A NEW MODEL TO ASSESS THE IMPACT OF INTERDISCIPLINARY CENTERS

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The new IBIT impact model is a systematic measure of the impact of Temple's Institute for Business and Information Technology (IBIT). IBIT is widely regarded as a successful high impact interdisciplinary center. To keep advancing, we need specific impact measures to identify strengths and weaknesses. The measures should identify areas for improvement, improve accountability with stakeholders, and assess how well we are executing our mission.

Current academic measures are typically internally focused.¹ For instance, citations and related measures only capture impact on the academy.

The mission of Temple's university wide Institute for Business and Information Technology (IBIT) is to engage with industry through its advisory board and corporate partners to develop relevant knowledge and talent for the digital era.

Our mission means that the knowledge and talent that IBIT develops must (a) involve and be relevant to industry, and (b) be digitally focused. To be accountable to our stakeholders which include an advisory board, corporate partners, students, academic colleagues, and administration, it is important to measure how well we are executing our mission.

Given the challenge of using traditional impact measures, IBIT developed a new model to assess impact. We started with the Association to Advance Collegiate Schools of Business (AACSB) standards for societal impact² by choosing focus areas and outcomes. Next, we applied the Common Foundations of Impact Measurement³ approach. The result is a set of measurable outcomes that afford insights on IBIT impact.

We defined the requirements of version 1 of the IBIT impact model as follows:

- 1. Assess the entire range of activities including research projects, networking events, student mentoring, and others (see Table 1 below). This is important because each activity consumes stakeholder resources, so *all* activities must generate ongoing value. The activities listed in Table 1 follow from our focus on knowledge, talent, and engagement.
- 2. Involve all stakeholders in assessing impact industry, academics, and students. This is important because even though we are industry focused, we are housed in a university, and must positively impact our two most important internal stakeholders academics and students.
- 3. Assess both the value generated *and* the contribution of stakeholders in each activity.

 Generating value is obviously important. In addition, academic institutions are more dependent

¹ Beltran, J. R., Aguinis, H., Shuumarjav, Y., & Mercado, M. (2024). Putting Scholarly Impact in Context: Implications for Policymaking and Practice. *Academy of Management Perspectives*, Published Online June 6, 2024

² AACSB and Societal Impact. *Aligning with the AASCB 2020 Business Accreditation Standards*, February 2023.

³ The Common Foundations of Impact Measurement, Version 2.0 (2024). *Common Approach to Impact Measurement*, Toronto, Canada.

on contributions from stakeholders than typical for-profit organizations. We are not independent actors; the value we generate is often co-created with stakeholders. For example, if industry executives and students perceive that mentoring is just a resume builder, then one or both parties may lose motivation to generate mutual value. Moreover, industry executives are volunteers that participate because of an intrinsic motivation to give back. Therefore, it is not sufficient to design an activity to generate value, it must also encourage participants to contribute to its success. Further, co-creation is often the reason that external stakeholders chose to voluntarily engage in the first place, therefore the opportunity to contribute to success is by itself as important as the value generated by the activity.

KNOWLEDGE	TALENT	ENGAGEMENT	
DIF Projects Three month to one year - design research projects that	DIF Workshops Small hands-on workshops for students and faculty on an	Advisory Board A seventeen-member group of Chief Information Officers,	
involve one or more corporate partners, faculty, and students.	important digital topic led by corporate partners.	CEOs, SVPs, and entrepreneurs.	
Cases Teaching and/or research cases about how partners implement digital transformation.	Mentoring A structured program to match senior executives with students across the university.	Executive-in-Residence One-to-two-day program to facilitate engagement among students, faculty, and senior industry leaders.	
IBIT Projects Special ongoing research projects such as the IS Job Index and more recently, measuring impact.	Scholarships Endowed or corporate scholarships for high performing students and students participating on DIF projects.	Symposiums Academic or industry, or mixed conferences on digital topics.	
IS Job Index A biennial national research study involving 35-45 universities on the entry level IT workforce. The IBIT Report A whitepaper publication on important digital topics.	Competitions Annual university wide and/or national student digital competition featuring a corporate partner. Digital Innovation Awards Awards for students, alums, and faculty who participate in university entrepreneurship competitions.	IT awards An annual dinner featuring industry awards and speakers.	

