Green Computing and your reputation

Reputation as Motivation:

Reputation management includes promotion, PR, conversations, and other ways by which people learn about your efforts. It can serve as a framework for your entire green computing effort. (Book)
Just like every company has a vision or mission statement that guides its overall purpose and direction, reputation can act as a powerful motivational force that shapes how a company approaches its goals, strategies, and initiatives, including those related to green computing.

Real-World Examples:

1. **Tesla's Reputation for Innovation and Sustainability:** Tesla, the electric car manufacturer, has built a reputation for innovation and environmental responsibility. Their motivation for green computing aligns with both making money and doing the right thing. By producing electric vehicles and investing in clean energy solutions, Tesla appeals to environmentally conscious consumers while also tapping into the market demand for sustainable transportation options. Their strong reputation for innovation and sustainability has contributed to their success and market dominance.
2. **Apple's Approach to Energy Efficiency:** Apple is known for its commitment to energy-efficient products and practices. Their motivation for green computing encompasses saving money and doing the right thing. Apple designs energy-efficient devices and data centers, reducing energy consumption and operational costs. By promoting their efforts to minimize environmental impact, Apple enhances its reputation as a socially responsible tech company, appealing to consumers who value sustainable technology choices.
3. **Google's Renewable Energy Initiatives:** Google's motivation for green computing revolves around making money and doing the right thing. The company has invested in renewable energy projects and data center efficiency to reduce their environmental footprint while also seeking cost savings. By transparently sharing their progress and commitments, Google enhances its reputation as a tech giant committed to sustainability, appealing to customers who prioritize environmentally conscious companies.

Avoiding Greenwash

Greenwashing is putting a layer of green PR over efforts that are really driven directly by the good, old-fashioned pursuit of profit. (Book)
Greenwashing is when a company promotes environmental initiatives or products in a way that is misleading to make themselves appear more environmentally friendly and sustainable than they really are.

Here are some examples that illustrate greenwashing:

- A manufacturing company runs ads emphasizing their use of a small amount of solar power, deflecting attention from their overall large fossil fuel energy use.
- A food brand labels their products as "natural" and "environmentally-friendly" when they still use pesticides and unsustainable farming practices.
- An oil company touts their tiny investments in wind and solar, but their core business remains extracting and selling fossil fuels.
- A beauty brand says their products use "eco-friendly formulas" even though the ingredients are still toxic or unsustainable when disposed of.
- A retailer claims their bags are "reusable" when they are still thin single-use plastic bags.
- An appliance company says a product is energy efficient when it only meets minimum federal standards.
- A hotel asks guests to "help the environment" by reusing towels without actually reducing its overall energy and water use.

So, Greenwashing occurs when a company claims to be environmentally friendly and sustainable in its marketing and messaging, but in reality, its actions and practices don't align with those claims. They're essentially trying to create a positive image of being "green" without actually making substantial changes to their operations. It's like saying one thing to the public but doing something different behind the scenes. Greenwashing can mislead consumers and stakeholders and harm the company's reputation when they discover the disconnect between the marketing and the reality.

Social License to Operate

The social license to operate means that society as a whole, and local communities where you operate, broadly accept that your activities are constructive. This touches on the issue of community standards, which are inherently vague. (Book)
It means If you start a company in a new area and the local community supports and approves of what your company is doing, that's like having a social license to operate. It means the people around you think your company's activities are a good fit for their community and that you're being responsible and positive in the way you're doing business. It's like getting their thumbs-up to run your company there.

Green Computing and Your Career

Green computing can affect your career depending on how well you integrate sustainability with saving money and reducing risks in your company. If sustainability is a big focus in your company, you can use it to justify and promote your green efforts. If it's less of a focus, you can

highlight sustainability benefits along with cost savings and risks. And if some people aren't into sustainability, you can emphasize other benefits first to get things done and build a good track record.

