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**SET PERFORMANCE COURSE AND SPEED IN THE RCN
BALANCED SCORECARD OR PERFORMANCE PRISM?**

Lieutenant-Commander P.J.J. Lebel

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BALANCED SCORECARD OR PERFORMANCE PRISM?**

By Lieutenant Commander P.J.J. Lebel
Par le capitaine de corvette P.J.J. Lebel

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INTRODUCTION

The Western world reached an unequalled favorable balance of power with the

end of the Soviet era in the early 1990s.[1] Although public administration is a vast subject

that varies from country to country,[2] all Western governments became interested in

realizing savings associated with the perceived peace dividend.[3] In Canada, the

government pursued the New Public Management (NPM) concept that intended to

institutionalize private sector management practices to increase efficiency and reduce

spending.[4] This led the Department of National Defence (DND) to establish the

Management, Command and Control Re-engineering (MCCR) initiative, which included

as a key tenet the requirement to implement a management framework, including

performance measurement.[5]

In 2001, Chief Review Services (CRS) promulgated a report to provide an

overview of the progress made by the MCCR initiative.[6] Departmentally, areas of

concerns identified included the management framework and performance measurement.[7]

The Fall 2011 Report of the Auditor General (AG) of Canada to the House of Commons

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[1] (Nacht 1995, 195-197.)

[2] Jocelyne Bourgon, "New Governance and Public Administration: Towards a Dynamic Synthesis," *Canberra: Centre for International Governance Innovation* (24 February 2009), 3.

[3] Michael Rostek, "A Framework for Fundamental Change? the Management Command and Control Re-Engineering Initiative," *Canadian Military Journal* 5, no. no.4 (Winter 2004-2005), 65.

[4] *Ibid*., 68.

[5] Canada. Department of National Defence., *NDHQ 99: Review of Restructuring and Re-Engineering Volume 1 Executive Overview.*Ottawa: DND Canada Chief Review Services,[2001])., 4.

[6] *Ibid*.

[7] *Ibid*., 4.

highlighted the fact that this area remained a concern.[8] Nearly three decades after the

inception of the NPM initiative, DND continues to struggle in its attempt to

institutionalize performance measurement and management (PMM).

In 2010, the Treasury Board of Canada Secretariat promulgated a Management,

Resources and Results Structures (MRRS) policy that mandates departments to define

and measure strategic outcomes, use the Program Alignment Architecture (PAA) to

prioritize, plan, measure and report on expenditures, monitor compliance and report to

parliament.[9] The MRRS does not impose any particular methodology on departments to

fulfill the policy's intent, allowing flexibility for the selection of a suitable PMM

framework. This paper will focus on the RCN and will demonstrate that despite long-

standing challenges, the RCN now has a number of key components in place that would

facilitate full implementation of the Balanced Scorecard, a framework ideally suited for

the public sector to enable a PMM system without paralyzing leaders and managers.

This paper will start by examining the theory on the key features of a PMM

framework in the public sector. It will then highlight what the RCN has currently

established that could support a public sector PMM framework, with results showing key

areas of strength and some areas of improvement. Considering this limited success, the

paper will consider two PMM frameworks for implementation in the RCN: the Balanced

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[8] Canada., Office of the Auditor General.,Depository Services Program (Canada), "Report of the Auditor General of Canada to the House of Commons Chapter 5 Maintaining and Repairing Military Equipment - National Defence," Office of the Auditor General of Canada, 16.

[9] Canada. Tresury Board of Canada Secretariat., "Policy on Management, Resources, and Results Structures (MRRS)," http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18218&section=text (accessed 04/30, 2014).

Scorecard, a PMM structure widely used in organizations throughout the world,[10] and the

Performance Prism, a more recent PMM system that shows great potential for the public

sector.[11] The theory and attributes of each model will be examined to confirm that each

meets the characteristics expected of a PMM framework in the public sector.

Subsequently, an analysis will be performed to determine which of the two PMM

frameworks is most closely aligned with the RCN's current PMM structure. Finally, it

will be determined that a number of key elements already established make the Balanced

Scorecard model ideally suited for the RCN moving forward.

PUBLIC SECTOR PMM FRAMEWORK

It is widely recognized that the public sector has very distinct attributes that are

different from the private sector: it is not profit oriented, there is limited opportunity to

generate income, and there is no bottom line against which performance can be

measured.[12] Despite these differences, the fundamental quote by James H. Harrington is

clearly applicable to both sectors:

> "If you can't measure something, you can't understand it. If you can't
> understand it, you can't control it. If you can't control it, you can't
> improve it."[13]

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[10] Robert S. Kaplan, "Conceptual Foundations of the Balanced Scorecard," *Handbooks of Management Accounting Research* 3 (2008), 3.

[11] Pietro Micheli and Mike Kennerley, "Performance Measurement Frameworks in Public and Non-Profit Sectors," *Production Planning & Control* 16, no. 2 (2005), 131-132.

[12] *Ibid*.

[13] James H. Harrington, "Goodreads Quotable Quotes," http://www.goodreads.com/quotes/632992-measurement-is-the-first-step-that-leads-to-control-and (accessed April/23, 2014).

This section will examine the key theory and features of a PMM framework in the public sector.

Societal demand for higher levels of accountability, responsiveness and quality by elected officials is increasing pressure to implement PMM for governments around the world.[14] The public sector delivers services to groups that have fundamentally different interests and expectations: taxpayers, users, and citizens.[15] Public administrators must therefore reconcile these differences and determine how to measure and manage performance in terms of the benefit for society as a whole and inform decision-making, enable controlling and provide accountability.[16]

In order to achieve this, the PMM theory examined through research revealed that there are fundamental principles associated with the public sector that are consistently raised by scholars. The first tenet is to remember that the PMM framework's purpose is to produce reliable and valid information on performance, and to allow decision makers to have a clear understanding of how to use this information meaningfully.[17] To do so, the PMM framework must be designed with a solid foundation that respects the following established principles:[18]

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[14] Kaifeng Yang and Jun Yi Hsieh, "Managerial Effectiveness of Government Performance Measurement: Testing a Middle-Range Model," *Public Administration Review* 67, no. 5 (Sep/Oct 2007, 2007), 861.

[15] Olga Gajda-Lüpke, "Performance Measurement Methods in the Public Sector." *Poznan University of Economics Review* 9, no. 1 (2009), 69.

[16] *Ibid*., 69-70.

[17] Robert D. Behn, "Why Measure Performance? Different Purposes Require Different Measures," *Public Administration Review* 63, no. 5 (2003), 587.

[18] Kravchuk, Robert S, Schack,Ronald W, "Designing Effective Performance-Measurement Systems Under the Government Performance and Results Act of 1993," *Public Administration Review*. 56, no. 4 (1996), 350.

