PUBLIC OR PRIVATE BY GENETICS OR DESIGN?

A CASE STUDY OF ORGANIZATIONAL DESIGN DECISIONS FOR NEW PUBLIC VENTURES

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ABSTRACT

When a new enterprise is born, how can an entrepreneur or intrapreneur decide how public or private the new enterprise should be? Should the publicness or privateness of a new enterprise be based upon genetics, i.e. replicate the publicness of the parent organization, or decided by design? As differences between public and private firms are blurred, entrepreneurs and intrapreneurs need to consider how public or private their new enterprise will be. This case study illustrates the tendency to replicate the publicness of the parent firm, which may not provide the right source of funding, ownership, control or other structures, such as board membership. This article provides propositions and a methodology to guide four major public versus private organizational decisions and establishes a future research agenda.

INTRODUCTION

At any given time, more than 10 million Americans are in the process of starting businesses (Ewing and Marion Kauffman Foundation Website, 2005). Entrepreneurship plays a key role in economic growth, both in the United States and in other countries. Entrepreneurship helps accelerate the generation, development and commercialization of innovative ideas (Styles and Seymour, 2006). Entrepreneurship creates wealth for individuals and for society as a whole (Kropp, Lindsay, and Shoham, 2006). Entrepreneurial behavior exists in a wide variety of organizations ranging from small start-up ventures to larger established corporations (Knight and Cavusgil, 1996) and public entities (Lewis and Zolin, 2004).

Enterprise development, the birth of new ventures, also occurs in both governmental and non-governmental agencies (Lewis and Zolin, 2004). The birth of new public enterprises leads to a series of interesting questions. When a new enterprise is born, how can an entrepreneur or intrapreneur decide how public or private the new enterprise should be? Should the *publicness* or *privateness* of a new enterprise be based upon genetics, i.e. replicate the *publicness* of the parent organization, or decided by design? *Publicness* is defined as the extent to which public authority influences how organizations act (Nutt, 1992) we use *privateness* to refer to the extent that the organization is owned and managed by private interests. People often stick with what they know but it may not be best for a new enterprise to have the same degree of *publicness* or *privateness* as the parent organization.

An example of a new public enterprise is the Naval Air Systems Command's (NAVAIR) new Enterprise AIRSpeed Program Office (2006). The AIRSpeed Program Office provides training and other services to NAVAIR's aircraft maintenance operations to help them implement the new logistics concepts of Lean, Six Sigma and the Theory of Constraints. This enterprise is operated as a government bureau, with public funding, ownership and control. While this may be the best choice for this enterprise, were other options considered at its inception? This article asks the research question: if *publicness* is a matter of design, what criteria can be used to guide this decision?

To answer this question, this article explores different aspects of public goods and provides a framework for estimating the Need For Publicness in the organizational design decisions of the new enterprise. A case study of the Homeland Security Digital Library, a new enterprise born in the public sector, is used to illustrate those decisions. Propositions are offered to guide the development of new public or private enterprises and provide the basis for future research.

THE BIRTH OF NEW ENTERPRISES IN THE PUBLIC AND PRIVATE SECTORS

The activity of creating new ventures occurs in the public sector as well as in the private sector (Pinchot and Pelham, 1999, Roberts and King, 1996). Pinchot (1985) expanded the concept of entrepreneurship to include larger organizations. We propose that corporate entrepreneurship, also known as intrapreneurship, is also appropriate to the government sector. We further propose that environmental or contextual changes will promulgate governmental agencies to create new enterprises or entities. A key question of this article is what form should these new enterprises or entities take? As we show in our case study, the change from the Cold War to the War on Terror promulgated the U.S. President to create the Department of Homeland Security in 2003. In response to this move the Naval Postgraduate School's Dudley Knox Library created the Homeland Security Digital Library (HSDL) to provide access to documents and references for their students and faculty. We use the HSDL to illustrate the public and private organizational design decisions facing public entrepreneurs.

New technology developments can also be the impetus for new government initiatives. Responding to the need for a network-based information services that could be available to all Navy and Marine military activities in a single enterprise-wide network, a new public enterprise, the Navy-Marine Corps Intranet (2006) (NMCI) was created. Thus NMCI is a new venture based upon high-tech innovation, similar to the many new high-tech ventures that arose during the "Dot Com" boom, except that NMCI was designed to be a public operation.

