ALLOVANCE METHOD™

CASE STUDY: A Nobel-prize Winning Hospital Network

Creating a Strategically Aligned Process for Prioritizing Facility Operations & Maintenance Projects for the hospital network

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Background

The University was founded in 1890, and is a world-renowned academic institution with several Nobel prize winners among its faculty and alumni. The University is also home to a major hospital network, which consists of the University Hospital and the School of Medicine.

In total, the University has over 16,000 students, employs nearly 20,000 faculty and staff, and hosts several thousand more people each day who visit the campus and hospital. For a busy, thriving urban campus, maintaining a safe, comfortable and secure environment is critical.

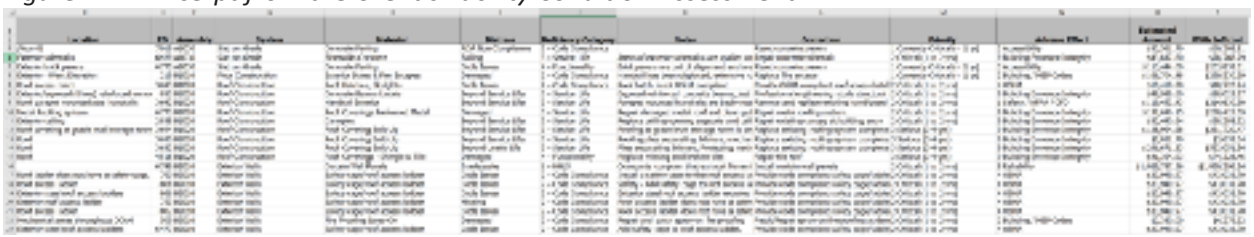
Our client was the Hospital Network's Executive Director of Operations, Facilities Planning, Design and Construction. He is responsible for managing all facilities operations, covering more than 6.5 million square feet, including maintenance, infrastructure, utilities, and deferred maintenance. Recently, he was also given responsibility for design and new construction.

The Challenge

Keeping a facility of this size and importance running smoothly day in and day out is a monumental challenge. Although the University has an endowment of more than $8 billion, our client had to work within a very limited budget allocated to the Hospital Network. With some buildings over 100 years old and having to endure a harsh Midwest climate, there was never enough money or resources to do all the necessary maintenance, and the log of deferred maintenance just kept growing.

Further complicating matters was a pending review by the Joint Commission, a non-profit organization that accredits more than 21,000 US health care organizations and programs. In preparation for the inspection and re-accreditation, our client retained a consultant to conduct a Facility Condition Assessment (FCA) to identify, prioritize and quantify facility deficiencies that require attention. In total, the FCA identified over 4000 items amounting to nearly $1billion in repairs.

Figure 1: An Excerpt from the Client's Facility Condition Assessment



With so many needs, a limited budget, and a very important inspection looming, our client needed help prioritizing work in alignment with the hospital networks strategy and turned to us for help. Our client was overwhelmed and needed a much more strategic and transparent approach to prioritizing and funding projects.

The Solution

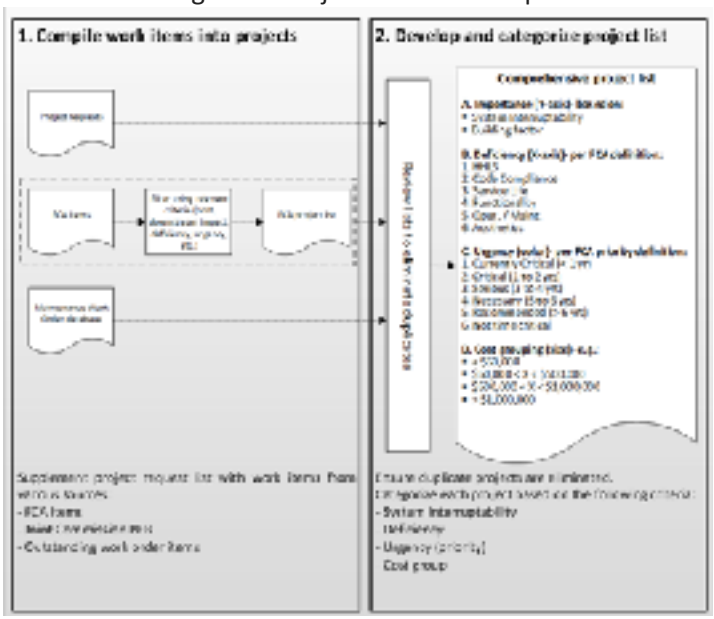
Over a six-month period, we helped our client solve their problem by applying the Allovance Method and using the Allovance Method Software. This would ultimately enable our client to create a short-term plan for prioritizing, selecting and approving projects as well as a five-year strategic plan aligned with the hospital networks strategy.