- Formulate a well-defined, coherent mission, strategy and objectives: understanding policy objectives allows for the determination of a clear and coherent mission and strategy, which together form the cornerstone of PMM. From the strategy, objectives are established and provide the foundation required to establish and interpret measures;[19]

- Develop a sustainable measurement strategy: developing a cost-effective system is the intent by considering the category and types of measures required, the technology available, requirements for data collection, storage, access, and reporting formats;[20]

- Involve key personnel in the design and development phase: critical to ensure credibility, common understanding and adoption of the performance measures by all decision makers and all key stakeholders;[21]

- Rationalize the programmatic structure as a prelude to measurement: program structure inconsistencies that would complicate meaningful measurement need to be resolved;[22]

- Develop multiple sets of measures for multiple users: decision makers and stakeholders at different levels of the organization need to have measures that meet their needs, one set of measures cannot accomplish this requirement, and;[23]

- Consider the customers of programs and systems throughout the process: the needs, desires and satisfaction of customers need to be considered at each

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[19] *Ibid*.
[20] *Ibid*.
[21] *Ibid*.
[22] *Ibid*.
[23] *Ibid*.

stage so that impact of efficiency or quality change can be assessed based on customer needs and satisfaction levels.[24]

The second tenet is that performance measurement is valuable only when it is followed by management action.[25] In order for management to be involved, the PMM framework needs to enable public managers to perform their tasks. Performance measurement systems are needed to link both financial and non-financial results, and feed them into management structures and processes. An effective system would facilitate a response to demands for accountability, enable budget requests, assist internal budgeting, initiate thorough examinations of performance problems and possible corrections, motivate employees, ease contracting, facilitate evaluation, support strategic planning, enhance communication and trust with the public, and enable continuous improvement.[26]

The two PMM tenets identified in this section emphasized the importance of instituting a PMM framework that is based on established principles enables public managers to perform their tasks thereby ensuring management engagement. The next section will examine the current RCN structures in place to support a PMM framework, and determine the extent to which they meet the principles of a PMM framework in the public sector.

RCN CURRENT STATUS

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[24] *Ibid*.

[25] Bovaird, A. G.,Löffler, Elke., *Public Management and Governance* (London; New York: Routledge, 2003), 132.
[26] Behn, *Why Measure Performance? Different Purposes Require Different Measures*, 587-588.

In order to understand the RCN status, the Director Naval Strategic Management (DNSM) directorate of the Naval Staff Headquarters (NSHQ) was contacted and graciously provided expert knowledge through phone interviews and documents that demonstrate the performance and other types of information currently generated in the RCN that would support a PMM framework. This section will summarize the findings and will determine the degree to which the RCN currently complies with the principles of a PMM framework in the public sector.

One of the key PMM principles is to formulate a well-defined, coherent mission, strategy and objectives. In the RCN, this principle is fulfilled, as evidenced by the February 2014 release of the Commander's Guidance and Direction to the Royal Canadian Navy – Executive Plan 2013-2017 document by the Commander RCN, Vice-Admiral M.A.G. Norman.[27] In the document, Vice-Admiral Norman clearly articulates that the Executive Plan links the higher CAF/DND intent, direction and guidance with the RCN's subordinate or supporting plans.[28] He provides a detailed Commander's strategic appreciation on the geopolitical/strategic, national, DND/CAF corporate, and RCN levels, with the corresponding planning implications for the RCN.[29] The policies, strategies and plans issued by the Government of Canada and the DND/CAF are mapped to twenty-three RCN key efforts or objectives.[30] He articulates the RCN center of gravity at the tactical, operational and strategic levels, and provides a clear mission and vision.[31] He also established four strategic priorities that flow directly from the Chief of the

[27] Canada. Department of National Defence., *Commander's Guidance and Direction to the Royal Canadian Navy - Executive Plan 2013-2017*,[2014]).
[28] *Ibid*., 1.
[29] *Ibid*., 1-2.
[30] *Ibid*., 3-4.
[31] *Ibid*. , 4-5.

Defence Staff's priorities, namely ensure excellence in operations at sea, enable the

RCN's transition to the future fleet, evolve the business of our business, and energize the

institution.[32] Although it is important to note that the Executive Plan did not include a

strategy map, the DNSM staff used the Executive Plan after its promulgation to create the

high-level strategy map[33] illustrated at figure 1 and the strategy map[34] exhibited at figure

2.

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[32] *Ibid.*, 5-6.