So, If you follow green or environmentally-friendly practices in your company, it can be really good for your career. It shows that you care about important things like the environment and sustainability. This can make you stand out as a responsible and forward-thinking employee, which can lead to positive recognition, promotions, and better opportunities in your career.

How you position sustainability alongside cost savings and risk reduction is important. Your approach should be guided by the overall position of sustainability within your company:

1. **Sustainability-led:** Sustainability-led means that sustainability is a core and guiding principle of the project. It's not just an extra feature; it's one of the main reasons for the project's existence. It's like building a house with a foundation made of eco-friendly materials. The sustainability aspect is at the forefront and integral to the project.
2. **Sustainability-supported:** Sustainability-supported means that while the project's primary focus might be something else (like cost savings), sustainability benefits are still an important part of the project. It's like buying energy-efficient appliances for your home to save on electricity bills – the primary focus is saving money, but you're also indirectly supporting sustainability by using less energy.
3. **Sustainability as a plus:** Sustainability as a plus means that sustainability is seen as an additional benefit, but it's not the primary driver of the project. It's like getting a smartphone with a great camera – the main purpose is having a good phone, but the excellent camera is an added bonus.

Let's break down each of these concepts using analogies and real-life examples:

Sustainability-led: Imagine you're baking a cake, and the main ingredient you're focused on is the delicious chocolate flavor. The other ingredients, like the icing and sprinkles, are there to make the cake even better, but the chocolate is the star. In this analogy, the cake represents your project, the chocolate flavor symbolizes the core benefits (such as cost savings and risk reduction), and the icing and sprinkles represent the sustainability benefits.
Real-Life Example: A tech company has a strong commitment to sustainability across all its operations. They decide to implement a green computing initiative to reduce energy consumption in their data centers. While they focus on cost savings and risk reduction as the primary benefits, they also emphasize how this effort aligns with their overall sustainability goals. They see sustainability as a fundamental part of their initiative, much like the essential chocolate flavor in the cake.

Sustainability-supported: Imagine you're building a treehouse, and you have a sturdy base made of strong branches. These branches provide the stability and support needed to build the rest of the treehouse. In this analogy, the base represents your project's main goals (cost savings and risk reduction), and the additional branches represent the sustainability benefits that support the project.
Real-Life Example: A software development team within a larger organization decides to optimize their coding practices to reduce energy usage in their servers. While their primary focus is on achieving cost savings and minimizing potential risks, they also highlight the sustainability benefits of their practices. They see these benefits as important branches that contribute to the overall stability of their project, much like the branches that provide support to a treehouse.

Sustainability as a plus: Imagine you're organizing a picnic, and you have a delicious main dish like sandwiches. As a bonus, you also bring along some tasty desserts that add to the enjoyment of the picnic. In this analogy, the main dish represents the primary benefits (cost savings and risk reduction), and the desserts symbolize the additional benefits of sustainability.
Real-Life Example: A marketing team decides to implement more energy-efficient hardware and software solutions to reduce operating costs in their department. While their main focus is on achieving these cost savings, they also recognize the sustainability benefits of their choices. They view sustainability as an added bonus, much like the delightful desserts that enhance a picnic experience.

Green Computing and Your Department

Green Computing and Your Department means that if challenges or problems arise, you understand your department well and can manage the situation effectively. It's like being the expert who knows how to handle things when they don't go as planned. By using green computing practices and your knowledge, you're ready to tackle any issues and make your department successful.

Let's imagine a scenario:

You're in charge of the IT department at a growing company. Your company relies heavily on its data center to store and manage all its digital information. One day, you start noticing that the data center is running much slower than usual, and employees are complaining about delays in accessing important files.
Problem: Upon investigation, you realize that the data center is overloaded. The increased demand for computing resources, coupled with inefficient energy usage, has caused the servers to struggle. This slowdown not only affects productivity but also leads to higher energy bills and potential system crashes.

