Why Startups Find the Academic Ecosystem Exciting

MODERATOR:

Chirag "Jay" Patel

Cactus Communications

SPEAKERS:

Ginny Herbert

AIP Publishing

Jessica Miles

The Informed Frontier

Will Schweitzer

Silverchair

Dustin Smith

Hum

Tim Vines

DataSeer

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The panel discussion moderated by Jay Patel focused on how the academic publishing industry, traditionally dominated by a few established players, is now experiencing a dynamic influx of startups eager to address its inherent inefficiencies and unmet needs. The new ventures aim to revolutionize research workflows, leverage emerging technologies, and foster more effective partnerships between researchers and publishers. The core questions are whether these startups can truly reimagine traditional processes, whether established players will embrace collaboration or investment in them, and ultimately, if they can seamlessly integrate technology into publishing workflows to solve academia's enduring challenges. The discussion delved into the motivations behind individuals joining this entrepreneurial wave, the unique challenges startups face in this ecosystem, and strategies for navigating resistance to change and securing vital funding.

The motivations driving individuals into the academic publishing startup sphere are deeply rooted in a desire for impact and personal fulfillment. For Will Schweitzer, an early school paper sparked his interest, leading him to find more reward in publishing than teaching English, driven by a profound sense of contributing to the scientific enterprise. Dustin Smith, a "trailing spouse," found his niche by spinning out Hum from Silverchair, motivated by a drive to solve problems and a desire to respond positively to the "fear" and "threat" often associated with industry disruption. Ginny Herbert, who began her publishing career at the front desk, remains dedicated because she believes the products created in this space can "change the world through knowledge creation and dissemination." Tim Vines,

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initially on a science track, discovered his true calling as a managing editor, finding work that aligned with his style and personality, allowing him to become an expert in a specific domain. Jessica Miles, with a science background, sought more variety in her work, finding it in the dynamic startup environment. This collective motivation highlights a deep belief in the industry's potential and the significance of peerreviewed studies.

For those entering the startup space, passionate commitment is only the beginning. Launching and sustaining a startup in academic publishing presents significant challenges, described by a panellist as akin to "Hunger Games" or "Survival" due to the resource-scarce nature of scholarly communication. While a high volume of activity and available funding in certain sectors might seem ideal for startups, finding a genuine "product-market fit" is exceptionally difficult in this specialized domain. Startups often struggle to solve problems that potential customers have not explicitly identified or do not yet value enough to invest in. Funding constraints are a significant hurdle; only about 10% of industry spending is allocated to technology, resulting in limited capital availability. Early-stage funding often relies on friends, family, or angel investors due to the extended timeline for return on investment. Convincing customers, who typically operate with tight budgets, to allocate funds to an unproven idea is a constant struggle, with only a few stakeholders willing to take that leap. Products that demonstrate clear cost-saving benefits or resource reduction for stakeholders tend to have an easier path to securing funding. For customers unable to directly financially support startups, engagement through product trials, demos, and providing valuable feedback becomes a crucial, nonmonetary form of support.

Overcoming resistance to change is another paramount challenge. From a startup perspective, learning from customer feedback and modifying products, or pivoting, should be viewed as a positive and essential aspect of development. The method of product delivery is also critical; it must align with customer preferences. Publishers, in turn, can learn from startups' focus on value by reassessing how they provide value and considering internal innovation or engagement with startups. The decision-making process for engaging with a startup often requires involving multiple stakeholders, adding layers of complexity. Successful integration of new solutions demands a rigorous, researchquestion approach: formulating a hypothesis, dedicating



Figure. Session moderator Jay Patel (standing) with panelists (left to right) Will Schweitzer, Dustin Smith, Ginny Herbert, Tim Vines, and Jessica Miles. (Credit: Jessica Miles.)

specific time for testing, and meticulously measuring outcomes. This systematic approach, coupled with effective communication planning (analogous to a technology rollout) and drawing on change management principles like Kotter's 8 Steps,¹ is vital. Building credit and trust in the process involves reflecting, taking responsibility, and transparently communicating when something is not working, then demonstrating adaptability and commitment to continuous improvement.

Looking ahead, the panelists cited current funding constraints, particularly those impacting Gen-Al related products, as posing a threat to future innovations. This raises the question of whether more talent will migrate from academia and traditional academic publishing to spearhead new startups. The advent of artificial intelligence (Al) could be a significant disruptor, potentially becoming the new reader of scholarly content. This opens doors for new subscription models tailored for Al readers, requiring specific data formats and delivery methods, potentially fostering a conducive environment for startups to fill these emerging needs. While Al provides a foundational layer for innovators, allowing for faster product creation, human involvement remains crucial for sales, marketing, and distribution. Panel members referring to Will Schweitzer as a

"mafia don of distribution" elicited a laugh and underscored the continued importance of human networks.

Conversely, well-established, long-running organizations are inherently ill-suited to operate like startups. The core ethos of a startup involves "holding ideas really loosely," constantly seeking real-world feedback, and being comfortable with failure, iteration, and continuous learning. As Dustin Smith points out, this requires an ability to absorb "cringe" and embrace being wrong. A common pitfall for new innovators is underestimating the difficulty of gaining stakeholder buy-in. Focus is critical for effective resource allocation. Tim Vines' adage, "'Just' is a four-letter word," highlights that perceived simple solutions are rarely easy in practice. The most promising opportunities for startups arise when a current pain point or inefficient process is actively consuming a customer's time or money, indicating a clear, valued problem to solve. Jessica Miles emphasized the importance of "intentional experimentation," where even failures provide valuable information to guide future adjustments, ensuring every effort contributes to progress.

In conclusion, the academic publishing landscape is undergoing a profound transformation, and it will benefit from an entrepreneurial spirit aiming to inject efficiency, innovation, and greater accessibility into scholarly communication. While startups in scholarly communication are fueled by a strong desire to contribute to knowledge dissemination and address long-standing challenges, they face significant hurdles in securing funding and overcoming resistance to change. Their success hinges on their ability to identify truly valued problems, pivot rapidly based on feedback, leverage strategic partnerships, and continuously adapt to a dynamic technological environment, particularly with the rise of AI. The future will reveal whether these agile newcomers, in collaboration with forward-thinking established players, can ultimately democratize access to research and seamlessly integrate technology with publishing workflows.

References and Links

1. https://www.kotterinc.com/methodology/8-steps/