore the current method is very manual and time consuming for the Innovation Team to prioritize new project ideas. In the case of Carver County, Carver County must optimize Lorraine/Mary Kaye’s time by improving the operational process of collecting innovation ideas. We recommend that Carver County utilize our Excel-based tool to collect necessary information about improvement project ideas. The newly developed collection tool will not only automate the process of information gathering, but also serve as a tool for the Innovation Committee to manage the pipeline of projects. By making the collection and management of the process more efficient, the Innovation Committee will have the ability to maintain a large project pipeline with minimal effort.

It is important for Carver County to provide an outlet for all of its employees and community members to voice their opinion. Carver County can best improve its operations by listening to its end users and making the necessary changes to its operating structure. Carver can utilize the closed-looped operating system (Appendix G) in which they listen to the Voice of the Customer (employees/taxpayers - Appendix F), they implement some of the ideas, and then they follow up with their Customer to inform them of the changes they made on their behalf. In the short term, Carver County should utilize this tool to collect innovation ideas from its employee base. In the near
future, Carver County can expand the use of the tool to collect project ideas from its broader community members. By linking this tool directly to the employees and taxpayers, Carver County will uncover gaps and opportunities to improve overall.

**Phase I: Employee Idea Generation (Years 0-2)**

The Project Pipeline tool should be posted on Carver County's Innovation SharePoint site so all employees of Carver County are able to access and submit new project ideas. The leader of the noted Department/Division will receive monthly updates of the projects within their area that were submitted to the Pipeline. As part of the intake process, information regarding the financial impact, effort required, organizational impact, and alignment with the Carver’s strategic initiatives will be captured. We used the Carver County Organization Structure (Appendix C), to add in dropdowns in the collection tool so you know which Department/Division the idea is coming from and the areas it will impact. This data will be critical for the Innovation Team to initially prioritize the projects that best align with the organization’s short term and long term goals.

Training and education of the tool will be important as Carver County may face resistance from employees not wanting to use a new tool. Carver County can do a Stakeholder Analysis (Appendix H) and a Technical, Political, and Cultural Analysis (Appendix D) in order to find out who might be resisters and why they might be resisting. It is important for Carver County to be transparent and available for questions on the use of this new tool. We recommend that a training video be posted to the innovation SharePoint so all employees can become familiar with how to submit an innovation project to the Pipeline.

**Phase II: Community Idea Generation (Years 3-5)**

As the end customer of Carver County’s work is the community that it serves, it is important to expand this innovation ideation to the taxpayers. Once Carver County feels confident in the results of Phase I and is ready to expand the project collection, it should allow the community to submit ideas to the pipeline. A version of the pipeline tool can be added to the County website so community members can access and submit project ideas to the Innovation Committee. This can be reviewed with community members at Carver County town meetings and be made available on Carver County’s public homepage.

**Recommendation 2: Prioritization Rubric**

Once project ideas, suggestions, and comments are sourced via the pipeline tool and department managers support and approve such ideas, the opportunities need to be put into a rubric for scoring. The purpose of the rubric is to rank the opportunities and ultimately prioritize the different potential projects so that the Innovation Team can quickly and efficiently schedule projects in a strategic manner with the help of the department manager and sponsor who submitted the project idea.

The rubric is designed to be implemented immediately to prioritize projects, but also should be changed whenever the Carver County strategic plan is altered. The Excel file will serve as a base during the first two years of implementation, but can then be changed to fit different needs and be split into multiple rubrics used in different
departments by different teams. If the pipeline of project ideas significantly grows to a point where the current Innovation Team is unable to manage all the projects, each department may need to create rubrics to help managers score projects that are then entered into the Innovation Team’s more encompassing rubric.

**Phase I: Immediate Implementation (Years 0–2)**
Immediate implementation of the rubric should occur after a project is sourced via the pipeline tool and enter into the following schedule:

1. During a management meeting, department managers will submit their top project choices to the Innovation Team based on the pipeline tool available for any employee to submit an idea.
2. The Innovation Team will accept department manager submissions and enter the submissions into the current rubric for scoring.
3. Discussion among the Innovation Team, and among department managers if necessary, will lead to an ultimate decision to select, postpone, or reject project ideas. If postponed, the Innovation Team may also suggest to alter the project in a capacity so that it becomes easier or more meaningful.
4. If selected, a planning session will be called by the Innovation Team with the project sponsor, department manager, and anyone else that is responsible for the event. During the session, the project’s status quo issues, scope, goals, and who should be included are planned out.
5. Once the project is ready from an execution point, the project is then finally scheduled.

**Phase II: Rubric Evolution (Years 3–5)**
The long-term objective of the rubric is to evolve it into a tool to prioritize the abundance of project ideas that get generated by the pipeline tool. Without the rubric, the Innovation Team will be unable to quickly score the difficulty or payoff generated by each project. The Innovation Team should closely monitor the acceptance patterns of projects in regards to the rubric to then notice what types of projects are fitting best. Over time, the Innovation Team will communicate the preference of strong project characteristics to department management who will then communicate through each department.

**Recommendation 3: Tracking Dashboard**

Tracking of the status of projects within the project pipeline is important to ensure Carver County has a useful way to measure the status, progress, and results of projects throughout the pipeline cycle. Based on information gathered in the pipeline and organized and prioritized in the rubric, there are specific data points to track which will give Carver County useful and relevant information about projects which have been submitted. These metrics from the pipeline and rubric data will be readily available via the Tracking Dashboard in easy-to-understand graphs, providing relevant and timely information toward Carver County’s stated goals for Kaizen & continuous improvement projects.

The information provided within the tracking dashboard intends to answer the following questions for Carver County:
• What divisions and goals will the projects most affect?
• Where are the projects coming from?
• How well are the projects moving through the system?

Within the pipeline document, Carver County management will be able to access a multitude of graphs to help track the process of projects through the pipeline. Examples of graphs are as follows:

• “Projects to Start Each Month by Division” – this bar graph will show, in a forward-looking manner, the projects currently in the pipeline scheduled to start in the next three months, broken down by division.
• “Monthly Requests Made per Division” – a bar graph which shows, over the past three months, the quantity of projects requested per month, split out per division.
• “Project Status in Pipeline” – This pie chart displays, for all projects currently in the pipeline, a snapshot of the “Project Status” of each project: Complete, Development, Discovery, Feasibility, or Parking Lot.

Phase I – Tracking Dashboard During Pipeline and Rubric Ramp-Up (Years 0-2)
For the first phase of the pipeline implementation, the recommendation is that the pipeline be focused on Carver County employees. Tracking Dashboard graphs will be useful to Carver County to get an understanding of where pipeline requests are coming from. This will help Carver to understand the needs and motivations of certain divisions towards innovation projects; certain divisions requesting more projects may be a sign that a specific issue or department as a whole needs more innovation attention, or that strategic planning needs to be reviewed. Management will also be able to ascertain early on which divisions are being most affected by the projects; this will allow them to properly allocate resources for future work per division. Understanding what projects are affecting which divisions also allows management to ensure alignment between project pursuits and overall operational strategies.

Phase II - Mature Project Pipeline Tracking (Years 3-5)
As the project pipeline becomes more robust in future years, the quantity of project ideas will be increasing as the stakeholder group expands to both internal employees and (external) Carver County taxpayers. At this higher quantity and with disparate customer groups, the Closed-Looped Operating System (Appendix G) becomes essential. The tracking dashboard provides all the necessary information for the “Voice of the Process” step within this Closed-Looped system. Metrics and tracking dashboard information will provide relevant and timely information to Carver County management for currently prioritized projects, allowing management to communicate useful updates back to stakeholders. Additionally, with multiple years of data in the pipeline, Carver County should be able to build out some aggregate project tracking metrics, which can provide historical context as required by the county’s needs at this future time.
Findings Supporting Recommendations

Recommendation 1: Project Pipeline

Current State at Carver County

Currently, Carver County collects ideas from employees as they e-mail or call Lorraine Brady requesting assistance with an innovation project. They then have a planning session with the sponsor & anyone else that is responsible for the event. At this meeting, they will talk about the issues (what’s not working today), the scope (what are they are and are not tackling), the goals (what can the team realistically accomplish), who should be included, and finally some timeframes on when they want to have the event. The County puts together a calendar of upcoming Lean/Kaizen events that tracks the number of suggested and actual attendees and the % completion for each project (Appendix A). After the project, they post updates and successes on their Innovation SharePoint site.

Overall, the current Pipeline is relatively small, due to the low number of projects being submitted currently. The small amount of dedicated resources to assist with Innovation projects makes it challenging to have a more robust pipeline. The collection of project information, mentioned above, takes up a fair amount of time and is something that could easily be automated. Additionally, the current Pipeline seems dedicated mainly to Lean/Kaizen events. By expanding the Pipeline to include non-Lean/Kaizen continuous improvement projects, Carver County can find more "quick-win" opportunities.

Literature/Articles/Theories Supporting Recommendation

Theory of Constraints: Appendix B shows Lorraine’s Top 5 Obstacles of the current process. Looking at the fifth obstacle in particular, the information collection and planning of projects takes up a large amount of Lorraine and Mary Kaye’s time. The limited amount of resources dedicated to innovation serves as the bottleneck of this process. Half of Lorraine’s time and only a small amount of Mary Kaye’s time is dedicated to Innovation projects, making resources the constraint. A constraint is “Anything that holds us back from achieving the goal...any resource that has capacity less than the market demand” (Improvement Methods & Process Analysis Lecture). The Theory of Constraints states that you must manage the constraint so that it is no longer the constraint, you must restructure the operations around the needs of your bottleneck in order to improve the process.

Voice of the Customer: Appendix F shows the Voice of the Customer graph in which all of the different touch-points that an organization has with its customer gives important information. Carver County must listen to its customer, both its employees and its community members, to hear about the changes they require and the current gaps in the process. Customers can "gift" an organization with new offering ideas or help improve the process by pointing out performance gaps. Carver County can collect these ideas as opportunities and add them to the Project Pipeline.
**Closed-Looped Operating System:** Appendix G shows the Closed-Looped Operating System that shows a flow-chart depicting an Operations Management System centered around the customer. Carver County should listen to its customers (employees & taxpayers) to determine improvement projects to implement that will improve the customers' experience. The article, Mastering the Management System by Robert Kaplan and David Norton, discusses the Closed-Looped Operating System. They state that, "as implementation progresses, managers continually review internal operational data and external data on competitors and the business environment" (Kaplan & Norton, 3). This sort of Management System allows an organization to be agile and make necessary changes in order to better serve the customer.

**Government, Industry, Non-Profit Practices Supporting Recommendation**

General Mills uses an online Project Pipeline collection tool (See Appendix I) to collect ideas/savings generated by employees. Employees submit and keep track of the Pipeline, updating important project information (Savings $ amount, Project Start Date, Function/Division, Project Owner, Project Status, Type of Project). Different functions have a corporate target of savings they need to generate each year.

The concept of a centralized project collection portal is currently utilized by Target Corporation, which uses a widely used information management system to capture future project ideas from team members. Ideas are typically submitted directly into a Microsoft SharePoint list and are periodically reviewed for prioritization by project team leads. Submissions are reviewed for alignment with company priorities, ease of completion, and overall business impact. Project concepts that make strategic sense for the company are moved along the pipeline for additional vetting and funding.

**Potential Roadblocks, Resistance, Barriers, and Suggestions for Reducing or Eliminating**

**Stakeholder Analysis:** A Stakeholder Analysis shows who the stakeholders in the change are, where they might be in terms of supporting the change, and the extent to which this opinion could be changed. It is important to envision resistance to a change before it happens in order to adequately combat it. In the Stakeholder Analysis in Appendix H, there are four different groups of stakeholders for Carver County: Newer Employees, Tenured Employees, Leadership, and Community Members. As you can see Newer Employees and Community Members are most-likely going to be receptive to the change. Tenured Employees and Leadership might have more resistance to the change, and thus require different forms of dealing with the resistance.

**Dealing with Resistance:** Professor Martens’ Change Management lecture cites three steps in Dealing with Resistance:
1. When you encounter resistance, first recognize the type of resistance and try to give it two **good faith responses**.
2. **Confront the Resistance** - Confront the resistance in a constructive manner. Positive attitude and search for a mutually acceptable solution is the key. Describe the situation and acknowledge the difference in opinions.
3. **Be an Empathetic Listener** - Open discussion is the key to understanding the other side. Your goal is to help them work through their own resistance.

*(Martens, Scott [2016]. Change Management [PowerPoint slides].)*

**Technical, Political, and Cultural Analysis**: Appendix D shows the *Technical, Political, and Cultural Analysis of Resistance for the Implementation of this new tool*. Carver County might face Technical resistance from employees not having the skills or knowledge to fully embrace the change. Wide-spread training and education around the new tool will be vital to combat this form of resistance. For Political, Carver County might have individuals who think this change will disrupt the political structure of the organization. For this form of resistance, it is important to communicate the need for the change and how the current state is not optimal. For Cultural, it is important to win these resisters over by explaining the benefit of the change being implemented. By using the Technical, Political, Cultural Analysis tool, Carver can brainstorm ahead of time resisters in the organization and how to minimize the resistance. Also, management buy-in and accountability are important in the success of the adoption of the new Pipeline management methodology.

**Recommendation 2: Prioritization Rubric**

*Current State at Carver County*

Carver County does not have a way to formally rank potential innovation projects in terms of impact nor difficulty of implementation. There isn’t an overabundance of project ideas being sourced where good ideas are ever put off, but the future pipeline of opportunities will substantially grow.

First, the Innovation Team will look at the potential impact and if they have the resources to ensure an event will be successful. At the early point of a project/event they do not cast judgment on the difficulty of implementation or funding implications because the suggestion/idea is still in discovery. A recommended outcome is unknown prior to an event. After an event, there may be tasks or a larger recommendation. If it formulates to a project, a group of invested staff will rank related to funding, human resources, impact and return on investment. The ranking is informal and done within an ad-hoc decision member group consisting of key stakeholders.

*Literature/Articles/Theories Supporting Recommendation*

Prioritizing the plethora of projects that are generated throughout the County will help define the relationship between projects and decisions (Martens). In short, “why we do what work.”
Alignment has been absent from the Carver County's prioritizing of innovation projects, but the rubric will immediately align specific projects that match County strategy that support the overall County goals.

**Government, Industry, Non-Profit Practices Supporting Recommendation**

The prioritization rubric has been used by many different organizations and in particular, by Hennepin County as a way to prioritize county projects (Martens). The rubric used by Hennepin County also ranks projects into four different classifications from A to D and helps decision makers chose which projects to allocate time and resources.

**Potential Roadblocks, Resistance, Barriers, and Suggestions for Reducing or Eliminating**

The rubric will need to be consistently updated by the Innovation Team so that it aligns with the County's vision and goals. A good exercise for the County to make use of is a failure mode and effects analysis (FMEA), which helps test functionality by testing failure circumstances (McCain). When Carver County realigns their vision and goals, the Innovation Team can then test the rubric by inserting projects that should score as failures to make sure the rubric can adequately adjust for internal change.

The rubric created will serve as a primary mode of ranking sourced projects and allow for the Innovation Team to allocate resources accordingly to engage in different types of projects from net impact to Carver County to ease of completion. Not always will the Innovation Team want to select easy projects and the rubric's chart will help in visualizing the ranking of projects.

The Innovation Team needs to be very agile and open to evolution at Carver County. If changes to the rubric do not occur at least on an annual basis to match the County's larger strategic plan, the rubric will no longer serve as an accurate tool in helping rank projects. Donald Sull outlined five major faults in executing upon strategy (Sull). One major fault is when organizations remain stuck to their strategic plan when an opportunity arises that requires deviating from the plan. When an opportunity is sourced for an innovation project, the Innovation Team needs to be agile and make necessary changes to the rubric to capture opportunity throughout the year.

Implementing change can be difficult and Carver County needs to acknowledge the phases of implementing change and understand how to manage change (Martens). The County will innovate and start to use many new tools to help the overall efficiency and effectiveness of the county; the change will not occur instantly, but rather travel through three different phases.

The first phase is the “Steady State” where Carver County is currently located. Implementation of our recommendations will drive the county toward an “Enhanced State,” but the middle phase, when change is actually occurring, is where difficulties may be encountered and productivity loss may occur.
The Innovation Team and Carver County management will need to generate a vision of improving innovation and communicate the future changes that are going to occur throughout the county. Goals need to be established prior to implementing such change and recognized when achieved.

**Recommendation 3: Tracking Dashboard**

**Current State at Carver County**

The current state of project pipeline tracking at Carver County is very rudimentary. Recently, there have been so few projects requested that tracking tools such as a project pipeline, prioritization rubric, and tracking dashboards are not necessary. Project ideas are communicated via email to the Innovation Team, and Lorraine Brady coordinates events on an ad hoc basis, on a first-come, first-served basis, when resources allow.

Project planning involves a basic meeting with sponsors to determine scope, timing, and a decision whether to move forward with an event or not. Given the current low number of projects, there are not any necessary formalized tools which Carver County needs to track project status or alignment with goals. Additionally, the Innovation Team has never needed to plan out further than four months from the planning meeting in order to get an event scheduled.

In the future, the Carver County Innovation Team will have a greater number of projects in the pipeline, and a tracking dashboard will become very helpful. The Innovation Team and stakeholders can easily review pipeline status and gather relevant information on projects in the pipeline.

**Literature/Articles/Theories Supporting Recommendation**

Kaplan and Norton's article "Mastering the Management System" talks about the step of "Monitor and Learn," where focused, data-driven, and action-oriented operational review meetings are key to ensuring that changes discussed and implemented are followed through upon. A data-driven approach to Carver County's innovation team will allow real, measurable data to provide accurate information on the progress of projects through the pipeline. A second type of meeting from the "Monitor and Learn" step is a strategy review meeting. This meeting is strictly to review the progress of an organization's strategy and strategic objectives. Lorraine noted that 10-20% of projects cause the Innovation Team and Carver County management to review and reevaluate strategic goals. It sounds like some type of strategic review meeting is already occurring – this should continue!

A key takeaway from both of these meetings is the recommendation that "managers should come to the meetings already familiar with the data to be discussed, thinking about the issues that the gaps in recent performance raise, and formulating solutions to problems." Tracking Dashboard information should be distributed in advance of recurring operational and strategy review meetings, so that time spent with the shared meeting time is optimized for discussion and not reviewing data for...
the first time. A robust project pipeline tracking dashboard will provide the relevant and timely data needed for Carver County management to make informed decisions about operational and strategic goals before meetings begin, leading to increased efficiency throughout the organization.

**Government, Industry, Non-Profit Practices Supporting Recommendation**

The Tracking Dashboard is a relatively common, yet very useful tool. Throughout the term in MBA 6220, the class been exposed to excellent tracking dashboard examples from many sources. Optum OPX dashboards (Martens) showed the usefulness of combining relevant data together into related graphs. We were able to review many tracking graphs and tables from Hennepin County (Martens) as well, which provided ideas for relevant information to provide to Carver County, such as “Closed by Line of Business” or “Completed in the Last Six Months.”

**Potential Roadblocks, Resistance, Barriers, and Suggestions for Reducing or Eliminating**

Data tracking via a dashboard is only as powerful as the data tracked within the pipeline. As the tracking dashboards pull data strictly from the Project Pipeline, any issue with integrity of data from the Pipeline can affect the usefulness of the Tracking Dashboard.

Despite the automation within the Pipeline and Tracking Dashboard displays, manual review and actionable follow-ups from the Carver County Innovation Team will drive the usefulness of this data through the organization. It is clear to this group that current enthusiasm for innovation is great at Carver County; it will take a county-wide commitment to grow and support innovation for this enthusiasm to continue.

**Conclusion**

“How can Carver County measure the impacts of innovation?” The recommended tools of a project pipeline, scoring rubric and tracking dashboard will allow innovation projects to be reviewed, prioritized, and aligned with strategic goals. These tools will provide great value added to the innovation team at Carver County. They are inexpensive and easy to use, providing low barriers for implementation and no recurring maintenance costs. The tools will help streamline data, process, and communication regarding innovation, Kaizen, and other general continuous improvement projects. Realizing increased efficiencies will allow the innovation team to take on more projects and spend more time growing a culture of innovation across Carver County.

By implementing the recommended tools of a Project Pipeline, Prioritization Rubric, and Tracking Dashboard, the Innovation Team will be able to more efficiently intake, prioritize and monitor projects, ensuring efficient allocation of Carver County resources and alignment to strategic organizational initiatives.
Included with this presentation to Carver County are the Excel files which contain the Pipeline, Rubric and Dashboard files. The Carver Innovation team will need to review and become experts in the use and maintenance of these files, as they are the drivers of the innovation culture within the county.