It was important to our client for the decision-making methodology to be dynamic, allowing for projects to change as strategies and priorities change. Additionally, the client required the methodology to incorporate emerging projects that surfaced throughout the year and have enough flexibility to include these projects into the decision model.

Fortunately, this is all possible within the Allovance Method and Software, and a key aspect of how our solution was designed. If the strategy changes, models can be easily updated to allow for re-prioritization of projects. Also, with the Allovance Method, each project is scored independently and then compared to other projects. If a new project emerges during the year, it is scored independently and may replace a previously selected project.

Figure 2 shows our pre-work. When we started, not only did our client have the 4,000-item FCA list, but also a list of project requests from faculty and staff, and items logged in a maintenance work order database. We first compiled the work items from these three sources into a single project list and eliminated the duplicates. We then categorized each project based on the following criteria: System Interruptability, Deficiency, Urgency and Cost Grouping.

Figure 2: Project Pre-work Steps

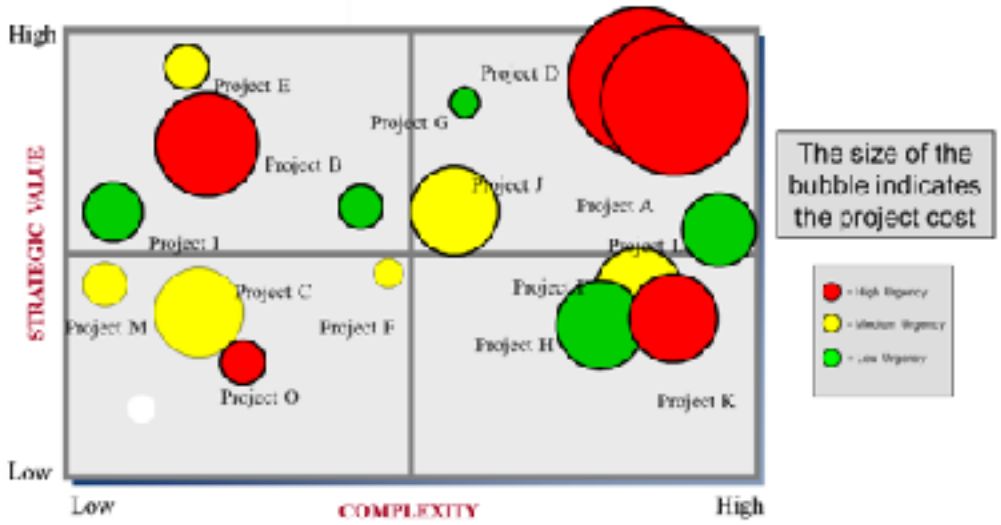


Then we followed the Allovance Method to prioritize and select projects in alignment with strategic objectives.

The Allovance Method follows five steps:

The Allovance Method creates transparent, objective decision-making processes by taking into consideration each project's cost as well the following:

- **Strategic value:** Criteria pertaining to the strategic impact of each project on corporate goals and objectives, as well as its value compared to other projects.
- **Complexity:** Criteria describing technical, management, or implementation complexity of a project, as well as its resource requirements and inter-relationship with other projects.
- **Urgency:** Criteria that evaluates the amount of existing risk that can be mitigated by the project.



Selection of projects is assisted by plotting projects on a bubble chart. The x- and y-axis are Complexity and Strategic Value respectively, the size of the bubble indicates the project cost, and the color indicates the urgency. The Allovance Method is very flexible and adaptable. For the hospital nework, we substituted "Deficiency" for "Strategic Value" as the X-axis, since "Deficiency" was a more critical factor.

Step 1. Strategize

During the Strategize phase, a certified Allovance Decision Coach works with the client to agree on the strategic priorities and objectives that are important to the organization. The hospital network's facilities team initially identified "Building Importance" and "Deficiency" per FCA definitions as the most important strategic priorities. However, upon further consideration, they revised these to "Building Operations" and "System Operation & Efficiency", and added "Community Outreach" and "Strategic Initiatives" based on the overall mission of the organization.