THE PUBLIC TO PRIVATE CONTINUUM

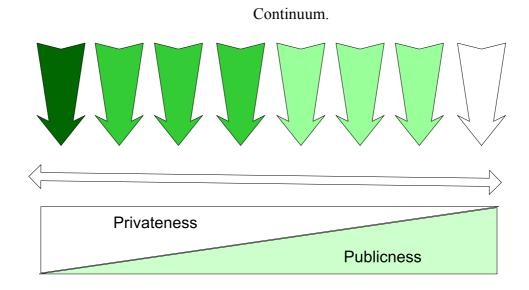
In the study of organizations, a distinction has been made between public and private organizations, where private organizations are enterprises that produce a product for the profit of the owners (Pindyck and Rubinfeld, 2005). As a counterpoint to viewing public and private as dichotomous categories, researchers are identifying an increasing number of distinctions that influence an organization's *publicness* or *privateness*. *Publicness* represents the degree to which public authority influences how organizations act (Nutt, 1992). Perry and Rainey (1988, as reproduced in Koppell 2003, p. 10) use ownership, funding, and control to sort organizations into eight categories.

Public ownership means that a governmental entity, as opposed to an individual or group of investors owns the assets and decision rights to the enterprise. Public funding indicates that public funds are used to pay for goods and/or services. In a publicly funded organization the budget is typically allocated by higher levels within the organization and could be based upon political decision making processes. A privately funded organization typically receives funding through market exchange with customers. Public control, or polyarchy, means that the government is the primary decision maker, both in terms of day-to-day decisions and longer-term decisions. A key example of public control is whether the government will rescue an organization from demise or allow it to live or die based upon its market performance, which is an example of private control. In contrast private control means that the stakeholders and market decide on the future, or otherwise, of the organization.

The eight categories, from bureau to private enterprise, created by differences in funding, ownership and control, are not sufficient to describe the differences in publicness and privateness between organizations. Rainey and Bozeman (2000) contend that all organizations have some level of publicness. Lewis and Zolin (2005) proposed a Public to Private Continuum, which ranks organizations from public to private based upon Perry and Rainey's three factors --- public vs. private ownership, public vs. private funding, and type of control plus the extent to which the organization uses a board as a proxy for market interactions. Lewis and Zolin (2005) suggest that the Public to Private Continuum can be extended to include other factors that differentiate public and private organizations, such as the use of a board membership to represent customers groups as a proxy for market interactions.

In this article we use features of the good provided and the organizational environment to estimate the Need For Publicness in the new organization. For example, the military can be classified as high in a need for publicness and a fast food chain can be classified as low in a need for publicness, but what about the organizations inbetween? The balance between the Need For Publicness and the Need For Privateness can be used to place the organization on the Public to Private Continuum (See figure 1). To the extent that a good has a Need for Privateness, it should choose options to the left side of the continuum. Organizations that have a higher need for publicness should choose organizational design options to the right of the continuum. The following section introduces the case study of the Homeland Security Digital Library, and uses it to illustrate this approach.

Figure 1: Need for Privateness and Need for Publicness on the Public to Private



BIRTH OF THE HOMELAND SECURITY DIGITAL LIBRARY

In 2003, the newly formed DHS provided funding to Naval Postgaduate School's Center for Homeland Defense and Security and Dudlen Knox Library to develop and maintain a digital library for students, faculty and alumni of the NPS Master's program in Homeland Security. A research project team at the library developed the Homeland Security Digital Library, which by 2004 included a repository of over 20,000 documents with metadata, a search engine and taxonomy to facilitate searching and browsing, as well as a convenient graphical user interface.

The HSDL quickly proved to be a valuable tool for the faculty and students of the Center for Homeland Defense and Security. Accordingly, in 2005, DHS asked NPS to rapidly deploy access to HSDL to Department of Homeland Security (DHS) employees and other groups of potential users, such as those in other federal agencies and in state and local governments, comprising a total of approximately 180,000 people. In addition, DHS wanted other individuals and organizations, such as the newly designated Homeland Centers for Excellence at various universities, who were quickly adding homeland security related content to their programs and courses, to have access to the HSDL services.