In closing, the members of MBA 6220 Group 3 would like to recognize and thank the Carver County leadership who have been involved in the Resilient Communities Project with the Spring 2016 MBA 6220 class: Lorraine Brady, Tom Vellenga, David Frischmon, Melissa Reeder, and Nick Koktavy. The group also would like to recognize the contributions of Mike Greco, the Director of the Resilient Communities Project at the University of Minnesota. Finally, the group would like to sincerely thank Scott Martens, our adjunct professor for MBA 6220, for his leadership and guidance throughout the project.
Appendix

A. Kaizen Event Pipeline Current State

<table>
<thead>
<tr>
<th>Event Name</th>
<th>#</th>
<th>TEAM</th>
<th>MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Review</td>
<td>1</td>
<td>15/15 100%</td>
<td>3/3 100%</td>
</tr>
<tr>
<td>Sheriff Arrest Warrants</td>
<td>2</td>
<td>8/8 100%</td>
<td>3/3 100%</td>
</tr>
<tr>
<td>Finance Emergency Claims</td>
<td>3</td>
<td>7/7 100%</td>
<td>4/4 100%</td>
</tr>
<tr>
<td>Library Invoices for Items</td>
<td>4</td>
<td>25/25 100%</td>
<td>n/a 25%</td>
</tr>
<tr>
<td>PH&amp;E PCA Assessment</td>
<td>5</td>
<td>4/4 100%</td>
<td>7/7 100%</td>
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<tr>
<td>CSS Medical Assistance</td>
<td>6</td>
<td>14/14 100%</td>
<td>4/4 100%</td>
</tr>
<tr>
<td>Library Purchase on Demand</td>
<td>7</td>
<td>10/10 100%</td>
<td>1/1 100%</td>
</tr>
<tr>
<td>Library Inter-Library Loan</td>
<td>8</td>
<td>10/10 100%</td>
<td>1/1 100%</td>
</tr>
<tr>
<td>PH&amp;E Sewer &amp; Septic</td>
<td>9</td>
<td>25/25 100%</td>
<td>7/7 100%</td>
</tr>
<tr>
<td>PH&amp;PH Doc Client Charting</td>
<td>10</td>
<td>36/36 100%</td>
<td>2/2 100%</td>
</tr>
<tr>
<td>IT Change Management</td>
<td>11</td>
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<td>1/0 0%</td>
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<tr>
<td>RTS Minor Subdivision</td>
<td>12</td>
<td>20/15 75%</td>
<td>10/6 60%</td>
</tr>
<tr>
<td>PH&amp;E Water Permitting</td>
<td>13</td>
<td>29/29 100%</td>
<td>6/6 100%</td>
</tr>
<tr>
<td>CSS Out of Home Placement</td>
<td>14</td>
<td>13/13 100%</td>
<td>10/10 100%</td>
</tr>
<tr>
<td>Finance Vendor Claims</td>
<td>15</td>
<td>10/10 100%</td>
<td>1/1 100%</td>
</tr>
<tr>
<td>CSS Child Care Assistance</td>
<td>16</td>
<td>13/13 100%</td>
<td>1/1 100%</td>
</tr>
<tr>
<td>PH&amp;E Engineer Doc Mgmt</td>
<td>17</td>
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<td>2/0 0%</td>
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<tr>
<td>EB New Hire Payroll Setup</td>
<td>18</td>
<td>14/14 100%</td>
<td>1/1 100%</td>
</tr>
<tr>
<td>PH&amp;E Hazardous Waste</td>
<td>19</td>
<td>15/15 100%</td>
<td>5/5 100%</td>
</tr>
<tr>
<td>Data Management for Redaction</td>
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<td>20/20 100%</td>
<td>3/3 100%</td>
</tr>
<tr>
<td>CSS Insurance Reimbursement</td>
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<td>n/a 20%</td>
</tr>
<tr>
<td>PW Night of Way</td>
<td>23</td>
<td>10/10 100%</td>
<td>n/a 10%</td>
</tr>
<tr>
<td>CSS HCOC intake</td>
<td>24</td>
<td>13/13 100%</td>
<td>2/2 100%</td>
</tr>
<tr>
<td>Sheriff Jail Medical Records</td>
<td>25</td>
<td>11/11 100%</td>
<td>n/a 11%</td>
</tr>
<tr>
<td>Land &amp; Water Permits for PW</td>
<td>26</td>
<td>19/19 100%</td>
<td>n/a 19%</td>
</tr>
<tr>
<td>July Update</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EB Employee Status Changes</td>
<td>28</td>
<td>10/10 100%</td>
<td>n/a 10%</td>
</tr>
<tr>
<td>Sheriff Jail Medical Records</td>
<td>29</td>
<td>17/17 100%</td>
<td>n/a 17%</td>
</tr>
<tr>
<td>Insured Assets</td>
<td>30</td>
<td>18/11 61%</td>
<td>n/a 18%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>441</strong></td>
<td><strong>429 97%</strong></td>
<td><strong>74 67 91%</strong></td>
</tr>
</tbody>
</table>

B. Biggest Obstacles of Current State

1. Not enough $ to be able to fully fund the entire new solution
2. Kaizen team doesn't have time to work on their respective Action Plan items and so the target dates continue to get pushed out.
3. Project is put on hold because IT is unable to work on the implementation solution due to other higher priority projects.
4. Management might not like the new solution being recommended by the team & may try to veto or alter their ideas.
5. Mary Kaye & Lorraine's schedules are so full that the event cannot be scheduled for 6 months.
C. Carver County Organization Structure
D. Technical, Political, Cultural Analysis

Figure out why you are facing resistance in order to determine what you must do to combat it.

— Technical: Learning new skills, sunk costs, lack of skills.
— Political: Threat to old guard, relationships, self-preservation, org structure changes.
— Cultural: Traditions, afraid of letting go, old mindset.

For Technical resistance, focus on education and training of the change you are trying to implement. This form of resistance stems from individuals not having the skills/knowledge in order to embrace the change fully. For Political and Cultural Resistance, focus on the need for the change and the benefits that will come about by implementing the change. Be transparent with information by using several different types of communication like e-mail, brown bag lunches, and testimonials.


E. Rubric Instructions

1. Enter name of project into column B, under the projects header.
2. Review the project’s implementation requirements and hover mouse over requirements for more information.
3. Use the drop down to choose the appropriate rating for each implementation requirement.
4. Once requirement ratings are populated, a priority grade is assigned to the project.
5. Assign project team leaders and events as needed.

A visual of the rubric with call-out instructions is included on the next page.
<table>
<thead>
<tr>
<th>Project</th>
<th>Ease of Implementation</th>
<th>Project Benefit</th>
<th>Priority</th>
<th>Score</th>
<th>Score</th>
<th>Project Team Leader Assigned</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>4</td>
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<td>0</td>
<td>0</td>
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**Step #1** Input project name

**Step #2** Review the project implementation requirements and hover mouse over requirements for more information

**Step #3** Use the drop-down to choose the appropriate rating for each implementation requirement

**Step #4** Once requirement ratings are populated, a priority grade is assigned to the project

**Step #5** Assign project team leaders and events as needed.
F. Voice of the Customer


---

*Integrated Voice Of The Customer (VOC)*

- Audits
- Data Ware House
- Complaints
- Process Management System
- Business Savvy
- Surveys & focus groups

*VOICE OF THE CUSTOMER*

*Customer Requirements & Performance Gaps*

*Opportunities*

*Project Pipeline (NPI & Improve / Innovate)*

---

Carlson School of Management
G. Closed-Looped Operating System

A closed-looped operating system centered upon and driven by our customer


H. Stakeholder Analysis

I. General Mills Project Pipeline tool

Summary

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Description

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References


8. Rooney, James J.; Kubiak, T.M; Westcott, Russ; Reid, R. Dan; Wagoner, Keith; Pylipow, Peter E.; Plsek, Paul () Quality Progress Vol. 42 No. 1 QICID: 27627 January 2009 pp. 18-29

9. Martens- Optum OPX Dashboards

10. Hennepin County - CIE - Judy Review 4Q2015 Dec 7.pptx (Project Tracker)

11. “2015 Closed Projects by Area”

12. “2015 Closed Projects by LOB”


14. Area of Impact of CIE Projects, Past and Present

15. Current projects

16. Projects Completed in past six months
Section III: Systematic Projects 4–9
Project 4: Strategic Roadmap for Culture of Innovation & Program Scorecard

By Katie Blake, Molly Daugherty, Ryan Halsch
Ian Kitchen, Jon Lund, Rahul Shah, and Liz White

Executive Summary

Aligning the goals of an organization with its strategic objectives, and measuring progress toward achieving those objectives are imperative for the long-term sustainability of the organization. A strategy map (goal tree) links and aligns goals with strategies and objectives and concisely illustrates both what an organization is trying to achieve and links that with how it plans to achieve that. A scorecard defines the objectives required to meet the goals, quantifies the criteria used to measure the objectives, and tracks progress towards achieving objectives and strategies that support the organization’s goals. When used together a strategy map and scorecard enable any member of an organization to clearly see how their efforts contribute to achieving the strategic objectives of the organization, and progress the organization is making towards its goals.

Introduction

The Innovation Program at Carver County is the focus of the strategy map and scorecard recommendations and applications discussed in this white paper. Additionally, we have focused on descriptions of these tools, recommendations for use, and supporting information. Also included are references to the works of other teams that tie to the strategy map and scorecard recommendations made here.

Foundations

Innovation and strategic goals should be fully connected to the overall strategy of Carver County. In order to do this, we must remind ourselves who we are, what we represent and what we are looking to achieve. Alignment of all elements is key sustainable innovation.

Mission/Vision of Carver County

Align from the top down. Functional strategy and innovation should be guided by the county’s overall mission and vision. This alignment helps ensure all functions within the county are in agreement. All functions must be well coordinated in order to stay competitive and relevant.
Carver County’s Mission
To meet the service requirements and special needs of our residents in a fiscally responsible and caring way. We will plan the county’s growth to preserve its uniqueness and will encourage rural and urban compatibility. We will protect our history while planning for a dynamic future.

Carver County’s Vision
Where the future embraces the past in keeping Carver County a great place to live, work, and play for a lifetime.

“House of Innovation”

Well executed strategy leads to desired strategic results. The strategy house helps us to identify who we are, what we represent (mission and vision) and what we are looking to achieve. Once again, aligning from the top, the strategy map featured below identifies Carver County’s mission and vision in order to be sure goals are aligned. The vision outlines where we want to be. The mission defines our purpose and how we will get to where we want to go. Next, goals are defined in order to better understand strategies, priorities and future work. The base of the house identifies the overall new project introduction. This model can be adapted depending on the state of the county and what new initiatives the area is ready to engage in (See Appendix A).6

Defining Innovation/Levels of Innovation

There are four levels of innovation to be aware of when looking to improve innovation. Often organizations move fluidly between the four levels of innovation and that is normal. Many times organizations working on Level Three will find themselves in Level One in solving new problems. The levels of innovation are a cycle and a guideline (See Appendix B).7

— Level One - Problem Solving - “We can fix this”
This is a reactive approach to innovation but can be powerful. The innovator must be strategic about which problems to create innovative solutions for. It can be easy to slip into a pattern of daily “fighting fires” rather than forward innovating for the future.

— Level Two - Problem Prevention - “We will look for opportunities”
This is a proactive approach to innovation. Attempt to identify potential risks or problems that haven’t occurred yet but are likely and create an innovative solution. Responding ahead of time to future threats and changes can be very valuable to organizations.

— Level Three - Continuous Improver - “We can get better”

Innovation does not simply come from solving problems. It is important to look at the organization as a whole and seek opportunities to improve, not simply in response to a problem. Often when things are going well, this is a great time to look for new innovations and projects to tackle. — Level Four - Creation of a New Future - “We shape the future”

Change is rapid in today’s society, so it is necessary to stay relevant and competitive. Bring leaders within the organization together who would not normally work together and challenge them to come up with new ways of thinking. The outcome may be surprising and just what the organization needs.

Recommendations

Recommendation #1: Strategy Tools

*Strategy Map/Goal Tree*

Keeping in line with Carver County’s mission and vision statements as well as developing the innovation program, the purpose of the strategy map is to construct a means of communicating and measuring goals, strategies and projects throughout the organization. For purposes of this project, the strategy map is read left to right starting with the overarching goal (Foster a Culture of Excellence and Innovation), then segmenting into 5 strategies that will be analyzed and implemented into 8 projects, all assigned to a project manager. Each project manager will then create a project charter (please see below section), which will then allow the projects to put the strategies and ideas into action. In order to successfully achieve the initial goal(s) set forth, it’s important to select appropriate projects to address. The strategy map as showcased in Appendix C exemplifies the strategic metrics of goals, strategies and projects presented by the 9 separate MBA 6220 teams. The overall goal is to foster a culture of excellence and innovation, with 5 outlining strategies: align and manage strategy, support decision making, improve and innovate, leverage knowledge and lead change. The 10 projects address the strategic and operational questions and provide insight and recommendations for Carver County’s innovation program (See Appendix C).

**Role:** Senior Management should be responsible to conceptualize, create, manage and communicate the strategy maps for Carver County.

*Project Charter*

The project charter follows the strategy map, delving into greater detail concerning developing and sustaining a cultural innovation transformation. The business case defines the purpose of the project being suggested or implemented, whereas the problem/opportunity statement defines the timeline and answers questions such as: Why is the project worth doing? Who is the project important to (i.e. business, customers, employees, etc.)? What are the consequences of not doing the project now? The goal statement and project scope both provide more insight concerning potential problems that may arise and targets the specific objective(s) of the project. Key deliverables and milestones define tollgates and deliverables targeted.
throughout the life of the project; measures meanwhile examine and project estimates regarding the project’s financial impact. The team members’ sections include roles of team members, stakeholders and the project manager and sponsor (when applicable). Lastly, the voice of the customer analyzes whether or not customers (external and/or internal) will be impacted (See Appendix D).

Role: Project Managers should be responsible to create, manage and communicate Project Charters for Carver County.

Action Plans

This is a process that allows for project teams to formulate a plan of attack, or set of actions to identify the objective to be addressed. As an example, the object that is being addressed is one of the strategies from the strategy map: improve and innovate. From there, specific teams are chosen to analyze the assigned objective, and are responsible for the project. Project teams create a project charter, and utilize it in order to develop a timeline to put words into actions to implement and innovate. As outlined in the strategy map and actions plans, teams 3 and 7 both were responsible for developing and implementing a project charter in order. The actions for both teams 3 and 7 follow a sequence of steps in order for them to succeed in accomplishing their tasks (See Appendix E).

Role: Project Managers/Team leads should be responsible to create, manage and communicate Action Plan documents for Carver County.

Weekly Status Report

Weekly status reports are means for which project managers, teams and stakeholders are able to track project accomplishments, progress and setbacks. Not only do they present information in an efficient manner, they also save time and allow for purposeful feedback to be provided. By outlining project information in a concise and timely manner, weekly status reports manage and track; whether or not goals will be met by a set time, types of activities and associated resources, communication methods and their effectiveness are just a few examples that these types of reports can include. Open communication regarding these weekly status reports is key to team success. Key players should always be aware of current project status (See Appendix F).

Role: Project leads should be responsible to create, manage and communicate Weekly Status Reports for Carver County.

Scorecard (See Recommendation #2 for Additional Information)

The program scorecard (also referred to as a balanced scorecard) is a tool that allows project members to align goals, objectives and key performance indicators in order to improve external and internal performances. Essentially, it is a set of measures that presents a comprehensive overview of project performance and progress; it supports organizations with moving from initial ideas (goals) and

putting them into action in order to achieving original, and eventually, long-term goals (See Appendix G). 9
Role: Project leads should be responsible to create, manage and communicate Scorecards for Carver County.

Supporting Information & Examples for Recommendation #1:

Strategy Map

Developed by Robert S. Kaplan and David P. Norton, “the strategy map provides a powerful tool for visualizing the strategy as a chain of cause-and-effect relationships among strategic objectives.” 10 Strategy maps serve the purpose of not only creating a strategic visual for project managers, team members and upper management in an organization but also provide a resource for monitoring performance (financial and non-financial). Senior leadership and project managers, by embracing the house of innovation that highlights and defines the identity, vision, mission, goals and innovation of Carver County, will then have the foundation to build a strategy map. This type of groundwork plays a crucial role in ensuring all aspects of Carver County’s innovation program are addressed; the visual tool allows for a tactical approach to assess and oversee project(s) inception and progress. Additionally, it serves as a business model that explains the inner workings of strategic objectives behind the program scorecard. 11 By defining strategies that are aligned with team projects (i.e. teams 3 and 7 putting the improve and innovate strategies into motion – please see appendix for the strategy road map), the opportunity to develop a measurement system becomes available. By clearly defining specific goals, project teams are able to explore strategies that create more synergy throughout the process from initiation to completion.

Current State Carver County

There exists a need to establish and implement a tool that transforms innovation ideas and strategies into a visual guide. By utilizing a strategy map, Carver County management would be able to efficiently communicate their mission, vision and strategies to its stakeholders. The Innovation Leadership Team, by utilizing strategy maps in their Continuous Improvement Program will be better suited to visually manage projects, they find that fit their mission and vision.

Others Who Have Been There

**Medtronic**
Medtronic remains aligned to their mission to maximize shareholder value and maintain an organization of highly motivated people. Former CEO Bill George recognized that having a company focused simply on maximizing shareholder value was a short term solution. He centered the company around their mission and creating a sense of purpose. He recognized that all decisions, across the organization, must be grounded in the vision and mission for the company to remain successful.  

**Walmart**
In October 2005, Walmart CEO Lee Scott successfully helped the company establish goals surrounding renewable energy and environment-friendly operations. The company’s efforts recycle efforts in 1989 had failed. The 2005 effort to “go green” was launched company-wide with all teams grounded in the same goals, measures and program implementation. Walmart was successful due to this alignment from the top down.

**University of Kansas**
University of Kansas developed a strategic map comprised of goals, strategies and initiatives to guide their efforts over the next 5 years to becoming a top tier public international research university. This strategic plan is titled “Bold Aspirations”. The opening statement in the strategic plan lists the university’s mission. The six goals outlined all tie back to the mission and vision of the university. Once again, grounding themselves in their culture while also developing a template for future transformation. University of Kansas has published their goal tree and strategic plan for public viewing.

**Harvard Business Review**
“Authors Robert Kaplan and David Norton, co-creators of the program scorecard, have adapted that seminal tool to create strategy maps. Strategy maps let an organization describe and illustrate-in clear and general language-its objectives, initiatives, targets markets, performance measures, and the links between all the pieces of its strategy. Employees get a visual representation of how their jobs are tied to the company’s overall goals, while managers get a clearer understanding of their strategies and a means to detect and correct any flaws in those plans.”

Strategy plans and maps allow for managers, and everyone else involved in the implementation and execution realms, to continuously monitor “operational

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plans and resources needed to achieve" the objects and goals. These types of maps, while get more complex depending on the size and scope of the strategy, translate the strategy into a visual manner that becomes easier to follow.\textsuperscript{16}

Potential Roadblocks

**Financial**
The financial investment for the strategic roadmap is minimal at most. The cost involves the wages of the key players needed to establish the overall strategy, goals and work initiatives. Alignment from the top requires high level agreement that is parallel with the county’s mission and vision. This initial pass should occur at the leadership level to ensure buy-in county wide.

**Cultural/Organizational**
Communicating the strategy map throughout the county organization will be important as transparent communication is key to successful projects. Take time to explain the strategy map and how it aligns with the county’s current mission. Highly influential players can often act as champions and voice enthusiasm for future innovation and change. Let their skills and networks carry the new strategy throughout the organization.

Recommendation #2: Program Scorecard

**Purpose and Benefits**

“I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind. If you cannot measure it, you cannot improve it”. Lord Kelvin, British scientist

The Carver County Innovation Leadership Charter highlights the importance of not only innovation, but also organizing and measuring innovation, which a program scorecard would enable. In this charter, it discusses the team’s role as to provide direction and aid in innovation events and projects, plan continuous improvement projects, monitor the budget, and have reporting for these events/projects. These tasks demonstrate that the leadership team already values quantifying and organizing their activities and need a tool, like a scorecard, to execute these tasks.

**Role:** Senior Management should emphasise the importance of a Program Scorecard to be able to track performance and measure results and enforce its use starting with major projects. Project Managers/Black belts in coordination with management should align on measurable KPIs for the scorecard. Lastly, Project managers/leads should be responsible to create, manage and communicate Scorecards for Carver County.

Supporting Information & Examples for Recommendation #1:

Current State Carver County

The need for a program scorecard is evident in the Kaizen projects and how the team received an abundance of projects; however, had no pre-determined way to determine which projects would have the greatest impact. As the Innovation Leadership Team implements the program scorecard, it will assist them in delivering on one of their innovation goals, which is to: “Champion efforts to include innovation in the County’s culture including the strategic plan, goals, performance evaluations, etc.”

Others Who Have Been There

* Bain & Company*
Results of a 2015 survey by the consulting firm Bain & Company found that nearly 40% of respondents reported using a Balanced Scorecard, and that of those who used it, the satisfaction level with using it was 80%. The survey included over 13,000 respondents from 70 countries around the world.  

* Hennepin County*
The Hennepin County Council on Local Results and Innovation recommended a standard set of performance measures for counties, that was adopted by the county and used in its 2015 Performance Measurement Report. The measures were designed to aid both residents and officials in determining the efficacy of county operations toward meeting scorecard type metrics. The council also created and published a list of “Standard Measures for Counties.”