Once the Strategic Priorities are agreed upon, the Allovance Decision Coach then helps the group to identify the Strategic Objectives for each priority. From the diagram below, you can see that for "Building Operations" the Strategic Objectives are "High-value Operations", "Building Condition", and "Maintain Critical Service".

The Allovance Method Software lets the facilitator capture these Strategic Priorities and Objectives in the Strategic Value Scorecard.

Step 2. Compare

In Step 2, we use pairwise comparisons to determine the relative weight of each priority and objective. These weights represent the importance of each priority and objective to the organization.

Doing this requires the skilled facilitation of an Allovance Decision Coach. We start by comparing two of the three strategic priorities to determine their relative weights. The Coach facilitates a discussion and then uses the Allovance Method Platform, moving the cursor left or right until the group agrees on the relative importance of one priority compared to the other. The Coach repeats the process until the group has completed pairwise comparison for all priorities.

Pairwise comparison also measures the consistency of the group. A high level of consistency builds confidence in the results and means that people are clear in their mind about their priorities, what's important and by how much. The outcome is the relative weights of the strategic priorities.

Next, the Coach follows a similar approach, facilitating pairwise comparisons for the strategic objectives within each strategic priority. The software automatically captures the pairwise comparison data and displays the relative weights of each strategic priority and objective on the scorecard.

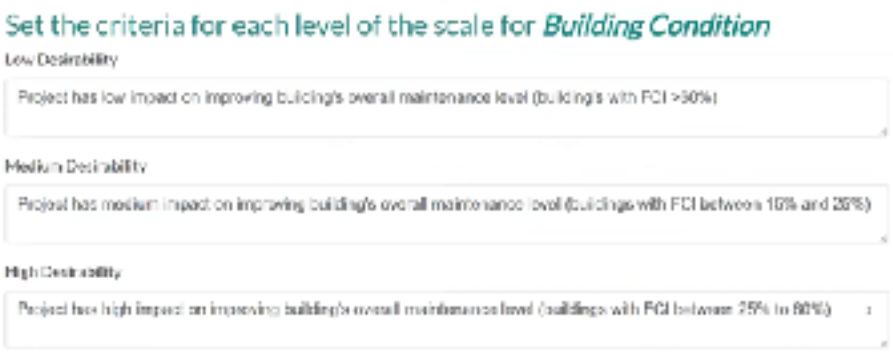
Finally, subject matter experts are assigned to each Strategic Objective, indicated by the initials in the bottom right corner. Subject matter experts play an important role in the next step.

Step 3: Quantify

During Step 3, Allovance Decision Coaches work with the client team and subject matter experts to quantify Strategic Objectives by developing scales. Experts are individuals with extensive subject matter knowledge in certain Strategic Objectives. The scales will be used to score each project on each strategic objective. This approach lets us measure and quantify subjective criteria. The Allovance Method Software then calculates project scores based on established scales.

We divide each scale into four intervals that span a continuum starting from no desirability to high desirability. The expert helps to establish definitions for low, medium and high desirability according to

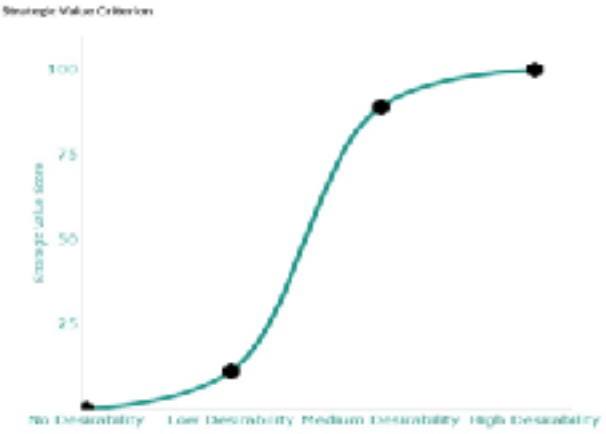
industry norms. Then the team chooses a curve to fit the scale, since not all measures will be linear. The experts also have the option of creating a customized curve.



For example, the first Strategic Objective for which we created scales was "Building Condition." We asked the group to define the levels of desirability for this objective. They defined desirability with respect to improving the building's overall maintenance level.

