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Executive Development Programs Enter the Digital Matrix:
I. Disrupting the Demand Landscape

Das Narayandas
Senior Associate Dean, External Relations and Harvard Business Publishing
Edsel Bryant Ford Professor of Business Administration
Harvard Business School

Mihnea Moldoveanu
Professor of Business Economics
Desautels Professor of Integrative Thinking
Vice-Dean, Learning, Innovation and Executive Programs
Rotman School of Management

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Abstract

Executive development programs have entered a period of disruption catalyzed by the digitalization of content, connectivity and communication and driven by renewed demand for high level executive and managerial skills. Unlike other segments of higher education, the executive education market is heavily subsidized by the organizations employing the executives that participate in them. To understand the ongoing transformation of the industry, we use a large database of interviews with participants in executive development programs at HBS – and executives in their sponsoring organizations – to map out the (multidimensional) objective functions of executive participants and their organizations, and show how the trio of disruptive forces (disintermediation, disaggregation and decoupling) that have figured prominently in other industries disrupted by digitalization (media, travel, publishing) are likely to reshape the structure of demand for executive development.

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What the Learners, and Organizations, Want: Mapping the Sources of Value and Drivers of Demand for Executive Development. "What does the client want?" is the most basic question any market analysis must ask—but, in ***the*** case of executive development, "the client" is not a uniform entity—and here is why:

They have mixed and varied motives. First, executives' and managers' motivations for developing skills and abilities are many and often mixed, varying by industry, life and career stage, hierarchical position, and professional background. Some are interested in developing specific skills, others in discovering more about themselves and building their own skill development plan. Some want to signal their credentials to constituencies within and outside their organizations, others to build new or refresh old connections. And for many, multiple incentives may be operating in combination.

The users are not the buyers. Second, any analysis of the executive development industry must capture specific sources of value-add for the organizations that typically pay the costs of executive development. Their motivations and value drivers differ from those of the participants. Organizations invest in executive development to enhance the capabilities of staff, improve coordination, or signal commitment to a particular course of action or creation of a new capability, and here, again, multiple motives may be operating simultaneously.

The ends may be means. We customarily ask, "What do users want?" but far less frequently, "Why do they want it?" In the case of a complex experience good that is a learning and development program, it is essential to examine the value participants attach to the heavily socialized aspect of learning within groups and teams or from "offsite" experiences offered by business schools and other organizations, and the ends being pursued by the organizations that invest in programs that train executives in groups or cohorts or promote greater coordination among executives across hierarchical levels of divisions. We consequently seek insight into the mechanisms by which executive programs' stated and otherwise revealed sources of value for participants and organizations may further other and less clearly discerned objectives.

Our inquiry will shed light on the degree to ***which*** alternative paths to development substitute for one another, as by supporting the pursuit and achievement of similar objectives, and the degree to which they are complementary in reinforcing and interacting with one another to produce desired results.

2.1. Mapping the Sources of User Value for Individual Participants

Participants in executive development programs include, among many others, middle managers contemplating moves within or between organizations or industries, seasoned executives at the CEO-1 (CEO minus one) and CEO-2 levels seeking to acquire skill sets and capabilities that will enable them to take their organizations to the next level of performance, and individuals with solid academic or personal credentials who want to develop specific "business" or "managerial" skills (**Figure 2.1**).

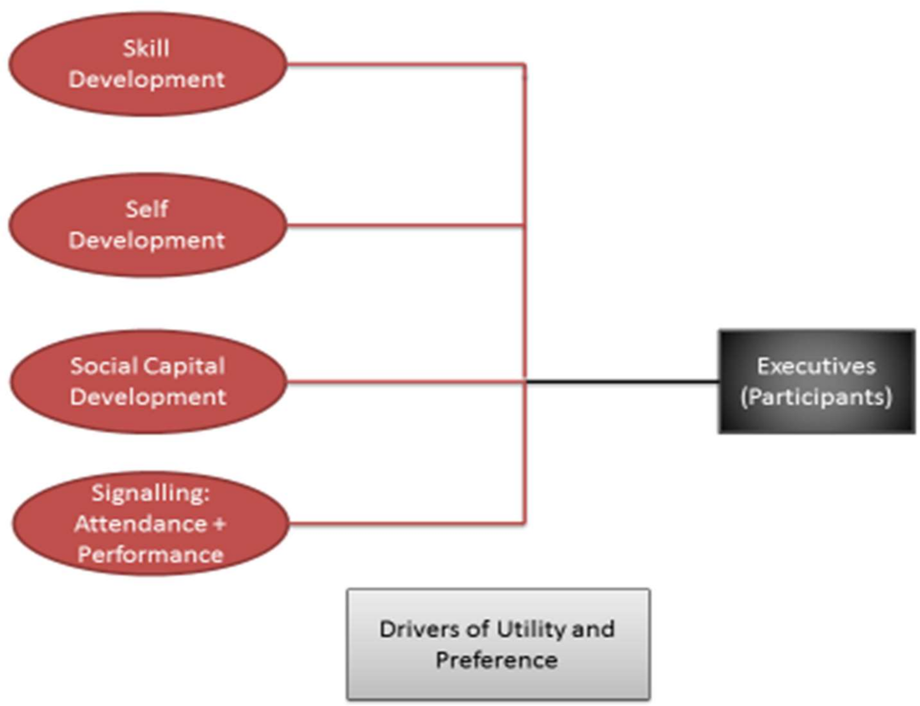

Figure 2.1. Drivers of Utility for Individual Participants in Executive Programs.
(Source: authors.)

Skill Development. *Skill development* is the most obvious starting point in analyzing executive programs' value to participants. We construe skills broadly, to include cognitive and non-cognitive as well as individual and relational skills.

