

A photograph of an industrial facility, likely a water treatment plant, featuring large pipes, valves, and a large building with a corrugated metal roof. The image is overlaid with a blue tint.

*What is the **Value** of a Failure
that Never Happens?*

*How to Document the Capital You
Need to **Improve Your Facility.**
An Introduction to Facility Health Inc.*



**FACILITY
HEALTH INC.**
Asset Life Cycle Care

6250 Jupiter Ave. Suite B
Belmont, MI 49306
Phone: 616-914-2246
e: m.mochel@facilityhealthinc.com
www.facilityhealthinc.com
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By: Mark Mochel, MBA, PMP, CSM, FCT, ACABE
Co-Founder and Senior Vice President

There is an increasing discussion at the national level about the aging HealthCare infrastructure and the impact of the physical environment on patient care. And when that issue is coupled with more stringent compliance requirements and relentless cost pressures, it creates the perfect storm of risk that will continue to challenge us all.

But is this really a new problem? Anyone who is involved in Facility Management lives with this risk and reality daily. Everyone knows that continued investment in the facility, over the full life cycle of the building(s), is the key to long-term success. Yet the struggle continues. ***So why is it so difficult to document and appropriate the capital that is required?***

Because Facility Managers and the C-Suite speak different languages. Facility Managers know when things are going wrong, and when critical assets need to be replaced. They talk about replacing Air Handlers and Boilers, but have a challenge to communicate the needs. And the C-Suite, more specifically the CFO, is looking for funding options and Return on Investment (ROI) metrics, but can't get the information they need to justify the request. And so it goes.

The reality is this. It can be difficult to create a meaningful ROI for the proactive replacement of an aging air handler that serves a surgery suite. A sexy new MRI, with direct ties to revenue, will win the ROI battle every time. But what happens when that air handler fails, surgery goes down, and it must be replaced in an emergent situation? The ROI goes to infinity and the money is always there. ***At double/triple the cost plus the liability.***

At FHI, we have redefined ROI. **ROI = Risk of Inaction.** Backing up infrastructure capital budget requests with data, and quantifying the risk associated with the failure of those assets is the key. **Both parties want to mitigate risk, so it's time to end the "Run to Fail" approach.**

We couldn't find the solution, so we developed our own. We call it the **Facility Health Index™**, and it is powered by our proprietary **Origin™** software platform. First, we conduct a baseline engineering assessment of the facility. Then, we continuously collect CMMS data for each asset to maintain the integrity of that assessment over time. The data drives the index, the index drives the expected asset useful life, and the capital plan is constructed based on cost, risk and tangible asset performance. **All in real time. The capital plan is linked directly to the facility performance and literally builds itself. No more guessing. No more games.**

The Outcome. Asset performance is quantified in engineering terms that are meaningful to the Facility Manager. Investment needs are quantified in financial terms that are meaningful to the CFO. The budget requirements are known to everyone in real time, **both parties together can model and prioritize spend, emergent repairs can be prevented**, and the physical environment can improve. **The value of the failure that never happens is measured not only in dollars and cents, but in risk avoidance, life safety and patient care.**

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Our Story. Everything we do is based on real-world engineering and facility management experience. After years of watching our customers struggle with the challenges of defining the necessary capital needed to improve their facilities, we decided it was time for a change. Assembling the best minds from our engineering team, recruiting leaders directly from HealthCare Facility Management to lead our professional services, and employing the latest trends in software technology and development, we have developed a **predictive maintenance solution** that is unique in the industry. **Designed specifically for the benefit of our HealthCare customers.**

Since inception, we have talked with industry experts and our customers about the “What” and “Why” of predictive maintenance. It is a cultural change as much as a professional service or technology solution. Managing and mitigating risk proactively vs. managing issues reactively is a fundamental shift in facility management. Why is it important? Because beyond the obvious benefit of proactive capital planning (which equally benefits both the facility manager and the CFO), we understand that a predictive maintenance strategy both supports and requires better CMMS utilization, better process definition, improved performance in compliance and accreditation surveys, and enables long-term energy savings opportunities. **It's an upward and compounding spiral of success that no traditional reactive maintenance or “run to fail” strategy can possibly match.**

What have we learned? Focus on the “How”. In simple terms, developing and deploying a predictive maintenance strategy is like digging a ditch. The concept of the ditch is simple enough. But the real work starts when you put your shovel in the ground. At some point, you must stop talking about it, and start digging. And once you do, with each shovel full of earth, you find out what's underneath the ground, you learn, you adapt, you modify the plan, and you keep going until the work is done. The work gets done incrementally, and over time.