Although the HSDL proved extremely successful for several hundred students, faculty and alumni at NPS, a number of issues had to be addressed if HSDL were to scale up the operation to serve over 180,000 users. The research team that built HSDL was insufficient for this volume of widespread use. This meant that that HSDL had to change from an informal research project to an organization with long term goals, strategies and organization structure.

The management of the HSDL initiated a research project to investigate alternative funding models. A key consideration was the decision as to whether to seek funding

solely from government, or also from private sources. The other public versus private decisions of ownership and control were not recognized at this time as necessary decisions. It seemed to be a foregone conclusion that HSDL would remain under government ownership with polyarchy control. In terms of the Perry and Rainey classification, the HSDL management only considered whether the organization should be a Bureau (public funding, ownership and control) or Government corporation (private funding with public ownership and control). Other options in the Perry and Rainey classification, involving private ownership or market control, were not considered. The Naval Postgraduate School's Dudley Know Library and Center for Homeland Defense and Security were both public organizations, which relied upon government funding to fulfill their mission, for example the funding from DHS which enabled the development of the HSDL. Having been funded by DHS for the use of students and faculty, there was a strong tendency for HSDL management to think in terms of a public, rather than a private organization. Similarly, extensions to the Perry and Rainey (1988) classification system, such as establishing a Board of Directors to represent the constituent groups, did not appear to be considered. The study into funding models was expanded in scope to allow the managers of the HSDL to explore other organizational issues, including private ownership, control and board membership that may be needed to expand the availability of HSDL within the U.S. government and beyond.

JOINTNESS OF CONSUMPTION: OPPORTUNITY FOR PUBLICNESS

Differences between public and private organization can be traced back to the type of good the organization provides. Although there are many possible definitions of public goods, we use the Carlton and Perloff (1994) conceptualization as goods, which, if they are provided to one person, can be automatically made available to others. The concept of joint consumption means that once a good is provided for one user it can be used simultaneously by many users with little or no reduction in quality. For example, with the HSDL, once the documents have been gathered and coded and an interface provided the service can be used by many with relatively little extra cost. In contrast individual consumption means that the goods can only be used by one person at a time, which means the marginal cost is about the same for each extra user. Joint consumption implies that once the high fixed costs have been paid, the direct or variable cost per user is relatively small.

Therefore, the extent that a good is capable of joint use increases the attractiveness of public funding. Although jointness of consumption can make public delivery of a good attractive, it is neither a necessary or sufficient condition for public funding, and joint use is unlikely to influence public ownership or control. Thus we propose:

P1a: If the good has jointness of consumption, the new venture should consider public funding.

P1b: If the good does not have jointness of consumption, the new venture should consider private funding.

Digital libraries have a degree of jointness in consumption. Once the digital library interface and content are created for a particular user group, the library can serve a certain number of simultaneous users based upon hardware and software capacities with minimal additional costs. While this was the case with the HSDL services, there were some direct expenses that could be attributed to the number of users. For example, increasing the number of users, while maintaining the level of guaranteed service, increased the number of servers needed, which increased the number of software licenses required and added to the number of technical and user support staff needed. Another consideration for the government in the decision whether to privatize HSDL might be the comparative cost of HSDL services, should HSDL be privitized. By comparison, other commercial Homeland Security and Terrorism databases cost from \$6,000 to \$9,600 per year per site. At this rate DHS could have paid many times more for commercial databases compared to the cost of HSDL.