> ***Re-tool.*** Executive program participants value the development of skills that will plausibly contribute to their professional development and career progress within and outside of their organizations. These may include applicable knowledge of new functional domains—such as financial risk management in the Basel 2+ era, cyber-security or digital marketing in the cloud computing environment—as well as skills related specifically to executive tasks, such as defining and structuring strategic, operational, organizational, and interpersonal challenges as solvable problems. Executives must be able to marshal the dialogical and discursive skills required to persuade others through well-structured arguments and challenge and question others' arguments, employ affective and perceptual skills that relate to understanding and shaping the emotional and visceral landscape of dyads, teams, groups, and entire organizations, and invoke X-skills useful in managing and optimizing the intra-personal allocation of time and energy to competing tasks and objectives.
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> Executive program participants range from highly specialized individuals to top management team members, and are distributed throughout the managerial and executive population. Whatever the ends being pursued, whether enhanced ability to manage across knowledge domains and interpersonal styles or the honing and refinement of the executive skill set, a pressing and complex challenge that faces every executive development program is to ensure the transferability of skills from the context of the learning vehicle, be it classroom lecture, case discussion, online material, or small group session, to the context of its application within the organization.
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> ***Re-think.*** Executive programs also provide participants with a valued space in which to refresh their personal skills and abilities, and perhaps discover gaps and opportunities to develop *skills they did not know they were lacking*, as well as to

reflect on the applicability and relevance of new skills and capabilities to personal and organizational problems and scenarios.

Self-Development

Self-development is an important and distinct dimension of value often overlooked or subsumed under "skill development." Surveys and interviews with executive participants, chief learning officers, talent development advisors, and professional development professionals reveal that participants value a **development** outcome and process that is neither tightly nor even causally related to the development of a professional skill or skill set. This source of value is consistent with the long-standing view that the personal transformation associated with leadership development programs operates not only at the levels of knowing (know-what, know-who) and doing (know-how), but also of acting in particular ways towards other people in various settings (know-be-do) (Snook, Khurana, and Nohria, 2011). Several components of the self-development value of executive programs stand out.

Re-frame and rebuild. Participants often value the opportunity to re-frame, re-conceptualize, or reinterpret their own professional and personal lives in ways informed by deep and meaningful alternative life designs or models (Moldoveanu, 2011), often in the company of others who share the same goals, and under the guidance of coaches with significant experience in self-transformation and guided behavioral change. Such self-transformation projects and experiences may *not* be instrumental to the performance of a specific organizational task or function, but be guided instead by an inner quest for greater connectedness, authenticity, integrity, coherence, or presence, or some combination thereof.

Refresh and recharge. "Well-being enhancement" is associated with well-designed executive programs that incorporate aspects that blur the line between wellness retreats and "learning and transformation" gatherings. Executive programs generally interrupt routinized flows of actions, thoughts, feelings, and behaviors that dominate quotidian, professional lives, providing "re-generative space" in which new ways of being can evolve and develop. Participant well-being is presumed to benefit from the interruptive and disruptive forces that attend a personal holiday from the routines of daily life, both work and home.

Observed an executive from ABN AMRO, "For me, the benefits have been the time it has afforded for reflection and the time allowed for role playing and experimentation." "People who have been questioning their career come back refreshed and reenergized," added an executive from an agribusiness company. "They see their purpose and want to do good."

Social Capital Development

Social capital ("know-who") tends to be boosted by participation in development programs that afford opportunities for executives to mingle. Networking is key in an economy in which professionals return to school for *additional* skills and emerge without a job offer. Deputy Dean for one university's School of Continuing Studies, noted that building connections is now a larger part of continuing education. "We aren't able to guarantee a job for every person, but we can guarantee that you will meet people who are succeeding in the field you want to get into, and that's very important," he said. "Among elite schools, executives will always want to have face-to-face programs," remarked associate dean of executive education at another university. "It's the network effect. Global elites want to be here [on campuses]."

Reconnect. The networking value of executive development programs includes both "knowing" and "being known," and is variously observed in the deepening and strengthening of interaction, friendship, trust, collaboration, and informational ties with co-workers and close associates on the job, development of new intra-organizational connections that span divisional, functional, and often cultural and national boundaries, and cultivation of reliable within-industry connections with structurally, hierarchically, or functionally equivalent others.

Such ties can have widely varying instrumental and developmental utility for participants. These could include, for example, pursuing, in the context of a professionally relevant substrate of activities that might include joint participation in case discussions, projects, and group-level exercises, closer relationships with superiors or functional equivalents in order to achieve greater levels of visibility or facilitate cooperation and collaboration with other within-firm groups. Alternatively, connections might be sought with executives elsewhere in the same industry, whether for purposes of expanding the capabilities of the focal business through coordination and collaboration with peer firms or to enhance opportunities for advancement, perhaps in a different organization. Relationships with executives in different industries might be relevant to the future activities of a participant's employer, or to the participant's own future career plans.

Signaling

Economists (since Spence, 1973, 1974) and sociologists (since Simmel, 1923) have argued that the decision to pursue executive development can be understood as a signaling strategy. The decision to invest time in an expensive execution education program signals to the market participants' own information about how competent, talented, and hardworking they are. Useful information about participants is provided by their very admission to a highly selective program, and their performance within and completion of it acknowledged by a *certificate* and transcript, and possibly more textured records of activities and interactions with instructors, facilitators, other participants, and course content including concepts, models, and methods. Program selectivity and status impinge on the value of signaling, which involves two components.

Signaling I—Selection and self-selection. The signaling value of participation in an executive development program is proportional to the cost of the investment (time and money) and the program's inherent selectivity. The dollar cost of programs is typically borne by employers, the investment of time made by participants. Because employers cover the cost of attendance, they often determine employee eligibility. That participants must both qualify for a program and be selected by their organizations effectively doubles the signaling value of participation. Selection value is diminished by high admission rates, even if program costs remain high. Signaling value is greatest for low-admittance, high-price programs.

Signaling II—Certification and credentialing. Certificates and diplomas that acknowledge completion of a sequence of learning or development experiences signal acquisition of a demonstrable skill. This adds currency to participants' personal capital that is quite independent of the signaling value that accrues to having been selected by one's parent organization, and subsequently applied, qualified for, and been admitted to an executive development program. The value of certification as a signal of skill varies with skill set. Cognitive-functional-algorithmic skills are more readily certifiable (even if their applicability to out-of-the-classroom settings is uncertain) owing to their amenability to quantification via exams, tests, and quizzes, non-cognitive, non-algorithmic, and X-factor skills are less so on account of the challenges faced in measuring and speaking about them in a common language system. These latter, however, given their life cycle value (Cunha et al., 2006) and demonstrated interaction with cognitive skills to produce superior individual performance, will be the focus of efforts to formulate reliable measures for them and identify the optimal conditions under which they can be taught, learned, and, most important, transferred in the context of the next wave of executive education programs.