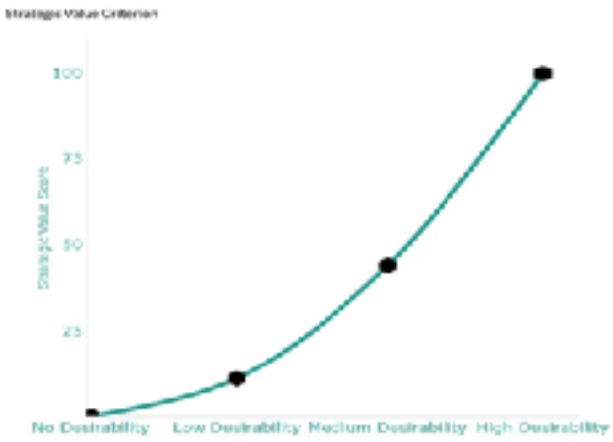
- **Low Desirability**: Project has a low impact on the building's overall maintenance level (Building's Facility Condition Index > 60%)
- **Medium Desirability**: Project has a medium impact on the building's overall maintenance level (Building's Facility Condition Index between 15% and 60%)
- **High Desirability**: Project has a high impact on the building's overall maintenance level (Building's Facility Condition Index between 25% to 60%)

The group then selected a curve that scores projects with medium or high desirability much higher than projects with low desirability, such as the one below.

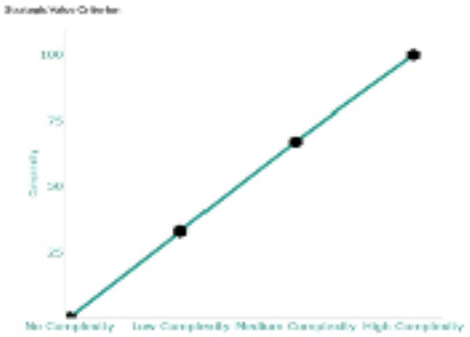


We worked through this for all nine strategic objectives, and also created scales to measure urgency and complexity.