* Mecklenburg County, NC and The Balanced Scorecard Institute*
Struggling with priorities that changed every two years on the election cycle, the Board of County Commissioners set forth on a new direction when in 2001, they adopted a long term vision for the county and appointed a new County Manager charged with guiding the county to that vision. The vision was summarized in the tagline, “In 2015, Mecklenburg County will be a community of pride and choice for people to LIVE, WORK and RECREATE.” To realize the vision, the county put in place a “sustainable cycle of strategic activities” that included a balanced scorecard. The scorecard was put to the test in 2003, when the Board decided not to raise taxes in the face of a $25M state funding cut, and instead manually adjusted the budget based on the objectives and targets in the scorecard. As a result of its implementation and use of a strategic management system that includes a balanced scorecard, Mecklenburg County has been

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19 [http://www.auditor.state.mn.us/other/councils/LocalResultsandInnovation/standardmeasuresforcounties.pdf](http://www.auditor.state.mn.us/other/councils/LocalResultsandInnovation/standardmeasuresforcounties.pdf)
recognized with numerous awards from the National Association of Counties, The Government Finance Officers Association, and many others.\textsuperscript{20}

**University of Minnesota**

Within the University of Minnesota, Office of Classroom Management (OCM) has routinely sought change management by way of change management implementation and employment of the Balanced Scorecard.\textsuperscript{21} In order to better align and deliver on their mission—to directly support high quality teaching and learning by faculty and students in University classrooms—OCM needed to have a better process of monitoring and tracking their strategic perspectives—financial, stakeholder, internal process, and innovation & learning.

As a unit of Academic Support Resources, the Office of Classroom Management supports both faculty and students as the one-stop for all central classroom issues. They are the primary point of contact, and single point of responsibility and accountability for all Twin Cities general purpose classroom issues. As such they felt that since their inception in 1999, they needed to better collect and track their collective progress, thus a decade later in 2009, they would implement a balanced scorecard with detailed metrics to better account for department activity. This 2009 Balanced Scorecard for the Office of Classroom Management is a measure of the deliverables provided by OCM and as an indicator of the return on investment in the General Purpose Classroom Cost Pool.\textsuperscript{22}

**Harvard Business Review**

“Authors Robert Kaplan and David Norton, co-creators of the program scorecard, have adapted a seminal tool to create strategy maps. Strategy maps let an organization describe and illustrate—in clear and general language—its objectives, initiatives, targets markets, performance measures, and the links between all the pieces of its strategy. Employees get a visual representation of how their jobs are tied to the company’s overall goals, while managers get a clearer understanding of their strategies and a means to detect and correct any flaws in those plans.” \textsuperscript{23}

**Potential Roadblocks**

**Financial**

It’ll be important to identify the resources required to plan and execute initiatives around innovation on the scorecard itself. Smaller projects may require less planning whereas others may need to be included in AOP discussions. Additionally, a plan should be drafted demonstrating measurable benefits for projects that benefit external stakeholders like citizens, local

\textsuperscript{20} http://www.balancedscorecard.org/portals/0/pdf/mecklenburgcacasestudy.pdf
\textsuperscript{21} http://www.classroom.umn.edu/scorecard-metrics/
\textsuperscript{22} http://www.classroom.umn.edu/Balanced-Scorecard-2009.pdf
Financial buy-in of stakeholders should lead to a higher success rate as they too will be vested in end goals. The scorecard is a good tool to keep track of the stakeholders vested level and benefits in order to keep a track on progress, drive engagement and achieve results.

**Cultural**
There may be some cultural barriers to these projects as with any project there will be some level of change needed in the organization. This will be important for the projects that do not require a lot of funding but just buy-in from employees. Informal networks should be leveraged within the organization, like identifying highly influential champions. These people are usually lower the organizational hierarchy but are well connected to multiple people. If these folks pledge their support then it is easier for management to get support from rest of the organization. KPIs around culture like satisfaction and service recommendation rate should be utilized to measure success in this area.

**Organizational structure and readiness**
As mentioned above, it will be very important to identify and bring on board influential champions for projects that involve a culture change. For some projects, however, it may be better to run a pilot in one part v/s rolling it out across the structure. This will help gauge if the organization is ready and what preparations are needed to get through with the change.

**Conclusion**

**Recommendation #1: Strategy Map**

The strategy map is an efficient tool that outlines the goals and objectives Carver County has laid out for their innovation program. It’s a visual means of communicating that incorporates Carver County’s mission and mission and ties them into current and innovative strategies to be utilized in investigating innovative efforts and projects. This type of framework, along with the program scorecard, is a useful tool incorporates strategies that currently align with the mission and vision already in place.

**Next Steps**

**Timeline: 0-2 years**

Over the first few months, key players in Carver County strategy should meet to discuss the strategy house. All innovation projects should begin by taking a look at the organization’s mission and vision. Goals can then be established that align with the mission. Once goals are established, work initiatives can be outlined and assigned to project sponsors. The project charter should be completed at that time by the project sponsor. Actions plans will follow and include the weekly status report tool by those who report to the project manager. These tools can continue to be used and adapted as goals and projects change.
Timeline: 3-5 years

By this time, Carver County will have updated and modified the strategy map to include more, or less, aspects to better outline innovation projects and strategies as a standardized template. By creating standard document, it will become widely accessible and utilized within Carver County.

Recommendation #2: Program Scorecard

A scorecard is a performance metric used in strategic management to identify and improve various internal functional performance and their resulting external outcomes. The program scorecard attempts to measure and provide feedback to organizations in order to assist in implementing strategies and objectives.

Next Steps

Timeline: 0-2 years

During the strategy map discussions, project teams should talk define how the scorecard will be used. This should include identifying metrics like KPIs and define them that should also be meaningful and measurable. The scorecard should be vetted with the entire project team’s involvement and get approved by the sponsors of the projects. Going forward every new project should be required to use the scorecard.

Timeline: 3-5 years

The longer term goal for scorecard management should be assessing if the format is working for projects currently under progress. Any improvements identified should be made to the master template. By this time using a scorecard should be a standardized process to measure performance for Carvery Co projects.
Appendices

Appendix A – “HOUSE OF INNOVATION”

Appendix B - Defining Innovation/Levels of Innovation
Appendix C - Strategy Map/Goal Tree

Appendix D - Project Charter

**Business Case & Problem Statement**

**Business Case:**
- Explanation of why to do the project
- For example, will it improve customer satisfaction, decrease defects, increase market share, save estimate dollars... relate it to the business objectives.

**Problem / Opportunity Statement:**
- Description of the problem/opportunity and objective in clear, concise, measurable terms
- Period of Problem/Opportunity: __________________________
- Where the Problem/Opportunity is occurring: __________________
- Customer Impacted:

**Key Deliverables & Milestones**

**Start Date:**

- Deliverable #1: target date
- Deliverable #2: target date
- Deliverable #3: target date
- Deliverable #4: target date
- Deliverable #5: target date

**Team Members**

- Sponsor:
- Project Manager:
- Core Team Members: People, Responsibilities
- Key Stakeholders: People impacted, Role involvement

**Goal Statement & Project Scope**

**Goal Statement:**
- Should start with a verb (reduce, eliminate, increase, control), then should explain what the project will do by what percent, dollar amount in what time frame
- *e.g. Reduce cost by $100K by 12/31/2016*

**In Scope:**
- Activities required to complete the deliverables
- Process dimensions, available resources
- On what process with the team focus on? What are the boundaries of the process you would like?

**Out of Scope:**
- Activities that will not be included in the scope of work
- Other processes that will not be reviewed in this project scope

**Measures**

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<th>Goal</th>
<th>Data Source</th>
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**Financial Impact:**
- Is this a cost avoidance? Estimate
- Is this a productivity enhancement? Estimate
- Will it impact volume, create incremental sales/new accounts? Estimate

**Voice of Customer**

If you have identified Customers, segment into Internal and External/Consumer vs. B2B Client and include some of their comments that relate to the problem.
Appendix E - Action Plans

Team 3: Project Pipeline Health

- Improve & Innovate
- Team 7: Innovation Model: Excellence Leads to Innovation
- Charter

Actions

3.1 Create Pipeline input spreadsheet
3.2 Develop rubric weighting system
3.3 Measure pipeline time component
7.1 Identify current state of innovation
7.2 Create project plan to map development path
7.3 Introduce “service revolution”

Appendix F - Weekly Status Report

Strategy: Improve & Innovate
Initiative: Project Pipeline Health
Action: 3.1 Create Pipeline Spreadsheet

Key Accomplishments

Key Work – In Progress

Issues & Points of Discussion

Resources

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<td>Lean Management/ Six Sigma</td>
<td>Joe Smith</td>
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Communication

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<th>Audience</th>
<th>Output/Action</th>
<th>Date/Time</th>
<th>Delivery</th>
<th>Lead</th>
<th>Feedback Loops</th>
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</thead>
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<td>Who are the recipients of the information</td>
<td>What is being communicated</td>
<td>When will the information be communicated</td>
<td>How will the info be communicated</td>
<td>Who is responsible for communicating the info</td>
<td>How to ensure communication is 2-way</td>
</tr>
</tbody>
</table>
### Appendix G - Program Scorecard

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objective</th>
<th>Measure</th>
<th>Target</th>
<th>Actual</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Impact and Benefits (Team 1)</td>
<td>Financial Return</td>
<td>FTE Savings</td>
<td>5%</td>
<td>5%</td>
<td>120%</td>
</tr>
</tbody>
</table>

#### Goals
- Overarching principle that guides decision making

#### Objectives
- Specific, measurable steps taken to meet the goal

#### Measures
- Definition of how objectives are quantified

#### Targets
- Value that marks success in achieving objectives
Project 5: Strategic Operating System

By Katherine Zimmermann, Jeremy Berghoff, D. Stephen Drott
Trent Haun, Joel Lundstrom, and Sean Preston

Executive Summary

Strategic Operating System - Operational Indicators, Strategy Maps, and Reviews: The strategic operating system is vital to linking together strategic goals and tangible operations. Special focus was dedicated to assessing the Carver County overall strategic operating system with attention to innovation, strategy, and operations. Specifically, strategic operating tools and periodic reviews were analyzed to ensure key performance indicators and activities are in place and acted upon to align both strategy and operations.

Carver County is already executing on several key components of the strategic operating system, and we fully believe that by enhancing their current strategic planning process with our recommendations, they will be well on their way to implementing a successful closed loop strategic operating system. We recommend Carver County utilize tools including a strategic goal map (similar to the document they currently produce today), a balanced scorecard, dedicated periodic reviews of progress towards strategic goals, and a ‘test and adapt’ approach to reviewing and revising their process and goals each year. In addition, we’ve provided an appendix that contains links to supporting material and key contacts to help aid the implementation our recommendations.

Overview

A strategic operating system is the set of underlying tools and processes that an organization uses to define its strategic goals, translate and apply them to operations, and provide the framework to both measure and improve the effectiveness of both. According to Robert Kaplan and David Norton in Mastering the Management System, there are two basic rules to effectively implementing a strategic operating system. The first is to understand the management cycle that links strategy to operations, and the second is know what tools to apply to each stage. Our goal for this project is to assess Carver County’s current strategic operating system using Kaplan and Norton’s framework, and provide recommendations on how to further enhance their strategic planning process by applying recommended operating system tools.
The Strategic Operating System

Carver County is already executing on several key components of the strategic operating system. Outlined in the pages below are what an ideal strategic operating system looks like, what it could look like for Carver County in the future, and what Carver County can do to get there. The following information details specific tools and recommendations to enhance the development of strategy and translate it into operational actions that can be monitored and measured to enhance performance, and Carver County resident satisfaction. With tools and processes such as the strategic goal map, the balanced scorecard, and dedicated periodic reviews, a roadmap of success can be implemented and applied to day-to-day operations guiding the way for the future.

When developing a closed loop operating system, the first step is to develop the strategy. A common pitfall is creating unrealistic ideal strategies that are impossible to execute over time. To avoid this pitfall, the ideal strategy is one that meets the reason for being of the organization and sets achievable short term and long-term goals. A strategy can be in use for up to five years, but it should be expected to evolve and change over time. The second step is to translate the strategy so that managers can create objectives and measures that are tracked by strategy maps and balanced scorecards throughout a period of time. The third step is to plan the actual day-to-day operations and actions to execute the strategy and achieve the metrics and measurements. Plan operations are measured to assess improvement over time and
identify successes and areas for improvement. The fourth step to take is to monitor and learn from results for the duration of the year and hold separate operational and strategy review meetings. The single largest pitfall organizations face when implementing strategy is allowing the operational pressures overshadow executing the strategic plan. The final step is to test the original assumptions that went into the strategic plan as those may have shifted over time and make changes accordingly. Repeating these steps year after year achieves a continuous closed loop operating system.

Assessing Carver County’s Strategic Operating System

Carver County’s operating system currently delivers on different pieces of the closed loop system, particularly in developing the goals and objectives. However there are gaps in the circle that need to be addressed in order to fully close the loop. One of the most critical pieces for Carver County to examine is consistent measuring of progress towards goals, not just once a year. Carver County has the opportunity to improve in a number of areas in order to create a sustaining model of strategy generation, measurement, assessment and strategy regeneration. We recommend Carver consider four areas of the strategic operating system to target for improvement. These four key areas are Translate the strategy, Plan Operations, Monitor and Learn, and Test and Adapt. When implementing these recommendations we advise Carver County to be cognizant and aware of the differences between strategy and operations. Evaluate each one on an independent basis and give them the attention they deserve. Link strategy and goals back to the Carver County mission, vision, and values. Translate the strategy into measurable operations and goals, all the while reflecting, learning, and adopting from success and failures. We thank Carver County for their time, participation, and insight. The ultimate goal is to improve Carver County for the residents they serve.

Recommendations

#1: Tools to Translate the Strategy

Goal Tree

The first tool we recommend Carver County should implement is a Goal Tree. A goal tree is a tool that helps link and align an organization’s goals, strategies, and specific objectives to ensure the work being done across the organization is moving towards the goals of the organization as strategically and effectively as possible. It connects the “what” with the “how” in an organization. We recommend Carver County tailors this tool to their specific needs and use it to better align their goals, strategies, and objectives. As part of this process Carver County will need to define some broad overarching strategic themes that can be applied by Directors and Managers in a manner that makes the most sense to their area of excellence or branch of service. An additional benefit of a goal tree is that it serves as an effective communication tool for showing how all objectives can be traced back to the County’s high-level goals. This is a great tool for communicating goals, strategies, and objectives to people at all levels of the
organization, and for speaking towards during periodic reviews. An example of what this could look like can be found in Appendix A.

**Strategy Map**

A Strategy Map another tool that we highly recommend Carver County considers using in the future. This tool is similar to the Goal Tree, except the strategy map focuses on one goal and divides the approach to achieving the goal into 3-5 vertical strategic themes. Each strategic theme consists of distinct strategically related objectives. There are also horizontal themes that layer over the vertical themes to help show how the strategic themes impact different key players. One of the unique benefits of a strategy map is the ability to simplify a complex strategy into a one-page chart that can be easily communicated. By splitting goals into a combination of strategic themes, a strategy map allows managers to customize the strategy to help deliver on their unique department needs while still aligning to the common goals of the county. Another advantage is that each theme typically delivers their benefits over different time periods, which helps organizations simultaneously manage short-term, intermediate, and long-term objectives all at once. An example of what a strategy map could look like for Carver County can be found in Appendix B.

**#2: Tools to improve Plan Operations:**

**Balanced Scorecard/KPI’s/Operational Metrics**

The third tool we recommend Carver County should implement is a balanced scorecard. A balanced scorecard is a tool to visually communicate and align the vision and strategy of the organization with operational activities. While it can include financial measurements, its most useful element is including non-financial performance indicators. This gives managers and directors a more “balanced” view of the overall performance of the organization. A balanced scorecard should be created by the Division leaders at Carver County, updated regularly and discussed quarterly, or as needed. Operational metrics connect to the core of what the organization does on a day-to-day basis. These metrics should be known, across all platforms of the organization, as they are the true drivers of completion actions. These should also be created at a high level in the organization and communicated downward as something that will hold teams accountable for improvements over time.

**#3: Tools to Monitor and Learn**

**Periodic Review**

The fourth tool we recommend Carver County implement is periodic review of the strategic plan throughout the year. However, it is important that Carver County clearly distinguish between strategic and operational reviews, as each should have their own separate meetings to discuss the agendas independently.
Both strategic reviews and operational reviews require different agendas, requirements and goals. Trying to double up on these meetings to accommodate availability and protect from meeting fatigue enhances the risk that discussions of operational crises overshadow strategic discussions. The division leadership, with department leadership and applicable support functions in attendance, should hold strategic reviews. On a monthly basis, division and department leadership should review the balanced scorecard and updates on strategic initiatives. Suggested focus points are as follow:

- On an annual basis, review the strategy as a whole, establish targets on the Balanced Scorecard, and prioritize initiatives for the upcoming year.
  - Typically, done over multiple days to lay the foundation for the upcoming year.
- Review project scope and impact to strategic initiatives
  - Make adjustments as necessary
- Review resource allocation and shift as necessary
- Review timelines, identify barriers and create action plans to remove barriers

Operational Review: Suggestions on frequency and suggested attendees follow:

- Team Meetings (5-15 mins Daily/Weekly)
  - Team closest to the operation and immediate supervisors (usually at the start of shift)
- Department Meetings (30 mins Weekly/ Biweekly)
  - Supervisors and department leadership
  - Applicable support functions
- Division Meetings (1 hour monthly)
  - Division and Department leaders
  - Applicable support functions
  - Updates on longer term activities стратегических инициатив
- All Employee Meetings (1 hour Quarterly/Semi-annual)
  - Involve all employees in the Division
  - Good opportunity to transfer feedback from team to division leadership (e.g. idea cards, question cards)
  - Leadership focus on positives
- A suggested agenda is as follows:
  - Review "Top 5" KPIs/metrics (Presented by the metric owners)
    - Positive Feedback
    - Opportunities
    - What’s being done to mitigate any challenges? Root cause?
  - Review Ongoing Tasks/Projects (Department/Division)
  - Announcements/Recognition

#4: Tools to Test and Adapt

Testing and adapting the strategy is the final step in the closed loop system. The specific tools used in this phase are actually the collection of all the tools mentioned previously, and the “test” portion of the phase is actually the work that your organization has been doing all year. The purpose of this phase it review, analyze, and adapt your strategy and goals to ensure your organization is delivering on its
mission and working towards its vision. The timing for this phase should align with annual review timing and it’s at this point in time when the “closed loop” operating system official closes the loop. At this point in time everything should get put up for discussion and questioned as you continue to analyze what’s working, what’s not, and how can you continue evolving and innovating to meet the changing needs of your community.

The first key to success in this step is leveraging all of the data and insights collected throughout the year to adapt and update the strategy going forward. Due to the constantly changing world we live in, from time to time our underlying assumptions and situations change. If you find your current strategy and goals are no longer relevant, that is OK! Your strategy and goals should be changing, and this the time and place to make the updates that are needed to evolve. The second key to success with this phase is making sure that this process continues to repeat year after year. This is not a process that can be performed once and expected to last forever. When testing and adapting becomes cyclical, strategy generation will becomes self-sustaining when diligently managed and can provide a framework for Carver County to not only achieve its performance targets and strategic operating goals, but also help Carver County continuously innovate and improve as the county works towards achieving its mission and vision.

Findings supporting recommendations

Strategic Operating Tools:

Current State of Carver County

- Currently Carver County has done a good job of defining their goals and objectives. These goals and objectives are clearly defined in the 2016 Carver County Budget document. The missing link in this document appears to be the defining of strategic themes, and the supporting communication documentation and tools that communicate how the objectives are strategically aligned to the County's broader goals.

Literature Supporting Strategic Operating Tools:

Periodic Review

Current state of Carver Co

- Departments and divisions currently hold monthly meetings to go over select updates. However, key performance indicators or scorecard metrics are not part of the agenda.

Literature Supporting Periodic Review


Best Practices of Periodic Review

- Generate an annual Strategic and Operating Meeting Calendar. Manufacturing industries use a similar approach for periodic review. An example is as follows:
  - Daily/Weekly Tier 1 Meeting (15 mins) – Brief overview with assemblers/machine operators and immediate supervisors to go over previous day’s metrics and any issues as well as announcements.
  - Daily/Weekly Tier 2 Meeting (15 mins-30 mins) – Overview with supervisors and supporting functions to go over previous day’s metrics, go over any issues, and announcements
  - Daily/Weekly improvement meeting – Supervisors and supporting functions review improvements brought up by operators. Resources are assigned, statuses are updated, or ideas get rejected. Ideas pursued and solutions completed are counted. This is a metric that is reviewed.
  - Bi-weekly/monthly Department meeting (30 mins) – Presented by supervisors, operators attend. Longer term metrics are reviewed, operators get more visibility of other functions (quality engineers, mfg engineers, supply chain planners attend and may present on a topic)
  - Bi-weekly/monthly Value-Stream Meeting (30mins-1hour) – Managers and supporting functions meet to talk longer term metrics and project updates
  - Annual strategic meeting (5 days) – Managers and supporting functions (quality, engineering, supply chain) Currently Carver County is performing annual strategy reviews, however without the analytics and operating tools we’ve recommended, it’s really difficult to effectively draft a sound strategy because there’s too many critical gaps. Best in class organizations will try to model the situational analysis as accurately as possible during the strategy formation phase which is made possible through measured metrics, and communicated effectively through the strategic operating tools.
Potential pitfalls of Periodic Review:

- Implementing periodic may become too frequent, too long, or too negative (esp. when metrics are not being met). Leaders must guard against this and make sure that each meeting results in meaningful communication that can drive action. Recognition of small wins/gradual progress is especially important in keeping up the moral of the division/department/team.