The signaling tokens (e.g., admission, performance, credentialing) bestowed by executive development programs afford participants an opportunity to redefine the skills and capabilities profile they present to their own organizations and to the broader market for organizational talent. A software designer might exploit participation in a leading "agile development" program to rebrand as a development team manager in the Web 2.5 environment, a mortgage-backed securities executive with a set of digital badges attesting to completion of targeted financial risk management training programs as a risk management expert in the post-2008 era. Faced with the diminishing ″half-life″ of organizational membership as well as of the signaling value of degrees, executives are increasingly turning to the nimble, rapidly evolving fabric of certificates, ″micro-“ and “nano-degrees,” and digital badges proffered by executive development programs to re-position their capability set and value within their organizations and to the market. A human resources manager, for example, might signal with such a credential a newly acquired skill set in coaching and leadership development.

The Distribution of Objectives and Sources of Value Among Executives: Three Differences that Make a Difference

The objectives with which participants come to executive development programs, albeit varied, mixed, and multiple, exhibit trends with respect to how they vary with origin (″who they are″), functional expertise (″what they do″), and hierarchical level (″who they manage″). These trends become key “modulators” of the demand characteristics of executive programs worldwide.

> ***“Who they are″—geographical distribution.*** Although the market for executive skill development programs has matured in North America (where they originated) and Europe, demand is rising in growing and emergent economies, in Asia in particular. The difference between the $2.9 billion per annum (2012) Asian companies spend on leadership development and the $10 billion spent annually by North American companies understates actual demand for executive skill development in the ″zero-experience″ sector, in which participants often pay the tuition for programs that provide bridges to the socio-economic, organizational, and cultural landscapes of other (predominantly North American) work environments, and that includes the ″Executive MBA″ market more heavily subsidized by the participants than its North American counterpart.

"What they do"—functional focus and expertise. Participants who seek to develop additional technical-algorithmic-functional skills are interested in the most efficient mode of acquiring, and unambiguously signaling to the market that they have acquired, them. "Risk management," "social media marketing," "real estate lending," "health care logistics," and "the technology and economics of BlockChain and BitCoin" are exemplary of functionally framed certificates that attest to acquisition of a skill base, accretive to existing credentials and certifiable capabilities that afford explicit differentiation in the market for functional skills. Implicit in these skills is a lexicon that enables those who acquire them to decode, to predict their impact on business and the market, events in the field, conversational capital that enables these individuals to speak confidently and competently about the events to others within the organization, and a repertoire of well-defined problems experts in the field are called upon to solve, together with a family of routinized methods for solving them. Participants focused on developing "relational" and "communicative" skill bases will likely attach more value to the self-developmental and self-transformational aspects of executive development programs and expanded opportunities they afford for social capital development and amplification.

"Whom they manage"—career cycle and hierarchical distribution. Discernable in association with the career and hierarchical modulator of executive program demand are three established segments—alongside an emerging fourth segment of participants.

(1) Participants contemplating a first switch to a managerial career, typically two to ten years out of college and unwilling or otherwise unable to apply for and enroll in a Master of Business Administration (MBA) program, are likely to be seeking to develop a set of functional business skills that will enable them to take the next step in their careers, and hence to weigh skill development programs that result in high signaling value certificates and diplomas more heavily than the development of managerial or leadership skills. This bias may

be due to ease with which functional and algorithmic skill acquisition can now be certified. But, it may also be due to imperfect awareness and understanding of the very significant value of non-cognitive, non-algorithmic skills currently labelled as ‘soft’ to the value of a junior manager’s life prospects and personal capital. Participants in this segment also typically attach greater importance to the skill development, certification, and signaling value than to the networking value of executive development programs.

(2) The motives and objectives of mid-level and senior managers with significant (10-15 years) experience in leadership and managerial roles will vary widely, but they will typically attach greater importance to executive programs’ development of specific, critical leadership skills and attendant network and social capital amplification than to the development of specific functional skills and certification value of the programs. As a group, they tend to be far more attuned to the potential to develop ”difficult-to-articulate” skills that will serve them in key managerial roles and value the potential for intra- and inter-organizational expansion of their professional and personal networks.

(3) Senior executives (CEO-1 and CEO-2) typically favor opportunities for self-transformation and reflection afforded by executive development programs, not least because of the dialog and interaction they facilitate among participants at similar life and career stages. The experience, exploratory, and transformational value frequently outweighs the networking, signaling, certification, and functional skill development components of such programs for these individuals.

(4) The growing gap between the skill base possessed by college graduates and that sought by employers, even for entry level positions, and encompassing communicative, relational, and X-skills increasingly recognized to convey significant value added as well as functional skills the acquisition and transfer of which is measurable across contexts, accounts for the emergence of the fourth,

very large, segment of the executive learning market, the *zero-work-experience* group just graduated from college or university and cognizant of the need to tool up with skills not acquired in school. The considerable analyses of the wage distribution of recent graduates, by major and discipline, region, country of origin, and economic sector, sheds limited light on the demand characteristic exhibited by this segment of the executive development market. Early returns from programs delivered in both online (HBX) and in-person settings (Wharton) suggest that the no-experience crowd is specifically focused on precisely the functional and relational skills and network amplification their college experience did not provide.