Table 1. IBIT Activities

To address the above requirements, we developed a 6-item survey of knowledge, talent, and engagement impact at the conclusion of each IBIT activity. The items are designed so that the same instrument can be used for each stakeholder. This is important so that we can compare the results both within and across stakeholders over time. It is also important for annual and longer-term strategic analysis of alignment with the university and school mission and impact goals.

To simplify the process of collecting and analyzing frequent assessments we automated the data collection process. Further, we limited the number of items to improve response rates at the expense of item validity. Limiting the number of items was also important given the context of some activities. For example, at the end of an event, participants are more interested in leaving than filling in a survey.

The items in the questionnaire focus on knowledge, engagement, talent, contribution, and overall value:

- 1. Gaining new knowledge
- 2. Applying the gained knowledge
- 3. Improving ability to engage
- 4. Enhancing network
- 5. Contributing to success
- 6. Value of participation

The above approach means that an undergraduate student who is just starting college will receive the same survey instrument as a senior industry leader. The items are worded to elicit contextually relevant responses. For example, to the undergraduate student, gaining new knowledge might mean learning a new digital term, to a faculty member, it might mean learning something new about an industry problem that can be applied to research or teaching, and for an industry executive, it might mean learning something new about a problem from the academic perspective. All the above interpretations are important and positively impact our mission.

The new IBIT assessment model was prototyped during spring 2024 and the results are presented below. The responses are from two student workshops led by industry, a student mentoring program, and an awards dinner all in 2023-24 which included a mix of industry, academics, and students. The DIF data is cumulative including design research projects from several years ago. In the future, we will report data only on an annual basis.

Overall, the results show that on knowledge, engagement, ability to contribute, and value, IBIT has an overall average impact rating of 5.98 on a scale from 1 to 7 with 7 being highest (see Table 2). The value and gain new knowledge dimensions had the highest impact with ratings of 6.47 and 6.22, while contributing to success and ability to apply knowledge scored the lowest with ratings of 5.36 and 5.77. DIF research projects and the mentoring program had the highest impact with ratings of 6.54 and 6.25. Standard deviations in general were close to 1 suggesting that our very different stakeholders agreed with each other.

We expect to continually improve the model. For example, it may be insufficient to only assess gaining and applying knowledge, we may need to directly assess the creation of knowledge. In this version of the model, we assumed that knowledge creation is subsumed by 'gaining new knowledge' but that may not be obvious to respondents. Overall, the above project is a step forward into completely new territory. As far as we know, there are no other similar efforts in the academy. We are proud to yet again break new ground.

Activity	New Knowledge	Apply Knowledge	Improved Ability to Engage	Enhanced Network	Contributed to Success	Valuable	Averages
Workshops (x 2)	6.45	5.41	5.62	5.17	4.79	6.10	5.59
RR 71%	(6.48 ST) (SD .69)	(5.56 ST) (SD 1.61)	(5.52 ST) (SD 1.15)	(4.96 ST) (SD 1.67)	(4.56 ST) (SD 1.92)	(6.08 ST) (SD 1.11)	
Mentoring	6.04	6.14	6.07	5.79	6.61	6.86	6.25
RR 100%	(6.75 ST) (SD 1.50)	(6.81 ST) (SD 1.51)	(6.75 ST) (SD 1.56)	(6.75 ST) (SD 2.13)	(6.63 ST) (SD .5)	(6.94 ST) (SD .36)	
Awards Dinner	6.17	5.66	6.14	6.31	4.92	6.43	5.94
RR 63%	(SD 1.12)	(SD 1.49)	(SD 1.25)	(SD 1.15)	(SD 2.30)	(SD 1.08)	
DIF Projects	6.43	6.43	6.64	6.29	6.71	6.71	6.54
RR 45%	(SD 0.8)	(SD 0.6)	(SD 0.6)	(SD 0.8)	(SD 0.6)	(SD 0.5)	
Averages	6.22	5.77	6.08	6.00	5.36	6.47	5.98
RR 70%	(SD 1.13)	(SD 1.53)	(SD 1.30)	(SD 1.56)	(SD 2.09)	(SD 1.01)	

Note: All numbers are averages on a scale from 1 to 7 with 7 as the highest rating. Student averages are included for workshops and mentoring. N = 154, 65 Students, 29 Faculty/Staff, 60 Industry. RR = Response Rate, ST = Student, SD=Standard Deviation.

Table 2. Impact Ratings

For more information, please contact ibit@temple.edu.

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