Solution Using Green Computing:

Knowing your department well, you take a proactive approach to address the issue:

1. **Cloud Computing:** You decide to implement cloud computing for some tasks to offload the strain on your in-house servers. This balances the load and ensures smoother operations.
2. **Energy Efficiency:** You optimize the data center's cooling system and upgrade to more energy-efficient servers. This not only reduces energy consumption but also saves on electricity costs.
3. **Virtualization:** You use virtualization to consolidate servers, running multiple virtual machines on a single physical server. This optimizes resource utilization and reduces the need for additional hardware.
4. **Monitoring and Management:** You set up better monitoring tools to keep an eye on server performance and energy usage. This helps you detect potential issues before they become major problems.

Outcome:

Your strategic use of green computing practices not only resolves the data center overload but also improves overall efficiency. Employee productivity increases as they experience faster access to data, and the company's energy bills go down due to optimized energy usage. This proactive approach not only solves the immediate problem but also positions your department as forward-thinking and environmentally responsible.

In this scenario, your knowledge of your department's needs and challenges, coupled with green computing strategies, enables you to handle the situation effectively and turn a potential problem into an opportunity for improvement.

Green Recruiting and Retention

It means bringing in people who care about sustainability and making sure they stick around in the company for a long time. HR creates good terms and conditions, like happy work environments and fair benefits, so that employees are happy working there. It's all about building a team of environmentally conscious people who are committed to the company's goals and values, and then making sure they stay and thrive in a positive work atmosphere.

Green Computing and Saving Money

Getting Focused on Money-Saving Efforts

The challenges companies face when trying to focus on both saving money and being environmentally efficient. It explains the bias towards revenue generation and offers insights into the advantages of cost-cutting efforts as investments.

1. The cost of cost-cutting efforts is often more predictable than the cost of revenue-generating efforts.
2. The savings of cost-cutting efforts are almost always more predictable than the revenues from revenue-generating efforts.
3. A cost-cutting effort usually pays off year after year after year, whereas revenue-generating efforts often have a more finite lifespan.

Let's explore examples for each of these three points:

Imagine you have a piggy bank, and you want to fill it up with coins. But you also want to be smart and not spend too much while doing it.

1. **Predictability of Costs:** When you save money, like putting coins into the piggy bank, you know exactly how much each coin costs. It's like when you decide to buy a toy that costs $5 – you're sure about the cost. But when you try to make money, like selling lemonade, you're not always sure how much money you'll make. Some days, you might sell a lot, and some days, not so much. It's a bit unpredictable, like not knowing how many people will buy your lemonade on a given day.
2. **Predictability of Savings:** When you save money by putting coins into the piggy bank, you can see the savings adding up. Each coin you put in contributes to your growing savings. This is like cost-cutting efforts – for example, using less water by turning off the faucet when you brush your teeth. You can see your water bill going down, and you're saving money over time. But when you're selling lemonade, you might not always know how much money you'll make from one day to the next. Some days you might make more, and other days less. It's not as predictable as the consistent savings you get from cost-cutting.
3. **Long term impact:** Saving money by adding coins to your piggy bank is like a long-term plan. Over time, you'll see your savings grow, and you can keep adding to it year after year. Selling lemonade, on the other hand, can be a shorter-term plan. You might have a great lemonade stand for a summer, but as the seasons change, the demand for lemonade might decrease. It's not as consistent as saving money in your piggy bank,

which you can do for a long time. In simple terms, it's like knowing exactly how much money you're saving when you put coins into your piggy bank, while making money by selling lemonade can be a bit uncertain because you can't be sure how much you'll earn each day. Saving is like a steady, long-term plan, while making money can be more like a fun adventure with ups and downs.

Implementing Energy Efficiency

Save energy by changing how you use devices, buying more efficient ones, or switching to devices that use less energy overall.

For end-user devices, you can save energy in a few different ways: (Book)

1. Changing how current devices are used. There's no capital cost involved here.
2. Buying new devices that are similar to current devices, but more energy efficient. The new devices might be slightly more expensive, or slightly cheaper, than what you would otherwise buy; the focus is on operational efficiency.
3. Buying new devices that are a different class of devices. If you replace desktop computers with laptops, you may spend more or less money. If you downsize to tablets, you'll almost certainly save money. Operational efficiencies from the change should be greater.