2.2. Mapping the Sources of Value for Participants' Organizations

An estimated 75%-80% of the cost of executive programs is paid by employer organizations—and that represents a sizable outlay. In 2012, U.S. corporations spent an estimated $13.6 billion on leadership development activities, and the top 600 companies worldwide an estimated $10.2 billion on external providers of leadership development (authors, compiled from Bersin and Associates, 2008-2013). And that spend has grown at 5% per annum over the past 10 years (authors, compiled from Bersin and Associates, 2008-2013). The field of established 'executive development programs' associated with business schools and dedicated organizations stands at about $1.2 billion a year (2015), and the most rapidly growing component of the 'skills on demand landscape' of the $41 billion worldwide learning industry is that for business and executive skills (authors, compiled from Docebo, 2014-2016 and 2017-2021). Moreover, the scope of "leadership development" has also expanded to include value-add activities in which "standard" providers of executive education programs do not engage. "Executive development," according to an executive at a power management company, "encompasses leadership development, succession planning, management tools, and development efforts segregated by executive, management, mid-level, and front-line activities."

As we will see, the sources of value associated with the development of new organizational capabilities, facilitation of communication, coordination, cooperation, and collaboration, and spatio-temporal concentration of the executive development figure very prominently for organizations, even as they do not figure prominently into the objective functions of participants (**Figure 2.3**). Given organizations' significant role in funding and shaping the evolution of executive development, it is important to unpack, with the same level of precision as that employed for individual objectives, executive programs' specifically organizational sources of value.

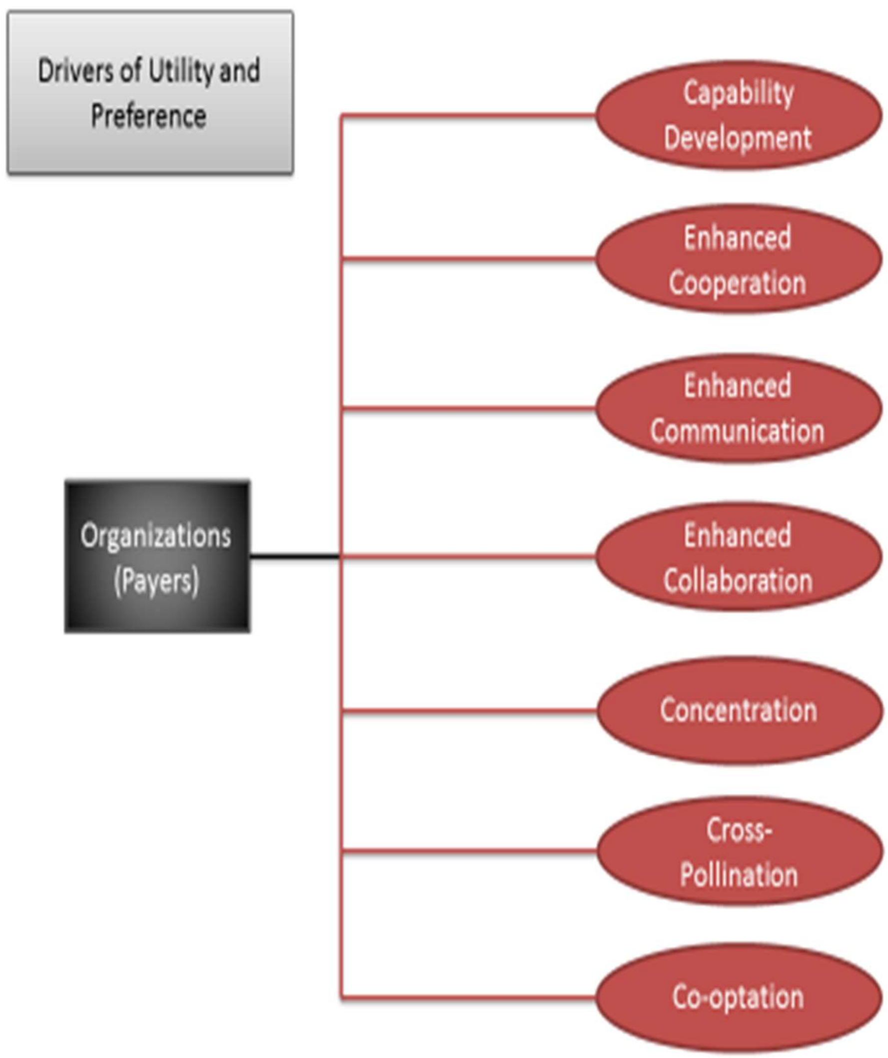

Figure 2.3. Components of Utility and Value Drivers for Participants' Organizations. (Source: authors.)

Capability and competency formation. Among the capabilities and competencies organizations seek to enhance through investment in developing the skill base of executives are strategic and operational agility, absorptive and integrative capacity over new technologies and market segments, cross-cultural integrative collaboration, and strategic innovation. The urgency not only of possessing, but of being able to develop quickly, such capabilities is heightened in the new economic environment. Explained an executive at a large tech company: "We want our leaders to have a broad perspective. Business challenges constantly change, and the ability of people to drive results needs to be constantly developed. In this kind of quickly changing world, we need execution, decision making, leadership, and adaptive learning."

That organizational capabilities are clearly not equivalent to random collections of specific individual skills and capabilities is as evident in old economy businesses like manufacturing (Milgrom and Roberts, 1989) as in the new information-knowledge economy (Garicano, 2000). Organizations depend on ***specific*** managerial and executive skill sets in complicated ways; organizational capability is embodied in specific combinations of collections of technical-functional, affective, and X-skills. The complex nature of the employee skill-organizational capability relationship explains, in part, the high variance in the payoff to organizations of investments in individual skill development. That the dependence of organizational capabilities on some combination of managerial and executive skills is intuitively obvious accounts for the continued emphasis on development programs and activities.

Although there is no single, or even clear, explanatory model that accounts for the dependence of organizational capabilities on the quality of executive, managerial, and employee skills, to turn high-functioning individuals into high-performance groups nevertheless requires a base of functional, technical, and otherwise "algorithmic" skill sets complemented by relational, affective, communicative, ***and*** X-factor skills. That heterogeneity of problem solving skills seems to be correlated with better group-level problem solving performance (Dunbar, 2001; Moldoveanu and Leclerc, 2015) has been demonstrated by analytical models of problem solving with heterogeneous groups of agents (Hong and Page, 2011). All of which suggests not that organizations are not well advised to invest in executive skill development, but that many factors and variables influence the skills to capabilities link, and their interplay becomes even more complex when rapid adaptive shifts in the capability base are required. Explained an executive at a tech manufacturer: "My company's roots are in manufacturing, but we've now added in aligned services. The transformation requires different competencies [. . .]. For example, clients for services require leaders with broader business competencies than purely manufacturing. This kind of change is leading our company to break employees out of their home-grown units for broader exposure, including through executive development programming."