[33] Canada. Department of National Defence. Director Naval Strategic Management directorate.,
Internal Document - RCN High-Level Strategy Map, 2014c), 1.
[34] Canada. Department of National Defence. Director Naval Strategic Management directorate.,
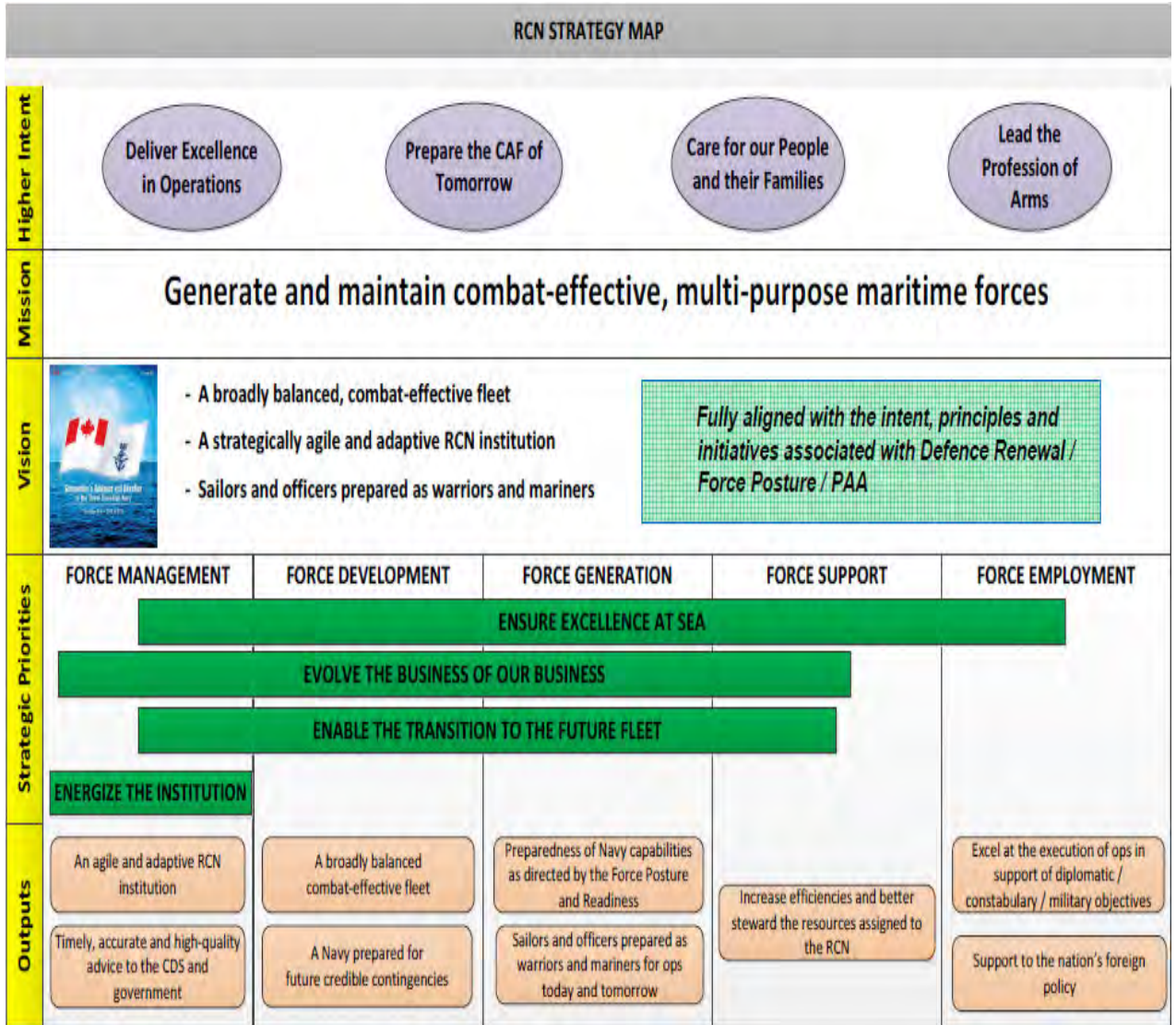*Internal Document - RCN Strategy Map*, 2014e), 1.
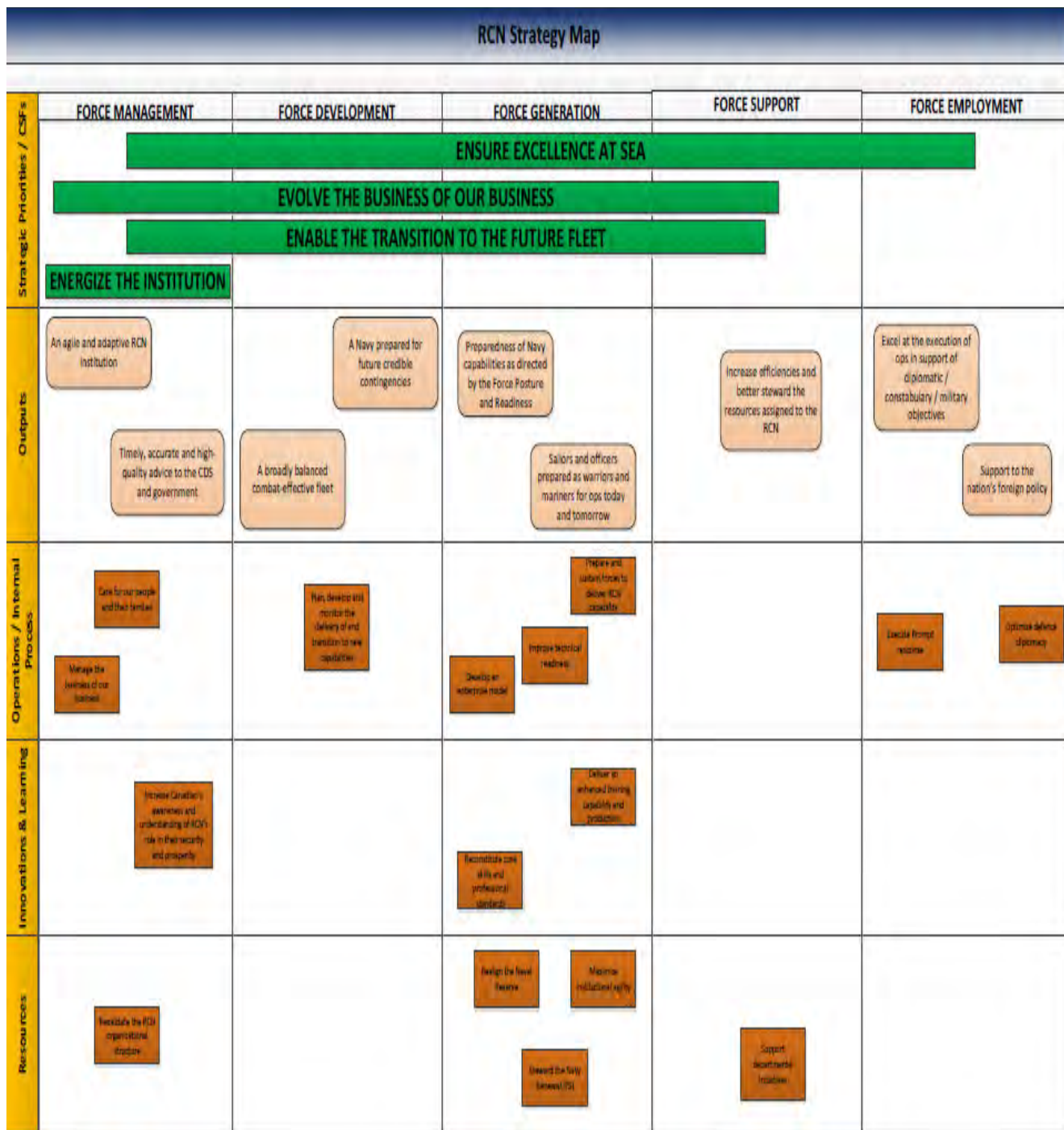
Figure 1 – RCN High-Level Strategy Map

Figure 2 - RCN Strategy Map

Another key component of this RCN executive plan is the *One Navy* concept, which promotes a unity of purpose and effort, including alignment to the strategic, national, and corporate functions. Additionally, it promotes similar structures, processes

and organizations between both coasts that include structural changes in order to manage the RCN as a strategic enterprise.[35] This streamlined structure will facilitate PMM by harmonizing processes and enabling a common set of performance measures towards RCN objectives, which is a very important step towards fulfilling the key PMM principle of rationalizing the programmatic structure as a prelude to measurement.

One of the weaknesses of the current RCN PMM construct is the misalignment between reporting structures for financial and non-financial results. For financial reporting, DNSM use a Naval Output Model (NOM), which was created to aggregate and group financial information (using Internal Orders (IOs), Group Ledgers (GLs), Fund Centers (FCs) and Cost Centers (CCs)) obtained from the official system of record, the Defence Resource Management Information System (DRMIS), into categories to facilitate PAA reporting.[36] The NOM is broken down into common categories well known within the RCN, namely Force Generation (FG), Force Support (FS), Force Management (FM), Force Development (FD), and Force Employment (FE). Each of these categories is comprised of a number of sub and sub-sub categories, as illustrated by the sustainment component of the NOM model at Figure 3.[37]

[35] Canada. Department of National Defence., *Commander's Guidance and Direction to the Royal Canadian Navy - Executive Plan 2013-2017*, i-16, 6.

[36] Canada. Department of National Defence. Director Naval Strategic Management directorate., *Internal Document - Naval Output Model (NOM)*, 2010).

[37] Canada. Department of National Defence. Director Naval Strategic Management directorate., *Internal Document - MEPM Board of Directors Briefing 27 Jan 2014.*, 2014b), 6.