More simple way,

1. **Changing How You Use Devices:** You can save energy by using your devices in smarter ways. This doesn't need any extra money, just changing habits.
   - ➥ Imagine you have a habit of leaving your computer, TV, and lights on when you're not using them. By simply turning them off when not needed, you're changing how you use these devices. This doesn't cost any extra money, but it saves energy and reduces your electricity bill.

2. **Getting More Efficient Devices:** You can buy new devices that work like your current ones but use less energy. They might cost a bit more or less than what you'd normally buy, but the focus is on saving energy over time.
   - ➥ You have an old refrigerator that uses a lot of electricity. You decide to buy a new refrigerator that has the same size and features as your old one, but it's labeled as an energy-efficient model. It might cost a bit more upfront compared to a regular refrigerator, but over time, it uses less electricity to keep your food cold. As a result, your monthly electricity bills will be lower, which can make up for the initial extra cost of the efficient refrigerator.

3. **Switching to Different Devices:** If you replace regular computers with laptops, it might cost more or less. But if you go for smaller tablets, you'll likely save money. The new devices should be more efficient to run.
    - ➥ Currently, you have a desktop computer at home that consumes a fair amount of energy. You think about replacing it with a laptop. Laptops are known to use less energy than desktops, plus they're more portable. So, even if you spend some money to buy the laptop, you'll likely save money on your electricity bill in the long run. Additionally, you consider going even more energy-efficient by switching to a tablet for casual web browsing and reading. Tablets use even less energy than laptops. While buying a tablet might have an initial cost, the energy savings over time can make it a cost-effective choice.

In simpler terms, in your home, you can save energy and reduce costs by adjusting how you use devices, choosing more energy-efficient versions of devices like refrigerators, and even switching to devices that naturally use less energy, like laptops and tablets. These changes might involve some initial spending, but the long-term savings can be significant.

Moving to Cloud Services

Cloud computing can be defined as “a new style of computing in which dynamically scalable and often virtualized resources are provided as a service with pay-as-you-go manner over the Internet”. Moving your services from being hosted at your place to being hosted in the cloud can actually help save a lot of energy. Here's why:

1. **Efficient Delivery:** Imagine you need a pizza. When you make it at home, it takes more time and energy to gather all the ingredients, cook it, and clean up. But if you order it from a pizza place, they are specialized in making pizzas quickly and efficiently. Similarly, cloud companies are really good at providing computer services efficiently because that's their main job. So, when you use their services, it's like ordering a pizza – it's done in a more energy-efficient way.
2. **Shifting Responsibility:** Think of it like hiring someone to take care of your garden. When you do it yourself, you spend time, effort, and resources on tools and maintenance. But if you hire a professional gardener, they bring their own tools, take care of everything, and you don't have to worry about it. With cloud services, the responsibility and energy needed to run and maintain the computers and equipment are shifted from you

to the cloud provider. This means you use less energy and the environmental impact is their responsibility.

Book →

1. Services are delivered more efficiently. One study found that cloud companies delivered computing services many times more efficiently than in-house data centers, mainly because this was the only business for the cloud companies. They were far more motivated, as well as structurally more able, to be efficient.
2. The cost and environmental impact of providing the services goes off your, and your company's, books, and onto the provider's.

Digitizing Non-IT Functions

Digitization and the internet have transformed many non-IT functions and processes that once relied heavily on physical documents, mail delivery, faxes, etc. Here are some key ways digitization has streamlined these areas:

Mail:

- **Before:** People used to be excited to receive physical mail every day.
- **Now:** Most important messages are sent and received via email.

Checks and Official Documents:

- **Before:** Checks and important documents had to be physically sent, often using services like FedEx.
- **Then:** Faxing became popular for transmitting such items.
- **Now:** More payments and document signings happen online, making it faster and more convenient.