EXCLUSION: OPPORTUNITY FOR PRIVATENESS

A more important distinction between public and private goods is exclusion, whether the provider of the good can exclude users from using or owning the good (Henry, 1989). Most private goods allow the seller to exclude someone from using the good until they pay for it. With public goods this may not be possible. Public goods typically have joint consumption without the ability for exclusion, which means that exclusion of some from use of the good is unfeasible (Savas, 2000). For example, if the government spends money to protect the environment, all citizens and visitors will be able to eniov cleaner air and water. This positive externality, or spillover effect, means that the provider of the good cannot limit the enjoyment of the good to those who pay for it. Therefore the good must be provided to everyone, however, someone will have to pay for it. Since individuals and companies typically cannot afford to benefit others free of charge, funding a good for which exclusions are not feasible is only likely by a government, philanthropic or Not-For-Profit (NFP) organization. For example, NFP firms like Greenpeace work to protect the environment for all, although they do not charge for their services. The ability to exclude some from the benefits enjoyed is a necessary condition for a private funding, but not sufficient. Therefore,

P2a: If the exclusion is unfeasible, the new venture should seek public or philanthropic funding options

P2b: If the exclusion is feasible, the new venture should consider private funding options or a hybrid funding strategy.

Exclusion from use of the HSDL services is feasible; since users can be required to use a password to login. This puts HSDL in the category of a "Toll Good," like cable television, or the requirement to pay a fee for borrowing privileges. Since Toll Goods have joint use and exclusion is possible, they can form natural monopolies, for example electric power and water supply. As the government can choose who will have access to HSDL services and consequently can choose to use either public or private funding. This means that a hybrid strategy is possible, in which some users are charged (private

funding) and some are not (public funding). Therefore, since exclusion is possible HSDL can consider both public and private funding options (See Appendix Table 1).

ESSENTIAL GOODS: THE NEED FOR PUBLICNESS

Essential goods are goods that a society considers necessary. Individuals and subgroups within a society frequently disagree about where a particular good may fall in that continuum from essential goods to non-essential goods. Essential goods or services typically include those that directly relate to public safety and well-being, for example fire-fighting. or reasons such as safety, security or international obligations the provision of these goods must remain the responsibility of the government. Non-essential goods can be considered desirable and beneficial to the public, like a museum or the opera. Though it would represent a loss, society can live without these goods or services.

Organizations delivering essential goods are typically funded, owned or at least controlled by the government. For example, air navigation services (ANS) are necessary for safe air travel and international agreements and conventions require governments to ensure their provision. Although ANS are publicly funded, owned and controlled through the FAA in the United States, ANS may be paid for by the consumer and provided by private corporations, as done in the U.K. Nevertheless, even in the UK the government maintains the right to control ANS and has provided support to avoid bankruptcy of the private ANS provider during difficult times.

For the purposes of our analysis we extend the concept of essential good and propose that some goods, while not essential for public safety, are considered necessary, such as health, education or welfare services. Which goods are considered necessary and the extent that they are considered necessary varies by society and may also vary over time.

If a good is considered essential or necessary, the government should consider public funding to ensure the appropriate people will have access to the good. The more essential the good, the more likely the government will also want to maintain public ownership or control. For example, while some essential services, such as electricity, may be privately owned, others, such as the military, remain publicly owned.

If exclusion is possible the public organization can choose to use a hybrid strategy of public funding for some groups and private funding for others. For example, the government funding body may consider a good necessary for one group, such as pensioners, and provide public funding for them, but not for another group, such as high income workers.

Thus if a good is considered essential or necessary the organization should have more publicness in its funding, ownership and/or control. Herefore we propose:

P3a: If a good is considered essential or necessary to public welfare the new venture should consider public funding, ownership and/or control.

P3b: If a good is not considered essential or necessary to public welfare the new venture should consider private, philanthropic or nonprofit funding options.

P3c: If a good is considered essential or necessary in some markets a hybrid funding strategy should be considered.

In the case of HSDL, the provision of security information to students and researchers dramatically increased in importance after 9/11. Organizations can also be ranked in terms of their need for access to homeland security information. For example, state and local governments have high mission needs for homeland security information because they are responsible for developing disaster response plans and carrying out the actual response to incidents. In contrast, for private companies homeland security information could be considered a private good that they should pay for. Therefore, HSDL could segment the market by organization and provide public funding for those organizations that the government considers homeland security information a public good, such as state and local governments.

Therefore, in terms of being an essential service, HSDL's services would be essential for some markets, but non-essential for others, suggesting a hybrid funding strategy and a balance between publicness and privateness (See Appendix, Figure 1).

