Private sector business principles to embrace - and to avoid - in planning and managing our public sector assets

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ABSTRACT

There is an increasing demand from the public and from legislators to treat pavement management like a business - know what you have, know what it is worth, and invest strategically. The private and public sectors, however, differ fundamentally in their purposes: the private sector aims to make and grow profits, while the public sector aims to support and improve society - financial profits and losses versus wider costs and benefits such as environmental and social impacts. Conversely, the private sector has begun to evaluate and discover the positive impacts of environmental protection and social responsibility on its profit margins. The public and private sectors have much to learn from each other.

This paper explores the management principles and tools used in the private sector that should be adopted in the pavement management sphere in order to better evaluate and communicate the impacts of our investments, with the aim of enhancing our economic, social and environmental sustainability. These principles include evaluating our entire portfolio against our goals - including assessing alternative service provision mechanisms - and re-directing our investments to more 'profitable' areas.

In addition to adopting private sector principles, many of our public sector principles and tools, such as pavement performance modelling and whole of life costing, should continue to play a strong role and should be further developed. This paper discusses how new and existing principles can be brought together for more sustainable and robust investment decisions - and, importantly, how they can be used to better communicate investment needs to stakeholders.

1 THE PUSH FOR ADOPTING PRIVATE SECTOR PRINCIPLES

Margaret Thacher’s government was one of the first in a long line of government initiatives internationally to begin privatizing government services. These initiatives were aimed at saving their nations money while delivering a good quality service. These initiatives, which continue today, are based on the belief that the public sector is inefficient and ineffective compared to the private sector [1]. Reports by respected management consultants continue to state that the public sector lags the private sector [2, 3].

A large body of research now exists that compares the efficiencies of, and differences between, the public and private sectors [2, 4, 3] – and in the highways sector, there is a particular emphasis on the potential efficiency savings to be achieved through outsourcing of maintenance [5, 6, 7, 8, 9, 10].

If the private sector is indeed more efficient and effective than the public sector at delivering the same services (and many reports and journal articles show this assumption to be arguable [5, 6, 7, 11, 12, 13, 14]), then the public sector should consider adopting private sector principles or outsourcing its services. However, there are fundamental differences between the aims of the private and public sectors that require some investigation before deciding to adopt private sector principles or outsource.

Formal comparisons between the practices, principles and efficiencies of the public and private sectors began in 1976 [15]. Researchers have found that the aims and roles of the private and public sectors differ sufficiently that they recommend different practices for each sector [16]. Specifically, because the decision content is so different between the public and private sectors – that is, because public sector decisions are open, transparent, organized compared to private sector decisions – it is logical that the decision processes and the tools and principles used to support them are also different [17, 18].

To determine which private sector principles to adopt and to avoid in the public sector, this paper:

1. Reviews the relative effectiveness of the public and private sectors in the management areas addressed, such as decision making and performance management, by synthesizing the public/private sector comparison literature.

2. Compares the public and private sector characteristics, which may be naturally lead to the differences in effectiveness identified in (1).

3. Reviews commonly-held views about the public and private sector and presents the literature that supports or refutes those views.

4. Based on the truths in (3), where the public sector is less effective, and where public characteristics are conducive to private sector principles and practices, recommends private sector principles to be adopted in the public sector.

2 DIFFERENCES BETWEEN PUBLIC AND PRIVATE EFFECTIVENESS

Studies have compared the differences between public and private sectors in terms of decision making [19, 20], performance management [21], staff members' performance and motivations [22, 23, 24, 25], risk tolerance [26], procurement [27, 28, 29], marketing and technology [30], and innovation [31]. A review of the literature summarises the relative effectiveness of each sector, according to each of these management practices, in Table 1. The Table 1 summary shows that based on the literature reviewed, although the public sector out-performs the private sector in terms of staff motivation and is equal in terms of decision making, it under-performs in terms of four of the eight management characteristics: risk tolerance, procurement, marketing and technology, and innovation. The literature reviewed was divided between the public and private sectors on the characteristics of performance management and overall service delivery. These results show that there is room for improvement in the public sector.