Conclusion

A successful strategic operating system is the key to achieving operational improvements over time. Carver County does many things well and the tremendous efforts in strategic planning and day-to-day operations are acknowledged. We assessed Carver County’s overall strategic operating system with attention to innovation, strategy, and operations. We provided recommendations in four key areas of the strategic operating system: Translate the strategy, Plan Operations, Monitor and Learn, and Test and Adapt. Implementing a Balanced scorecard, KPI’s and Operational Metrics, Periodic Reviews and testing and adapting the overall strategy will close the loop on Carver County’s strategic operating system. A closed loop system will allow Carver County’s leadership to successfully manage the competing interests of strategy and day-to-day operations.
APPENDIX A – Carver County Goal Tree Example

Goals

- Communities: Create and maintain safe, healthy, and livable environment
- Culture: Provide an organizational culture which fosters individual accountability to achieve goals and sustain public trust and confidence in County Government
- Connections: Develop strong public partnerships and connect people to services and information
- Finance: Improve the County’s financial health and economic profile
- Growth: Manage the challenges and opportunities resulting from growth and development

Strategic Themes

- Innovation
- Organizational Excellence
- Strategic Partnerships
- Public Engagement
- Financial Stewardship
- Environmental Sustainability

Objectives (1-5 years)

- Objective: 1
- Objective: 2
- Objective: 3
- Objective: 4
- Objective: 5
- Objective: 6
- Objective: 7
- Objective: 8
- Objective: 9
- Objective: 10
- Objective: 11
- Objective: 12
APPENDIX B – Carver County Strategy Map Example

<table>
<thead>
<tr>
<th>Strategic Themes</th>
<th>Customer Perspective</th>
<th>Process Perspective</th>
<th>Financial Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Service experience is best in class</td>
<td>Continuously refine processes and services to improve cost/quality/efficiency</td>
<td>Highest return within limitations of budget</td>
</tr>
<tr>
<td></td>
<td>Service delivery continuously improves and stays relevant with new technology</td>
<td>Continuously measuring progress against goals and objectives</td>
<td>Grow revenues in new innovative ways, and reduce unnecessary costs</td>
</tr>
<tr>
<td></td>
<td>Community members are seamlessly connected and actively engaged</td>
<td>Creatively redefine services to overcome challenges, and changing needs</td>
<td>Optimize financial spend across customer touch points</td>
</tr>
</tbody>
</table>

Goal
CONNECTIONS
Organizational Excellence
Innovation
Public Engagement
APPENDIX C – Additional Materials

Strategic Operating System
Carver County Executive Dashboard Example

Communities

- Progress Variance
  - A. Improve Public Health of the County through policies and systems.
  - B. Mitigate flooding of County Infrastructure.
  - C. Protect and enhance the County’s natural resources from AIS.
  - D. Raise the quality and quantity of service to the County’s veterans and their families to a level of excellence.
  - E. Plan for the changing needs in Carver County as the demographics adjust due to the projected increase in the number of older adults living in Carver County by 2030.
  - F. Study, plan, and implement measures to provide for the security and protection of the public and County employees and County assets.

Finances

- Financial charts and graphs showing variance and running variance total.
### Carver County Operating & Strategic Calendar Example: 2016

<table>
<thead>
<tr>
<th>Month</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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<td>Operational Review</td>
<td>Directors Operations</td>
<td>Directors Operations</td>
<td>Directors Operations</td>
<td>Directors Operations</td>
</tr>
<tr>
<td>Strategic Review</td>
<td>Directors Strategy</td>
<td>Directors Strategy</td>
<td>Directors Strategy</td>
<td>Directors Strategy</td>
</tr>
</tbody>
</table>

**Team Daily Stand-Up’s**

**Weekly Department Meeting**

- All Employee Town Hall
- Annual Review

### Carver County Compass

**Goals**

- Communities: Create and maintain safe, healthy, and livable communities
- Culture: Provide an organized culture which fosters individual accountability to achieve goals and sustain public trust
- Connections: Develop strong public partnerships and connect people to services and information
- Finance: Improve the County’s financial health and economic profile
- Growth: Manage the challenges and opportunities resulting from growth and development
APPENDIX D – References


http://mrsc.org/Home/Explore-Topics/Finance/Budgets/Performance-Measurement.aspx

http://www.kirklandwa.gov/depart/CMO/Reports/Performance_Measures.htm

http://www.fcny.org/fcny/cgp/

http://www.gfoa.org/performance-management

http://www.maricopa.gov/mfr/
Project 6: Resourcing, Training and Leadership Development

By Alyssa Bowersock, Claire Dunlap, Michael Hektner, Daniel Korman, Jason Lusk, Nick Reveland, and Garrett Sohn

Executive Summary

The focus of this project is to determine recommendations to help Carver County figure out the appropriate level of human capital needed to achieve its mission for expanding innovation efforts. Based on our findings, we have 4 key suggestions for Carver County:

1. Commit Resources to Process Improvement Activities
2. Increase ILT Activism
3. Implement Training Programs and Leadership Development
4. Apply for Grants to Fund Future Innovation Expenses

Through our communication with the Innovation Leadership Team (ILT), and through class lectures we were able to effectively analyze Carver County’s current state, and where it wants to be in the future. We researched best practices to determine appropriate techniques to engage more county employees in innovation. In addition, our research involved analyzing current models for innovation training such as Kaizen Events and Lean Management. Finally we researched potential grants that the County could leverage in the future to help grow innovation initiatives. While there are significant hurdles to overcome, we feel that by making a significant resource commitment, taking advantage of identified partnerships, training, and funding opportunities, the ILT and Carver County are in a good position to make improvements with respect to human capital that will support a culture of innovation for years to come.
Recommendation 1: Commit Resources to Process Improvement Activities

Operational (0–2 Years) – Gain momentum for PI activities and develop champions

Select 2–3 Divisions within Carver County that have expressed enthusiasm for Process Improvement (Finance [51], Public Works [62], Health Services [215], and Public Services [124])

1. Work with division management to identify 1 to 4 people from selected divisions and train-up as process improvement champions – integrating with leadership development program
   a. Formal training programs (covered in greater detail later)
   b. ABLE Light program (covered in greater detail later)

2. Gain commitment to reinvest (a portion) of savings from subsequent process improvement projects into Innovation Development within Carver County. Savings can be used to:
   a. Fund additional employee/leadership training long-term
   b. Free up Lorraine to spend 100% of her time managing innovation for the county
   c. Facilitate more active participation by ER on the ILT
Strategic (Year 3 and Beyond) – Create a new future through innovation beyond process improvement activities

1. Ensure engagement of all Carver County Divisions in PI Activities to support true cultural change – each division will have a core group of people that will have gone through internal/external training to lead/facilitate process improvement activities
2. Move beyond Process Improvement to Creating a New Future – now that momentum has been gained for creating a subculture of continuous process improvement, commit resources beyond process improvement to visionary innovation

Recommendation 2: ILT Activism

Operational (0–2 Years) Identify innovation partners and celebrate success

1. Add a representative from ER
2. Develop relationships with Carver County Industry Partners to support training efforts
3. Identify relevant success stories to influence Division Managers now, promote own success stories when available
   a. Communicate plans for reinvestment – requires SMART goals and tracking
   b. Develop program to communicate/celebrate successes on a more frequent basis
4. Develop plan with Division Managers to implement ABLE Light program

Strategic (Year 3 and Beyond) – Championing innovation as a part of Carver County’s culture

1. Provide insight and context for moving beyond process improvement to “visionary innovation” by understanding differences and facilitating next steps

Recommendation 3: Training for County Employees

Operational (0–2 Years) Capitalize on free offerings provided by State of Minnesota

1. Goal is to provide exposure and awareness to basic concepts of innovation
2. County to identify which leaders will “Champion” projects within their functional area
3. Begin application process for state and federal funded grants for formal innovation training
Strategic (Year 3 and Beyond) Continue to reinvest savings in training programs for leadership

1. Goal of sending 1-4 leaders within each functional area to receive formal training from private sector programs
2. Innovation Champion will be responsible for updating the ILT on project status within their functional area

Recommendation 4: Apply for Grants to Fund Innovation Expenses

Operational (0–2 Years) – Apply for Private or Federal grant for fiscal year 2017

1. Apply for Bush Foundation “Community Innovation” or a similar grant in 2017 to fund training expenses
2. Identify and apply for Federal grants during fiscal year 2018
3. Begin to allocate a small portion of time, 1-2%, during ILT meetings to discuss grant options

Strategic (Year 3 and Beyond) – Allocate 3–5% of ILT time towards finding/applying for grants

1. Apply for grants annually at the Federal Level
2. Apply with private foundations (ex. Bush Foundation)
3. Work with other government entities to apply for larger grants
4. Fund innovation training, and technology enhancements with grant funds

Recommendation 1: Supporting Information

Current State: Carver County

- Constraints outlined in 2015, Recommendation #5 (beginning with premise that no additional funds are available for innovation staffing in 2015) hold true:
  - No increase for paid staff time - no change should be made in the amount of paid staff time allotted for innovation projects
  - Increase indirect staff time - respond to County staff interest in identifying, recruiting, and training other county employees in facilitation methods provided there is employee interest and supervisor support for the training
  - Continue advisory committee - continue to have the Innovation Leadership Team serve as the advisory committee for innovation efforts within the County
- It does not appear as though the ILT has identified a current state, a desired (future) state, as well as a progress map with respect to human capital.
- Currently there are only 2 FTEs with allocated time towards innovation/process improvement activities
• The county does not have a formalized and defined leadership program. The approach has been more fluidic, identifying key organizational priorities and leadership development needs.
• The Employee Relations Division has organized mandatory supervision training programs for all supervisors (Bruce Miles series - http://www.bigrivergroup.com/).
• They have also invested in customer service/culture training for leadership and employees (http://www.petramarquart.com/index.html).
• There is a lot of autonomy for divisional managers when developing leaders (How does this autonomy impact overarching cultural change?)
• It has been expressed that the county does have a desire to use innovation as part of their leadership development program.
• $30,000 is earmarked specifically for leadership development.
• In 2015, $27,098 of that $30,000 was spent.
• It is assumed that some of the $456,000 that gets allocated to each county division may be spent on leadership training/development - anecdotally, the thought that is only 1% to 5% of those distributed funds will be spent on leadership development, it is predominantly spent on subject matter expertise.

Supporting Literature/readings/articles/theory


Potential Challenges and Barriers + Strategies for Overcoming

• Managers wary of lost time focused on employees’ “day job” if innovation/improvement involvement. Lorraine doesn’t feel her appeals to managers are getting through. Need to communicate value of project for leadership development and work through success stories to bring functional managers on board with ILT vision for innovation in Carver County.
• Employee Relations (ER) is considering the list below for training topics for 2016; currently these topics are independent of the ILT. The ILT needs to work in concert with ER to promote process improvement training activities as opportunities for leadership development and support redirection of some of the funds to support training
  o Additional focus on performance management and staff development
  o FMLA/ADA, legal and compliance related topics in working with personnel situations
  o Respectful workplace
  o Diversity and inclusion
  o Additional leadership development topics building on the Bruce Miles series
• There is a lack of staffing resources to develop and support an ongoing/sustained leadership development program (and prior to 2015 a lack of budget).

Recommendation 2: Supporting Information

Current State: Carver County

• A blind survey was conducted to assess the effectiveness of the team. Below are the results:
  o Question: On a scale of 1 to 7, how would you rate the communication between you and your team members? (1 - no communication, 7 - very communicative)
    ▪ Average response: 6.2
    ▪ Range: 6 - 7
  o Question: On a scale of 1 to 7, how well does the innovation team closely work together to solve issues? (1 – never talk to him/her, 7 – we coordinate on all innovation projects)
    ▪ Average response: 6
    ▪ Range: 5 - 7
  o Question: On a scale of 1 to 7, how frequently does the innovation team communicate with departments that are the focus of key initiatives? (1 – never, 7 – very frequently)
    ▪ Average response: 5
    ▪ Range: 2 – 6
  o Question: On a scale of 1 to 7, do you feel the team is on the same page in regards to key initiatives and innovation goals? (1- no one on the team is on the same page, 7 - the team is totally in sync)
    ▪ Average response: 6
    ▪ Range: 5 - 7
  o Question: On a scale of 1 to 7, since the last innovation meeting, how well did the team work on projects that were considered innovative? (1 – no work at all, 7 – we were very innovative)
    ▪ Average response: 5.2
    ▪ Range: 4 - 6
o Question: On a scale of 1 to 7, please rate the overall effectiveness of the ILT over the past three months. (1 – nothing was accomplished, 7 – all goals were exceeded)
  ▪ Average response: 5.6
  ▪ Range: 5 - 7

o Question: On a scale of 1 to 7, please rate the effectiveness of the meetings over the past three months (1 – resulted in extreme regression, 7 – resulted in extreme forward motion)
  ▪ Average response: 6.2
  ▪ Range: 6 - 7

o Question: Over the past three months, do you feel the team has been able to stay focused on key innovation initiatives? (1 – not focused at all, 7 – completely focused on key innovation initiatives)
  ▪ Average response: 6
  ▪ Range: 5 – 7

o Question: Please describe your key goals for the team, in regards to innovation, for the next three months.
  ▪ Responses:
    — (1) help jumpstart the data redaction process; (2) how can innovation support staffing needs
    — To keep struggling department/division events moving to the “desired state” that span multiple supervisory areas
    — (1) Communication and coordinating, (2) RCP project and follow up, (3) Data practices project
    — Make progress on the redaction project, answer questions for the students
    — (1) I would like to see the work more evenly distributed between team members. At times work assignments seem to fall more on a couple of us than all 5 team members; (2) Review the RCP recommendations and determine next steps; (3) Make progress on the Data Management dilemma.

- It is recommended that the ILT perform this survey on a quarterly basis to monitor their perspective on the growth of the team. It is also recommended that the responses to the final question be reviewed with the entire team in order to ensure alignment of key goals, strategies, and projects.
- The ILT is currently made up of five members:
  ▪ Assistant County Administrator/Public Services Director - Tom Vellenga
  ▪ Property & Financial Services Director - Dave Frischmon
  ▪ IT Director - Melissa Reeder
  ▪ Assistant Finance Director - Mary Kaye Wahl
  ▪ Lorraine Brady (IT Project Manager/Business Analyst & Innovation Program
    ▪ In addition to their current members, the ILT has identified that it should also include a member of ER

- Meetings occur monthly or at least every six weeks
  ▪ 8 – 12 meetings annually
- Strengths indicated:
  ▪ Upper management representation from key departments
  ▪ Small group size reduces scheduling conflicts
  ▪ Strong ability to work together in a cohesive fashion
Job titles are “left at the door”
High comfort level allows all members to voice their opinions
Provides a management support system for employees that are working to enact innovation strategies
Very positive space

Supporting Literature/reading/articles/theory

- [http://www.businessnewsdaily.com/7047-leadership-improvement.html](http://www.businessnewsdaily.com/7047-leadership-improvement.html)

Government, industry, non-profit practices supporting recommendation

Action Based Leadership Experience (ABLE) Light program provides a leadership opportunity for county employees by giving them a leadership role to plan, develop and implement a county project.

- Program will consist or 1-2 employees from the county
  - 25% of the time dedicated to the ABLE project, 75% will continue to work on their current job.
  - Candidates must show strong leadership abilities and be willing to listen and learn from others.
- Assigned a project by the ILT
  - Project must be completed in 12 months or less
- Each ABLE Light member will be assigned a mentor with experience in the county leadership
  - Must be in a leadership position within the county
  - The mentor must give guidance on how to complete project tasks and overcome obstacles.
- By the end of the program the county will have 1-2 employees with new leadership skills and have the confidence to take on more challenging county projects.
- Potential Industry Partners:
  - Carver County Community Development Agency
  - Crown College
  - Minnesota Department of Employment and Economic Development
  - Heartland America
  - Ridgeview Medical Center
  - TAK Communications
  - Hydro Engineering
  - Business ware Solutions
  - We Business Strategies
  - General Mills
  - Supervalu
  - Lake Region Medical Manufacturing
  - Entegris
• Emerson Process Management/Rosemount Measurement
• Beckman Coulter
• Lifetime Fitness
• Americinn

• Successful implementation examples:
  • http://mn.gov/admin/lean/results/projects-events/
  • https://goleansixsigma.com/lean-six-sigma-industry-success-stories/
  • https://goleansixsigma.com/case-study-pierce-county-procurement-streamlines-contracting-procurement-processes/

• Development Groups:
  • Marketing
    o Minnesota Interactive Marketing Association, http://www.mima.org/
  • Human Resources
  • Finance
    o Minneapolis Institute of Management Accountants, http://www.minneapolismanima.org/
  • Miscellaneous
    o Young Professionals of Minneapolis, http://ypminneapolis.org/

Potential Challenges and Barriers + Strategies for Overcoming

• Weaknesses indicated:
  • Team does not include someone from HR/ER
  • HR/ER has been unable to participate in the ILT due to time constraints.
    o This could be amended by conducting a full analysis of the job functions of the representative that would be most appropriate and allocating selected tasks to a subordinate employee
    o https://www.shrm.org/hrdisciplines/orgempdev/articles/pages/delegateeffectively.aspx
  • Most employees are unaware that the team exists
  • Employees do not recognize the ILT as a resource
  • Employees are not away of the ILT’s past successes or future initiatives
  • There is currently no way for employees to make suggestions or share ideas with the ILT
  • Engaging more employees from multiple divisions will allow the ILT to gain greater scope and notoriety in the County
  • The ILT must increase the volume of communication with the County and look to collaborate more often with all divisions
  • Implementing a program like ABLE will produce effective leadership practices that focus on innovation and process improvement
Recommendation 3: Supporting Information

Current state: Carver County

- There is no formal training for innovation
- There is $30,000 allocated for leadership development training
- The County currently has a lack of employees that have been trained in innovation and process improvement methods (Kaizen events, Six Sigma, Lean Management etc.)

Supporting Literature/readings/articles/theory

- [www.stthomas.edu/execed/minimasteroftheleanenterprise/registration/](http://www.stthomas.edu/execed/minimasteroftheleanenterprise/registration/). St. Thomas offers a "Mini Master of the Lean Enterprise." Cost is $2,695 per student. This comprehensive program covers the following topics:
  - An introduction to Lean methodology
  - Customer requirements/VOC
  - Understanding processes
  - 5S and visual management
  - Pull systems, kanbans and TAKT time
  - Kaizen events
  - Quality and Lean
  - Performance measures and Lean accounting
  - Lean inside and outside the organization
  - Change management and communication
  - Lean deployment planning
  - Additional tools of Lean
- [http://www.6sigma.us/lean-agent.php](http://www.6sigma.us/lean-agent.php)
  - Formal six-sigma training; "Lean Fundamentals"
  - Cost of $2000 per student, group discounts available

Topics include:

- Overview of the Lean Initiative
- Incorporating Lean & Six Sigma
- Muda (or Waste) Eradication
- Value Stream Mapping (Present and Prospective State)
- How to Conduct a Lean Vision Events (or Kaizen Events)
- Flow, TAKT Time and PITCH Applications
- Replenishment Pull methods vs. Traditional “Push”
- Kanban or Visual Signaling
- Goldratt’s “Theory of Constraints”
- 5S and Visual Control
- Poka Yoke (Error Proofing)
- Program Synopsis
Government, industry, non-profit practices supporting recommendation

- [http://mn.gov/admin/lean/](http://mn.gov/admin/lean/). Free resource to all public sector employees; introduction to CI, measures of improvement, problem solving tools, online training and on demand courses

Potential Challenges and Barriers + Strategies for Overcoming

- Champions will lead different functional areas
- Share success stories with employees to help enable “buy-in”
- Show that the county continues to invest in the program and in the employees

Recommendation 4: Supporting Information

Current state Carver Co

- The County currently has a lack of funds to expense towards innovation
- The County could cover innovation expenses with grant funds

Supporting Literature/readings/articles/theory

- [http://www.dol.gov/general/grants2](http://www.dol.gov/general/grants2)
- [https://www.bushfoundation.org/grants/community-innovation-grants](https://www.bushfoundation.org/grants/community-innovation-grants)

Government, industry, non-profit practices supporting recommendation

- Ramsey County was awarded the Bush Foundation “Community Innovation” grant
- Many local governments work together to receive larger federal grants

Potential Challenges and Barriers + Strategies for Overcoming

- Time allocation - time is needed to research and suggest grants to apply for
- Readiness - the County needs to discuss oversight of funds if they are awarded grants and how to maximize the use of the funds
- Committing a small amount of time towards grant applications may help the county fund future innovation related expenses
- Avoid having to expand Innovation budget

Conclusion

To recap, our recommendations for Carver County are intended to provide insight and tools to help them achieve the appropriate level of human capital to drive a culture of innovation. We strongly feel that the County should:
1. Commit Resources to Process Improvement Activities
2. Increase ILT Activism
3. Implement Training Programs and Leadership Development
4. Apply for grants to fund future innovation expenses

We believe that Carver County is positioned to achieve its goal of becoming more innovative. Many hurdles lie ahead though. The County will need to commit resources and display effective leadership to move forward. Changing the culture of a large organization is a very difficult task. The ILT must work hard to develop processes to implement recommendations that will have meaningful impacts. Our four recommendations have potential to help Carver County foster a culture of innovation. The ILT must act on them and determine the best method for execution.
Appendix – References

Recommendation 1


Recommendation 2

- http://mn.gov/admin/lean/results/projects-events/
- http://www.mnama.org/
- http://www.hrpmn.org/
- http://www.tchra.org/
- http://www.minneapolisisma.org/
- http://ypminneapolis.org/
Recommendation 3

- http://www.stthomas.edu/execed/minimasteroftheleanenterprise/registration/
- http://www.6sigma.us/lean-agent.php
- http://mn.gov/admin/lean/

Recommendation 4

- http://www.dol.gov/general/grants2
- https://www.bushfoundation.org/grants/community-innovation-grants
Project 7: Innovation Model and Voice of the Customer

By Konstantin Butskiy, Brittany Dyshaw, Sam Hinton, Param Kler, Alana Novosad, and Siddhartha Saladi

Executive Summary

Innovation is the key to an organization’s continued growth and success. Our recommendations are focused on a model of innovation, which is composed of 4 levels needed to achieve innovation, and a fully integrative voice of the customer system that highlights information gathering methods from new and existing internal and external customer touchpoints.