Telephone:

- **Before:** Telephones were reliable but somewhat slow to set up.
- **Now:** Telephone numbers are digital, and cell phones and services like Skype handle a lot of communication.

Meetings and Conference Calls:

- **Before:** people had to physically gather for meetings or use traditional phone lines for conference calls.
- **Now:** Digital tools and platforms allow people to conduct meetings and conference calls remotely, using video and audio over the internet.

Greening Your Energy-Saving Moves:

When you do things to save money and be more efficient, those actions can also be good for the environment in three different ways:

1. **Saves Money and Traditionally Green**
   - ➥ Upgrading old, energy-hungry web servers to newer and greener models not only cuts operating costs but also reduces environmental impact. When you talk about this upgrade, you can emphasize both the money-saving and environmental benefits because they go hand in hand.
2. **Saves Money and Not All That Green**
   - ➥ When you make a deal to buy laptops in bulk at a lower price, and the new supplier happens to be more environmentally conscious, it's worth mentioning in passing. You might include a short paragraph about the supplier's eco-friendly approach in a press release. However, it's not the main focus.
3. **Saves Money and Not Green at All**
   - ➥ Using videoconferencing to cut down on travel for meetings is a green move. However, if you use the same technology to hire executives who will frequently fly in for meetings, it might end up having a larger negative impact on the environment. In such cases, it's better not to highlight the green benefits of the technology-driven hiring approach if those benefits don't actually exist.

In simple terms, when your money-saving actions also align with environmentally friendly practices, it's a good idea to highlight both benefits. If the money-saving actions don't directly contribute to environmental improvement, it's best not to emphasize green benefits that aren't really there.

Some Big Thinking About Money-Saving Efforts

In simple terms, it means not just making small changes, but considering stopping certain activities, doing things differently using new technologies , and even completely reimagining how you do tasks to save money and make your operations greener.

Stop doing Stuff: When you realize you're spending a lot of money on certain things, like business travel, it's smart to step back and ask why. If the travel budget has been growing rapidly, consider replacing some of that travel with videoconferencing. This not only saves money quickly but can also lead to significant savings. Additionally, you can make a substantial cut in the travel budget after implementing videoconferencing and enjoy the resulting cost reduction.

Do Similar Stuff Differently: Think about how much money you could save if a portion of your employees started using iPads instead of regular computers. If you use the money you save in the first year to develop or buy new apps, you might be able to move a lot of tasks onto iPads, which could exceed your original cost-cutting goal.

Do New Stuff: Besides just changing how you do IT-related tasks, consider doing things in a completely new way. For example, if you're spending a lot on travel, think about how you make products, sell them, and provide support. Look at these processes with fresh eyes and see if you can find ways to reduce costs while also making them more environmentally friendly.

Another Sir's example:

1. **Stop Doing Stuff:** Travel
    - ➥ **Before:** People used to travel a lot for work, which costs money and has an impact on the environment.
    - ➥ **Now:** Instead of traveling for every meeting, we can use videoconferencing to talk to people from different places. This saves money on travel expenses and reduces the need for transportation, which is better for the environment.

2. **Do Similar Stuff Differently:** Online Offline Class
    - ➥ **Before:** Students used to go to physical classrooms to learn.
    - ➥ **Now:** With online classes, students can learn from home using computers. This is a different way of doing things, but it's still about education. It saves money on commuting and can also be more flexible for students.

3. **Do New Stuff:** A New Way of Doing Things

- ➥ **Before:** We used to make products, sell them, and provide support in a certain way.
- ➥ **Now:** Let's rethink everything! Maybe we can find better, more cost-effective, and eco-friendly ways to make, sell, and support our products. This might involve using new technologies or changing our processes to be more efficient and green.

In simple terms, **"stop doing stuff"** means cutting out things like excessive travel. **"Do similar stuff differently"** means changing how we do familiar things, like taking classes. And **"Do new stuff"** means coming up with fresh ways to do tasks, like changing how we make and sell things.