Although researchers may agree that the private sector is more efficient or effective in a number of areas as outlined in Table 2, the fundamental differences between the purposes and operating environments affects the public sector's ability to apply private sector principles. These differences are outlined in the next section.

3 DIFFERENCES BETWEEN PUBLIC AND PRIVATE SECTOR CHARACTERISTICS

The fundamental differences between the public and private sectors are summarized in Table 2. These differences center around the public sector's ambiguous goals and the large number of stakeholders, which result in a lack of focus and clear overarching processes for making decisions, as well as significant resource used to consult various stakeholders.

Table 1: Summary of evidence that private or public sector is more effective / efficient in various dimensions of effectiveness

Effectiveness dimension	Which sector is more efficient / effective?		Summary explanation
	Private	Public	
Decision making	-	-	No evidence of a superior decision making ability, but decision makers in the public sector are more successful when they use hard data [19]. Public sector decision makers generally have a more structured decision making process [18, 20]
Staff members' performance and motivations		[25, 24]	Public sector employees may be more efficient, and are more motivated by accomplishment, helpfulness and community service than private sector
Performance management	[22, 21]	[23]	Despite these motivations, performance pay, which is a feature of the private sector, is more effective at increasing productivity than general pay rises – particularly in small teams. However, performance pay also produces hidden costs that may outweigh the performance benefits. Overall, performance management, with clear objectives, produces superior performance to one that does not measure, monitor and aim to improve.
Risk tolerance	[26]		Organizations with more red tape, weak performance incentives, and high involvement with elected officials are more risk averse.
Procurement	[27, 29]		Due to requirements for open, fixed price tenders, quality is more likely to be lower and price is likely to be higher for public sector procurement
Marketing and technology	[30]		Due to a lack of market pressure, public sector provides less information of interest to individuals, but greater disability access and consumer protection
Innovation	[31]		Due to a 'low-trust', risk averse environment, the public sector is naturally less innovative
Overall service delivery	[32]	[28]	Costs of administering contracts and monitoring compliance result in higher costs than if service was provided in-house; however, the results are much dependent on the incentive structure

Table 2: Characteristics of private and public sector organizations and implications for organizational efficiency and effectiveness

Organizational Characteristics	Private relative to public	Implication for private sector in decision making, efficiency and effectiveness	Ref
Goals and objectives	Fewer goals; clearer & agreed; relatively static	Greater time and cost efficiency: Easier to assess alternatives against goals and therefore make a decision	[16]
Market / stakeholders	Market defined by buying behaviours rather than oversight / collaborative bodies	Greater time and cost efficiency: Not required to seek consensus from numerous oversight bodies	[16]
Constraints	Less limited by legislative, regulatory and ‘obligational’ constraints	Greater time and cost efficiency: Required to invest in fewer obligations and can spend less time developing strategies and relationships for meeting these obligations	[16]
Innovation	Reduced requirements for transparency	Greater innovation potential: Research finds that innovation is stifled when alternatives are developed as they are produced; greater innovation results when organizations are allowed to put forward multiple alternatives before developing concepts. Public scrutiny frequently demands details before a full set of alternatives has been put forward.	[16]
Information for decision making	Not constrained by the amount that can be invested in information for decision-making	Greater certainty in outcomes and cost effectiveness: Public sector organizations find little support for data collection and analysis	[16]
Decision making	Based on data and analysis to a much greater extent	Greater certainty in outcomes and cost effectiveness: Public sector organizations rely more on bargaining, consensus and qualitative information	[16]
Budgeting	Costs and fees based on market mechanisms	More able to target investments at those that bring greater returns: Fees are directly related to costs, and budgeting is based on future expected demand. In the public sector, budget allocations are frequently based on historical allocations.	[16]
Employee motivations	More motivated by pay	More able to improve performance by offering payment incentives	[23]

The impact of unclear goals on an organization is that ambiguity makes it difficult to rule out alternatives [16]. Each time an investment is proposed, clear project-level goals must be set.