• 5F		FE	FG	FS	FD	FM	FS	FS	FS	FG	FS
		Ops Cap	E &M	Personnel	EQP	Gov	Logistics	Realty	Protection	Training	IM/IT
S U S T A I N M E N T	M A N A G E	Ops Capacity Management	E&M – Policies, Plans and Direction	Personnel policy	Eqp policies	MFM Policies & Direction	Supply management	Realty Asset policy, Plans & Direction	Protection Policies, Plans & Direction	Training Management	IM/IT Policy & Direction
		Provide Muti-Functional Management Policies and Direction	Command	Oversee and Develop Pers policy	Develop and Maintain Equipment policy	Provide MFM Policies & Direction	Provide Supply Policy Plans & Direction	Provide Realty Asset policy, Plans & Direction (Overhead)	Develop & maintain Protection policy	Provide trg Management, Policies & plans	Provide information management & Finance
	S U P P O R T	Intelligence	E&M Support	O&E	Eqp direction	Doctrine	Logistics Support	Realty asset plans	Security	Training Support	IS Security
		Provide Intelligence Support (Trinity / Athena)	Fleet Technical Authority	Provide organizational & establishment Services	Oversee misc. Requirements	Electronic Warfare Support	Provide Logistics Delivery Support	Develop CIP (Infra)	Provide Police Services	Maintain Simulators	IS Protection
	D E L I V E R / P R O V I D L	Fleet readiness at Sea	Engineering	Food	Equipment Requirements	Comptrollership	Warehousing	Operations	Fire	Training Regular Force	MF Data Systems
		Fleet readiness at Sea (Ship's Fuel, rations, Port services)	Provide marine Systems Services	Provide Food Services	Deliver Eqp Reqs	Provide Comptrollership and Resource Management	Provide Warehousing Services	Utilities, Janitorial, PILT	Provide Fire Services	Deliver Sea Div Seamanship Courses	Desktop Support (including Laptop Service Teams)

Figure 3 - sustainment component of the NOM model

Created in the early 2000s and reviewed in 2009-2010, the NOM was intended to align with the PAA,[38] therefore there is no link between the financial information generated from the NOM and the RCN strategy map. Subsequently, there is currently no ability to use the NOM or any other reporting mechanism to generate reports on the strategy map outputs or objectives. A key point to note is that DRMIS is currently not configured to enable reporting on the RCN strategy map, however DNSM staff did indicate that there is a pilot project scheduled for 2014 that will test new DRMIS

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[38] *Ibid*., 3.

reporting functionality recently procured by DND, the Business Objects module for the

Systems, Applications and Products in data processing (SAP) software. In the meantime,

the DNSM staff is currently working towards implementing a dashboard for the RCN

Executive Plan, however as figure 4 demonstrates, the current dashboard version is

aligned with the PAA and NOM, and not with the RCN strategy map.[39]

OPI DNSM	Title: Executive Plan Dashboard	Updated:

Executive Summary

Org:	RCN - 3371AA
PAA:	3.1.1 Maritime Roles - Read
NOM:	Governance

Commander's Assessment

RCN Priorities:	Quantitative	Qualitative
Ensuring excellence at sea, with particular focus on leadership and core war-fighting skills.		
Enabling the transition to the future fleet, including execution of the National Shipbuilding Procurement Strategy, major projects and new capabilities (space, cyber and C4ISR).		
Evolving how we do business in order to maximise institutional agility, especially in the areas of training and readiness.		
Energizing our institution by embracing the essential role we exercise in the defence, security and prosperity of Canada.		

Change Agenda Risk profile

Impact (consequence): Severe, Major, Moderate, Minor, Insignificant

Probability (Likelihood): Rare, Unlikely, Possible, Likely, Almost Certain

Force Development		Force Generation		Force Management		Force Support		Force Employment	
Start Obj	**Fleet Recapitalization**	**Strat Obj**	**Develop RCN FG Model**	**Strat Obj**	**Managing the**	**Strat Obj**	**Future Effeciencies - Base, FMF,**	**Strat Obj**	**MCC Role - Relationship to**
Sub Obj - 1	HCM & MHP	Sub Obj - 1.1	Integrate key elements of FG into FGMP	Sub Obj - 1	Develop the Enterprise Model	Sub Obj - 1	Explore future Fleet Implication on FMF Business and Construct	Sub Obj - 1	Support to completion/approval of MCC concept (CJOC)
Sub Obj - 2	JSS	Sub Obj - 1.2	Naval Boarding Party 3.0	Sub Obj - 2	Personnel Establishment &				
Sub Obj - 3	AOPS	Sub Obj - 2	Transfer IT&E +NTS to MARPAC	Sub Obj - 3	Head Office Review				
Sub Obj - 4	CSC	Sub Obj - 3	MARS - Dual Stream	Sub Obj - 4	O&E Approval				
Sub Obj - 5	Platform Devistment	Sub Obj - 4	Command Development	Sub Obj - 5	Management Oversight				
Sub Obj - 6	SSK Capability Extension	Sub Obj - 5	Transfer OPS Pers mgt to MARPAC	Sub Obj - 6	Naval Material Assurance				
Sub Obj - 7	New Capability Introduction	Sub Obj - 6	Gov of Delivery of Core Warfare Competencies	Sub Obj - 7	Naval Reserve Command and Control				
Start Obj	**Informing / influencing Policy Development**	Sub Obj - 7	Transfer CT/OT to MRLANT						
Sub Obj - 1	HODR Interim Capability	Sub Obj - 8	Integrate Strat HR Model						
Sub Obj - 2	CATG Concept - Revisit TG Concept & Composition	Sub Obj - 9	Institutionlize Strat Nav Res Mission and Roles						
Sub Obj - 3	Vic Class Force Dev								

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[39] Canada. Department of National Defence. Director Naval Strategic Management directorate., *Internal Document - Executive Plan Dashboard*, 2014a), 1.

Figure 4 – Executive Plan Dashboard

In addition to misalignment between financial and non-financial reporting structures, there is also inconsistency around requirements for reporting performance results into management decision-making. RCN Formations are currently not mandated to report performance measurements up the chain of command to NSHQ, or DNSM staff. Last fiscal year, one RCN Formation produced an annual performance report on their own initiative and submitted it to NSHQ, while the others did not. A coherent system is needed to integrate consistent financial and non-financial performance results into RCN management structures.

The key PMM principle of developing a sustainable measurement strategy is therefore clearly an area of improvement due to the RCN misalignment of the categories and types of measures required, as well as the lack of reporting capabilities from the system of record DRMIS (note that there is current work in progress to mitigate the DRMIS reporting issue). Moreover, the fact that RCN Formations are not mandated to report performance measures to NSHQ is a limitation to the key PMM tenet that performance measurement is valuable only when it is followed by management action.