Urgency Curve



Complexity Curve

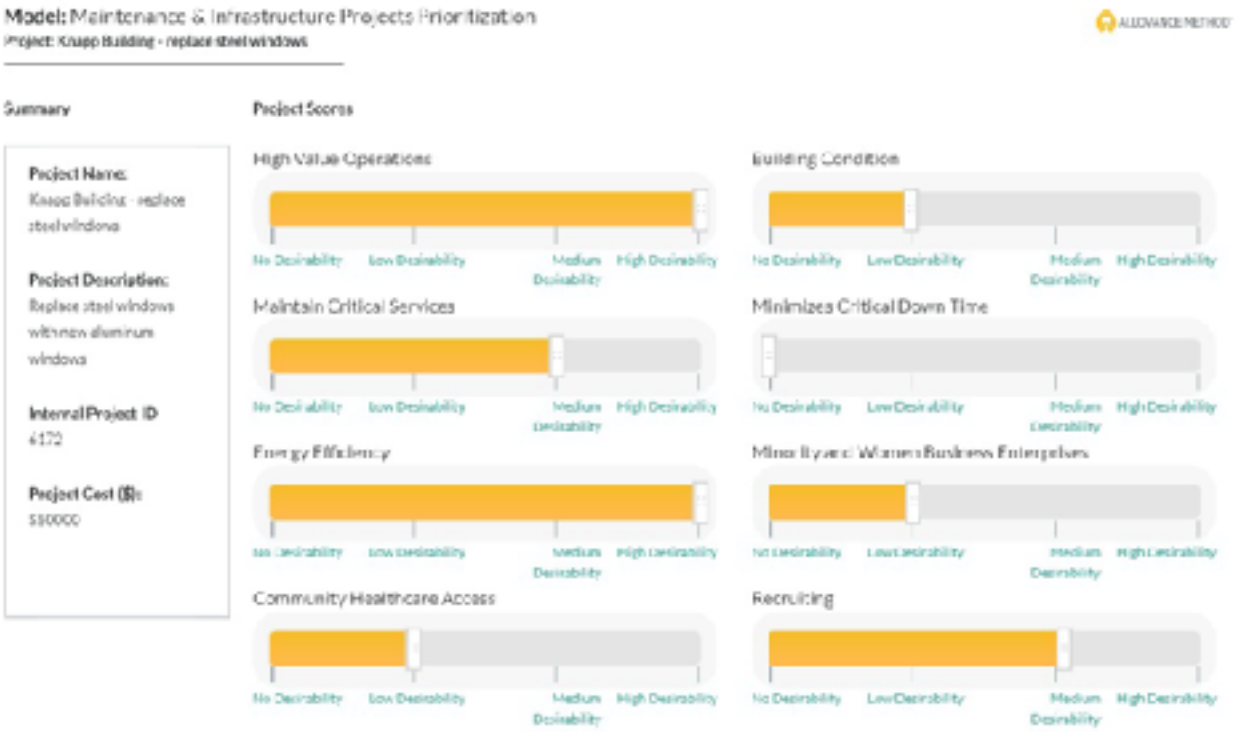


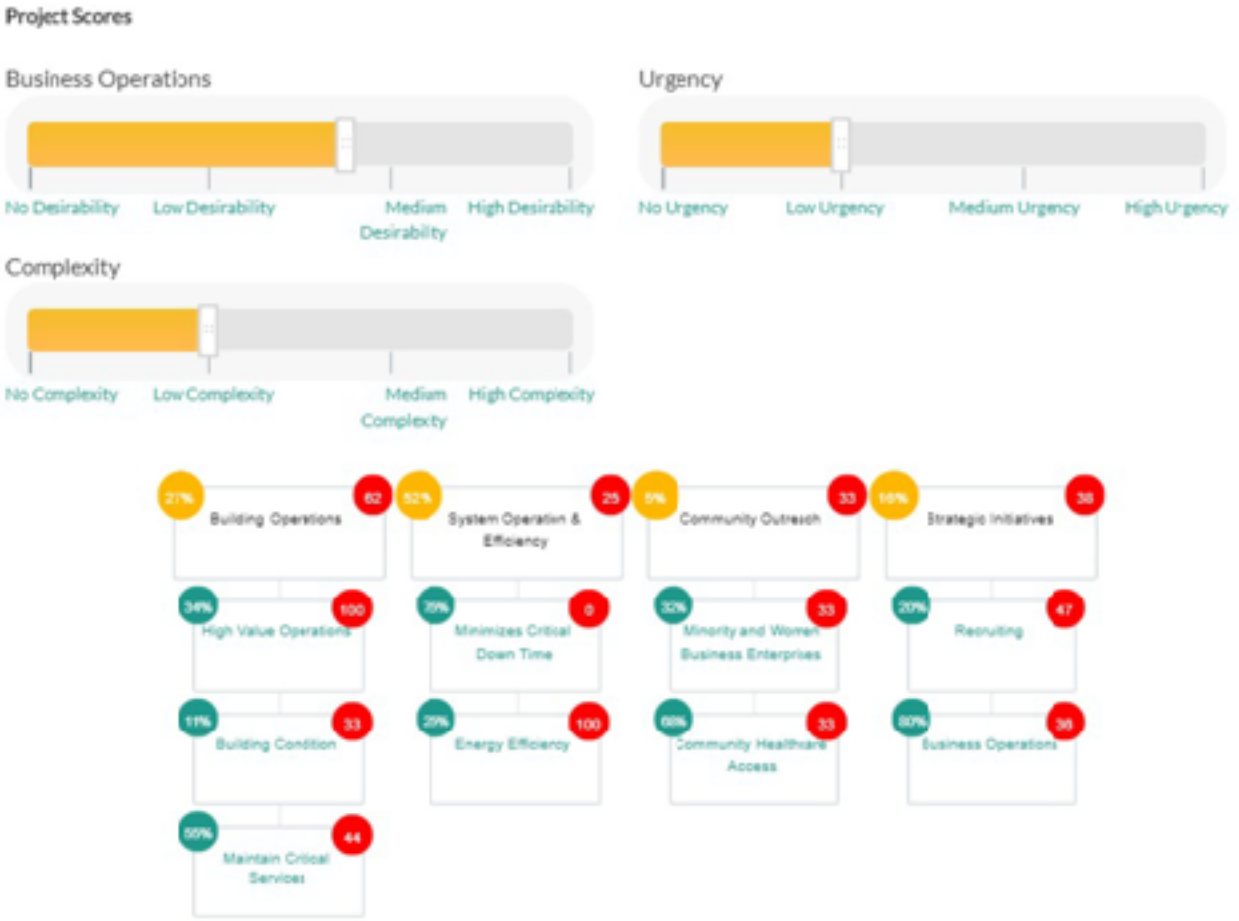
Step 4: Score

With the weights and scales established for each Strategic Objective, the next step was to score the projects. Technically, each of the 4000 rows of the spreadsheet represented a project and evaluating them all could take several months. However, the Allovance Method Software simplifies and accelerates this process considerably, letting users upload projects from an Excel spreadsheet and automating the project creation process. Projects can also be scored in Excel before uploading them into the software.