The impact of having numerous stakeholders is that the resources required for informing, negotiating and strategizing are significant, and leave fewer resources for collecting and analyzing data. In the area of pavement performance, much data and analysis are used; there is therefore confidence that available budgets are being used efficiently. The bigger question, however, is how well the budgets are being determined in the first place, in view of overall organizational goals.

The Table 2 summary provides some clues as to why privatization and outsourcing may sometimes have delivered cost efficiencies: if contract metrics are clear, then the private firm delivering the service has many of the advantages of the private sector in delivering public services: it has clear goals, is buffered by the public sector organisation from the large number of stakeholders and intense public scrutiny, and will choose to collect information that is of value to their decisions, as costs permit.

4 TOOLS AND PRINCIPLES FOR THE PUBLIC SECTOR

Based on an understanding of the differences between the public and private sector, Table 3 summarises the myths and truths about the relative effectiveness of the public sector, and proposes actions for the public sector to address each concern. This table shows that while it is **untrue** that the public sector is disorganized, less cost effective and has less motivated and less efficient staff, it is **true** that the public sector spends significant resources on consulting, bargaining and negotiating, and also that the public sector has inadequate mechanisms for fostering innovations.

Table 3: The research evidence in support of and against common myths of public and private sector performance

	Myth / Statement	Truth	Proposed action for public sector
	The private sector is more productive than the public sector.	Researchers of differences between public and private sector organizations agree that the public sector's goals are ambiguous and shifting [21, 16, 33]. It is therefore more difficult to calculate to what extent goals are met, and how much investment is required to meet them [34].	Develop clear and measurable organization-wide goals that measure productivity
	The public sector is disorganized	Research into the decision processes of public versus private sector managers shows that public sector decisions are more structured than those in the private sector [18]; presumably because of the need to define their objectives for each decision. However, the private sector is more likely to use data and analysis to support its decisions, while the private sector relies on bargaining and more qualitative information [16]. As a result, public sector employees tend to be more satisfied with a larger gap between ideal and actual information [18].	Develop data strategies that highlight the value of collecting information and its potential to inform decision makers about stakeholder outcomes.
	The public sector is immobilized by red tape	There is a high degree of formalization in the public sector [35, 36, 37, 38].	Assess the costs and benefits of policies and legislation – particularly those that may have been produced far in the past.
	Private sector service provision is more cost effective	The majority of the research highlights the difficulties in comparing the costs of providing services through the public and private sectors [7, 11, 12]. Research funded by the public sector tends to find that the public sector is more cost effective, while research funded by industry groups tends to find that the private sector is more cost effective [7].	Rigorously analyze costs of activities to allow equal comparison between public and private sector [40]. If private sector costs appear more favorable,

	Myth / Statement	Truth	Proposed action for public sector
		Some research finds outsourcing to be more cost effective; while others find in-house service provision to be more cost effective, as shown below: **More cost effective** Private sector: [32] Public sector: [39, 14] Equal: [40, 12] **Better quality** Private sector: [39] Public sector: [14, 32] The public sector do not tend to outsource service provision expecting a lower cost; they outsource to expedite project delivery, manage workload, address seasonality, manage equipment, and procure an adequate number of, and skilled, staff [7, 40, 11]	consider the need for immediate response, and in-house inspection and contract administration capabilities [40]; produce a clear schedule of asset inventory, include litigation risks and costs in risk management review, provide clear performance expectations, evaluation schedule and financial performance incentives [14]. Consider the use of Special purpose vehicles (SPVs) for delivering services as a separate arm of the organization, using in-house staff [31]. If outsourcing is to be undertaken, partner closely with industry and existing employees to develop specifications, a code of conduct, and