The PMM principle of involving key personnel in the design and development phase is an area that has had successes and challenges. DNSM staff indicated that NSHQ senior leaders are actively involved and interested in PMM, however current travel limitations imposed by the Government of Canada across all departments is severely limiting the RCN's ability to engage Formations senior leaders at the level desired. This restraint, combined with the fact that Formations are not mandated to report performance measures to NSHQ, contributes to the fact that there are currently no performance

measures implemented within the different Formations levels that cascade and aggregate up to the NSHQ measures. The key principle of developing multiple sets of measures for multiple users, specifically within the Formations aggregating up to the NSHQ measures, is therefore an area of improvement. Addressing this topic would also ensure that the key principle of considering the needs, desires and satisfaction of customers of programs and systems through the process is supported.

In summary, evidence shows that the RCN senior leadership in NSHQ and the DNSM directorate staff are highly interested and leading the way in RCN PMM. As a result, the Commander's Guidance and Direction to the RCN – Executive Plan 2013-2017 document formulates a well-defined, coherent mission, strategy and objectives that provides the foundation required to establish and institutionalize PMM in the RCN. The *One Navy* concept that includes structural changes in order to manage the RCN as a strategic enterprise is a key PMM enabler moving forward. Key areas of improvement identified include mandated and aligned reporting from Formations, DRMIS reporting limitations, engaged Formations leadership, Formations measures at different level aggregating up the chain of command to NSHQ, and consideration of customers of programs throughout the process. Although some key strengths were noted, the areas of improvements necessitate the consideration of a structured approach moving forward. To this end, the next two sections will analyze the theory and attributes of two PMM models for compliance with principles of a PMM framework in the public sector: the widely used and proven Balanced Scorecard and the promising Performance Prism.

BALANCED SCORECARD

Robert Kaplan and David Norton introduced the Balanced Scorecard in 1992, a PMM framework that has been adopted by thousands of private, public and non-profit organizations ever since.[40] This section will examine the key theory and attributes of the Balanced Scorecard model to determine the degree to which it complies with the principles of a PMM framework in the public sector.

Until the 1990s, the primary management system used by companies for measuring performance relied almost exclusively on short-term financial information and budgets.[41] Although new quality and just-in-time concepts were developed in Japan in the 1970s and 1980s, Western companies largely ignored these new innovative concepts and concentrated their efforts on short-term financial performance.[42] In the same timeframe, a stakeholder theory was developed which increased awareness on how failure to include stakeholders' preferences and expectations could adversely affect an approach focusing on short-term financial results.[43] The Balanced Scorecard was created to retain the valuable aspects from the literature on quality and lean management, financial performance measures and stakeholder theory.[44] It emphasizes the business requirement for both financial and non-financial performance measures, and was created therefore to measure organizational performance across four balanced perspectives, demonstrated at figure 5: *financial*, *customers/stakeholders*, *internal processes*, and *learning and growth*.[45]

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[40] Kaplan, *Conceptual Foundations of the Balanced Scorecard*, 3.
[41] *Ibid.*, 7.
[42] *Ibid.*, 7-8.
[43] *Ibid.*, 17.
[44] *Ibid*.
[45] Robert S. Kaplan and David P. Norton, *The Balanced Scorecard: Translating Strategy into Action* Harvard Business Press, 1996), 2.
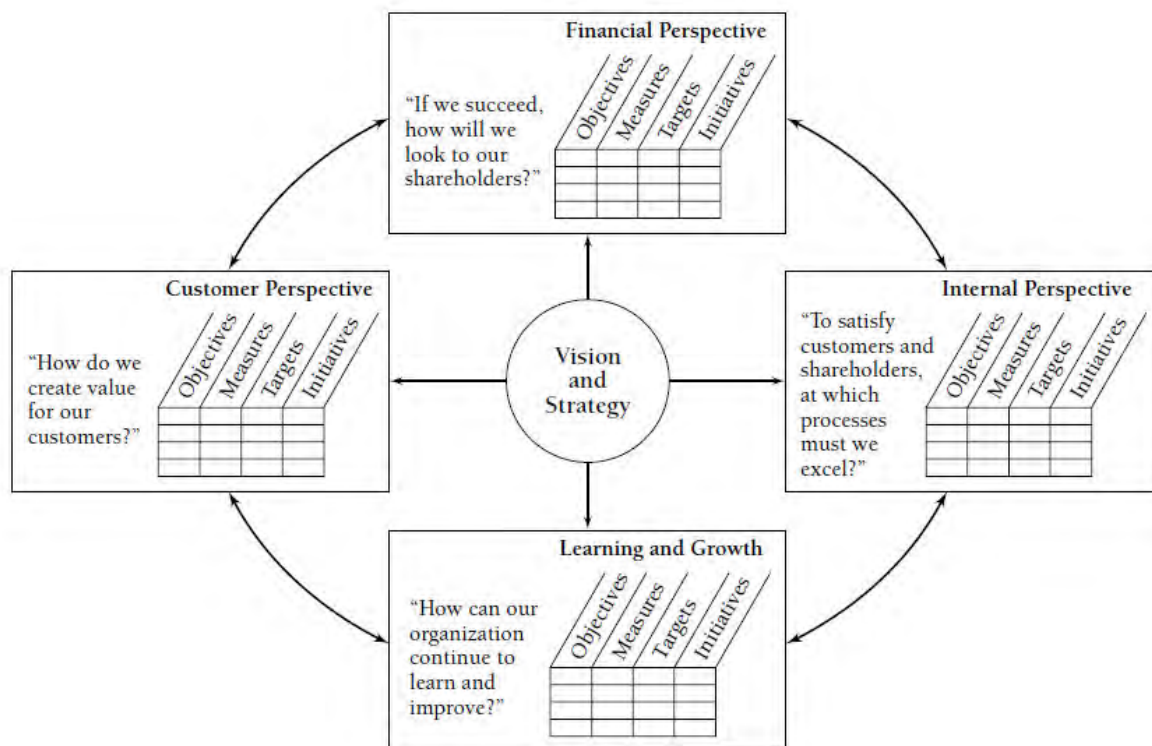
Figure 5 – Balanced Scorecard four balanced perspectives

The cornerstone of the Balanced Scorecard is the organization's strategy, vision/purpose, and mission.[46] The strategy, vision and mission provide the foundation to derive tangible objectives and measures.[47] A group of senior leaders normally develops and creates the scorecard to reflect the entire business, which becomes the accountability tool for the executive team.[48] This includes the organization's objectives, which describe what the organization must do well in order to implement its strategy, and measures, which are typically quantitative and used to monitor progress.[49]

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[46] Robert S. Kaplan and David P. Norton, "The Balanced Scorecard for Public-Sector Organizations," *Balanced Scorecard Report* 15, no. 11 (1999), 1.

[47] Kaplan and Norton, *The Balanced Scorecard: Translating Strategy into Action*, 10.

[48] *Ibid.*, 12.

[49] Paul R. Niven, "Balanced Scorecard Step-by-Step for Government and Nonprofit Agencies," Wiley, 15.