Communication, coordination and the cultural value of connectivity. Joint participation in executive learning programs can help teams, groups, divisions, and organizations develop common language systems including common nomenclature, models, and methods that facilitate coordination. New concepts become focal points in intra-organizational coordination games that replicate a business's culture (Kreps, 1990) and communication (via the creation of a shared *code* of intra-organizational communication) (Arrow, 1974; Bolton and Dewatripont, 1994). The value to organizations of the "conversational capital" developed by executive development programs is therefore separable and separate from that of "capability-development." It can also be realized independently of the development of specific skills in participants: it is possible for one to speak knowledgeably about credit default swaps, Gaussian copulas and Ito processes as models the time series of stock processes without being able to explain these terms to the satisfaction of a professional risk manager, or to make use of the models and methods normally associated with their usage. Coordination and communication can thus be viewed more broadly as a core set of organizational competencies that facilitate a wide range of more specific capabilities requiring efficient and reliable communication and effective and fault-tolerant coordination.

Cooperation and collaboration. The value of facilitating connectivity among intra-organizational participants in executive programs transcends that of reducing the cost of communication and collaboration and enhancing the expressivity and applicability of face-to-face and electronic conversation. Experiential, feedback intensive, problem-solving oriented development programs help participants develop an *esprit de corps* based on a deeper understanding of *who*, *how,* ***and*** *when to trust*, and more reliable estimates of others' integrity and competence (Moldoveanu and Baum, 2014)—essential to the instantiation of the well-functioning 'collective mind' that high performing organizations strive for. Organizations leverage the trust-building effect of enhanced connectivity to boost the efficiency and effectiveness of cooperation (based on greater trust in integrity) and collaboration (based on greater trust in integrity and competence). Mentoring relationships emerge consequent to same-organization executives at different hierarchical levels co-participating in executive programs. As an executive at Samsung explained: "Our company is still relatively young [. . .]. Lots of new people are coming from fast-moving consumer goods sectors, with their own strong cultures, and need to learn ours. The company emphasizes relationships to navigate the company, and mentoring helps. Top leaders spend more time on culture in development, which can then trickle down."

Concentration: the value of localized intervention. Executive development and learning occurs "all the time" in organizations, through coaching, mentoring, dispensing of informal advice, and annual and monthly task- and behavior-related individualized feedback in dyads, teams, and groups. Targeted, localized executive learning interventions and development programs ***enable*** organizations to *concentrate* their learning and development activities in a four-dimensional framework (space, time, people, skills) so as to more easily track, measure, observe, and shape the leadership development process. Concentration optimizes development efforts in order to maximize their impact and the observability of outcomes. Concentration of developmental activity becomes extremely important when an organization needs to produce a new skill or capability base "on demand" as a result of a rapid shift in strategic focus or market conditions. Observed an executive at a chemical company: "There are evergreen needs, what we expect of company leaders at every level, a base set of skills and values. Then there is the more dynamic set that is aligned to the current business strategy, and that changes fairly quickly. These things have to be developed fast, changed fast, and not fallen in love with. Boards are asking for a refresh around strategy every three years."

Co-optation. Executive development programs' signaling and perquisite values function as talent management and retention tools and mechanisms. Through choices of *who attends*, *what they attend*, and *who pays for what*, organizations shape executive, managerial, and employee incentives including those that affect individuals' decisions to stay or leave, and at the same time extract ***organizational*** value (such as capability development and collaborative capital) in excess of what could be expected from providing only pecuniary or purely personal perquisites. Observed an executive in a foreign government agency: "External training is used as a retention tool, as we are lower paid than other parts of the civil service." Added an executive from Japanese e-retailer Rakuten, "Japanese companies have often used exec ed programs as a reward for work well done," and an executive from a European bank noted, "Going to an external program is also a viable alternative to higher pay, both because it broadens your skill set, but also because EU banking compensation is not going to rise any further in the near term."

Cross-pollination. Inasmuch as ***executive*** education program participants learn from each other as much as from content, instructors, coaches, facilitators, and context, the cross-organization and cross-industry learning and skill transfer components of such programs serve to inform sponsoring employers about broader "best practices," "good routines," and "great ideas." Observed an executive in a Japanese conglomerate: "We are not so familiar with the competitive/harsh discussion/debate in Western corporate decision making. We send executives . . . abroad or create a similar program in Japan in order to immerse them in such an environment." Added an executive from Baosteel: "We have one three-year training program aimed at encouraging those on our succession list to be more entrepreneurial. We send them to visit private sector Chinese companies over the course of three years. Those people improved quite a lot; most are now leaders of the subsidiaries."

Distribution of Sources of Value Among Organizations: **Three Differences that Make a Difference**

Organizations that invest, like the individuals who participate, in executive and leadership development programs can also be ***segmented*** according to what they value and why, using a set of distinctions perhaps less obvious than, but equally as useful as, those of demographics, career and life stage, and geography.

Organizational mindset: talent as a cost versus talent as an asset. Whereas "human capital" shows up as a cost ("headcount") on accounting measures of organizational performance, "talent" is proclaimed by leading organizations to be their most important asset, the key to further and future innovation, differentiation, profitability, and survival. These two interpretations are simultaneously at play in most organizations, and patterns of investment and promotion that favor one over the other, and consequently determine the mindset with which the development of employees, managers, and executives is approached, serve as a basis for differentiation.

