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AUDIT AND ADVISORY SERVICES Tel: (510) 642-8292 611 UNIVERSITY HALL #1170 BERKELEY, CALIFORNIA 94720-1170

October 9, 2018

Paul Alivisatos Executive Vice Chancellor and Provost

Executive Vice Chancellor and Provost Alivisatos:

We have completed our audit of New Academic Ventures – Berkeley (NAV-B) as per our annual service plan in accordance with the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing* and the University of California Internal Audit Charter.

Our observations with management action plans are expounded upon in the accompanying report. Please destroy all copies of draft reports and related documents. Thank you to the staff of NAV-B for their cooperative efforts throughout the audit process. Please do not hesitate to call on Audit and Advisory Services if we can be of further assistance in this or other matters.

Respectfully reported,

Jaime Jue Interim Director

 cc: Vice Chancellor Rosemarie Rae Dean and Executive Director Diana Wu Chief Operating Officer Scott Shireman Associate Executive Vice Chancellor and Chief of Staff Phyllis Hoffman Managing Director Darek DeFreece Senior Vice President and Chief Compliance and Audit Officer Alexander Bustamante Associate Chancellor Khira Griscavage Assistant Vice Chancellor and Controller Delphine Regalia



AUDIT AND ADVISORY SERVICES

New Academic Ventures -Berkeley Audit Project No. 18-707

October 9, 2018

Prepared and Reviewed by:

Jaime Jue Interim Director

University of California, Berkeley Audit and Advisory Services New Academic Ventures - Berkeley

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OVERVIEW

Executive Summary

The objective of this audit was to assess the adequacy and effectiveness of risk management, control and governance processes in providing reasonable assurance that opportunities are effectively vetted, financial modeling is sound, market analysis is reliable, performance metrics are appropriate and monitored, and lessons learned are leveraged by New Academic Ventures - Berkeley (NAV-B).

Based upon our fieldwork, we observe that NAV-B is currently operating consistent with its original vision of functioning as an independent and separately funded unit that objectively identifies, reviews, and reports on academic revenue generation plans. There are opportunities for further clarification of its mission, role, authorities, and responsibilities relative to other campus functions and processes in order to increase its effectiveness and to better discharge its responsibilities for considering and advancing academic revenue generation initiatives.

These potential opportunities include

- Clarifying NAV-B's principal role as consultant or gatekeeper to academic units and whether it is in conjunction with or decoupled from the annual budget process.
- Determining whether NAV-B should play a top-down role of creating a collective portfolio of individual opportunities, especially involving intra- or inter-divisional collaboration that would not otherwise occur without centralized coordination.
- Narrowing NAV-B's focus on larger revenue opportunities related to bringing research ideas to market, assisting incubators and accelerators, and increasing education related sales and services.
- Standardizing practices for tracking, monitoring and reporting revenues and expenses related to opportunities.
- Minimizing potential overlap with existing units associated with advancing research activities, external commercial partnerships, research-based startups or commercializing intellectual property.
- Ensuring that appropriate consideration is given to incremental indirect cost and burden on central administrative units and at what point it may outweigh the potential revenue generation for the individual unit.
- Deciding whether NAV-B will need to develop subject matter-expertise in philanthropy to pursue its mission or if that role will stay with University Development and Alumni Relations as a partner.

Management has responded with proposed action items that will consider and address many of these opportunities.

Source and Purpose of the Audit

One of the goals of campus financial reform is strengthening units' ability to influence revenue growth through academic entrepreneurship. To this end, the New Academic Ventures - Berkeley office was established. The objective of this audit was to assess the adequacy and effectiveness of risk management, control and governance processes in providing reasonable assurance that opportunities are effectively vetted, financial modeling is sound, market analysis is reliable, performance metrics are appropriate and monitored, and lessons learned are leveraged.

Scope of the Audit

The scope of our audit included interviews and document review with NAV-B management and certain other key stakeholders and partners. The original scope of the audit included the Berkeley Resource Center for Online Education (BRCOE), but with its subsequent move and incorporation into Digital Learning Services under the Vice Chancellor for Undergraduate Education, it was excluded from scope. Our fieldwork was conducted between January and July 2018.

Background Information

The creation of NAV-B was announced by then Interim Executive Vice Chancellor and Provost Carol Christ in January 2017 with a stated goal of "considering and advancing academic revenue generation initiatives for our campus." The announcement goes on to state

"While the campus has a well-defined and strong academic approval process in place to review self-supporting [graduate professional] degree programs (SSGPDPs), there is a need to for an integrated process to review the economic feasibility of these ideas as well as other academic revenue generation proposals. To this end, I have asked Diana [Wu] to build and oversee an independent and separately funded unit – leveraging key strengths of the Extension and BRCOE models – to objectively identify, review and report on all units' academic revenue generation plans.