The innovation model introduced in the following recommendations is a model with communication as the central component and defines the four levels of innovation (problem solver, problem preventer, continuous improver, and creator of a new future) in alignment with existing organizational competencies and identifies growth opportunities. To drive this culture of innovation, a strategic engagement program can be used to increase awareness and participation.

Also recommended is a formal Voice of the Customer (VOC) information gathering system that utilizes customer touchpoints to obtain feedback. Once customers/products and drivers of satisfaction have been identified, customer satisfaction surveys should be developed and conducted. To analyze survey results, department/service specific focus group discussions should be conducted on a quarterly basis. The VOC insights obtained from these focus groups can then be integrated into the Innovation Pipeline Project Analysis tool.

Currently Carver County does not have a formal innovation model in place that is used to drive thinking about projects and there are very few formal VOC systems in place to gather and manage information from internal and external customers. The recommendations and supporting findings outlined in this report will provide the County with the tools necessary to implement these practices into their overall innovation and process improvement strategy.

Overview

Every organization with an innovation program should have a model or way of thinking that allows for the broad communication and capture of in-flight innovation ideas, projects and results. Carver County’s innovation focus at this time centers primarily around preventing problems (e.g. 5S initiatives) and continuous improvement (e.g. kaizen events). We believe there is additional opportunity to expand the current innovation model by adding emphasis to problem solving and envisioning new potential future operating models for Carver County.

The Voice of Customer (VOC) or process of capturing customer’s expectations, preferences and aversions is another tool that innovative organizations should be leveraging. Carver
County uses employee bulletin boards and ad hoc suggestions from individuals to capture feedback internally and does not currently have a process for collecting and organizing VOC information externally. We feel there is significant opportunity to improve VOC insights both internally and externally through the implementation of surveys and focus groups that feed insights into the innovation project pipeline recommended by Group 3.

Our assessment and recommendations are informed by Melissa Reeder, Director of Information Technology at Carver County, concepts from Scott Martens’ Operations Management (MBA 6220) course and industry best practices around innovation. Details that support our recommendations and conclusions are imbedded in the following sections of our paper and the appendix.

**Recommendations**

**Innovation Model**

*Define the Four Levels of Innovation for Carver County*

It is imperative that an organization defines innovation to educate and motivate employees on what the organization would like to accomplish by becoming more innovative. Based on the current state analysis, it is recommended that Carver County define innovation through the implementation of a four level innovation model which clearly articulates a broad definition of innovation that spans from process improvement to new developments.

The four levels of innovation, as defined by Larry Myler, are problem solver, problem preventer, continuous improver, and creator of a new future (Myler, 2013). As shown in Exhibit 1.1 the organization will maximize its impact if its workforce continuously innovates within all four levels.

*Exhibit 1.1: The Four Levels of Innovation*

![Exhibit 1.1: The Four Levels of Innovation](image)

**Central Component – Communication:**

Communication of innovative thinking in other levels and projects will not only facilitate cross collaboration between projects but also encourage employees
limiting themselves to thinking in a single level to expand and contribute beyond their current mindset.

**Level 1 – Problem Solver:**

A problem solver can be defined as one who seizes a failure or error as an opportunity to correct the current cause of the problem. This level of innovation is most widely understood in its most basic form when the something breaks and is fixed to continue ongoing operations.

**Level 2 – Problem Preventer:**

By analyzing downstream affects before making a decision or implementing a change to the process, an employee can proactively prevent future problems and ensure a positive experience for both internal and external customers. This level of innovation can be executed by mapping process flows and analyzing using a failure mode effects analysis (which is discussed later in supporting findings section of this paper) which allows the team to eliminate all potential risks and mistake proof the process prior to implementation. From this analysis, the team can prioritize, detect cause and eliminate this issue (McCain, 2006).

**Level 3 – Continuous Improvement:**

Continuous improvement is energizing talent to review and constantly consider opportunities to work faster, simpler or more efficient. Kaizen events are a great example of how Carver County is already excuting in this level of innovation.

**Level 4 – Creator of a New Future:**

Lastly, the creator of a new future innovation level empowers employees to launch new programs, data dashboard or service measures that will align with the ever changing customer needs.

*Create an Engagement Program to Increase Awareness and Participation*

Though Carver County has exercised operations touching on various levels, embedding these levels into the culture has not yet been achieved. Innovation should be included in day to day operations and not feel as though innovation is a special added project. To transform an organization, it’s important to establish familiarity around the model. Large “town hall” type events are effective of introducing and developing a high level understanding of what this model means for the county. Ongoing communication, encouragement and visibility is next. It is recommended that a measurable goal be implemented and required for employees. Change management theory encourages celebrating small wins and rewarding

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24 Failure Mode Effects Analysis (FMEA) reviews the potential points of failure and the impact of said failures. This analysis then requires potential failures are prioritized and corrected based on the amount of acceptable risk is inherent in the underlying process. (Quality)
positive behavior regardless of the result of the project at times (Kotter, 2007). In terms of the 4 level model, it may be effective to run a campaign which you can qualify for a badge for successfully demonstrating innovation at each level. Highlighting the various ongoing efforts would allow employees to get inspired and potentially recreate a win in one group to a similar process in their own group.

**Integrate Innovation Model into Ongoing Strategy**

Lastly, to drive long lasting change, innovation must be established pillar of success. Whether that is defined in the value statement, included in personnel goals or create dedicated time to work or discuss suggestions for change. Clearly defining changes in corporate culture will foster an environment that enables individuals to be the change when there is a problem or an idea to create something new (Kotter, 2007). Dedicating time to educating the new approach, behaviors and developing the core competencies of each level of the model will ensure that this change will be long term.

**Voice of the Customer**

**Developing and Conducting Customer Satisfaction Surveys**

In order to understand customer satisfaction, the recommendation is that all surveys in all departments use a common, five-point scale and include the following types of questions:

- Questions about overall satisfaction
- Key drivers of satisfaction;
- Customer characteristics (demographic info) and;
- An open-ended feedback question.

It is vital that the survey be tailored to each department’s’ services, customer base, information needs, and resources. However, it is important that information gathered be comparable and meaningful; using the common scale and similar types of questions will help ensure that.

Customer satisfaction surveys should include four types of questions:

**Overall Satisfaction:**

Overall satisfaction measures are derived from questions that ask the customer to rate the service as a whole, such as, “Overall, how satisfied are you with the service provided by this department?” This kind of question is intended to capture all aspects of the customer experience, from the time the customer begins his or her quest to find the product or service, through receipt of the product or service, and into the use of the product or service.
Drivers of Customer Satisfaction:

If possible, the drivers of customer satisfaction will be identified prior to developing a customer satisfaction survey. Once the key drivers of satisfaction have been identified, effective survey questions can be developed around these drivers.

Customer Characteristics:

Departments should gather information that is important to better understand service delivery, customer segments, and overall customer demographics. Examples of service delivery-related information are as follows:

- How services are accessed (online, in person, over the phone)
- Day or time services are accessed

Open-Ended Questions:

Recommended questions up to this point have been structured, fixed-alternative, Likert-type questions (e.g., multiple choice). In order to gather true qualitative impressions from customers and allow them to express themselves in their own words, it is recommended that each survey include at least one open-ended question.

Examples of possible open-ended questions are as follows:

- Is there anything else you would like to tell us?
- What is the most important thing can we do to improve our service?
- Suggestions/comments?

Developing and Conducting Focus Group Sessions

Departments may want to consider using focus group discussions to supplement customer satisfaction measures. Focus groups bring a small number of people (usually 6-12 customers) together to discuss research questions and generate qualitative information about their feelings and opinions, as well as their reasons for those opinions, attitudes, and beliefs.

The following recommendations should be considered when designing and conducting focus groups:

Participant Selection:

Focus group participants should be able to speak to the questions that will be explored in the focus group. Thus, participants should share a common base of understanding, experience, and/or knowledge that will allow them to engage in a discussion of the questions. In addition, relevant background characteristics may be considered when recruiting focus group participants in order to insure
that a range of customer perspectives is included while still permitting open
discussion in the focus group. Focus groups with county employees or internal
service recipients can be used by internal county services.

Focus Group Moderation:

In order to have successful focus groups, the groups should be facilitated by an
experienced moderator who is not part of the organization conducting the focus
groups. Focus group moderation is challenging, and a moderator who is
affiliated with the county organization conducting the groups is likely to
influence the discussion or cause participants to frame their comments more
carefully (or positively) than they would when talking in a group with an
unbiased, third-party moderator.

Analyzing Focus Group Results:

The qualitative information obtained in focus groups can help explain why
customers feel and perceive things the way they do; their range of feelings and
opinions; and the reasons for their feelings, perceptions, and opinions. However,
focus groups do not generate quantitative information and, therefore, will not
give any indication as to what percentages of customers have, for example, a
particular opinion, experience, or priority. Thus, focus groups are a good
supplement to, but not a substitute for, quantitative survey research.

Integrating VOC Insights into Innovation Pipeline

Some of the ways that customer satisfaction information should be used are listed
below:

Management & Program Improvement:

- Understanding customer perspectives and finding areas for
  improvement in processes and service delivery
- Refining and improving the customer satisfaction measurement process
- Internal staff meetings and management discussions of performance
- Executive level briefings and performance forums

Reporting:

- Public reporting in annual reports, performance reports, Web sites, and
  newsletters to stakeholders, partners, and customers
- Internal reporting to program staff, management, and organizational
  partners
- Strategic and business planning analyses and documents
Supporting Findings

Innovation Model

The Four Levels of Innovation

The purpose of this model is to clearly articulate what innovation is and encourage action within all four models which will result in efficiency savings and futuristic thinking. This model supports an efficient, productive process that realizes lean as a critical component of innovation. By constantly looking for ways to remove or prevent issues, solutions such as automation or standardization will result that will allow streamlined predictable process supported by lean. It is important to be aware that lean does support systematic results which are not completely conducive to innovation as it could reduce creativity. For example, 3M did implement lean and other continuous process improvement systems into their workflows that negatively resulted in a reduction in risk taking, creative thinking and new ideas. (Hindo, 2007) To combat these negative results consider standardizing non value add activities and avoid strict process controls on areas of more variation. Non value-add activities that would be great candidates for lean standardization include wasted motion, waiting, defects and unnecessary delivery routes.

Current State

Currently Carver County is succeeding with their ability to execute levels 2 (problem preventer) and levels 3 (continuous improver) of the innovation model through the use of 5S initiatives and Kaizen events. The core competencies such as preparedness, future challenge awareness, focus on future growth, and the ability to confront the status quo are just some of the ways in which the County is succeeding in driving innovative thinking. However, there are still opportunities for Carver County expand the current thinking around innovation and grow benefits for the County as a result.

Best Practices

There are many examples of organizations both government agencies and public corporations innovating utilizing various areas of this innovation model. Currently, San Joaquin is driving a project to reduce online hiring from forty days to seven. The workforce is evolving to become more attractive to millennials. Not only does this project take this government agency in a new direct to target a younger demographic but it also improves a current problem of lengthy hiring windows and additional time to review time for capable individuals. This innovative project solves and prevents problems with future hiring delays and cost challenges, reduces non value activities such as waiting by continuously improving the hiring process and lastly redirects its focus to entice millennial to take government entry level positions growing a talent pool for future aging workforce (Shueh, 2016). Thomson Reuters, a intelligent technology company, implemented a quarterly project that required management to lead a team meeting to create a list of start, stop and continue activites which essentially encompasses levels 1 (problem solving), 3 (continuous improvement) and 4 (creation of
a new future). The driving purpose behind this activity is to reevaluate workflow, eliminate non-value add and redefine priorities to best serve the customers. By investigating current use cases of innovation by organizations in other industries Carver County can take this learnings and apply them in order to continuously evolve.

Voice of the Customer

Current State

Carver County currently does not have any formal systems in place to gather information relating to innovation from either external customers or internal employees. However, there are some informal information gathering practices in place to obtain information from internal employees. Social media is an excellent way in which the County can source feedback from county residents. Currently Carver County has a limited social media presence on Facebook and Twitter but does not actively use these channels as a formal device to source information. In the past the County has utilized its website to post surveys as a way to gather information from customers.

Internal Employees

One of the current methods in place to gather internal feedback or ideas on innovation is the current practice of encouraging managers to pull ideas from their staff that have been posted to internal bulletins asking for input. This input is then directed to the Innovation facilitators. However, there is no formal method in place that ensures that this information is collected and acted upon.

External Customers

In contrast to internal employees, there are more semi-formal systems in place that the County uses to obtain feedback from residents. For each department and subject area within the county that provides services there exists an email account that is used as a means for residents to reach out to the County. More formal methods currently being utilized by the County is the use of in-person events to communicate County initiatives or public awareness in the areas of Social Services, Public Health, special programs, and other related training. These events are sometimes held at Carver County Public libraries where multiple training and education events related to life-long learning are held.

VOC as the Key to Innovation

When companies are strategizing ways in which to engage customers in order to create the optimal customer experience they often utilize customer touchpoints as a means to manage these relationships. These touchpoints are the individual transactions through which customers interact with the business through its various offerings, in the case of Carver County this includes the variety of services offered to residents by the County such as utilities, public amenities (libraries), license acquisition, and other means of interaction. A well-developed and integrated
Voice of the Customer system utilizes several different touchpoints to identify performance gaps and translate the needs and wants of customers into customer requirements which become opportunities for project development in an organizations project pipeline. This relationship is outline in Exhibit 1.2.

Exhibit 1.2: Integrated Voice of The Customer (VOC)

![Integrated Voice Of The Customer (VOC)](image)

The output obtained from the Voice of the Customer process is then used to drive innovative projects related to process improvement and quality refinement in all areas of the organization that impact the customer experience.

VOC is critical to innovation because often those within the organization become desensitized to the external experience of their customer. By gathering customer feedback as it relates to the customer experience organizations are able to develop a better understanding of the true nature of the customer experience. The insights obtained from this feedback pave the way for innovative projects aimed at increasing customer satisfaction. These insights and they value that they provide to an organization is why VOC is so important to an organization’s overall innovation and customer engagement strategy.

**Best Practices**

Today businesses must have a formal voice of the customer (VOC) program in place to systematically capture, manage, and act on internal and external customer feedback across the organization and devise ways to incorporate that feedback into
strategic initiatives (Endeavor Management, 2012). VOC ensures that the right people get the right information in the right format at the right time.

The most useful feedback is feedback that is actionable and fits within the scope of organizational capabilities. The foundation of any VOC program is to open the channels of customer feedback and then acting on this feedback to drive organizational improvements. The following industry supported best practices, as outlined by Endeavor Management, are integral to an organization’s ability to drive a strong VOC program and in turn create a better customer experience.

Routine Feedback Collection:

It is not enough to simply open the channels of communication with customers, in order to fully realize the benefits of VOC feedback collecting must become part of routine organizational activities. This consistency enables organization an organization to be agile when acting on feedback by addressing issues as they arise.

Understand the Feedback and Take Action:

There are many methods in which an organization can obtain data from external and internal customers such as qualitative survey data and customer service feedback. Key to an integrative VOC system is the ability to understand the feedback and the factors affecting it. Doing so enables organizations to take deliberate actionable measures to resolves issues and improve the customer experience.

Bring Feedback to Life Internally and Match Behaviors

Organizations with high levels of customer satisfaction have one thing in common: the customer is at the center of all business operations and customer satisfaction is the responsibility of all employees at all levels and functions. Using VOC data effectively enables organizations to elevate their internal operations in a way that is focused on improvement and driving results specific to the customer experience. This can be achieved by VOC insight driven training programs focused on matching employee behaviors to customer feedback.

Celebrate Success and Realize Benefits

Implementing any sort of organizational change is never an easy task, especially in the beginning stages of any form of change management initiative. But by celebrating small win’s and customer experience success stories early on organizations can increase employee engagement and buy-in to the process. Additionally, by quantifying VOC data and comparing outcomes resulting from customer feedback driven initiatives, organizations can realize actual return on investment from the change.
Conclusion

Innovation is more than just a concept or a tool. It is a culture that encompasses the thinking and actions of all individuals at levels of a highly engaged organization. A strong culture that is realized internally and experienced externally is the key to a successful customer-centric organization. It is in the best interest of Carver County to utilize these recommendations in order to devise strategies that enable them to take current competencies combined with customer feedback and a new way of thinking to enable organizational growth. Customer satisfaction is directly correlated to a successful organization, and an organization’s ability to take customer feedback and translate that feedback into innovative projects ensures customer retention. The recommendations and supporting findings outlined in this report will provide Carver County with the necessary tools to drive their strategic initiatives by creating a culture of innovation and defining ways to best utilize customer feedback through VOC.
Appendices

References

- King County. (2016). Retrieved from King County: http://www.kingcounty.gov

Team 7 Contact Information

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Project 8: Innovation Cultural Assessment,
Analysis, and Action Planning

By Daniel Tawfik, Khaled El-Sawaf, Mandy Hulke,
Margaret Lamuro, Rebecca Sansone, Russell Byers, and
Timothy McCormick

Executive Summary

The objective was to develop a tool/survey that can be used to create a baseline and periodically assess the innovation climate and culture within Carver County. Results of the assessments are meant to be actionable and analyzed (segregated) by major areas of the county. The assessment aims to gather both qualitative and quantitative data. The scope of our deliverable includes the following:

• Assist Carver County in understanding its current innovation practices/capabilities, and clarify where the organization needs to focus to maximize innovation success
• Assist Carver County's innovation leadership team in tailoring programs to address areas of weakness in order to enhance the innovation capabilities of Carver County employees
• Identifies the areas of strength in regard to innovation with Carver County, so these strengths can be exploited to further increase innovation
• Help Carver County’s innovation leadership team to understand and reduce the barriers which stifle creativity and innovation
• Develop county-wide Innovativeness Index, and Indices for the various county departments
• Benchmarking Carver County against other organization
• Publishing the results of the internal surveys on innovation will, in and of itself, help foster a culture of innovation

When establishing measures of innovation, establishing a clear objective and purpose for doing so is a must. Once the purpose is defined, and the scope of measures is established, then critical inputs, activities and outputs are identified. With Carver County’s goal being to foster a culture of innovation, then factors such as variation between divisions and departments must be considered.

Survey Considerations

Carver County would like to gather input both from its 600+ employees and from its residents. Surveys can provide a wealth of useful data points and feedback for employers but surveyors may miss critical points or misinterpret key responses if certain methodologies are not followed in the creation of the survey.
Survey Best Practices

First Things First

While many surveys put demographic questions at the beginning, survey design research demonstrates that respondents will be more likely to complete long surveys and answer honestly if they can begin by answering the core material rather than being distracted by questions that are not pertinent (to the reason the survey is being conducted). (WebSurveyor for Marketing) Demographic questions should be minimized as these tend to be the most sensitive of questions. Any demographic questions that are included should be placed at the end of the survey to avoid a possible negative reaction at the beginning of the survey. Questions that may seem invasive, irrelevant or questions that may make respondents feel as if their anonymity is jeopardized should be avoided. For example, our group initially included a question regarding age, but after careful thought we realized this may not have enough relevance to justify the possible negative reaction by survey respondents. When administering the survey, it’s important that respondents feel confident that their survey responses will remain completely anonymous. Survey communication should aim to make respondents confident that their anonymity will be guaranteed and that, once submitted, responses cannot be traced back to the respondents.