"Talent-as-an-asset"-minded organizations, being inclined to emphasize the proactive development of managerial and leadership skills and organizational capabilities, are likely to make investments that highlight the skill/capability development and collaborative capital enhancement dimensions of the typical organizational objective function, and therefore favor programs high in the demonstrable self-development of participants and development and transfer of applicable skills to their work environments. "Talent-as-a-cost"-minded organizations, tending to favor the coordination-communication cost reduction and cooptation components of the organizational objective function, will likely favor programs that are not very different from organizational events and retreats—social lubricant injections that decrease communication and coordination costs within the organization. Both mindsets seem to function like a Kuhnian "paradigm" (Kuhn, 1962), wherein a scientific theory is true or valid within the boundaries of theoretical constructs and experimental and validation practices of the discipline that "speaks its language." An executive at a multinational CPG, echoing Henry Ford's "whether you believe you can or you believe you cannot, you are right!" remarked: "If you believe in it, you invest in it. If you don't, you don't. And all the measurement stuff in the world can't justify what we invest in."

Organizational structure: centralized versus decentralized talent development processes. Organizations are differentiated on the basis of the degree to which their talent management processes and functions are centralized, as measured by the degree of concentration of decision rights (initiation, ratification, implementation) related to the development of their managerial and executive talent base.

Organizations with highly centralized processes and functions tend to favor executive development programs that aim to develop and transfer identifiable and measurable skills and capabilities (which represent "deliverables" in the year-end reports of chief learning officers, chief operating officers, and vice presidents and directors of human resources departments) and that decrease communication and coordination costs within the organization by reaching broad constituencies of employees. An Asian oil and gas company's centralized approach to rotation for development was explained by one of its executives as follows: "Our People Development Committee (PDC) comprises members of the senior leadership who meet periodically to discuss mass talent mobilization. For top talent, this function is performed by the Talent Council, which is similar to the PDC but includes more senior members. They look at the list of top talent and assess them on their leadership competencies and other criteria including their performance and verbal feedback from their reports. It's a combination of many factors. The Talent Council then matches top talent to available locations for assignment."

One would expect organizations with decentralized talent development processes and functions to defer specific objective functions to their divisions, subsidiaries, and teams, which may vary according to differing degrees of intra-divisional centralization of development-related decisions.

Organizational practice: formal versus informal talent development processes. Organizations are also differentiated on the basis of the formality of their executive and leadership development functions and talent management functions more generally. Relatively formal talent development processes are reflected in internal corporate universities awarding of certificates that attest to certifiable levels of expertise in particular skills and domains and the development of intra-organizational "knowledge" (in the sense of Garicano, 2000) or "skill" hierarchies that track executives' individual internally or externally achieved degrees of certification. Such organizations are likely to value the certification and certifiable skill level achievement dimension of executive development and learning programs. Grainger's process was explained by one of its executives: "When I get assigned to a VP, my job is to collect information on their performance, summarize it on one sheet, share insights and feedback received with the executive team, and then sit down with that person to discuss. Out of this process, we identify additional development required, including intense programs, like programs offered at Harvard, or EMBA programs, etc. Out of those reviews we also decide who will participate in Harvard programs. We also exchange ideas with leaders on what else they can do to improve competence and capability for current and future roles."

Integration of executive training and education with a business's strategic and operational goals can amplify the formal aspects of the talent development organization. How this emerging feature plays out was explained by an executive at an agribusiness company thus: "It was very simple in the past. I go to the president of the company, talk about the needs across the business, and he gives me a budget. We agree that we keep the budget in his office so that money isn't redirected when we're under stress in the business. That's worked very well. Now we're integrating the budget more into long-range planning. For high potentials, I see us continuing to fund through the president. But we're thinking about a system of chargebacks to business, having them fund our work through an allocation process."

2.3. When Participants' and Buyers' Objectives Diverge: How the Digital Vortex Is about to Wreak Disruption

Executives and organizations value learning and development programs differently (**Figure 2.4**). Apparent similarities mask divergent motives and incentives that the forces of disaggregation are likely to uncover and render transparent.

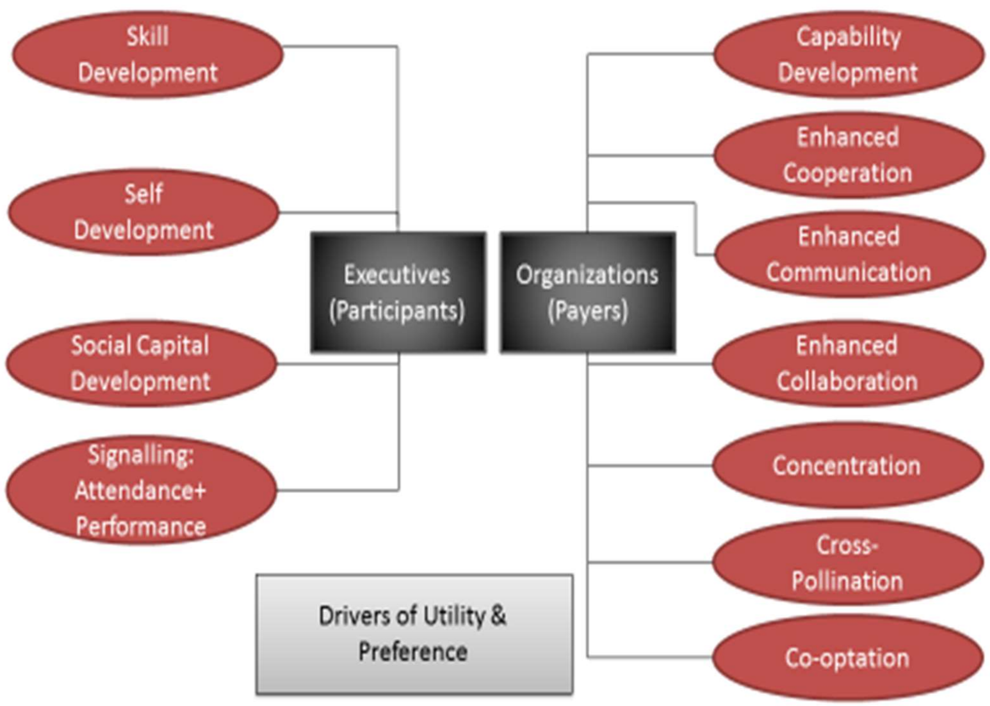

Figure 2.4. Summary of executive programs' sources of value and demand drivers for executive participants and their organizations. (Source: authors.)