This New Academic Ventures team will be led by Scott Shireman. In working with schools, departments and colleges, Diana and Scott will work collaboratively with Vice Chancellor Cathy Koshland on undergraduate revenue programming, Graduate Dean Fiona Doyle on graduate degree programs, and with Chief Financial Officer Rosemarie Rae on the 2017-18 budget goals as well as strategies for long-term financial goals for the campus."

Since that announcement, NAV-B has continued in a development state and we understand that a formal charge or charter has not yet been communicated to unit leadership. Interim EVCP Christ has subsequently also become the Chancellor and previous Vice Chancellor of Research Paul Alivisatos has stepped into the EVCP role.

Summary Conclusion

NAV-B is currently operating consistent with its original vision of functioning as an independent and separately funded unit that objectively identifies, reviews, and reports on academic revenue generation plans. There are opportunities for further clarification of its mission, role, authorities, and responsibilities relative to other campus functions and processes in order to increase its effectiveness and to better discharge its responsibilities for considering and advancing academic revenue generation initiatives.

These potential opportunities include

- Clarifying NAV-B's principal role as consultant or gatekeeper to academic units and whether it is in conjunction with or decoupled from the annual budget process.
- Determining whether NAV-B should play a top-down role of creating a collective portfolio of individual opportunities, especially involving intra- or inter-divisional collaboration that would not otherwise occur without centralized coordination.
- Narrowing NAV-B's focus on larger revenue opportunities related to bringing research ideas to market, assisting incubators and accelerators, and increasing education related sales and services.
- Standardizing practices for tracking, monitoring and reporting revenues and expenses related to opportunities.
- Minimizing potential overlap with existing units associated with advancing research activities, external commercial partnerships, research-based startups or commercializing intellectual property.
- Ensuring that appropriate consideration is given to incremental indirect cost and burden on central administrative units and at what point it may outweigh the potential revenue generation for the individual unit.
- Deciding whether NAV-B will need to develop subject matter-expertise in philanthropy to pursue its mission or if that role will stay with University Development and Alumni Relations as a partner.

SUMMARY OF OBSERVATIONS & MANAGEMENT RESPONSE AND ACTION PLAN

Current Status of New Academic Ventures - Berkeley

Observation

Since the announcement by then Interim EVCP Christ in January 2017, leadership in University Extension (UNEX) has worked to implement the vision of NAV-B as then articulated. However, as there has not been a subsequent formal charge or charter from the EVCP organization, UNEX leadership has used their best judgment on implementation decisions "to build and oversee an independent and separately funded unit... to objectively identify, review and report on all units' academic revenue generation plans."

Against this criteria, we observe that NAV-B is currently operating consistent with this vision. However, we believe there are opportunities for further clarification of its mission, role, authorities, and responsibilities relative to other campus functions and processes in order to increase its effectiveness and to better discharge its responsibilities for "considering and advancing academic revenue generation initiatives for our campus."

Consultant or Gatekeeper

One recurring question that came up in our fieldwork is whether NAV-B's primary role is (1) a consultant to, (2) an advocate for, (3) a gatekeeper or (4) a combination of all three for academic units to develop, present, and implement revenue generation opportunities.

What was not clearly defined in the January 2017 announcement is whether NAV-B has the ability and the duty to say no to ideas it feels will not be successful, for whatever reason, despite the objections of the school or college.

What has also evolved since January 2017 is NAV-B's role in reviewing divisional submissions for revenue generation estimates submitted as part of the annual budget process. This step was not explicitly mentioned in the original announcement. In this respect, NAV-B does function as a mandatory control step and gatekeeper. Outside of the budget process review of incremental revenue projections, consultation with NAV-B is voluntary.

Regardless of what the campus ultimately decides, such as whether NAV-B's work is decoupled from the annual budget process, it should be clearly communicated to schools and colleges – particularly if NAV-B is expected to act as a gatekeeper for revenue opportunities so that NAV-B will not be perceived as being inconsistent, arbitrary or subjective in its decision making and to minimize any perceptions of conflicts of interest.

Portfolio or Individual Opportunity Approach

Another question that was raised was whether NAV-B should prioritize creating a collective portfolio of individual opportunities, in which case the focus is on the entire portfolio reaching a collective revenue contribution goal and, therefore, there is less focus on whether each individual

project meets contribution targets. Also, what is the optimal number of opportunities that could reasonably be managed by NAV-B at a given point in time and a given level of initial review and subsequent monitoring. At this point there is not a specific optimal target number of opportunities or a collective revenue goal to be pursued given their available resources.

