Put the framework at the heart of your sustainability strategy. Start by using it to audit your internal resources.

As an organisational mission, sustainability is hard to wrap your head around. Given its enormity and complexity, individuals have trouble measuring their own contributions, let alone those of their teams and departments. Of course, organisations can use standard sustainability metrics to assess progress based on output. But without an overall, desiloed view of who’s doing what internally, it is difficult to weigh results against organisational potential. And in an organisational setting, invisible potential can never be leveraged.

As professors in the technology and operations management (TOM) research area at INSEAD, we recently overcame this challenge when we decided to outline how our research and teaching have contributed to INSEAD’s Business and Society initiatives through the **United Nations Sustainable Development Goals** (SDGs). Introduced in 2015, the SDGs are a 17-point framework designed to motivate global efforts towards ambitious targets, such as ending poverty, ensuring universal access to quality education and providing clean water to the entire world.

We could have addressed this task by employing a bibliometric approach, i.e. keyword-based matching of research papers and courses from our faculty to specific SDGs. Instead, we opted to audit the total contributions of each faculty member, developing a weighted score quantifying their involvement with every SDG. As you can imagine, this was much more time-consuming than merely assessing output using the bibliometric option, yet the discoveries we made ended up being well worth the additional work. There were even side benefits we never anticipated.

**Affiliation matrix**

One of the key virtues of the SDGs is that they unpack the nebulous notion of sustainability into a set of aspirational yet clearly defined actions (achieve gender equality, etc.). The framework is also widely adopted and generally recognised as neutral, coming as it does from the United Nations rather than a nation or institution perceived to have its own agenda.

Our intuition was that the SDGs would thus provide a transparent, rigorous way to assess TOM’s internal sustainability resources, and identify untapped opportunities for collaboration. The mechanism for this relates to how **engineers working on integrated and innovative projects** – e.g. a new model of airplane or automobile – can communicate more effectively. The best matched collaborators can find each other using a visual tool known as an **affiliation matrix**, which shows the aspects of the product each individual is working on and how they...
interrelate.

To start creating an affiliation matrix, you need two things: the names of everyone involved in the project, and a list of the project components. In the case of sustainability, the org chart takes care of the first requirement. The second would be impossible to fulfill without a framework such as the SDGs.

**An SDG-based internal audit**

First, we needed a data-collection method that would stand up to scrutiny. Our subjects, after all, were fellow academics with a nose for dubious data. We coupled an extensive in-person interview with an online survey in which our TOM colleagues rated their contribution to, and interest in, each SDG. The interview was important for ensuring our colleagues’ self-verification of their scores, as well as helping some of them situate themselves within the SDG scheme. One professor, for example, was adamant that none of his research was related to the SDGs, until we pointed out to him that one of his key areas of interest – forecasting – plays a central role in attaining several of the goals. A careful co-perusal of the full official description of the goals – which surprisingly few people take the time to read – helped switch on the lightbulb for others.

This fluid mode of interpretation required us to draw distinctions between primary and secondary contributions to SDGs. We were thus able to find room in our matrix for researchers (like our forecasting colleague) who contributed to SDGs indirectly. In addition, we could accommodate work that landed squarely on one, two or a few SDGs but made at least glancing contact with others.

**Presenting the results**

As stated above, our strategic objective for the audit had become more focused on uncovering synergies that could lead to valuable future collaborations. Remember, however, that our goal was to show where TOM stood on sustainability here and now. We wanted to produce something senior stakeholders could appreciate. This is probably also true of sustainability audits at most organisations.

With the help of research associate Sarah Dewilde, we prepared petal charts depicting each professor’s contributions to various SDGs, as well as the goal-by-goal output of the research area.

Additionally, we converted the affiliation matrix into a network graph including all TOM professors with lines to the SDGs their work addressed. With all but one SDG covered by at least one professor, the chart conveyed the far-ranging impact of our group.
We plan to add these visuals to the TOM website, to aid recruiting prospective PhDs curious about what we’ve achieved with sustainability so far. We also want our expertise map to be accessible to other academics and practitioners who are looking for expertise in different SDG domains.

Suffice it to say that our method, while internally focused, nevertheless produced images that made an impression outside our little group. However, things really began to take off when we unveiled them for our colleagues at the annual TOM retreat. Tracing the web of connections on the TOM network chart, they discovered commonalities with one another’s work that they never would have imagined. It was striking – though perhaps not surprising to those of us with extensive experience in academia – how little we knew about the research interests of our area colleagues. Because we all use somewhat different lingo, we believed we were further apart than we actually were. Visualising our affinities revealed we were fundamentally talking about the same issues with different words. We were able to recapture much of the common ground that had been lost in translation.

We immediately divided the group into breakout rooms according to the research clusters revealed in the chart. Lively discussions about collaboration opportunities ensued. These conversations birthed some very encouraging ideas for new research papers and executive education courses, currently in the early stages.

**Organisational implications**

We believe our example could inspire companies to try similar internal-resource audits based on affiliation matrices. Sustainability is an ideal area for our method since it is a gargantuan and multi-dimensional affair with a fairly reliable framework (i.e. the SDGs) to split it into more approachable pieces. But the idea could theoretically be tried with any complex cross-silo challenge, as long as a guiding framework can be either found or created.

The framework itself needn’t be perfectly neat. The SDGs, for example, have significant interaction effects – movement in one may affect several others, positively or negatively. We tried to account for these by clustering closely linked SDGs together and inviting synergies between them. Still, the weighted scores do not reflect the intricate interrelationships between SDGs, but rather professors’ work within each SDG area taken in isolation.

Keep in mind, this type of assessment is not intended for use as a performance evaluation tool. The primary purpose is to uncover overlaps between employees who may work in different teams, silos, even different countries. For example, the exercise could help compliance and R&D teams choose which issues they should collaborate on. It can also help departments that are already working together identify the right collaborators for each conversation. These synergies amount to untapped potential for value creation that already exists within the organisation. They are like picking up money found on the ground and investing it wisely with a healthy return.

Because it is centred on self-assessment, this type of audit will fail if people believe the results will have consequences for jobs, status or budgets. Self-interest will tend to trump objectivity, leading to unreliable self-reports. It must be clearly communicated that no one’s star will rise or fall in the organisation based on the audit findings.

Additionally, the audit will work better with a supportive senior leader who is willing to elevate the discussion to a high-profile forum, such as the annual area meeting we held, and schedule enough time for participants to plant seeds of future collaborations.

**Future plans**

Now that the TOM audit has been judged successful, we are looking at an institutional roll-out. We are also exploring ways to automate the time-intensive data-gathering and data-processing phases. If this many “a-ha” moments came out of the exercise among the 15 of us, we can only imagine the cross-area opportunities that may arise if we’re able to run it among the 145+ INSEAD faculty. It goes without saying that with increased scale will come more refinement of our method as well as more lessons. We look forward to sharing what we find.
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