ENTREPRENEURIAL ORIENTATION: NEED FOR PRIVATENESS

Our previous analysis suggests that, even though a good is considered necessary to the public, if it is feasible to exclude access to the good there is an opportunity to employ private funding and ownership, while retaining public control. HSDL is a prime example of this situation because, although the government has decided that information on homeland security is necessary, access to the digital library can be limited through passwords. In fact, although HSDL was one of the first digital libraries to provide homeland security information, it was not the first and there were other providers in the market, some of whom were private companies.

Therefore, although these goods can be funded and owned by the public, they could also be private and we propose that goods in the introduction or growth the stage in the product lifecycle have a greater need for entrepreneurial orientation, which is easier to find and facilitate in private organizations than public organizations. In this section we describe how entrepreneurial orientation can relate to the decision to make a new firm public or private and then explain the market environment of our case organization HSDL.

The practices, processes, and decision-making activities employed by entrepreneurs to enter new markets and to support entrepreneurial opportunities has been referred to as entrepreneurial orientation (Lumpkin and Dess, 1996, 2001). Entrepreneurial orientation is a style of business behavior characterized as including autonomy, innovativeness, proactivess, risk-taking, and competitive aggressiveness (Lumpkin and Dess, 1996; Kropp, Lindsay, Shoham, 2006). We believe that the need for or desirability of

entrepreneurial orientation can shape the potential structure of the resulting governmental entity, albeit a public entity or a private enterprise.

Autonomy

Lumpkin and Dess' (2001, p. 431) define autonomy as the "independent action by an individual or team aimed at bringing forth a business concept or vision and carrying it through to completion." Individual autonomy implies an ability to act based on one's own judgment, free from organizational constraints. In the organization context, autonomy also implies a freedom of action in decision making. Public enterprises, i.e., those controlled by governmental entities, generally employ a hierarchical control structure which can limit autonomy. As described earlier, certain environmental changes make it desirable, if not essential, for governmental entities to act quickly. Therefore,

P4A: If quick decision making is required to deliver a public good or service, the new venture should consider more private control.

P4B: If quick decision making is not required to deliver a public good or service, the new venture should consider more public control.

The events of 9/11 and the resulting increase in public sector expenditures on homeland security created a market for relevant information products, such as digital libraries, databases, research and education. This trend is likely to continue. Thus, homeland security products in general and digital libraries in particular are both in the growth phase of the product lifecycle. Sales and competitors could increase in the immediate future, if the products launched are successful. Entering the market early can provide a product with the first mover advantages of higher market share and higher awareness, and possibly becoming the market leader. More homeland security digital library products will probably be developed by both private and not for profit organizations. The products will become increasingly sophisticated and will target specialized markets. Current specialized databases are also likely to expand their content from single to multiple topic databases. The HSDL had the opportunity to enter the public market in the introductory stage, but that opportunity could fade as commercial firms enter the market. Nevertheless, if the HSDL is only interested in providing a public good to subsidized organizations that market is unlikely to be targeted by commercial firms thus removing the urgency to enter the market prior to the maturity phase.

Innovativeness

The concept of innovativeness comes from Schumpeter (1954) and includes fostering a spirit of creativity, supporting R&D and experimentation, developing new processes, introducing new products/services, and technological leadership. Innovation may imply being the first-to-market with new product offerings (Covin and Slevin 1991). Innovativeness spans a continuum from making marginal improvement to technological leadership (Lumpkin and Dess 1996).

Although we acknowledge that governmental entities support innovation and are trying to become more innovative, the administrative hierarchical nature of government can be

an impediment to innovation. Often, the private sector can be more creative and innovative. Therefore,

P5A: If innovation is required to deliver a public good or service, the new venture should consider more private ownership and control.

P5B: If innovation is not required to deliver a public good or service, the new venture should consider more public ownership and control.

The market for HSDL can be characterized by three different, but overlapping dimensions; user role (e.g. policy makers and first responders), organization, (e.g. DHS), and user skill levels (e.g. Novice to Guru). The user role determines the content and the required interface to provide convenient access. For example, policy makers may need to know all the background legislation, while first responders may need guaranteed access in case of an emergency. Different organizations will have different user roles; for example, first responders such as local fire departments versus state emergency management agencies, which are likely to have a greater proportion of policy makers and planners. Finally, all organizations are likely to have users with different skill levels, which necessitate different levels of training and documentation. In order to be responsive to the needs of its users, HSDL should conduct market research and develop suitable content and graphic user interface (GUI) for each market segment.