One perspective from stakeholders was that NAV-B should not simply wait around for units to come to them. They should also play a top-down role in driving forward progress for the campus. Their situation was compared with developing interdisciplinary research initiatives or approaches to entrepreneurship. Targeted campus-level efforts would supplement ongoing revenue generation efforts by individual departments, principal investigators and inventors pursuing their separate professional interests, and would be helpful to promote intra- or inter-divisional collaboration that may not otherwise occur without centralized coordination.

Underlying this portfolio approach, NAV-B would need to be provided some understanding of what risk tolerance for underperformance or failure the EVCP is willing to entertain, either for the campus as a whole or individual divisions. A lower risk tolerance would likely entail more vetting and more subsequent monitoring by NAV-B.

Other Consideration Points

- Narrowing Focus on Larger Opportunities Some stakeholders felt NAV-B could benefit from a narrower focus on larger revenue opportunities related to bringing research ideas to market, assisting incubators and accelerators, and increasing education-related sales and services. NAV-B's current consideration of concurrent enrollment opportunities result in smaller amounts of incremental net revenue so could be left for academic units to manage. Similarly, increasing summer sessions enrollment could be assigned to Summer Sessions as their interests in increasing their overall program and their accumulated expertise make them a better fit.
- Ongoing Monitoring and Reporting There is not currently a formal tracking, monitoring and reporting protocol in place for revenues and expenses recorded in the campus financial system related to the portfolio of academic revenue generation opportunities. NAV-B would be a logical candidate for this role. As an alternative, divisions already perform quarterly financial reviews and review of revenue generation initiatives could be included in the scope of those reviews. The choice may depend on the desire to monitor the collective group of opportunities as a campuswide portfolio as opposed to being an individual contributing element of divisional performance.
- *Minimizing Overlap with Other Units* If NAV-B is approached or charged with development of revenue generation opportunities associated with research activities, external commercial partnerships, research-based startups, or commercializing intellectual property, they may be working in areas that overlap and potentially conflict with the existing functions in Research (e.g., Intellectual Property and Industry Research Alliances (IPIRA) and its constituent units the Office of Technology Licensing (OTL) and Industry Alliances Office (IAO)) and Finance (University Partnership Program (UPP)). A clear division of responsibilities and formal rules of engagement could be established. Alternatively, a softer approach allowing for collaboration and a healthy tension or competition might be preferred.

- *Indirect Costs* Indirect costs associated with revenue generation opportunities are incurred at the unit, division, and the campus level. While units are asked to estimate both direct and indirect costs as part of their financial modeling, the impact of indirect costs on a division or the campus are not explicitly incorporated in the modeling NAV-B evaluates. There is a question as to whether NAV-B should be concerned with or try to estimate the indirect costs or impact associated with potential increased demands on central services (i.e., school or college counseling, registrar or financial aid services, housing, etc.) A threshold or other consideration criteria has not been established for when the indirect impact to the division or campus may outweigh the potential revenue generation for the individual unit.
- *Expertise in Philanthropy* Philanthropy is not currently identified as a subject-matter expertise of current NAV-B management. However, revenue generation opportunities submitted to NAV-B often have a significant philanthropic giving component. There is a question as to whether NAV-B's charge should include increasing philanthropic capabilities of units or should that be retained by University Development and Alumni Relations.

Management Response and Action Plan

Management agrees with the audit observation. NAV-B is aware of the perception that it serves as a gatekeeper for revenue opportunities, but is shifting its focus. The breadth and diversity of campus means that there are a significant number of revenue generation programs that can be developed or enhanced. Applying a gatekeeper function to all of these opportunities may be impractical if not infeasible.

NAV-B is currently revising its mission statement and in the near term will develop (a) a strategic plan, (b) an opportunity assessment model to accompany its financial planning worksheet already in place, and (c) a communication plan which will include an internet landing page setting forth its engagement model to delineate when NAV-B consultation is required. Notwithstanding these requirements, proactive and voluntary engagement with NAV-B will be encouraged.

NAV-B is in the process of developing assessment criteria that can be used during the entire lifecycle of a program, from idea generation, implementation, modification and eventual retirement. We suggest that periodic engagement with NAV-B would enable units to determine the ongoing viability of programs or whether such programs should be changed or even terminated.

NAV-B would agree that its highest use is to look for some of the largest opportunities for campus. While it should remain involved in reviewing most revenue generation opportunities, the implementation of those opportunities are perhaps best left to the individual academic units, with NAV-B retaining an open-door policy to provide feedback, conduct research, identify programs that are successful on other parts of campus, etc. This will allow NAV-B to focus its efforts on those opportunities that require significant input and research, business acumen and additional resources to implement and scale.

In addition, reporting of revenue generation programs, regardless as to whether NAV-B is employed, should be required, to determine the effectiveness of those programs, promote information sharing and best practices, track and develop effective metrics and dashboard reporting, encourage cross-unit partnerships and prevent competition and market confusion.