For example, organizations and individuals both value targeted interventions and learning experiences that develop skills; individuals value those that enhance career-long prospects within their organizations, industries, and beyond; organizations value those specific to organizational objectives and that can optimally be combined and synthesized into organizational *capabilities*. Similarly, individuals and organizations both value self-transformation and ″well-being enhancement″; individuals—the transformational and restorative dimensions of such programs; organizations as modes of cooptation and concentration of the executive development process or as a means by which teams can develop the collaborative capital required to solve specific problems.

Development of greater levels of connectivity is also mutually valued. So, too, the formation of intra-organizational networks with densely connected topologies that optimize communication and coordination costs and build collaborative capital that helps both individuals and organizations pursue objectives more efficiently. Individuals, however, often value more specifically the development of personal networks beyond the boundaries of the organization, and even its industry, that boost immediate and more distant career advancement prospects, and whereas organizations and individuals may both value the cross-pollination value of executive programs as "memetic" sources of new organizational routines, technologies, and ideas, individuals may additionally value interactions with executives in other organizations and industries as sources of additional options in the market for talent.

The signaling and certification aspects of executive development programs are also valued by both organizations and individual executive participants, albeit significantly more "sharply peaked" for individual participants seeking to enhance resumes and credential bases.

What Happens When Executive Programs Enter the Digital Vortex?

The "market-based solution concept" for coupled and potentially competing objectives and incentives of users and payers is simple enough: *apportion the cost of programs to individuals and their organizations in ways* that *mirror what is valued by each*. That is to say, require that the costs of programs that emphasize individual (personal network expansion, self-exploratory self-development, individual skill development, individual signaling) over organizational (individual skills the transfer of which measurably augments organizational capabilities, development of collaborative capital) value be borne by participants.

What has kept organizations from adopting this rational expectations equilibrium to date is that the sources of value for individuals and organizations are typically *bundled, intermediated,* and *coupled* in executive development programs. A program offered by a top-ranking business school offers a hard-to-separate mix of personal skill development, organizational capability formation, personal network amplification, and collaborative capital, all or mostly paid for by the organization. Business schools aggregate a variety of learning vehicles (modules, courses, classes, content) that often couple different sources of value (development of conversational capital and of a high level dialogical skill) and intermediate between instructors (faculty members) and participants.

Enter now *disaggregation, decoupling,* and *disintermediation*, the trio of forces responsible for digital disruption precipitated by the informational and computational "tectonic shifts" of the past decade and culture of sharing, transacting, collaborating, and learning enabled thereby. Exponentially lower and ever decreasing search costs, ubiquitous access to broadband links and learning management systems that form an evolving "personal learning cloud," executive reputation tracking platforms that track with great precision individuals' value to the organizations that employ them (e.g., SalesForce.com), and the "quasi-free agency" of instructors, trainers, and business school faculty members who can deliver content through various platforms collectively afford *organizations the option of paying only for what they value*, leaving *individuals to pay for that which they value*.

Organizations can design skill development programs that solve the "*far transfer of skill problem*" as they are delivered internally and simultaneously at the level of groups and teams, the proper locus and unit of analysis for "capability" development. Cooptation and concentration value can be maximized by making such programs selective with respect to who is admitted and predictive of promotion and advancement. Organizations can leverage the wide base of freelance executive mentors, coaches, and instructors and evolving personal learning cloud to reduce the cost of executive development offerings. The forces that drive the digital vortex figure prominently in delivering the market solution to the "mixed motives" and "multidimensional value drivers" problems. The divergence in the objectives of users and payers positions the industry for immediate disruption simply on the basis of presenting payers an unbundled menu of easily searchable options, thereby reducing the bargaining power of aggregators and intermediators. How this is likely to come about can be shown by unpacking the effects of each of the three forces of the digital vortex.

Disaggregation. The rapid disaggregation, or unbundling, of different components of executive development programs is enabled by the ubiquity of information regarding the quality of instructors and offerings in any one program, or offered by any one provider, and the specific 'feel' of the learning experience. Disaggregation can proceed by program module, type of experience and instructor, and modality of teaching and learning, effectively serving up executive development *à la carte* (allowing participants and organizations to choose individual program components that maximize their specific objectives, be they networking, individual skill development, organizational capability formation, signaling, or collaborative capital enhancement), and often *on demand*.

Business schools, talent development organizations, and large scale consultancies currently offer programs composed of *bundles* of lecture-based presentations, case discussions, and opportunities for high quality interaction that seeds network formation and facilitates learning, attended by signaling value proportional to cost and selectivity. Such programs offer organizations the ***promise*** of relevant knowledge and skill acquisition and transfer on the basis of the latest research and understanding of best practices within and across industries. Profitability is driven by providers' ability to bundle into high-price/cost-margin offerings low-cost content and experiences (e.g., re-packaged lectures and case discussions from MBA and undergraduate business programs) and carefully selected high-delivery-cost units (personalized coaching, project-based learning, feedback-intensive group sessions). A disaggregated, marginal-added-value-based regime unbundles low-cost, commodified components (lectures and teaching note-scripted case discussions, quizzes, tests, and problem sets related to the measurement of functional skill acquisition), leaving participants and organizations to select only the highest value-added components of the programs in which they choose to invest.

Disaggregation teases apart participant-level and organization-level value-added component and modules that are intertwined by current program designs. Some are designed to maximize collaborative capital within the executive team of the organization. Some are designed to equip individual participants with skills that are organization- and industry-specific. Some will specifically maximize the social networking opportunities of executives within or even outside the industry of the sponsoring organization. A disaggregated environment makes it possible for organizations to specifically measure the outcomes and sources of value of each component of an executive development program, and to select only those components that maximize the organization's specific development objectives. Disaggregation is thus valuable to organizations to get to weigh executive development projects that contribute to the organization's capability base more heavily in their funding decisions—which is something they value. As one executive with an apparel brand's umbrella company: "We must separate the benefit of learning to the individual from what will benefit the firm in the short and long term. Today's culture at large is less forgiving of missteps that are valuable development experiences."