Pilot Tests

Surveys often have problems with unclear wording, confusing design, questions that may be difficult to understand, and typos that could easily be corrected with a small pilot test. The feedback of even one other person can be valuable to clarify and spot-check errors. (Garmall)

Biases, Double-Barreled, and Loaded Questions

A question is biased if the wording is such that it leads the respondent to a particular conclusion. (UCI School of Social Sciences) For example, the question, “Given the success of the past Kaizen events conducted in Carver County, would you be willing to participate in future event if invited?” will most likely result in agreement. After all, who wouldn't want to participate in a successful event that may bring about something positive? A better way to word questions is “Do you think a Kaizen event would be beneficial to solving for some process improvement in your unit?”

A double-barreled question that asks for opinions on two different subjects causes confusion among respondents and produce results that cannot be interpreted. (UCI School of Social Sciences) For example, if a respondent answers the question “Do you believe innovation is a key to the success of your business unit and your job?” with a yes, one may conclude the answer to both questions is a yes. This can easily be avoided by breaking the question into two different questions. Try to avoid merging two disconnected topics into one question as respondents may have differing thoughts about the two topics (Morrel-Samuels); this is why we broke up several questions regarding “department” "manager” and “self.”
Also avoid loaded questions that present only one side of an issue. (UCI School of Social Sciences) For example, the question “do you support cutting the budget for the health group in order to fund innovation across the county” does not give the respondent enough opportunity to state their opinion. However, since other alternatives exist, a better way to ask the question would be “Some people support the idea of cutting the budget for the health group in order to fund innovation across the county. Other people believe spending in the health group is important and suggest funding should come from other areas. What do you think?” Avoid loaded questions by presenting both sides of an issue.

Additionally the 'halo effect' is a watch is out for survey questions that may link a position with a particular person or group. The respondent’s attitude or opinion about the person or group may influence their response. (UCI School of Social Sciences) For example, “Do you agree with how the current innovation leadership group executes against innovation ideas.” If the respondent has any personal disagreements with the leadership team they will most likely respond negatively, even if they believe that the group has whole executes innovative ideas effectively.

**Other Best Practices**

The following section outlines a variety of “best practices” that were used in the creation of the draft survey.

Because the problems contributing to a lack of innovation are ever-evolving, it is likely that Carver County will need to make adjustments to this survey in the future. By adhering to the following guidelines for survey content, format, language and administration, Carver County can ensure any future changes will align with the questions provided in this draft. For question content, it’s important to pick questions that ask respondents to analyze observable, measurable behaviors.

A survey prompt such as “my manager removes barriers in order for me to develop new ideas and process improvements” is preferable to something along the lines of “my manager supports innovation.” The former prompt doesn’t completely remove subjectivity, but it gives the respondents more concrete events to reference when answering. Furthermore, respondents should not be asked to rate a person’s abilities; survey results should not be easily disputed and survey creators should aim to minimize the impact of personal biases as much as possible. (Morrel-Samuels)

It is also helpful create questions that can be independently verified with supplemental data. (Morrel-Samuels) For example, when asking employees if they know how to access innovation materials or whether they're aware of innovation initiatives, the results could be compared with data regarding the amounts of communications sent to employees in the past year. Similarly, the results of the question “my department has the resources needed to innovate” can be compared with kaizen participation by department.

One last best practice regarding content is only including questions that have a direct link to the business outcome; innovation. (Morrel-Samuels) In developing
new questions, speak with employees and managers to discover possible causes of innovation problems. Then research possible causes of the problems and develop survey questions that assess those causes.

**Question Grouping (Or Lack Thereof)**

Once the content of the survey is developed, formatting and question order should be considered as these can be important factors in limiting employee biases. As a best practice, keep survey sections unlabeled and uninterrupted by page breaks when possible. When questions are grouped together, employees tend to rate them similarly instead of evaluating each question independently and rating them based on their own merits. (Morrel-Samuels)

**Question Length**

All questions should also have a similar number of words as respondents often assume longer questions are of greater importance and thus tend to rate them higher. (Morrel-Samuels) This principle applies to both section length and survey length as well.

**Semantics**

Semantics are also important when crafting questions – avoid terms that may trigger strong associations with respondents, including subconscious associations. (Morrel-Samuels) Our group initially included a question asking whether change is “celebrated” or “punished,” but later changed the question to ask whether “failure is an acceptable outcome when implementing a new process or idea.”

**Survey Length**

Surveys should be kept to a short length and respondents should be able to complete it within 20 minutes or less. (Morrel-Samuels)

**Avoid Rankings**

We decided not to include a ranking of any sort; these types of questions are extremely susceptible to a variety of respondent biases related to order of presentation, number of choices and methods of selection. (Morrel-Samuels)

1. **Question Types**

**Qualitative vs. Quantitative**

To provide clarity on the definitions used:

- **Qualitative data** - Information about qualities; information that can't actually be measured
- **Quantitative data** - Information about quantities; that is, information that can be measured and written down with numbers

- **Discrete distribution** - Data can only take on certain values, for example integers.

- **Continuous distribution** - Data can take on any value within a specified range (which may be infinite)

**Variable vs. Discrete**

We chose to go with discrete data as it made it easier to categorize for the survey. If we decided to use continuous data (such as text boxes for employees to fill out) we would have the potential of thousands of different responses from employees of Carver County, making it difficult and time consuming to analyze in order to be actionable. Furthermore, continuous responses would require a multitude of categories which would realistically not be feasible for a survey.

While the nature of the questions gathers qualitative data, sorting and grouping of the survey results allows quantifiable results of qualitative responses.

**Measurement for Analysis**

Survey questions are designed to measure three key areas of interest (categories):

- Support – does the employee feel that Carver County and his or her manager is committed, and has sufficient resources, to be innovative?
- Communication – how well is the culture of innovation being communicated to the employees of the county?
- Implementation – measures the employee’s personal feelings and impressions of innovation within Carver County

Each question for the primary measurement section of the survey tool has four distinct qualitative response choices: Strongly Disagree, Disagree, Agree, Strongly Agree. Respondents should be able to easily differentiate between measurement intervals. We selected four types of responses to force respondents to lean either positively or negatively but also provided a "N/A" to prevent false answers. Using the same measurement scale throughout the survey minimizes confusion for respondents and allows them to complete the survey in less time; it also allows for easy comparison and more reliable data for surveyors.

Each response is given a score:

- Strongly Disagree, -2 Points
- Disagree, -1 Point
- Agree, 1 Point
- Strongly Agree, 2 Points
These scores can be aggregated. Suggested ranges for evaluating these scores:

- An average response to a question, or a category of questions, of 1.25 to 2 would indicate a strongly positive response
- An average response to a question, or a category of questions, of 0.25 to 1.25 would indicate a positive response
- An average response to a question, or a category of questions, of -0.25 to 0.25 would indicate a neutral response
- An average response to a question, or a category of questions, of -1.25 to -0.25 would indicate a negative response
- An average response to a question, or a category of questions, of -2 to -1.25 would indicate a strongly negative response

Total Innovation Culture Index is simply the average of the scores for each of the 25 questions. There is no weighting of any particular questions or categories reflected, but weighting could be easily applied to the data if it is desired.

**Survey Timing and Frequency**

**Initial Survey On Innovation Culture**

- Perform an initial survey of your employees within 30 days of launch of the new innovation program
- The purpose of the initial survey is less about the results of the survey than it is about establishing the fact that county administration values feedback regarding the initiative from its employees
- Don’t be too concerned over scores on the initial survey. The goal of this survey is to gain perspective on where your culture is at. Changing the culture requires the long-view
- A plan has been developed to guide the county through the creation of an innovative culture. Stick to the plan and trust that desired results will follow

**Second Survey On Innovation Culture**

- Perform a second survey a reasonable time after the launch of the program, allowing the efforts to have begun taking root within your organization. We recommend this is done 9 months after rollout
- The second survey serves as the lynchpin for data going forward, and a baseline for future measurement. Your employees have now been exposed to the strategy and goals for Carver County’s culture of innovation, so the responses to the questions are more educated
- It is quite possible that scores may actually drop from the first survey to the second, but do not let this be a source of discouragement. It likely is a result of your employees now having a clearer picture of the strategy, the definition of innovation, and the rollout of the program; it then may reflect
that they have a better understanding of how far the county will have to travel from its current state to achieve the goals

*Follow Up Surveys on Innovation Culture*

- On annual basis, survey your employees on the innovation culture.
- Results of the survey now can be effectively compared to your survey baseline, and also against each other over time, to track the progress of the county in reaching its strategic objectives
- Progress should be seen in more positive results. Do not expect drastic swings upward, changing the culture does take time

*Analyzing the Results of the Surveys*

To help visualize the results from the data, we white sheeted responses to the survey questions. This was done by creating a tabulated view of the global results, by question and by category. For this sample, in the terms of the “Support” and “Implementation” categories, it is apparent that overall, the results are virtually neutral, which is as to be expected – the program has only just launched, and many of the new practices have truly yet to begin. In the “Communication” category, the results are on the negative side, which again may be expected this early in the process – the employees simply haven’t been educated as of yet as to what the program means and how it will be implemented. (See Appendix B)

In the white sheeted data for survey two, (see appendix B) you will see that there has been some progress towards a better score, but the key component to this survey is to serve as a true baseline for measurement going forward. The greatest opportunities for improvement, as communicated by the employees of the county to management lie overall in “Communication.” This could indicate that managers are not fully getting the message down to the rank and file, etc., and represents an excellent opportunity for discussion between senior management and managers to ensure that the program is being communicated to the employees in the most effective manner.

For survey three, the white sheeted data has a brief analysis showing that positive change has occurred within the areas of “Support” and “Communication”, and a slight regression on the “Implementation” side. Again, results such as these may be natural to the process – we’re now two years in, and employees are beginning to recognize that the administration is committed to innovation and the campaign now has them educated on what it means to be innovative. The disconnect now appears at the implementation level – the employees are engaged and interested in innovation, but perhaps are a bit frustrated on their ability to make change in their role. An excellent opportunity presents itself for intentional conversations between managers and employees to empower them in their efforts to be innovative.
Actions to Take After the Surveys

Employee surveys can be a valuable tool, and can do a great deal of good for your organization. The best results, however come when the survey becomes a launching point for conversations between employees and managers. These conversations will not only improve your progress towards your strategic goals, but will reduce turnover, increase the engagement level of your staff, and boost productivity. Unfortunately, the discussions of survey results are rarely a priority to the organization. Rather than seeing an opportunity to improve performance and increase morale and retention, managers tend to view the follow up to be just another item on their “To Do List.” This is a serious mistake, because holding a survey with no follow up is a guaranteed way to undermine the initiative. Employees immediately begin distrusting their managers and the organization for not “hearing” their voices through the survey. (Earl, Dunn Lampe and Buksin)

An action plan must be developed before the survey happens, so the follow up does not slip through the cracks. Here are our recommendations as you progress through the timing of the surveys:

Initial Survey

- Prior to the survey
  - Schedule a time for the senior management team to meet to review and discuss the results
  - Schedule follow up meetings between senior managers and the management teams to review and discuss the results
  - Schedule follow up meetings within departments to review and discuss the results
- Publish the global results almost immediately after the results are in, so that employees can see that their feedback is valued
- In the meeting between senior managers, communicate that these results are very preliminary, and reinforce the point of the initial survey
- In the other scheduled meetings, be sure to take the results of the survey as an opportunity for growth, and reference the long-term goals of the initiative

Second Survey

- Prior to the survey
  - Schedule a time for the senior management and leadership team to meet to review and discuss the results
  - Schedule follow up meetings between senior managers and the management teams to review and discuss the results
  - Schedule follow up meetings within departments to review and discuss the results
  - Put together a clear action plan to resolve any issues that arise from the results of the survey
- Publish the global results almost immediately after the results are in, again so that employees can see that their feedback is valued. Explain the results of the survey.
- In the meeting between senior managers and leadership team, discuss the results for the organization as a whole, and of the various divisions of the organization, to determine if any special action needs to be taken at the management level.
  - Be mindful not to compare results aggressively to the initial survey – this survey is truly the benchmarking point for data going forward.
  - Discuss what the results mean for each department.
  - Identify some possible items to work on over the next 12 months.
  - Select two or three key items from the list to focus work on over the next 12 months, with a focus on improving the culture based on the feedback received.
- In the meetings between senior management and managers, focus on seeing this survey as a benchmark for future growth.
  - Explain the results of the survey for the whole organization.
  - Explain and discuss the results of the department the parties work within.
  - Identify some possible items to work on over the next 12 months.
  - Select two or three key items from the list to focus on over the next 12 months, with a focus on improving the culture based specifically on the information gathered in the survey.
  - Brainstorm on follow-up actions and form a written plan for improvement.
  - Follow up regularly on the plan, and on how it is progressing.
- In the interdepartmental meeting, focus on communicating the purpose of the survey, the results of the survey for the whole organization and the specific department they’re in.
  - Talk through the results item by item.
  - Brainstorm some follow-up actions and select two or three key action items to focus on for the next year.
  - Solicit feedback to go back “up the ladder” with regarding the results.

**Subsequent Surveys**

- The process is the same as for the second survey, but now the organization has some clear and measurable results that will identify progression towards the goals and regression away from the goals.
- Action planning now moves beyond tasks but assigning responsibility and accountability for progress.

**Measure Progress**

Begin to compare departments’ progress towards the goals against each other.
• Identify departments that are succeeding, and which are struggling.
• Engage management in discussions of the results, and formulate a plan relative to organizational opportunities for improvement, leveraging the successes of certain departments as benchmarked activities to implement in other departments.
• Bring successful managers alongside managers that are struggling, and see if common solutions can be found.
• Some samples of graphical display of the white sheeted data, comparing departments against each other are shown below.

*Figure 1. Chart Displaying the Response Results for One Question Across Ten Departments*

*Figure 2. Chart Displaying the Results for One Question Across Three Departments, by Response Type*
Figure 3. Chart Displaying the Results for One Question Across Ten Departments, Broken Out by Response Type

I am aware of current innovation initiatives within Carver County.

Survey Options

Overview of Options: Pros & Cons

Google Forms

Google Forms is a free and simple tool available within Google’s suite of products. It provides a simple, user friendly tool, but without much sophistication in terms of data analysis. The biggest differentiator of Google Forms is that it provides a free service. For a free service it does have several benefits including ability to be customized with logos, images, videos, etc. and ability to build fairly sophisticated surveys with skip logic and question branching. (Google)

Google Forms is currently not a tool of Carver County, nor do they currently use other Google products, e.g. mail, drive, etc. While the tool does provide real time graphical results, all detailed analytics and reporting must be done outside of the web based tool. Internal and external reports will have to be created separately from the data analysis.

• Pros
  o Free tool with unlimited surveys and respondents
o Answers/data automatically collected in Google Spreadsheets and analyzed with real time response info and charts
o Can be customized with logos, images, videos
o Can build more sophisticated surveys with skip logic and question branching
o Embed survey into emails or websites

• Cons
  o Not a current IT tool of Carver County

*SharePoint*

SharePoint is a software currently utilized by Carver County that includes survey building functionality specific for internal (Carver County employee) users. Though the platform does not present survey questions in an aesthetically pleasing format, or is easy to use for building surveys, it does provide a familiar tool for the survey builder and respondent. The tool can be used for unlimited surveys at no added cost to the County as they are already using the system.

There are two prominent negatives to SharePoint. Due to being an internal tool, the system tracks users and therefore any survey would not truly be anonymous. It may not be visible to the survey creator, but user data is hardcoded and could be extracted. As we discussed earlier, anonymity is very important to getting good survey results. The other negative is the tools limitations with data analysis. All data needs to be exported to excel for analysis, outside of simple bar response table.

• Pros
  o Only tool that is a current IT tool of Carver County - familiarity with using the system for both the requester and respondents
  o Ability to export responses into excel
  o No additional cost as County already has SharePoint
• Cons
  o Set up not as user friendly
  o User data hard coded, surveys can't be anonymous (may be a pro if don't want it to be anonymous, then don't need to ask personal data questions)
  o Reporting not as customizable unless data is dropped into Excel, lose real time aspect

*Typeform*

Typeform provides the most aesthetically pleasing survey experience for both the survey builder and survey respondent. With many question functionalities and platform interfaces, Typeform stands out from competition specifically around its aesthetics. In addition to creating aesthetically pleasing surveys, the system can also generate reports that could be used for internal and external communications.
The cost associated with this platform is in the mid-range of tools analyzed ($420/year), and does not provide strong reporting capabilities. A free version is available, but has limited functionality. For example, one benefit of moving to the paid version is automatic respondent reminder emails. Results can be exported to Excel, but manipulation to drive charts and graphs must either be done within Excel or in Google analytics. (TypeForm)

- **Pros**
  - Unlimited surveys and respondents
  - Visually appealing with ability to work on mobile devices
  - Build more sophisticated surveys with answer piping (embeds responses into future questions)
  - Reports automatically created, data available for export
  - Pay option available ($420/yr) with more features for building surveys and respondent notification emails

- **Cons**
  - Not a current IT tool of Carver County
  - Free version does not have all functionality, although it has most of what Carver County would need

*Survey Monkey*

Survey Monkey provides a simple to use and aesthetically pleasing online survey tool. With multiple platform interfaces and strong customization capabilities, Survey Monkey represents a strong candidate for Carver County. In addition to being simple and aesthetically pleasing, Survey Monkey provides custom reporting options within the online platform.

Survey Monkey is in the mid-range of our cost of tools at $300/yr. There is a free version but it is limited in the number of responses and questions. For example, surveys can only have 10 questions and only 100 responses. This would not be enough to allow for all employees at Carver County to take the survey. (Survey Monkey)

- **Pros**
  - Unlimited surveys and respondents
  - Data easily exported and real-time, customs reports can created
  - Can be customized with logos, colors, etc
  - Can build more sophisticated surveys with skip logic, A/B testing, randomization, etc

- **Cons**
  - Not a current IT tool of Carver County
- Cost $300/yr. There is a free version but it is very limited in number of responses, questions, and exporting capabilities and would not support the needs of the county

**Client Heartbeat**

Client Heartbeat is an online survey tool with strong capabilities in both question customization and reporting. This tool stands out from competition specifically relating to customer satisfaction, and has strong benchmarking capabilities. This will be useful to Carver County as the system will relate responses from the second survey back to the first for easy trend analysis.

This survey tool offers a lot of functionality that would not be of strong benefit to Carver County. It has the ability to sync with a CRM system. Additionally, the system can pull in industry benchmark data to compare a company's results to industry average. Unfortunately, we are confident that there isn't a publicly available benchmark for innovation at the county level. (Client Heartbeat)

- **Pros**
  - Ability to sync with CRM
  - Unlimited surveys but only 500 contacts
  - Strong analysis features allowing for custom reports
  - Set up alerts for certain responses
  - Will run periodic surveys with the system automatically requesting responses

- **Cons**
  - Not a current IT tool of Carver County
  - No free option, quite pricey compared to other options
  - Many of the other benefits (industry benchmark data) may not be useful to Carver County

**a) Qualtrics**

Qualtrics is the most expensive survey option with the most features. It is a software based survey tool utilized by many organizations, including the University of Minnesota. With many question customization options and strong analytical capabilities within the software, Qualtrics scores the highest on our survey analysis tool. These capabilities and strengths come with the greatest tool cost amongst surveys analyzed.

While the most expensive, Qualtrics is sophisticated enough to be used for other surveys Carver County might already be using, for example employee 360 reviews. If Carver County does go forward with this tool, we would recommend using it for more than just the Innovation Culture survey due to the high cost. If Carver County decides to keep this survey separate and only use the chosen tool for the survey, we would recommend a lower cost tool. (qualtrics)

- **Pros**
Survey Options Matrix

Based on our primary research, we created a Cause & Effect (C&E) Matrix to analyze each of the tools against each other. Each category was given a weighting factor to ensure the importance of a characteristic was included in the overall score. Weights were given on a 1 - 10 scale and were determined through analyzing requirements and input from Carver County. The spreadsheet is set up so these weights can be changed by Carver County, if they would like to see how certain weights change the overall scores for each tool. Then for each category, we gave each tool a score using the 9, 3, 1 scale. Factors that went into determining these scores can be found in the comment boxes in the weighting factor box for each category. These can also be adjusted by Carver County if they feel our analysis misrepresented any of the tools. Below the C&E matrix is a summary of each tool against the high level categories of Cost, General Tools, Design Features, Analytics, Survey Building, and Systems. This information was used to generate the "Tool Analysis Matrix" that was presented in our slides. Color coding was added individually and is not hardcoded through conditional formatting, as changes in the weighting factors will change the category sums.