Once the Balanced Scorecard is established, it is communicated throughout the organization to ensure employees understand the critical objectives that must be accomplished.[50] It also enables employees to understand organizational interdependencies, and the influence they have on others and the organization as a whole.[51] This can be accomplished using a very powerful communication tool, a clear and concise one-page strategy map that identifies what is critical to accomplish the organization's strategy.[52] Although the four balanced perspectives are typically broad enough to effectively illustrate the strategy, the choice of strategy map is not bound by this methodology. [53] The strategy map needs to be selected by taking into account the organization's culture and unique circumstances in order to ensure the strategic intent is clear, concise and understandable.[54] With an understanding of the organization's strategic intent, specific measures at the operational level are beneficial in order to set local targets that will contribute to achieving unit objectives directly in support of the higher organizational strategy, vision and mission.[55]

Another very critical component regarding the implementation of the Balanced Scorecard as a PMM framework is the strategic feedback and learning. There is a requirement to review past results with an emphasis towards its impact on the future by establishing near-term and long-term milestones, and determining whether future expectations remain achievable.[56] Gaps identified between desired performance targets

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[50] Kaplan and Norton, *The Balanced Scorecard: Translating Strategy into Action*, 13.
[51] *Ibid*., 15.
[52] Niven, *Balanced Scorecard Step-by-Step for Government and Nonprofit Agencies*, 151.
[53] *Ibid*., 156.
[54] *Ibid*., 156-157.
[55] Kaplan and Norton, *The Balanced Scorecard: Translating Strategy into Action*, 13., 13.
[56] *Ibid.*, 15.

and actual results can be addressed by strategic initiatives, which are specifically intended to address those concerns.[57] This process allows the Balanced Scorecard not only to measure performance, but also to enable change in organizations, effectively linking performance measurement with management action.[58]

In summary, the Balanced Scorecard theory and attributes found through research underline that this PMM framework meets or enables the key theory and features of a PMM framework in the public sector that were identified previously in this paper. It is a methodology used widely and successfully throughout the world in the public, private and non-profit sector.[59] It enables the careful selection of performance measures from the organization's strategy.[60] It illustrates how the organization will achieve its mission and strategic objectives by achieving the measures selected, which identify the organization's outcomes and performance drivers.[61]

PERFORMANCE PRISM

The Performance Prism model is a second-generation PMM framework[62] that was created by Andy Neely, Chris Adams and Mike Kennerly in 2001.[63] This section will examine the key theory and attributes of the Performance Prism model to determine its degree of compliance with the principles of a PMM framework in the public sector.

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[57] *Ibid.*, 15-16.
[58] *Ibid.*, 16.
[59] Kaplan, *Conceptual Foundations of the Balanced Scorecard*, 3.
[60] Niven, *Balanced Scorecard Step-by-Step for Government and Nonprofit Agencies*, 13.
[61] *Ibid.*
[62] Andy Neely, Chris Adams and Paul Crowe, "The Performance Prism in Practice," *Measuring Business Excellence* 5, no. 2 (2001), 6.
[63] Anita Susilawati et al., "Develop a Framework of Performance Measurement and Improvement System for Lean Manufacturing Activity," *International Journal of Lean Thinking* 4, no. 1 (2013), 54.

The creators submit that the strength of the Performance Prism is the way in which it amalgamates existing PMM frameworks, builds on their strengths, and addresses their issues by providing an integrated structure in order to enable organizational performance.[64] In contrast to the Balanced Scorecard's strategy centric approach, the Performance Prism model is innovative in that it adopts a stakeholder centric approach to PMM with a view to fulfilling stakeholder satisfaction. This feature makes it particularly relevant to the public and non-profit sectors despite the limited evidence in its application in those two areas.[65] At the forefront of the model are the organization's intricate relationships with its numerous stakeholders within the operating environment.[66] The Performance Prism model, displayed at figure 6, entails five distinct but interrelated perspectives of performance: *stakeholder satisfaction*, *strategies, processes*, *capabilities*, and *stakeholder contribution*.[67]

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[64] A. D. Neely, "Business Performance Measurement Theory and Practice," Cambridge University Press

[65] Micheli and Kennerley, *Performance Measurement Frameworks in Public and Non-Profit Sectors*, 131-132.

[66] Andy D. Neely, Chris Adams and Mike Kennerley, *The Performance Prism: The Scorecard for Measuring and Managing Business Success* Prentice Hall Financial Times London, 2002), 2.

[67] Neely, Adams and Crowe, *The Performance Prism in Practice*, 12.
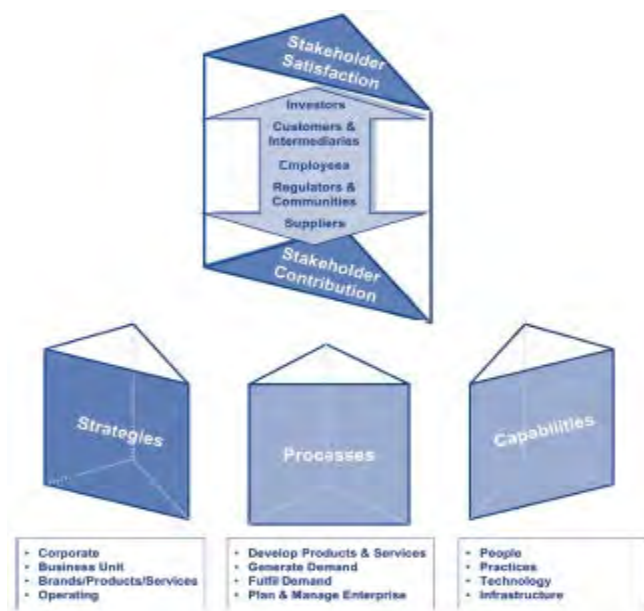
Figure 6 – Performance Prism perspectives of performance

The *Stakeholder Satisfaction* perspective encompasses who stakeholders are, and
what they want and need.[68] This perspective reflects the fact that organizations exists to
provide value added to their key stakeholders. Stakeholders include organization
shareholders (or employer such as government), investors, customers, employees,
suppliers, regulators, pressure groups, and communities.[69] *Stakeholder Contribution*
refers to what an organization wants and needs from its stakeholders.[70] This reflects the
importance for the organization to maximize stakeholder contributions in the conduct of
operations.[71] The *Strategies* dimension focuses on a top-down, management led
deployment of strategy,[72] and includes the strategies which an organization needs to

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[68] Neely, Adams and Kennerley, *The Performance Prism: The Scorecard for Measuring and
Managing Business Success*, 4.

[69] Neely, *Business Performance Measurement Theory and Practice*, 151.

[70] Neely, Adams and Kennerley, *The Performance Prism: The Scorecard for Measuring and
Managing Business Success*, 4.

[71] Neely, *Business Performance Measurement Theory and Practice*, 152.