Proactiveness

Proactiveness is a vision or mindset that looks into the future (Lumpkin and Dess, 1996). Proactiveness involves identifying and assessing the strengths and weaknesses of opportunities, and forming teams capable of exploiting them (Kropp, Lindsay, and Shoham, 2006). Entrepreneurs use their intellectual and other resources to take advantage of perceived opportunities and to create something new (Schumpeter, 1954). Therefore,

P6A: The greater the need for proactiveness required to deliver a public good or service, the greater the need venture to consider more private ownership and control.

P6B: The less the need for proactiveness required to deliver a public good or service, the less the need venture to consider more private ownership and control.

Risk-taking

By their very nature, entrepreneurs are willing to take risks in return for potential gain (Timmon and Spinelli, 2004). Entrepreneurs looks at downside risk as the "uncertainty and potential losses associated with the outcomes which may follow from a given set of behaviors." (Folani and Mullins, 2000, p. 304). They are willing to take risks in exchange for possible profits. Notwithstanding their willingness to take reasonable risks in the hope of attaining financial or other objectives, entrepreneurs prefer to lower the risk component of the risk-return equation (Kropp, Lindsay, and Shoham, 2006).

Governmental entities tend to be extremely risk-averse and in the extreme, risk avoidant. Therefore,

P7A: If greater risk is required to deliver a public good or service, the new venture should consider more private ownership and control.

P7B: If lower risk is required to deliver a public good or service, the new venture should consider more public ownership and control.

Competitive Aggressiveness

In the private sector, a firm will be classified as competitive aggressive by the degree to which it is willing to challenge market rivals to gain market share (Lumpkin and Dess 1996). Lumpkin and Dess (2001) found that competitive aggressiveness was more helpful to firms in later stages of industry development than in earlier stages.

P8A: If high competitive aggressiveness is required in the market the new venture should consider more private options.

P8B: If low competitive aggressiveness is required in the market, the new venture should consider more public options.

The Congressional Quarterly Homeland Security Database, The Terrorism Intelligence Center's Terrorism Database, and Jane's Terrorism and Insurgency Center were early entrants in the homeland security information market in which the Homeland Security Digital Library operated. These products can be characterized as addressing niche markets with narrow products (e.g. Single Topic, such as Terrorism or Disaster Management). As competitors move to attract broader markets, these products are likely to expand and broaden their appeal in the years ahead. The HSDL was unique in its broad appeal when it was first established. However, if HSDL does not invest to expand its document database, it will likely be overtaken by other databases as they expanded their content and market coverage. In general, we propose that the more entrepreneurial orientation needed in the delivery of the good or service, the more public options should be considered. Therefore,

P9A: The greater the need for entrepreneurial orientation required to deliver a public good or service, the greater the need venture to consider more private ownership or control.

P9B: The less the need for entrepreneurial orientation required to deliver a public good or service, the less the need venture to consider more public ownership or control.

The need to remain competitive with other digital libraries meant that HSDL needed a certain level of the entrepreneurial orientation dimensions of autonomy, innovativeness, proactivess, risk-taking, and competitive aggressiveness. Therefore with respect to entrepreneurial orientation, HSDL's Need for Privateness is higher than its Need for Publicness.

ANALYSIS

Our review so far has shown that the type of good and market conditions can be used to indicate where to place a firm on the Public to Private Continuum. Joint consumption makes public funding attractive and being an essential good may make public ownership and control necessary. Exclusion makes private funding possible and the need for entrepreneurial orientation makes private ownership and control attractive.