We included in the appendix a reference to an analysis of multiple survey tools against different survey tool characteristics. The survey tools chosen were to provide Carver County information on a variety of tools out there, rather than being an exhaustive list. We pulled in three tiers of survey tools, two that are completely free, two of moderate cost, and two more expensive ones. This way Carver County can evaluate what tier of product will work best for their needs. For the categories, we pulled together input from Carver County as well as inferred benefits from discussions and emails with Carver County. The details table includes the actual information from our primary research on these tools. Additional information about each result that did not fit in the main cell is listed in the comments section. The other category captures other benefits of the tools that did not fit into our designated characteristics. (See appendix A).

Recommendations

Select Survey Tools

The analysis that we performed on the survey tools demonstrated that Qualtrics and Survey Monkey would be the best suited for Carver County's needs. We would
recommend that the team take time to evaluate these two tools to see which one would be best suited. If this is not an option due to resource constraints, then the evaluation should be done based on usability of the system. Qualtrics is expensive and would have benefit if the county adopted it for all of its survey needs. If this is not possible, then Survey Monkey would be a more cost effective solution for the Innovation Team to utilize.

**Utilize Initial Survey Questions**

(See Appendix D)

**Short-Term Goals:**
- Understand current innovation practices/capabilities
- Clarify focus
- Identify areas of strength and weakness

**Initial Survey:**
- Within 30 days of launch of the new innovation program
- Less about results, more about valuing feedback
- Don’t worry about scores for initial survey

**Long-Term Goals:**
- Tailor programs to address points of weakness/enhance areas of strength
- Benchmark Carver County against other organizations

**Second Survey:**
- Within 9 months of program rollout
- Results will be a baseline for future measurement
- Don’t be discouraged by a potential drop in scores

**Follow-Up Surveys:**
- Annual basis
- Effectively compare results to survey baseline and year over year to track progress
- Don’t expect drastic change; culture change takes time

**Analyze Results of Survey to Strategically Inform Decisions retaliated to Innovation**

(See Appendix E)

**First Survey:**
- Prior to survey, schedule follow-up meetings for sr. management, managers + sr. managements, and managers + departments
- Publish results almost immediately
- Reinforce preliminary nature of results
- Frame survey as baseline; opportunity for growth
Second Survey:

- Continue to hold follow-up meetings & immediately publish results
- At all follow-up meetings, identify items to work on over the next 12 months
- Create action plan to resolve any issues exposed by results
- Follow-up regularly to assess plan progress

Subsequent Surveys:

- Same as previous meetings, plus...
- Now there are clear and measurable results to identify progression towards and regression from goals
- Action planning moves from tasks only to assigned responsibilities and accountability for progress
- Begin to compare individual departments’ progress towards goals

Develop Future Survey Questions Based On Survey Best Practices

1. Demographic questions limited and last.
2. Conduct pilot tests.
3. Be aware of biases, double-barreled and loaded questions
4. Ask respondents to measure concrete, observable & measurable behavior.
5. Ask questions that can be independently verified.
6. Ensure questions have direct link to business outcome (innovation).
7. Don’t group questions.
8. Keep questions short.
9. Avoid terms that trigger strong associations.
Appendix

C&E Matrix

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<th>General Tools</th>
<th>Design Features</th>
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Category Scores

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Cost | General Tools | Design Features | Analytics | Survey Building | Systems |
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</table>
White Sheet Data Tables

Initial Survey – White Sheeted Data

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Survey 1</th>
<th>Question Score</th>
</tr>
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<tr>
<td><strong>Support</strong></td>
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</tr>
<tr>
<td>1</td>
<td>My manager encourages and supports me in my efforts to innovate.</td>
<td>-0.663</td>
</tr>
<tr>
<td>2</td>
<td>I am empowered by Carver County to innovate.</td>
<td>0.031</td>
</tr>
<tr>
<td>3</td>
<td>I am confident that Carver County is committed to innovation.</td>
<td>0.143</td>
</tr>
<tr>
<td>4</td>
<td>My manager and Carver County allows me the time to be innovative.</td>
<td>-0.102</td>
</tr>
<tr>
<td>5</td>
<td>My department has the resources needed to be innovative.</td>
<td>-0.153</td>
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<tr>
<td>7</td>
<td>I am aware of current innovation initiatives within Carver County.</td>
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</tr>
<tr>
<td>8</td>
<td>I understand where to go for updates on innovation projects.</td>
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<td>9</td>
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<td>-1.041</td>
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<tr>
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<td>I feel that current communication provides a clear picture of our innovation goals.</td>
<td>-0.663</td>
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<tr>
<td>13</td>
<td>I feel motivated to generate innovative ideas.</td>
<td>-0.378</td>
</tr>
<tr>
<td>14</td>
<td>I feel that there are repercussions when I try to innovate.</td>
<td>0.031</td>
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<td>15</td>
<td>I am empowered to create innovative ideas that can fail.</td>
<td>0.082</td>
</tr>
<tr>
<td>16</td>
<td>My manager rewards me for my innovation.</td>
<td>0.122</td>
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<tr>
<td>17</td>
<td>When trying something new, failure is celebrated rather than punished.</td>
<td>-0.061</td>
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<tr>
<td>18</td>
<td>I see examples of my peers' innovation efforts being put to work in Carver County.</td>
<td>-0.102</td>
</tr>
<tr>
<td>19</td>
<td>I am interested in innovating in my role.</td>
<td>-0.378</td>
</tr>
<tr>
<td>20</td>
<td>I have the time I need to innovate.</td>
<td>-0.153</td>
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<tr>
<td>21</td>
<td>I have the skills I need to innovate.</td>
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<td>22</td>
<td>Innovating is included in the scope of my job.</td>
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<td>23</td>
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<td>24</td>
<td>I am recognized for my innovations.</td>
<td>-0.306</td>
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<tr>
<td>25</td>
<td>Innovation is important to my leadership.</td>
<td>0.031</td>
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### Table 2: Second Survey – White Sheeted Data on Table 2

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<tr>
<td>2</td>
<td>I am empowered by Carver County to innovate. -0.194</td>
</tr>
<tr>
<td>3</td>
<td>I am confident that Carver County is committed to innovation. 0.000</td>
</tr>
<tr>
<td>4</td>
<td>My manager and Carver County allows me the time to be innovative. -0.102</td>
</tr>
<tr>
<td>5</td>
<td>My department has the resources needed to be innovative. 0.031</td>
</tr>
<tr>
<td>6</td>
<td>My manager has the resources he or she needs to be innovative. 0.041</td>
</tr>
</tbody>
</table>

**Support Category Score**: -0.095

<table>
<thead>
<tr>
<th>Communication</th>
<th>Question Score</th>
</tr>
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<tbody>
<tr>
<td>7</td>
<td>I am aware of current innovation initiatives within Carver County. -0.378</td>
</tr>
<tr>
<td>8</td>
<td>I understand where to go for updates on innovation projects. -0.306</td>
</tr>
<tr>
<td>9</td>
<td>I know where to submit ideas for potential innovation projects. -0.520</td>
</tr>
<tr>
<td>10</td>
<td>I feel that current communication provides a clear picture of our innovation goals. -0.531</td>
</tr>
<tr>
<td>11</td>
<td>I feel I receive sufficient communication around our innovation projects. -0.704</td>
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**Communication Category Score**: -0.488

<table>
<thead>
<tr>
<th>Implementation</th>
<th>Question Score</th>
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<tbody>
<tr>
<td>12</td>
<td>It is easy for me to innovate in my current role. 0.143</td>
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<tr>
<td>13</td>
<td>I feel motivated to generate innovative ideas. 0.102</td>
</tr>
<tr>
<td>14</td>
<td>I feel that there are repercussions when I try to innovate. 0.010</td>
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<td>15</td>
<td>I am empowered to create innovative ideas that can fail. 0.112</td>
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<td>16</td>
<td>My manager rewards me for my innovation. -0.163</td>
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<td>17</td>
<td>When trying something new, failure is celebrated rather than punished. 0.092</td>
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<td>18</td>
<td>I see examples of my peers’ innovation efforts being put to work in Carver County. -0.010</td>
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<td>19</td>
<td>I am interested in innovating in my role. 0.163</td>
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<tr>
<td>20</td>
<td>I have the time I need to innovate. -0.020</td>
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<tr>
<td>21</td>
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<td>22</td>
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<td>23</td>
<td>My attempts to innovate are supported by my manager. -0.153</td>
</tr>
<tr>
<td>24</td>
<td>I am recognized for my innovations. -0.010</td>
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<tr>
<td>25</td>
<td>Innovation is important to my leadership. 0.184</td>
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**Implementation Category Score**: 0.052

**Total Innovation Culture Index**: -0.091
### Subsequent Surveys – White Sheeted Data on Table 3

**Table 3**

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<tr>
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<td>2</td>
<td>I am empowered by Carver County to innovate.</td>
<td>-0.194</td>
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<tr>
<td>3</td>
<td>I am confident that Carver County is committed to innovation.</td>
<td>0.000</td>
<td>-0.020</td>
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<tr>
<td>4</td>
<td>My manager and Carver County allows me the time to be innovative.</td>
<td>-0.102</td>
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<tr>
<td>5</td>
<td>My department has the resources needed to be innovative.</td>
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<td>-0.031</td>
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<tr>
<td>6</td>
<td>My manager has the resources he or she needs to be innovative.</td>
<td>0.041</td>
<td>0.163</td>
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**Category Score**

-0.095  0.109  5.1%

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<thead>
<tr>
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<td>I know where to submit ideas for potential innovation projects.</td>
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<td>10</td>
<td>I feel that current communication provides a clear picture of our innovation goals.</td>
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**Category Score**

-0.488  0.482  24.2%

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<tbody>
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<td>0.143</td>
<td>0.102</td>
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<tr>
<td>13</td>
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<td>When trying something new, failure is celebrated rather than punished.</td>
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<td>21</td>
<td>I have the skills I need to innovate.</td>
<td>0.265</td>
<td>0.010</td>
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<tr>
<td>22</td>
<td>Innovating is included in the scope of my job.</td>
<td>0.020</td>
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<tr>
<td>23</td>
<td>My attempts to innovate are supported by my manager.</td>
<td>-0.153</td>
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<tr>
<td>24</td>
<td>I am recognized for my innovations.</td>
<td>-0.010</td>
<td>0.153</td>
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<tr>
<td>25</td>
<td>Innovation is important to my leadership.</td>
<td>0.184</td>
<td>-0.041</td>
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</table>

**Category Score**

0.052  0.045  -0.2%

**Total Innovation Culture Index**

-0.091  0.148  6.0%
### Survey Links

- Google Forms: https://www.google.com/forms/about/
- Survey Monkey: https://www.surveymonkey.com/
- TypeForm: https://www.typeform.com/
- Qualtrics: https://www.qualtrics.com/

### Recommended Survey Questions

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<th>Categories</th>
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<td>My manager encourages and supports me in my efforts to innovate</td>
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<tr>
<td></td>
<td>I am empowered by Carver County to innovate</td>
</tr>
<tr>
<td></td>
<td>I feel that I have the knowledge and tools to be innovative for Carver County</td>
</tr>
<tr>
<td></td>
<td>I am confident that Carver County is committed to innovation</td>
</tr>
<tr>
<td></td>
<td>My manager and Carver County allows me the time to be innovative</td>
</tr>
<tr>
<td></td>
<td>My department has the resources needed to be innovative</td>
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<tr>
<td></td>
<td>My manager has the resources he or she needs to be innovative</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>I am aware of current innovation initiatives within Carver county</td>
</tr>
<tr>
<td></td>
<td>I understand where to navigate for updates on innovation projects</td>
</tr>
<tr>
<td></td>
<td>I know where to submit ideas for potential innovation project</td>
</tr>
<tr>
<td></td>
<td>I feel that current communication provides a clear picture of our innovation goals</td>
</tr>
<tr>
<td></td>
<td>I feel I receive sufficient communication around our innovation projects</td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td>It is easy for me to innovate in my current role</td>
</tr>
<tr>
<td></td>
<td>I feel motivated to generate innovative ideas</td>
</tr>
<tr>
<td></td>
<td>I feel that there repercussions when I try to innovate</td>
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<td>I am empowered to create innovative ideas that can fail</td>
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<td>My manager rewards me for my innovation</td>
</tr>
<tr>
<td></td>
<td>When trying something new, failure is celebrated rather than punished</td>
</tr>
<tr>
<td></td>
<td>I see examples of my peers’ innovation efforts being put to work in Carver County</td>
</tr>
<tr>
<td></td>
<td>I am interested in innovating in my role</td>
</tr>
<tr>
<td></td>
<td>I feel equipped to innovate in my role in the following categories:</td>
</tr>
<tr>
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<td>1. Time</td>
</tr>
<tr>
<td></td>
<td>2. Skills</td>
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<tr>
<td></td>
<td>3. Scope of job</td>
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<td></td>
<td>4. Support from my manager</td>
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<td></td>
<td>5. Motivation</td>
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<td></td>
<td>6. Recognition</td>
</tr>
<tr>
<td></td>
<td>Innovation is important to my leadership</td>
</tr>
<tr>
<td></td>
<td>I am aware of what happens to my suggestions once they are delivered</td>
</tr>
<tr>
<td></td>
<td>I am interested to see other innovation submissions from other areas in Carver County</td>
</tr>
<tr>
<td></td>
<td>I have been an active participant in past Kaizen events</td>
</tr>
<tr>
<td></td>
<td>I would like to be a facilitator at a Kaizen event</td>
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</tbody>
</table>
Survey Analysis

- Scatter plot shows relationship between two variables
- Questions about participation & facilitation of Kaizen events show correlation between participation & desire to facilitate
- Positive correlation could be interpreted that events are inspiring

### Correlation - Kaizen participation vs. Desire to facilitate

![Graph showing correlation between Kaizen event participation and desire to facilitate](image)

\[ R^2 = 0.83698 \]

I would like to be a facilitator at a Kaizen event.

I have been an active participant in past Kaizen events.

Bibliography


Project 9: Leadership Engagement & Change Management

By Laura Daugherty, Briana Hendrickson, Devi Kyanam,
Sam Larson, Mike Madetzke, Ryan Mcelhinny
Polina Saprygina, and Thuong Thai

Executive Summary

Every organization experiences change, whether driven internally or externally. An external change might be a requirement that is driven by a customer, whereas an internal change might be the result of deliberate planning or the outcome after a Kaizen event.

The focus of this paper is on the type of change that is intentionally driven internally with the goal of making some type of improvement. This type of change is referred to as innovation. In the following pages, this paper will discuss the importance of managing this change at all levels of leadership, from the senior levels on down through the general staff. An important part of this is how to recognize high quality leaders and what types of traits they exhibit. These types of leaders should be recognized and incentivized to create an environment of continuous innovation.

Additionally, there are several change management models and concepts that can help manage change and ensure that the projects and activities driving the change will be a success. The team recommends the Kotter 8 step model and this paper details these steps and offers tools to help manage this process. With the direction of this model and the aid of these tools, the ability to successfully innovate can be coordinated, promoted, and managed throughout the organization.

Finally, this paper will review Carver County’s performance management and make recommendations that can help foster and encourage more innovation at the County at all levels. This includes enhancing the current performance review to help establish requirements around innovation and encourage buy-in from the managers and general staff.

Management, Leadership and Change

Management, leadership and change are interrelated concepts. “Change” is simply to make something, anything, different. Leadership is the ability to influence a group towards the achievement of a vision or goal. Stated another way, leadership is the ability to inspire others to make a change. Finally, management means getting things done through other people by making decisions, allocating resources and directing activities.
Without change you lack direction, without management you lack organization and without leadership you lack inspiration. “Change management” is where these three concepts intersect.

In this section we will take a close look at what the research says about leadership and management and how those concepts apply to managing change. In light of that research, we are making the following recommendations:

• Incentivize leaders at all levels, but especially in management roles, to submit improvement opportunities via group 3’s idea submission and tracking tool.
• Train managers on “Transformational Leadership” concepts.
• Consider team productivity when evaluating manager success.
• When hiring for manager or change-related positions, evaluate candidates against the “Big 5” Personality Traits, with an emphasis on extraversion.

Manager vs. Leader

If you’re a member of LinkedIn, you’ve probably seen an article discussing management and leadership as a dichotomy. We see this as a false dichotomy.

Management and leadership are both important and related skillsets. Leaders inspire others to act and managers organize and direct that action. Many leaders are not managers and many managers are not leaders. Those with both skillsets, though, are a force to be reckoned with. This is why the top levels of management in most organizations are filled with strong leaders and why they’re often referred to as “senior leadership.”

![Figure 2: Kotter International (2015). 8 Steps to Accelerate Change in 2015.](image)
It is important to recognize that leaders exist, and must be engaged, at all levels of the organization. Look to engage, and develop, staff-level leaders through improvement initiatives like the Kaizen and 5s events. Make sure all staff are aware of their ability to submit improvement ideas.

Managers, in performing routine activities such as planning, decision making and problem solving, are placed in the ideal position to uncover organizational opportunities for improvement; things that they would like to change. To capture these ideas we recommend some sort of incentive for managers to use team 3’s idea submission tool. Over time, a mental catalog of these changes inform how managers think about “how things should be done.” The differences between how things are today and “how things should be done” is vision. In later sections we’ll learn that vision is the foundation of both leadership and change management.

**Transformational Leadership**

The Transformational Leadership Model was developed by presidential biographer James MacGregor Burns and first introduce in his book, “Leadership” in 1978. Since then his model has been expanded and studies have shown it to be highly correlated to lower turnover rates, higher productivity, lower employee stress and burnout, and higher employee satisfaction.25

The model outlines two modes of leadership: transactional and transformational. It defines transactional leadership as leadership based on a contingent reward system: the carrot and the stick. Transformational leadership builds on transactional leadership by adding inspiration.

The model defines four key components to transformational leadership, sometimes referred to as the 4 ‘I’s:

- **Idealized Influence:** Provides vision and a sense of mission. Instills pride, gains respect and trust.
- **Inspirational Motivation:** Communicates high expectations, utilizes symbols to focus effort, clear communication of vision.
- **Intellectual Stimulation:** Promotes intelligence, rationality, careful problem solving but also creativity!
- **Individualized Consideration:** Tailors the message to the audience. Treats people as individuals. Coaches, advises.

As we will see in later sections, many of the behaviors of a transformational leader align with the behaviors required to successfully implement change. This isn’t a coincidence.

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Effective vs. Successful Managers\textsuperscript{26}

In 1988 Fred Luthans, a professor at the University of Nebraska, published a study looking at the differences between successful managers, those who are promoted the fastest, and effective managers, those with the most productive teams. What he found was that they apply their time very differently.

Luthans looked at how managers divided their time between four categories of behavior:

- **Communication**: This included things like answering questions, disseminating information and processing paperwork.
- **Traditional Management**: This category included activities like planning, decision making and controlling.
- **HR Management**: This included things like giving feedback, coaching, hiring and training.

• **Networking**: This category consisted of socializing, politicking and interacting with outsiders like other departments, customers and vendors.

What Luthans found was that successful managers tended to spend a significant percentage of time, 48%, on networking activities while effective managers spent the most time on communication, 44%.

![Figure 4: Managers and the 4 behavioral categories.](image)

One important takeaway from this study is that the behaviors of successful and effective managers are not aligned. This could indicate an issue with the way managers are evaluated, something we’ll take a closer look at later.

A second important takeaway is that the most effective managers are spending a lot of time on communication. As all of the four ‘I’s of transformational leadership depend on communication, this may indicate a link between leadership and effective management.

**Big 5 Personality Types**

The “Big 5” personality types, also known as the Five Factor Model, is a model of human personalities which gained prominence in the 1980s. The Big 5 model was derived through independent research. While the model is still under study, it is nearly 4 decades old and is generally considered valid.

The five traits are: extraversion, agreeableness, conscientiousness, neuroticism and openness to experience.
Many studies have been done to look for correlation between the Big 5 Traits and performance across a variety of areas, including leadership. A meta-analysis looking at the correlation between the Big Five Traits and Transformational Leadership found positive correlation to Extraversion, Agreeableness, Conscientiousness and Openness and negative correlation to Neuroticism. The correlation between extraversion and transformational leadership was especially strong:


**Meta-Analysis of the Relationship Between Direct Measures of the Big Five Traits and Transformational Leadership**

<table>
<thead>
<tr>
<th>Trait</th>
<th>Average r</th>
<th>p</th>
<th>SD_p</th>
<th>% variance due to sampling error</th>
<th>80% CV Lower</th>
<th>80% CV Upper</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>-.14</td>
<td>-.16</td>
<td>.00</td>
<td>100%</td>
<td>-.16</td>
<td>-.16</td>
<td>-.20</td>
<td>-.13</td>
</tr>
<tr>
<td>Extraversion</td>
<td>.20</td>
<td>.23</td>
<td>.06</td>
<td>67%</td>
<td>.17</td>
<td>.32</td>
<td>.20</td>
<td>.29</td>
</tr>
<tr>
<td>Openness</td>
<td>.07</td>
<td>.09</td>
<td>.07</td>
<td>63%</td>
<td>.00</td>
<td>.17</td>
<td>.03</td>
<td>.14</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.09</td>
<td>.12</td>
<td>.07</td>
<td>60%</td>
<td>.03</td>
<td>.21</td>
<td>.06</td>
<td>.17</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.09</td>
<td>.11</td>
<td>.12</td>
<td>31%</td>
<td>.00</td>
<td>.27</td>
<td>.04</td>
<td>.19</td>
</tr>
</tbody>
</table>

![Figure 6: Bono, J. and Judge, T. (2004). Personality and Transformational and Transactional Leadership.](http://www.free-management-ebooks.com/images/crpt0202.jpg)

Studies have also shown that these personality traits and their underlying facets are a combination of nature and nurture. The general understanding is that nature pre-
disposes individuals in one direction or another, but that through practice one can improve their ability in any facet.