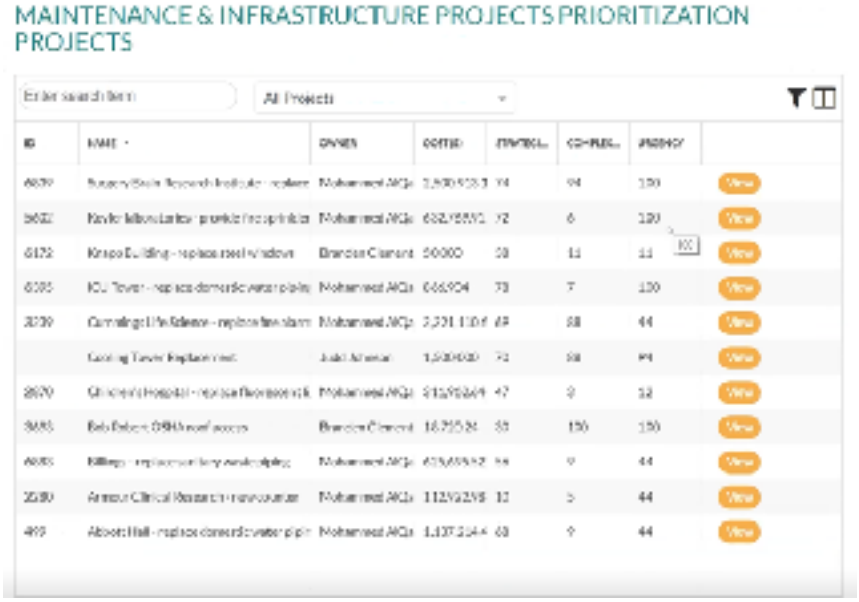
A project form is created in the Allovance Method Software to collect required information such as project name, description, and cost. The form may be customized to add more fields if necessary. The information will be used to measure the impact or desirability of each project in relation to all strategic objectives and priorities (i.e., the strategic value), as well as its complexity and urgency.

The work can also be distributed to project owners or sponsors requesting funds. Project owners receive a system-generated email with a link to their project dashboards where they can create and submit multiple projects. Project owners use the sliders on the project form to estimate the impact or desirability of the projects they create in relation to strategic priorities and objectives, as well as complexity and urgency based on expert definitions that were established in the Quantify step.





Based on inputs from the project owners on their forms, the software calculates a score for the projects in relation to each of the strategic objectives. Scores are combined to obtain an overall project score for strategic value, complexity, and urgency. The project dashboard displays the project scores.



Step 5. Select

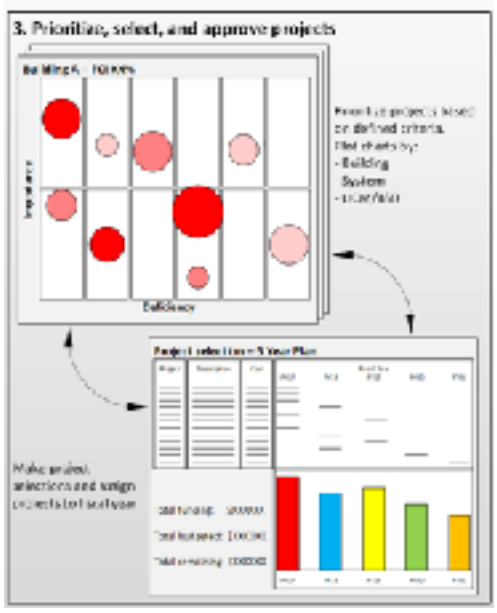
Once the team enters the project information and the software scores the projects, the software then plots the project score on a bubble chart. The y-axis represents the strategic value, the x-axis represents the complexity (or in this case the deficiency), the color of the bubble represents the urgency, and the size of the bubble represents the cost.

The Allovance Method Software allows users to model different selection strategies through its sophisticated filtering capabilities. For example, the hospital network had over 4000 projects, and from these they had to select the projects they would fund. It was very useful to run different scenarios filtering by goals to build greater confidence in their final decisions.

Impact

The client team involved in this effort was very excited about the impact of adopting the Allovance Method for prioritizing and selecting facility improvement projects. The Allovance Method and software helped bring order, objectivity, transparency and efficiency to overcome a very significant challenge. The Method and Software also let the client run more sophisticated models that consider more variables and improve the effectiveness of their decision-making process.

Finally, the approach enabled the client to create a dynamic, 5-year strategic plan that can be updated as the University's strategy and priorities change from one year to the next.


3. Prioritize, select, and approve projects