[72] *Ibid*.

establish in order to achieve the desired level of stakeholder satisfaction and

contribution.[73] The *Processes* aspect refers to the processes the organization requires to

fulfill stakeholder wants and needs.[74] The *Capabilities* perspective refers to the people,

practices, technology and infrastructure required by the organization to operate the

processes effectively and efficiently.[75] This multi-dimensional framework enables a

balanced representation of the business to be accomplished, highlighting external

(*stakeholder*) and internal (*strategies*, *processes*, *capabilities*) measures that are financial

and non-financial in nature, in addition to effectiveness and efficiency measures that

encompass the entire organization.[76] The five distinct but interrelated perspectives ensure

that this framework is integrated across the organization's functions and hierarchy,

therefore aggregating towards the common objectives.[77]

Key to implementing the Performance Prism is success mapping, which is

intended to ensure *strategies, processes*, and *capabilities* are aligned, and that critical

links are identified, in order to enable *stakeholder satisfaction* and *contribution*.[78] The

model also recognizes that PMM is intended to determine whether the organization's

goals are achieved and therefore, for the Performance Prism, whether the stakeholders are

satisfied.[79] To support this objective, four fundamental processes to support the

Performance Prism management framework are identified: *design*, *plan and build*,

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[73] Neely, Adams and Kennerley, *The Performance Prism: The Scorecard for Measuring and Managing Business Success*, 4.
[74] *Ibid*.
[75] *Ibid*.

[76] Neely, *Business Performance Measurement Theory and Practice*, 153.
[77] *Ibid*., 152.
[78] Neely, Adams and Kennerley, *The Performance Prism: The Scorecard for Measuring and Managing Business Success*, 7.
[79] *Ibid*., 8.

implement and operate, and *refresh*.[80] The *design* process focuses on the importance of

understanding what needs to be measured and how it will be measured in order to ensure

the desired objectives are achieved and the appropriate behavior is encouraged.[81] The

plan and build component emphasizes the requirement to understand available

technology, requirements for data collection, manipulation, and distribution, and ways in

which to overcome political and cultural concerns regarding performance measurement.[82]

The *implement and operate* process concentrates on the requirement to manage,

understand and act on the measures generated. Someone must act on the measures in

order for PMM to be effective and valuable.[83] The *refresh* process underscores the

importance to maintain and nurture the measurement system itself, which is critical to

enable continuous improvement and ensure the measures remain relevant for the

organization.[84]

     Despite the fact that there is no mission or vision explicitly formulated in the

Performance Prism model, the cumulative effect generated from the *Strategies*

perspective, the success mapping, and the interrelated perspectives aggregating to

common objectives combine to implicitly provide the mission and vision intent of the

organization.

     In summary, although there is limited evidence supporting the application of the

Performance Prism in public and non-profit organizations,[85] its PMM framework satisfies

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[80] *Ibid*., 8-9.
[81] *Ibid*., 8.
[82] *Ibid*.

[83] *Ibid*.
[84] *Ibid*., 9.
[85] Micheli and Kennerley, *Performance Measurement Frameworks in Public and Non-Profit Sectors*, 132.

or enables the theoretical attributes required from a public sector PMM framework. It is an innovative and holistic framework that is stakeholder centric with a focus on fulfilling *stakeholder satisfaction*. Assuming *stakeholder satisfaction* is a central outcome for an organization, it is a valuable framework for focusing management on how to achieve long-term success and viability. The five distinct but interrelated perspectives of performance, [86] the success mapping, [87] and the four fundamental processes to support the Performance Prism PMM[88] provide the conceptual foundation to ensure the organization's strategy, objectives and measures are clear, coherent and logical.

ANALYSIS

Considering both the Balanced Scorecard and the Performance Prism meet the principles of a PMM framework for the public sector, this section will analyze which one is better suited for potential implementation in the RCN. This will be accomplished by taking each area of strength and improvement identified from the RCN's current PMM system, and determining whether these areas align with one or both frameworks considered for this paper. Finally, understanding the aggregation of these results will provide the best way forward for the RCN.

This paper provided evidence that the RCN complies with two of the six key principles of a PMM framework in the public sector, namely formulating a well-defined,

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[86] Neely, Adams and Crowe, *The Performance Prism in Practice*, 12.
[87] Neely, Adams and Kennerley, *The Performance Prism: The Scorecard for Measuring and Managing Business Success*, 7.

[88] *Ibid.*, 8-9.

coherent mission, strategy and objectives[89] and rationalizing the programmatic structure as a prelude to measurement.[90] There is also some notable strength observed under the principle of involving key personnel in the design and development phase,[91] particularly as it relates to the institutional leadership in NSHQ and the DNSM directorate.

Starting with the principle relating to formulating a well-defined, coherent mission, strategy and objectives,[92] the Commander's Guidance and Direction to the RCN – Executive Plan 2013-2017 is predominantly a strategy-oriented document.[93] The document is very clear in establishing the strategic context, and then linking the RCN objectives to strategies and plans from the Government of Canada and the DND/CAF, namely the Canadian Forces Defence First Strategy, and the CDS guidance to the CAF and directive on force posture and readiness. Moreover, the strategy maps developed by the DNSM directorate and found at figure 1 and 2 of the RCN Status section are one-page documents, and clearly articulate the critical components of the RCN organizational strategy, including the higher intent, vision, mission, strategic priorities, outputs, and strategic objectives.[94] All the RCN information supporting the formulation of a well-defined, coherent mission, strategy and objectives directly aligns with the Balanced Scorecard theory.

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[89] Kravchuk, Robert S, Schack,Ronald W, *Designing Effective Performance-Measurement Systems Under the Government Performance and Results Act of 1993*, 348
[90] *Ibid.*
[91] *Ibid.*
[92] *Ibid.*

[93] Canada. Department of National Defence., *Commander's Guidance and Direction to the Royal Canadian Navy - Executive Plan 2013-2017*, i-16
[94] Niven, *Balanced Scorecard Step-by-Step for Government and Nonprofit Agencies*, 151.

The principle of rationalizing the programmatic structure as a prelude to measurement,[95] specifically the *One Navy* concept that includes structural changes in order to manage the RCN as a strategic enterprise is a key PMM enabler moving forward. The harmonization of structure and processes will facilitate the development of measures throughout the RCN that can be easily aggregated from the operational to the strategic level, thereby enabling management decisions. This principle supports both the Balanced Scorecard (*Internal Operations* and *Financial* perspectives) and the Performance Prism (*Processes* and *Strategies*) models.

The principle of involving key personnel in the design and development phase of the PMM framework,[96] supported by the active engagement of the institutional leadership in NSHQ and the DNSM directorate, is an attribute that is instrumental to both the Balanced Scorecard and the Performance Prism considering both frameworks heavily rely on management engagement in developing the PMM. The DNSM directorate is already working on establishing a PMM working group that will create the synergy necessary to facilitate involvement from senior Formations leaders.[97] DNSM staff indicated that this working group would be the ideal forum to engage Formations more actively and promote the concept of developing Formation-level measures that will cascade and aggregate up to the NSHQ level in support of the strategy map. This initiative is a key enabler to not only ensure the principle of developing multiple sets of measures for multiple users evolves in the RCN, but also promotes the principle to

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[95] Kravchuk, Robert S, Schack,Ronald W, *Designing Effective Performance-Measurement Systems Under the Government Performance and Results Act of 1993*, 348

[96] *Ibid*.
[97] Canada. Department of National Defence. Director Naval Strategic Management directorate., *Internal Document - RCN PM Framework Implementation Strategy*, 2014d), 10.

consider the customers of programs and systems throughout the process. Although these two principles remain work in progress, they would contribute and align with the Balanced Scorecard's four balanced perspectives (*financial*, *customers/stakeholders*, *internal processes*, and *learning and growth*) and the Performance Prism's five distinct but interrelated perspectives of performance (*stakeholder satisfaction*, *strategies*, *processes*, *capabilities*, and *stakeholder contribution* theories).