Organizations concerned with leadership would be well advised to consider the Big 5 Traits both during hiring and in leadership training.

**Importance of Change Management**

One thing that is just as important as innovation, if not more important, is the management processes used to monitor and implement change. Change management aligns an organization's people, culture, and structure during times of organizational change. If change management is not practiced, transformation within an organization can be stunted, take longer, or fail entirely. This section will outline different change management techniques, and provide evidence as to why it's vital to Carver County's innovation plan.

**Change Acceleration Process (CAP)**

The Change Acceleration Process (CAP) is a change management tool that is used for moving the current state of an organization/product/service to an improved state. CAP, the change management tool synonymous with Six Sigma, was created under the direction of GE's CEO, Jack Welch, in 1989-90. The adoption of Six Sigma came from Welch's realization that all businesses were reaching a state of constant change, and those who did not adapt quickly would fail.

*Figure 7: The steps in the CAP model for change.*

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Below are the steps within the CAP model for change:

- **Leading Change**: Leaders in the organization are imperative to have on board before any changes are implemented. Without proper leadership during change initiatives, the project is doomed to fail.

- **Creating a Shared Need**: You must create a shared need with all stakeholders within the organization. There will always be a want to maintain the status quo, so there must be a persuasive reason for change to happen.

- **Shaping a Vision**: The vision for change must be clear and widely spread. The end game for change must be properly outlined with quantifiable outcomes.

- **Mobilizing Commitment**: Utilize early adapters to spread your message and start implementing change within the organization in order to troubleshoot issues that may arise in a “safe space” where learning can take place.

- **Making Change Last**: Leverage early wins, use knowledge gained from pilot programs for the big rollout.

- **Monitoring Progress**: Measure the progress of your initiatives, celebrate wins and learn from losses.

- **Changing Systems and Structures**: Evaluate supporting structures such as IT, staffing, training, resource allocation, etc. to support the new structure of the organization/programs.

**Lewin Model (Unfreeze, Change, Refreeze)**

Kurt Lewin is recognized as the *Founder of Social Psychology*; his work highlights his fascination with the human aspect of change. His work was noteworthy because he used scientific methods and experimentation to research social behavior.\(^\text{29}\)

Below are the stages to his model for change, which utilizes the analogy of melting ice.

- **Unfreezing**: This preparatory phase prepares an organization to surpass the status quo. During this phase it’s important to develop a compelling message as to why change needs to happen for the good of the organization. This part of the process is usually the most stressful – to challenge the way that people have been working can conjure strong reactions.

- **Change**: Kurt Lewin stated that change is not an event, but rather a process. During this stage people need to be given time to process the new changes and learn new processes. Support from management is imperative during this stage; employees need to be given the right amount of resources and communication to learn from their mistakes, and prosper under the new structure.

• **Refreezing:** During this stage changes have already been implemented, and accepted as the new norm. Some people disparage this portion of the Lewin Model; critics believe that change is constant, and that there is no time for new routines to take root.  

ADKAR Model (Awareness, Desire, Knowledge, Ability, Reinforcement)

ADKAR is a sequential process to track an individual’s journey through change. Each step must be achieved in order for changes to be implemented.  

![ADKAR Model](https://www.prosci.com/adkar/adkar-model)

**Figure 9: The ADKAR model.**

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• **Awareness**: First agents of change need to know what the issue is, and why change is necessary. During this process it is also important to weigh the importance of each issue and figure out what is a priority and what isn’t.

• **Desire**: List the good and bad consequences of change to identify risks and possible rewards. These can be used to motivate individuals to move them forward within the change development.

• **Knowledge**: Define the skills and training necessary to support the changes you want implemented. During this process it’s important to research not only the skills necessary to manage change, but how much time the processes necessary will take in order for change to happen.

• **Action**: During this stage change will start to be implemented. It’s important to start small and learn from mistakes early on. As mistakes happen, take what you’ve learned and apply it moving forward.

• **Reinforcement**: As successes occur, identify champions of change and praise their successes. Share the experiences of those who have been positive influencers of change, and if mistakes happen quickly address how similar situations will be addressed in the future.

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**Introduce Kotter’s 8 Steps – Recommended Process**

Kotter’s 8 Steps were developed in the early 2000s in response to the rapid increase in change the world was experiencing, even more so than when Six Sigma was developed in the early 1990s. Some of the differences between the current model and models a decade ago are:

• The steps are run concurrently, rather than in a sequential order
• Change agents can be found at all levels of the organization, not just the top
• Rather than functioning in a traditional hierarchy, change can happen within a flexible network agilely outside of, but in conjunction with, a traditional hierarchy.
• Rather than doing just one thing well in a linear fashion over time, constantly seek opportunities to capitalize on innovations and complete them quickly.\(^{32}\)

Due to its nimble and adaptive nature, we are recommending that Carver County uses Kotter’s 8 Steps as the change management structure when approaching innovation initiatives.

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Creating a Shared Need

Establishing a Sense of Urgency

The first of Kotter’s steps lays the foundation for leaders and the change process. Establishing a sense of urgency is crucial for all involved and getting leaders bought in allows for a trickledown effect for all involved. Instilling a sense of urgency in the involved stakeholders begins with building a business case for the needed change. Those involved need to see value in the change and show how it answers the question of “What’s in it for me?” It is also important to position the need for change in a way that is greater than the resistance to change. Though resistance to change can be expected, leaders should be aware of negative resistance and be able to differentiate it from positive resistance. Negative resistance such as obvious forms of sabotaging the plans for change should be decreased, while positive resistance such as thoughtful questioning about the change and searching for solutions should be worked with. An additional factor that Kotter stresses is that of complacency. Many stakeholders within organizations will often focus on past successes, regardless of how dated they may be, and place little emphasis on current challenges and the changes needed to get through them. Kotter stresses not to underestimate the power of complacency in your
stakeholders. Breaking down this complacency and the many things that drive it as well as instilling urgency for change is needed to progress through Kotter’s remaining steps.

Figure 11: Complacency contributors.

Form a Powerful Coalition

The second of Kotter’s eight step model, lasting change, can’t be carried out by just one person, it should involve people working together as a team. Having buy-in for the change is needed at all levels within Carver Country, and this starts with strategically building a team of change leaders. Identifying and empowering those who are change leaders and early adopters, at any level, will help with this process. The team should be comprised of those who have enough influence on others to set an example and lead the way for any change efforts. The team needs to have a level of credibility that has other stakeholders contributing and being committed to the change process. Having the team will lead to quicker actions because of this level of commitment. Kotter explains that the team needs to have both management and leadership skills; he elaborates, “The former keeps the whole process under control, while the latter drives the changes (Kotter 760).”
Figure 12: Management and Leadership coalitions.

Change Management Tool: Threat/Opportunity Matrix

The threat/opportunity matrix is a change management tool that shows what the threats are of not making changes over both the short and long term. It also shows what potential opportunities there are when changes are made. Within Carver County, an example of a short-term threat of things simply staying status quo is stakeholders leaving Kaizen events without buy-in or clear next steps and commitments. An example of a long-term threat is employees not seeing the value in the changes or solutions proposed, and that some implemented changes aren’t being revisited over time to measure their success. On the other hand, a short-term opportunity of making change is stakeholders leaving Kaizen events with a vision and an action plan around the new solution and what success would look like. A long-term opportunity of implementing change is all stakeholders understanding how things have changed.
Another change management tool is the 3D matrix – 3D representing data, demonstrate, and demand. These different approaches are looking to present the information in a way that a wider audience can understand and connect with – focusing on just one of the three dimensions may result in a lower buy-in. An example of the data approach is providing stakeholders with facts, such as specific measurements of how their change has resulted in a higher efficiency bracket. An example of the demonstrate approach is providing stakeholders with success stories from other local counties around how they were able to implement change or completed Kaizen events that have added value and increased efficiency. An example of the demand approach is setting standards for the county around the current status quo not adding value for the county or the stakeholders.
Importance of Creating a Vision

The success of transformation depends on developing a picture of the future and providing direction to the entire organization to move forward. The transformation effort would dissolve into a laundry list of tasks and aimless projects if the vision is not defined and communicated diligently. An effective and popular way to shape a vision is to create a vision statement. Once the vision and goals are established, setbacks and obstacles will seem insignificant as the team works through them and perseveres to the end. Vision helps leaders work on what is important to achieve the goals and not get caught up in the mundane stuff. It helps leaders to focus on the 20% that is important instead of the remaining 80% that can be delegated and handled by others.

Change Management Tools to Create a Vision

Backward Imaging is an effective tool to help create a vision. This tool helps team members see the future in advance. First, the team needs to imagine what the successful state looks like. Next, the team needs to describe how the new process looks and feels.

Shaping a Vision
when it is functional. Finally, the team compiles these diverse views of the future and creates a consensus of what the best solution will be. For example, the future state could be a developed community with well-defined processes, creative and productive employees and new growth initiatives with appropriate funding.

Another change management tool that helps create the vision is More of/Less of chart. Similar to backward imaging, this technique asks the team to look into the future and describe the future state in terms of behavior that successfully supports it. This behavior falls into one of two categories: the kind we need more of and the kind we need less of. For example, in the case of transformed Carver County, the team may like to see more of innovation and increased productivity, new growth initiatives and happy communities and employees. On the same line, the team may want to see less of redundancies in processes, less of disappointment and frustration in communities and employees.

**Importance of Communicating the Vision**

A vision provides a bigger picture of what things can look like in the future and sharing a vision is a central role of a leader. Communicating the vision helps people raise their hopes and expectations and inspires them. When people are inspired, they are more likely to work on something to actually make a difference. It is okay to deliver the message multiple times to various audiences rather than under communicate the vision. It would make more sense to the employees if the leaders can make an effort to connect the outcome of Kaizen events to the goals and vision of the County. Walk the talk is very important and the transformation journey should be triggered by the leadership team and trickled down to all the employees.

**Change Management Tools to Communicate the Vision**

The Elevator Speech helps communicate the vision more effectively. It forces the leaders to condense their message into a pitch that provides focus and direction to the entire team. It should be clear, concise and compelling and should be presented in a quick and organized fashion. Messaging the benefits of change and transformation using the elevator speech ensures a consistent content delivery mechanism. A successful elevator speech conveys critical information such as what the vision is for Carver County, what it will look like in the future, why it is important, how to get there, and what is needed from the stakeholders and teams to make it happen.

<table>
<thead>
<tr>
<th>What is the vision?</th>
<th>What will it look like in 5 years?</th>
<th>How do we get there?</th>
<th>What do you need?</th>
</tr>
</thead>
</table>

*Figure 14: The construction of an Elevator Speech.*
Mobilizing Commitment

Potential Resistance

Change management is always a challenge for companies to manage because employees disagree on its importance and do not always see its value. Companies should identify potential resistors as they are considering change management. Potential resistors impact change management in two different ways. First, they provide value by questioning things and bringing up key ideas as to why change management is not the correct solution. This challenges leadership and causes them to dig deeper into change management before presenting their answers to the potential resistors. Second, potential resistors influence change management negatively by not adapting to changes. They are too comfortable in their current culture and work environment that they do not see the value in change management.

Supporters and Key Stakeholders

Committed supporters are crucial to successful change management. Change management strategies are carefully developed to address the cultural and organizational issues caused by the changes. Supporters can use their knowledge of the company and culture to identify important cultural and organizational changes. In addition to pinpointing the issues, supporters can also determine the causes of the issues and work together to brainstorm recommendations for addressing the issues. Committed supporters can use their influence to move resistors to adapters.

The key reason behind successful change management is support and involvement from key stakeholders. Individuals who can influence change at the company, investing in the projects, and support the project objectives are stakeholders. Support from key stakeholders should be obtained prior to starting projects. This is important because resources should not be spent on projects until approved by stakeholders. It is possible that stakeholders may disapprove the project altogether, or have recommendations to change directions in the project.

Stakeholders should be involved throughout the lifetime of the project. Key stakeholders should stay engaged in the project through regular updates to discuss large milestones, small accomplishments and current roadblocks. Stakeholders also have the responsibility of providing resources if needed. Examples include a budget, subject matter experts, or the project team members. It is also important for stakeholders to lead the changes from the project. Stakeholders should help convert resistors to adapters through implemented changes.

Importance of Ongoing Communication

Ongoing communication throughout change implementation needs to be structured and effective. Correct communication channels are valuable because the information reaches the people who are involved or affected by the change. Depending on people’s roles, the communication methods are different. For example, the project team driving the change should meet at least weekly to share updates on the change.
Meetings with the key sponsors and stakeholders should occur frequently and early in the process. The recurring meetings should provide updates on the change implementation plan and highlight possible risks and how to mitigate them. Communicating with stakeholders often will ensure that they understand the process and benefits of the project.

Ongoing communication should also be sent to the employees who are affected by the change. Detailed summaries are not necessary with the general public. Instead, keep the message brief and informative, focusing on what the next steps are and how people will be affected by them. With ongoing dialogue occurring, it will be easier to anticipate people’s reaction and build action items into the project plan that will win people’s support.

**Change Management Tools to Build Commitment**

There are many tools available to build commitment to change management. It is important to involve others to mobilize commitment to show their knowledge and agreement is appreciated. Commitment is crucial to change management strategies because individuals need to understand its value and be committed to the change. There are three main tools that can help remove resistance and create short-term wins.

The first tool is the Stakeholder Analysis. This technique is used to identify key people who need to be won over in order for the project to be successful. Depending on their positions, the stakeholders need to be managed appropriately due to their influence and interest in the project. This tool provides numerous benefits. For example, the most powerful stakeholder is identified and their opinions can be used to improve the quality of the change. Gaining support from the powerful stakeholders can also help win more resources. By definition, stakeholders are individuals who have influence or interest in the inputs, outputs, process, and the success or failure of the project. Use the Stakeholder Analysis to understand people’s current position on the change, where they need to be to successfully drive change, and the gap in between.

The second tool to remove resistance is the Technical-Political-Cultural (TPC) Analysis. The TPC Analysis is a technique used to identify the sources of resistance and understand why they exist. Observe the resistance and determine if the resistance makes sense. The company’s culture can influence resistance negatively if the culture does not support change. For this tool to be effective, the project team needs to brainstorm ways for employees to adapt to the change easier. Recommendations could include emphasis on heavier stakeholder involvement or push for change agents in the company.

The third tool to build commitment is a Communications Plan. Essentially, this technique is a road map for delivering the message to the audience. A Communications Plan is a crucial tool to manage change because it affects the desired outcome. First, understand the need to communicate and pinpoint what needs to change as a result of communicating. Then consider who needs to be communicated with. Their current opinion on the change will alter the direction of the conversation. Write key messages for each audience and reflect how the messages will make them feel or what they have
to do as a result of the communication. Decide when the messages should be delivered and how they will be communicated. The medium to deliver the communication can impact people's reactions. Knowing the audience, their perspectives and priorities will allow customization in the messages.

**Institutionalize**

**Continue to Build Momentum to Reach New Steady State**

After creating meaningful short term wins in the first couple years of the change it is important to use that momentum to launch into bigger and more complex changes in the coming years. The small wins will have begun to educate employees on how to utilize the new vision of innovation. Gradually increasing the complexity of innovation projects then will allow the development of employees into more effective producers of change. It is important not to dive right into these large scale projects as doing so may kill any momentum before it has a chance to get going. Another important consideration is to not declare overall victory too early on in the change process. A large scale change will take 3-5 years to become the new culture. Declaring victory in year one or two of a change will stall and future progress as both resistors of change and supports of it are happy to reduce their workloads. Group 3 provides a more detailed look into how to build a project pipeline.

**Develop Employees into Champions of the Vision**

It is important to realize that change is more effectively driven from the bottom up and not the top down. Getting as many employees in all levels to champion the vision is key in implementing and sustaining the vision. Turn all employees into "leaders" of the change, meaning while they may have no formal authority, they can champion the change by living it in the day to day work lives and promoting its benefits to other. Encourage all participants of Kaizens to go out and advertise their experience to energize others to want to participate in Kaizens and innovative behaviors as well. This ties in closely with Group 2's project on net promoter score and rating kaizen events. Beyond that pay close attention to the overall development of employees. Innovation can even go as far as helping to decide who to hire, and can become part of the interviewing and onboarding process. Failing to develop current and new employees will leave the county in a constant state of implanting change, and never reach the new desired steady state.

**Create Leadership Development Plans to Maintain Vision**

Desired Change behaviors must also be tied to promotions. Employees that ascend to higher ranks must be open to the vision or they will become change resisters and stall out change. This can be addressed through the creation of a leadership development plan where individuals must show and exhibit certain behaviors related to the change before they can be considered for promotion. Ample opportunities must be given for these individuals to show they support the vision. One recommendation for doing this would be through attending and then leading Kaizens. The more exposure that high
potential candidates can get to innovation the easier it will be to evaluate them for those behaviors. It is recommended that employees participate in at least one kaizen as a learner before going on to lead a Kaizen. Leading a Kaizen will allow the deeper understanding necessary to promote change in higher levels of the county. Group 6 provides more information on potential training opportunities to keep in mind while developing future leaders.

**Illustrate Clear Connection between New Behaviors and Recent Success**

One of the best ways to encourage change is to show how the new behaviors are providing clear benefits. The benefits can be financial, organizational or any other tangible item that can be measured. Group 1’s metrics would be useful to help illustrate any changes. Use the established communication channels to get the message out there linking the success of innovation with recent increases in performance. Don't leave it to individual employees to draw connections as to why performance has increased. They may link individual behaviors or people to the success rather than the vision of innovation as a whole. People are more willing to accept behaviors as the new normal when they can see clear changes as a result.

**Performance Management**

**Current process**

Carver County uses a “Management by Objective” method of performance appraisal. In this method, the manager and the employee agree upon three to four specific, measurable goals with a specific deadline. Employees are encouraged to set strategic goals for the year and to include at least one “stretch” goal to achieve something not previously accomplished. These goals are placed in each of the four performance categories: customer service and communication, productivity, leadership, and decision making.

In order to promote innovation and formalize it in the Carver County organizational culture, it is necessary to incorporate it as an essential part of performance management process. Redefining one of the existing performance categories, such as leadership, to include innovation sends a message that innovation is not an optional activity, but an expectation and a requirement. Depending on the employee level and responsibilities, expectation for their involvement in the innovation initiative is different. While employees at a staff level are expected to focus on developing innovative ideas for improving the processes, the expectation for their managers is to encourage a supportive environment that promotes innovation.

**Innovation for Management**

For employees at the managerial level, the performance review should focus on ways they can promote innovation within their teams, solicit innovative ideas, and plan and execute Kaizen projects. An example of a goal for a manager can be: “Successfully implement one change by the end of the year.” It is important to emphasize completion
of the innovation projects, in order to avoid generating projects that end up stalled and unfinished. It is also important not to discourage teams from taking on innovation projects that extend beyond one year, so a balance must be observed and sufficient guidance must be provided to the teams during performance review process.

Since innovation projects are supported by a team of facilitators, it is important that managers are also given an opportunity to provide feedback for the level of support they received. At a minimum level, management should be encouraged to include that feedback as part of the performance review process. However, a better approach is to incorporate regular status meetings with the facilitators to discuss ongoing changes and any issues that teams are facing. These meetings will also encourage knowledge sharing among the teams.

**Innovation for Staff**

For employees at the staff level, it is important to structure goals and expectations in a gradual way so that they are given opportunity to learn and participate in the change process. An example of a goal for a staff member can be “Successfully participate in at least one Kaizen event by the end of the year.” Encourage team members to partake in Kaizen events lead by other teams to learn more about Kaizen process. Additionally, staff should be given the opportunity to provide feedback on the level of support they receive from their manager. It may be helpful to provide a set of prompts that encourage such discussion, for example, “Do I have a clear understanding of what my role is in innovation process? Does my manager enable me to participate in innovation?”

**Communication plan**

Incorporating innovation component into the performance management process does require modifications to the current process. It is important that these changes are communicated to the Carver County employees in advance of the annual performance review period. Communication should incorporate multiple channels: internal email, SharePoint newsletter and FAQ page, as well as in-person meetings to discuss the changes.

**Conclusion**

A successful change can be a long, complicated, and difficult journey. When appropriately planned and accounted for, the negative effects can be drastically reduced. The uncertainty and resistance that is bound to rise at some level can be mitigated. But this doesn’t just happen by chance. By using the change management techniques of Kotter’s 8 step process and the tools described above, the time to reach the new and improved steady state can be minimized.

Equally important is recognizing and encouraging the various leadership roles at all levels of the organization. From the senior management team down to the general staff, buy-in is critical. Recognizing the various leaders and equipping them to promote change will increase the chances for success.