Using the framework developed in this study, HSDL's product has joint consumption and at least for some markets it is an essential or necessary good, exclusion is possible and there is some need for an entrepreneurial orientation. This indicates that HSDL needs to balance its Publicness and Privateness, placing it Continuum between the government enterprise and regulated enterprise somewhere in the middle of the Public to Private Continuum. Thus HSDL could have a hybrid public/private funding strategy, with private ownership and polyarchy control, placing the firm in the category of the regulated enterprise. Adopting the form of a regulated enterprise would allow the HSDL to have private funding and investment to fund its new product development. This option supports the hybrid model of public and private funding and has the advantage of polyarchy control, which means that the government can ensure the organization continues to provide its vital services.

In the case of the HSDL the decision was made to follow the genetic example of its two parent organizations, CHS and DKL, and adopt public funding, ownership and control. This had several advantages and disadvantages. The advantages are that the government can maintain complete control over the product. The disadvantages are that funding and investment will be limited to the budget the government can make available. The organization may not have the funds for new product development or develop the entrepreneurial orientation needed to continually develop and improve the product.

Technology, innovation and changing needs create opportunities for new enterprises across the Public to Private Continuum, but the blurring of the distinctions between publicness and privateness increases the importance of deciding where an organization should reside on the Public to Private Continuum. Organizations may tend to adopt the publicness or privateness of their parent organization but genetic publicness may not be the best option for the new enterprise. New organizations should consider four criteria to determine their publicness or privateness; joint consumption, exclusion, essential or necessary goods and the need for entrepreneurial orientation. These variables are used to score the organization's need for public versus private decisions in new enterprise development and form an agenda for future research:

If a good has joint consumption, the firm should consider public funding. If exclusion is possible, the firm should seek private funding.

To the extent that the good is considered essential, the firm should seek more public ownership and control options. To the extent that entrepreneurial orientation is needed in the market, the firm should seek more private ownership and control options.

Our case example illustrated a tendency for organizations to adopt publicness or privateness of their parent organization. This has advantages because the private entrepreneur will be more comfortable in the private sector while the public intrapreneur is likely to be more confident in the public sector. But the "genetic" choice of publicness or privateness could ignore important features of the product or market. New enterprises born in the private sector may be more suited to public funding, ownership, control or user representation in overseeing board membership as a proxy for market interaction. Similarly, new enterprises born in the public sector might be better off with some private features. This article proposes that entrepreneurs and intrapreneurs should consider these four decisions before deciding how public or private to become.

CONCLUSIONS, IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

As differences between public and private firms are blurred, entrepreneurs and intrapreneurs need to consider how public or private their new enterprise will be. This case study illustrates the tendency to replicate the publicness of the parent firm, but that may not provide the right source of funding, ownership, control or other structures, such as board membership. This article provides propositions and a methodology to guide four major public versus private organizational decisions and establishes a future research agenda. This article is limited in only providing one case of a new enterprise born into the public sector. Future research is needed to provide similar case studies of firms across the Public to Private Continuum.

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APPENDIX

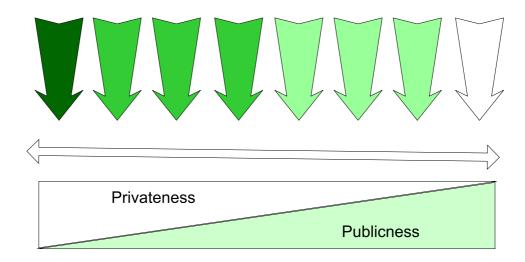
Table 1: Perry and Rainey Classification of Institutions (Perry and Rainey, 1988, as reproduced in Koppell 2003, p. 10)

Category	Ownership	Funding	Control	Example
1. Bureau	Public	Public	Polyarchy	Bureau of Labor Statistics
2. Government corporation	Public	Private	Polyarchy	Pension Benefit Guaranty Corporation
3. Government-sponsored enterprise	Private	Public	Polyarchy	Fannie Mae
4. Regulated enterprise	Private	Private	Polyarchy	Private utilities
5. Governmental enterprise	Public	Public	Market	No known examples
6. State-owned enterprise	Public	Private	Market	Amtrak, Airbus
7. Government contractor	Private	Public	Market	Grumman*
8. Private enterprise	Private	Private	Market	IBM

^{*}Now known as Northrop Grumman

Figure 1: Need for Privateness and Need for Publicness on the Public to Private

Continuum.



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