HUMAN CAPITAL AND HIGH TECH ENTREPRENEURIAL DISCOVERY: BEYOND THE SEARCH SERENDIPITY CONTINUUM (INTERACTIVE PAPER)

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INTERACTIVE PAPER SESSION

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Principal Topic

Explaining how technology entrepreneurs discover opportunities is of immense interest given that innovation is the prime instrument of competition for many firms (Baumol, 2002). However, existing research does not address why some technology entrepreneurs serendipitously discover opportunities whereas and others search and discover opportunities. We argue that these discovery modes are a function of technological entrepreneurs’ human capital and that differences in human capital underpin entrepreneurial discovery. Human capital has been linked to nascent entrepreneurship (Davidsson & Honig, 2003), evaluations of venture capitalists (Dimov & Shepherd, 2005), and number of opportunities identified (Corbett, 2006). Even so, little evidence exists of human capital affecting serendipitous or search-based discovery.

We explain technology entrepreneurial discovery mode via general human capital (i.e., experience depth, experience breadth, formal education). We then explain discovery mode using a specific human capital framework comprised of Shane’s (2000) prior knowledge constructs (i.e., markets, customer problems, ways to serve markets, and technology). We then put forward configurations, or gestalts, of human capital associated with serendipitous and search-based discovery.

Method

Data derive from technology entrepreneurs (n=145) in university-affiliated incubators. Items were developed using deductive scale development and construct analysis. Factor analysis was employed on the prior knowledge scales resulting in four items across each of the knowledge areas. Differences in human capital across discovery mode were analyzed using t-tests, and hierarchical regression was used to forecast discovery mode using both general and specific human capital variable sets.

Results and Implications

Results indicate discovery mode differed in aspects of both general and human capital. Differences were based on years of experience, formal education and prior knowledge of ways to serve markets. Both the human capital variables sets were significant in explaining serendipitous discovery. However, for search-based discovery the specific human capital variable set alone was significant. Human capital configurations were plotted for both discovery types showing different patterns for serendipitous and search-based discovery. Based on these findings, we recast the dominant view of entrepreneurial discovery as a continuum based on serendipity versus systematic search (Bhave, 2004). Instead, we posit that discovery is better explained by two distinct dimensions (serendipity and search) that co-vary.

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