It's the same concept with predictive maintenance and capital planning. But Instead of digging in the ground, it's about digging into the data. Incrementally, intelligently and following a prescribed plan of action. Follow the data, learn, adapt, modify and keep going until the work is done.

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How to Deploy a Predictive Maintenance Strategy and Support Capital Planning. We have developed the following 7-step process that we use to guide our customers through the process and achieve success:

- 1. Change Management:** Make the commitment to a predictive maintenance strategy, understand the cultural and operational challenges, and communicate the intended outcomes with the maintenance staff and the C-Suite alike. Create the Vision.
- 2. Review Standards:** Conduct a complete review of CMMS data standards and the processes for tracking reactive, preventative and compliance related tasks. Correct any deficiencies as necessary before moving on. Create an Operational Baseline.
- 3. Evaluate Asset Risk:** Complete a risk assessment of all utility assets to properly prioritize both maintenance and investment requirements. Apply standards equally and universally across the enterprise. Understand and quantify risk tolerance.
- 4. Validate Current Performance:** Conduct a Facility Condition Assessment (FCA), validate asset inventory, and understand current asset performance. Collect all data utilizing the enterprise standards. Link risk evaluation to actual asset condition.
- 5. Calculate the Facility Health Index™:** Deploy the FHI exclusive Origin™ software platform and consolidate the above information into an objective condition index value for each asset, zone, building and campus. Construct an initial capital plan.
- 6. Maintain the Facility Health Index™:** Import CMMS performance data into the Origin™ solution, continuously update index scores over time, modify asset useful life and model capital planning. Optimize capital investment based on asset risk and performance.



7. Continuous Improvement and Risk Mitigation:

See the results of investment, quantify those results through improving index scores, optimize ongoing maintenance strategies, and avoid emergent repairs. Follow the data and celebrate success.

The Secret Sauce: Our Universal Asset Repository.

As part of the Origin™ software platform, we have identified and compiled industry standard performance criteria for over 1000 asset types. Asset expected useful life, expected preventative maintenance and expected replacement costs are maintained (updated regularly) in the software, and are used as a benchmark to validate and substantiate capital requests.

Results. Current customers are utilizing our solution and are forecasting and modeling (both short and long term) over 71,000 assets and \$6 Billion in capital investment for the improvement of existing facilities. All based on asset performance. All prioritized based on risk. And all based on proactive replacement of assets as indicated by the Facility Health Index™.

If you would like additional information or need further information on the development of your operational and capital metrics, please contact us for assistance. We are happy to help!

About Facility Health Inc. Founded in 2016, and based in Grand Rapids, Michigan, Facility Health Inc. is a leading provider of facility engineering and critical environment expertise. We value our customer relationships and strive to help those customers achieve maximum facility performance. It is our vision to enhance the human experience in the Health-Care Industry through continuous improvement in the physical environment.



About the author. *Mark Mochel, MBA, PMP, CSM, FCT, ACABE has 20+ years of Enterprise experience in technology deployment, program management, and financial cost accounting. Throughout his career, Mark has focused on the use of technology and process development to provide real value in multiple*

industries, including Healthcare. That focus means creating an objective, data-driven communication link between the technicians, the engineers, the management team, and the C-suite leadership where the CAPEX and OPEX budget decisions are made.

Mark has a bachelor's degree in Mechanical Engineering Degree from Purdue University and a master's degree in Business Administration from the University of Michigan. Mark is also active in many state level ASHE chapters, and has been a featured speaker at multiple ASHE annual, regional and state level conferences. He, along with the rest of the FHI team, are dedicated to improving the Health Care physical environment for all who are served.