Sustainability budget: Akin to Monte Carlo method for optimization

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Capital budgeting processes data to help a business determine whether projects such as constructing a new building or investing in long-term ventures are worth pursuing. Projected lifetime cash inflows and outflows are assessed in order to determine whether the returns generated meet a sufficient target benchmark.

Sustainability budgeting is more than processing data projecting the future ROI of any given sustainability initiative as in capital budgeting. It's about the urgency of strategic changes and the need for new budget tools to assess sustainability conditions on a life-cycle basis such as: risk mitigation, fiscal conditions, site selection, workplace design, HR recruitment|retention, corporate culture, social impacts and natural capital resources.

Big data analytics provides tools such as transparency reporting which can help portfolio managers determine what and how to measure, as life-cycle analyses are unique to each client, their initiatives and the inherent conditions.

Given the sheer volume of factors to be considered and input into a calculation, and the variety of impacts each sustainability initiative can produce, which may change along the continuum of it's life-cycle, and the integration of various life-cycle durations at an integrated strategic, "whole company" level, sustainability budgeting is akin to an adaptation of Monte Carlo methods for optimization - except we still have to create the tools!

Nadine Cino, LEED AP, is a regular contributor to the greater purpose of generating SustainAble action, and is CEO and co-inventor of the Tyga-Box System, New York, N.Y.