	Myth / Statement	Truth	Proposed action for public sector
			innovation mechanisms [41, 9].
	Private sector employees are more motivated	Public sector employees are more committed to accountability and contributing to community well-being [42, 43, 24]. In a large literature review of differences between public and private sector employees, the *only* consistent finding was that public sector employees are more committed to community [24]. The public sector provides little reward for taking risks and being successful in implementing positive change in policies or programs [44]. Government rules make it difficult to encourage good performance and punish poor performance [44]. Although government employees frequently know what needs to be done, they face significant restrictions such as laws, regulations and policies that prevent prompt – or any – action [44].	Develop standard procedures and business processes for encouraging, evaluating and implementing innovations.
	Private sector employees are more efficient	When faster, more accurate, and more vigilant work is required (e.g., airport security or emergency responders), government may be superior to private service provision [25]. Participants perform better when working for government rather than for the private sector [25].	Keep this type of work in-house
	The public sector pay structure does not incentivise performance	Pay for performance schemes contain excessive hidden costs of rewards [23] Pay for performance schemes may increase productivity when they are	Do not implement ‘pay for performance’ schemes

	Myth / Statement	Truth	Proposed action for public sector
		team-based [22]	
	The private sector is more innovative	In terms of making information available to the public, one study found this statement to be true; the researchers found that government websites lacked important features that would allow individuals to tailor information to their own needs [30] However, in the same study, the researchers found that government websites offered better disability access and consumer protection [30]. The public sector by its nature trusts slowly and is risk averse. These two characteristics foster a conservative, procedural environment rather than an innovative one [31].	Special purpose vehicles, as discussed above, are one way of buffering public sector staff from its usual restraints [31].

The response to most of the barriers to productivity in the public sector is to develop robust performance measures, to monitor them through benchmarking and performance management programs, to identify the actions required to meet target metrics, and to establish accountability [45, 46].

5 PRIVATE SECTOR PRINCIPLES AND PRACTICES TO ADOPT AND TO AVOID

Based on an understanding of the areas in which the private sector out-performs the public sector, and the principles they use, the author recommends the following principles to adopt and avoid in the public sector:

ADOPT:

The private sector is more effective in the areas of risk tolerance, procurement, marketing and technology, and innovation. The literature reviewed was divided between the public and private sectors on the characteristics of performance management and overall service delivery; however, there are important lessons to share:

1. Set clear goals at organization level which can be used to evaluate investments.
2. Implement a performance measurement framework to measure productivity.
3. Implement benchmarking to introduce competition and a culture of continuous improvement.
4. Assess the full costs of an activity, including administrative costs.
5. Invest in collecting and analyzing data to improve decision making.
6. Consider mechanisms such as a Special Purpose Vehicle or other specific business processes for encouraging, evaluating and implementing innovation.
7. Procure using trusted suppliers and negotiated contracts to reduce risk and price.
8. Personalize services to meet individuals' information needs.

AVOID:

The public sector out-performs the private sector in terms of staff motivation and is equal in terms of decision making. It is NOT recommended to:

1. Implement pay for performance schemes.
2. Use less structured decision processes.

CONTINUE:

The literature shows that the public sector performs better when it uses data and analysis-based decisions. It is recommended to CONTINUE:

1. Assessing lifecycle behaviours and costs of pavements.

6 CONCLUSION

One of the resounding recommendations for the public sector is to implement a strong performance management program, which includes benchmarking metrics, frequent monitoring, and built-in improvement processes [45, 47, 21, 31, 14, 9, 41, 46, 48] – at the very least, clear objectives [26]. Assigning staff to missions that align with their own objectives will also increase productivity and reduce the need to introduce incentives [48].

Also recommended is a good inventory and good supplier relationships [29, 27, 14, 9, 41]. Finally, the cost of service provision should be captured appropriately, including any related administration, quality control and other ‘hidden’ costs [28, 14, 40].

The appropriate solution to improve the productivity of a given service, however, depends strongly on the type of service provided; where greater skill and speed are required, it may be more productive to maintain these services in-house – and it may be counter-productive to monitor efforts [48, 40]. Linking pay to performance may also not be the optimal solution, as it frequently results in dysfunctional behaviours [22].

The best way to convince stakeholders of the need for an investment is to agree clear goals at organizational level and analyze the extent to which proposed investments will contribute to those goals. Setting of clear goals is one major area for improvement in the public sector.

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