Constituent sources of value that were previously difficult to formulate, articulate, or measure are rendered visible, observable, and, to an ever greater extent, measurable by disaggregated regimes. For example, enhanced *collaborative capability* across teams, groups, and functions consequent to executives' participation in development programs, constitutes a significant source of value to organizations. The value of collaborative capital cannot be fully substituted by enhanced means and platforms for interpersonal and group communication and coordination, nor greater levels of spontaneous sociability and cooperativeness induced by broader connectivity and interpersonal access. Simply put, collaboration is not just ubiquitous interpersonal access, frequent communication, and a set of entrenched norms of cooperation. There is a hard-to-quantify quantity of fluidity and interpersonal "presence" in highly collaborative interactions that are recognizable *ex post* but difficult to describe or prescribe *ex ante*. "Difficult" does not mean "impossible," however, and the disaggregated landscape of executive program offerings increases the stakes for executive programs to show precisely *how* they create collaborative capital. Executive programs that claim to transform individual skill upgrades into the collaborative capital associated with upgraded organizational capabilities are facing significant pressure to differentiate and demonstrate value added in excess of what can be imparted to an organization of motivated people by a collection of good communication and joint ideation platforms.

De-coupling. De-coupling distills into their constituent value-bearing fragments the components (lectures, tests, presentations, case discussions, workshops, feedback sessions) unbundled by disaggregation. A classroom lecture discussion, a standard feature of programs run by business schools in custom as well as open enrollment settings, can be de-coupled, for example, into a "transmission" component, the presentation itself, and a "feedback-deliberation" component that serves to clarify and deepen, through a process of public dialog, participants' understanding of the content presented. The *transmission* component can be replicated at negligible marginal cost in distributed learning environments with the added advantage of enabling participants to slow down and replay content that at first seemed unclear, and even pre-structure the discussion component by aggregating, classifying, and ranking participants' queries, questions, challenges, objections, and rebuttals in advance of a far more focused and higher value-added in-person, or Zoom/Skype/Hangout-mediated, discussion. Decoupling, in intensifying the disaggregation effects of the disruptive socio-technical shift enabled by Web 2.0 and amplified by the VUCA economy, supports ever finer distinctions among, and refined choices of, specific aspects of learning interaction that maximize the objectives of individuals and organizations.

De-coupling also separates the previously coupled enhancements of individual participants' know-what/know-how/know-who "personal capital." The already limited value of executive programs as sources and certifiers of “factual information” and “conceptual knowledge” will become negligible in the era of searchable professional level data and knowledge ***bases***, and modes of exposition that range from video to text to graphics to symbolic entities like structural, functional, and causal models and their associated imagery. The “know-how” associated with using information and knowledge in context-sensitive situations is more difficult to develop, requiring careful and sensitive matching of knowledge with behavior and context. For example, Lynda.com and other platforms have widely popularized short, ”how-to” modules on activities ranging from video editing to integrated circuit construction and from cooking to writing professional resumes and emails. The expanded interactivity, reach, and vividness of the latest learning media have substantially reduced the cost of *know-how development* for many and perhaps even most skills. The cost has come down especially for developing skills that improve the performance of tasks that are in some sense algorithmic. Moreover, as evidenced by the density and richness of interpersonal interaction on platforms ranging from LinkedIn to Facebook, personal social capital development need not depend exclusively, or even mostly, on co-membership in exclusive residential programs.

Disintermediation. The proliferation of organizational and technological forms by which executive development can presently be promulgated and the ability to “pre-experience” learning environments and view outcome and process measures before committing to participate enables individuals and organizations to distinguish among executive development providers on the basis of the quality of the experience provided. Consultancies and business schools are “intermediaries” between the ultimate experience provider (the partner, client services team, or professor or other academic) and end-user (the participant and organization).

The many ways instructors can provide developmental experiences to executives and organizations (consulting engagements, online content development, proprietary platforms, and interactive programs that generate revenue streams shared with universities in the manner of patent and invention royalties, that is, on a 15% rather than 50% revenue share basis) in combination with distributed, low cost ways of experiencing the presence and competence of these providers, in fostering direct links between end-user and primary provider, is removing much of the bargaining power and added value of *all but the intermediators with the very highest status and reach*.

Because **signaling with certificates is easier than certifying the signals**, the signaling value of executive programs is significantly challenged by the rapid proliferation of certificate types and denominations. Whether dispensed online and by universities, consultancies, and corporate universities, records of participation, performance, achievement, and completion, the ”data trail” produced as participants transition through various programs, is now sufficiently dense and textured to allow inquiry and tracking of individual contributions at the level of class, session, and even individual outputs, thereby diminishing the signaling value of participation in, or completion of, any one program or the programs of any one provider. As the citation index of scientific journals matters far less in an era in which individual paper's citations can be tracked, so the ability to track individual participants' contributions to every interaction diminishes the signaling value of any one program.

At the level of individual signaling, the value of ”certified by Duke”–type credentials is replaced in a disintermediated regime by either a small group of “super-aggregators” (such as Coursera, EDX, Udacity on the platform, and perhaps HBS, IMD, and McKinsey on the provider, side), or by a large fabric of participant-and-program-specific digital badges and certificates of completion that attest to specific skills developed, and feature detailed information on participant performance on tests, quizzes, and other learning outcome measurement instruments.

As dramatic as the effects of these factors on the current landscape of executive development programs by virtue of undoing cross-subsidization effects and re-setting the foundations of competition is their impact with respect to affording organizations and individuals the means to re-consider and re-conceptualize the value of participating in *any* organized executive development offerings. As networking platforms and interfaces achieve levels of transparency and access previously available only to small and privileged groups and elites, classroom learning of all types is increasingly democratized by the availability of on-demand content, and the signaling and certification value of various programs is further scrutinized and unbundled, executive development programs are retreating to their mission and source of value-added, that being the development of useful and relevant individual skills and organizational capabilities absent which the auxiliary signaling and networking value of co-participation would not exist.

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