The principle of developing a sustainable measurement strategy is crucial to both frameworks considered in this paper and is to be managed carefully considering the technology supporting this tenet, namely DRMIS and its interfaces, is the only aspect supporting a PMM framework analyzed in this paper that is beyond the RCN direct span of control. This is consequential considering DRMIS is the official system of record for engineering, supply and finance and therefore, will play a vital role in providing data, storage and reports for financial and non-financial measures, all of which considered vital to both frameworks. The proactive outlook by DNSM directorate, with the assistance of the Director General Maritime Equipment Program Management (DGMEPM) Management Information System (MIS) section, is evident by their efforts in securing a pilot project to test newly procured DRMIS reporting capabilities. Mandating reporting from Formations to NSHQ is a requirement that enables both framework and needs to be examined closely despite the fact that it will be challenging until the new reporting capability in DRMIS is tested and validated.

The most recent audit expressed concerns on management framework and performance measurement.[98] It could therefore be argued that the RCN has not made

much progress and therefore, there is significant flexibility in selecting a PMM

framework moving forward. The analysis has demonstrated that since the last audit, the

RCN made significant progress and not only has strengths, but is also working on each of

the areas requiring improvement. Most importantly, although two of the three RCN

strengths highlighted above align with either PMM framework considered, the fact that

the RCN has formulated a well-defined, coherent mission, strategy and objectives that

aligns with the Balanced Scorecard framework is very significant considering this

information forms the cornerstone of PMM and provides the foundation required to

establish and interpret measures.[99] Underpinning this key strength is the strong leadership

in NSHQ and DNSM and the *One Navy* concept, very critical attributes that further

reinforces the solid foundation already established. Moreover, the areas of improvement

are all progressing and support the current foundation already established, all of which

align with the principles of the Balanced Scorecard.

The current RCN Executive Plan aligns well with the Balanced Scorecard

model's strategy-centric approach. It is not however a stakeholder-centric strategy, and

would require a rewrite to align with the Performance Prism model. As a result, although

the Performance Prism could theoretically be a viable option, it is not desirable because it

would reverse all the progress and work made since the 2011 AG audit in establishing the

foundation of a PMM framework. Moreover, considering the highest RCN leadership

level is embracing and leading the way forward in a direction that aligns with the well-

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[98] Canada., Office of the Auditor General.,Depository Services Program (Canada), *Report of the Auditor General of Canada to the House of Commons Chapter 5 Maintaining and Repairing Military Equipment - National Defence*, 16.

[99] Kravchuk, Robert S, Schack,Ronald W, *Designing Effective Performance-Measurement Systems Under the Government Performance and Results Act of 1993*, 348

established and proven Balanced Scorecard, continuing in this direction is sensible from a bounded rationality perspective. [100] The alternative would entail convincing the highest RCN leadership level to disregard all the work already done in order to change direction and lead the efforts required to execute the foundational work necessary to implement the Performance Prism, with the risk associated to pursuing an innovative but unproven framework in the public sector.

Pursuing the Balanced Scorecard in the RCN would, in accordance with the theory presented in this paper, enable continuous improvement and enforce compliance throughout the chain of command by promoting and measuring strategic objectives at all RCN levels, thereby increasing transparency and accountability. Additionally, efficient reporting on a common purpose would aggregate to NSHQ, making information readily available, enabling management to identify and mitigate financial and non-financial issues early, focusing and motivating the RCN team to strive for excellence. All these would not impose unnecessary burden or limitations on managers and would ensure performance measurement is followed by management action, which is the second PMM fundamental principle for the public sector. [101]

CONCLUSION

The geopolitical situation post-Cold War motivated democracies around the world to become more fiscally responsible, leading the Government of Canada to mandate that

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[100] Herbert A. Simon, "Theories of Bounded Rationality," *Decision and Organization* 1 (1972), 162-164.

[101] Bovaird, A. G.,Löffler, Elke., *Public Management and Governance*, 132.

departments implement a management framework, including performance measures.[102] Since then, various audits have revealed that departments achieved very limited progress despite the Government's flexibility demonstrated with the MRRS policy, which highlights the high-level management and measurement requirements without imposing a specific framework.[103]

At first glance, the RCN appeared to have experienced the same difficulty as all departments. For this reason, this paper started by examining the theory on the key features of a PMM framework in the public sector. Then, the current PMM information used in the RCN, and any other information that would support such a framework, was investigated to determine the degree to which it complied with the PMM framework in the public sector. Evidence showed that the RCN has solid strengths in the principles relating to formulating a well-defined, coherent mission, strategy and objectives[104] and rationalizing the programmatic structure as a prelude to measurement.[105] Some notable strength was also observed under the principle of involving key personnel in the design and development phase.[106]

Considering the RCN does not fully comply with the PMM framework for the public sector, this necessitated the consideration of a structured approach moving forward. As such, the theory and attributes of two viable PMM frameworks were examined for compliance with the principles of a PMM framework for the public sector,

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[102] Canada. Department of National Defence., *NDHQ 99: Review of Restructuring and Re-Engineering Volume 1 Executive Overview.*, 4., 4.

[103] Canada. Tresury Board of Canada Secretariat., *Policy on Management, Resources, and Results Structures (MRRS)*

[104] Kravchuk, Robert S, Schack,Ronald W, *Designing Effective Performance-Measurement Systems Under the Government Performance and Results Act of 1993*, 348

[105] *Ibid.*

[106] *Ibid*.

the extensively and successfully applied Balanced Scorecard and the promising,

innovative Performance Prism. Both were proven suitable choices for a PMM framework

in the public sector. Using this information, an analysis of the identified RCN strengths

and areas of improvement was conducted to determine whether there was an alignment

with one of the two frameworks considered. The three strengths aligned with the

Balanced Scorecard, while only two aligned with the Performance Prism. The aggregate

effect of the three strengths aligning with the Balance Scorecard, combined with the work

ongoing by the DNSM directorate in the areas of improvement that supports and builds

on the strengths established, was determined to be sufficiently consequential that

pursuing the Balanced Scorecard was justified from a bounded rationality perspective.[107]

The RCN is in much better position than originally advertised. The foundation

established in the RCN is noteworthy and includes the essential attributes to enable the

implementation of a Balanced Scorecard framework. The DRMIS reporting capability is

the only aspect that is outside the RCN span of control and therefore will need to be

managed carefully. The RCN is on the right course and speed to implement the widely

used and proven Balanced Scorecard PMM framework, which when implemented

adequately will enable and empower managers without paralyzing them.

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[107] Simon, *Theories of Bounded Rationality*, 162-164.

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