

**ADAPTING ENVIRONMENTAL MANAGEMENT ACCOUNTING  
PROCESSES AND THE BALANCE SCORECARD TO MEET  
PERFORMANCE REPORTING REQUIREMENTS IN FIRST NATION  
SOCIAL ENTERPRISES:  
A FEASIBILITY STUDY**

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**KEY WORDS:** Sustainability, Environmental Management Accounting, Balance Scorecard, Intangible Assets, Social Enterprise, Aboriginal and Torres Strait Islander.

**ABSTRACT:**

Research has identified the need for further work to develop modelling processes and accounting tools that are compatible with Australia's First Peoples' (Aboriginal and Torres Strait Islander) worldviews and socio-economic systems. While Environmental Management Accounting (EMA) processes have been instrumental in providing a means for corporations to report on performance against environmental measures, and the sustainability or social enterprise balanced scorecard (BSC) has introduced a social dimension, there remains a gap in processes that meet the reporting requirements of First Nation Social Enterprises (FNSE). Distinguishing features of FNSE that require further consideration include communally held assets that comprise both tangible and intangible cultural heritage; access and use protocols that require extensive negotiation within and between groups; and accountability for outcome improvements in economic participation and other social and wellbeing indicators. This paper reports on early findings of an investigation into the means through which culturally and socially located indicators might be developed to facilitate an holistic approach to financial reporting to improve the sustainability of FNSE.

## 1. Introduction: premise, context, purpose, and research questions

Firstly we acknowledge Traditional Owners and Custodians of the country on which we live and work, and pay our respects to our Aboriginal and Torres Strait Islander Elders, past and present.

The key premise of this study is that intangible cultural heritage (ICH) is the predominant asset in Australia's First Nation Peoples' enterprises (FNE). ICH comprises heritage assets and intellectual property (IP), for example, cultural knowledge and labour over time, that contribute services and goods – including to tourism – ([Kirshenblatt-Gimblett, 2004](#)) that do not deplete or degrade natural resources (Harward-Nalder & Grenfell, 2012). The communal nature of ICH places conditions upon the treatment of this asset to comply with cultural protocols and social obligations that are not considered in financial accounting practices, and therefore remain unreportable. These circumstances place First Nation enterprises that are conducted on country by Traditional Owners in the category of social enterprises or socially responsible enterprises (FNSE).

Preliminary research was undertaken to formulate a culturally appropriate methodology and approach to the feasibility study to be undertaken with FNSE operating in South-East Queensland and extending into Northern New South Wales where the state border cuts through the lands of one Aboriginal Nation. This geographical region provides an ideal context for the study because it encompasses a complex of urban and suburban environments, vegetation-rich bio-diverse hinterland areas on the rim of an extinct volcano, and coastal lands with adjacent islands, with eco- and cultural tourism services as key economic drivers. An external factor of influence in this setting is federal and state government policy and associated regulatory tools that control natural resources (Altman, 2004), which in turn are influenced by party politics. Currently both states have conservative governments that have legislated to reduce 'red tape' to facilitate urban development and resource extraction in these fragile environmental areas.

The questions guiding the research are:

- Can ICH and IP be measured using conventional accounting standards for public benefit and not-for-profit organisations such as FNSE?
- Can the adapted and extended tools and models for EMA and BSC be applied to facilitate measures for the performance reporting needs of FNSE, whose asset base comprises communally held ICH and IP?
- In what ways can a study of FNSE, whose profits are communally shared, contribute to the EMA (and sustainability BSC) theory, and practice in the area of *sustainability* (social, environmental, cultural, and economic)?

## **2. Research Methods**

*Data sources* are constructed using a list of all registered FNSE operating in the selected region that are registered as public sector organisations or identified by the Office of Registered Indigenous Corporations (ORIC), Queensland South Native Title Services (QSNTS), Local Development Corporations, and Community Elders. We then identify the ownership structure (e.g., business structures) and various financial accounting data from publicly available databases (e.g. ORIC, ASX, FinAnalysis and BVID).

*Study participants* comprise Community Elders and FNSE directors and managers, in accordance with “Indigenist” research methods (Rigney, 1997) which focus on and learn from the array of cultural knowledge, skills, abilities and contacts possessed by socially marginalised groups that often go unrecognised and unacknowledged (Yasso, 2005). Traditional protocols dictate that we negotiate the terms of engagement and share information leading to, and resulting from the study.

Conventional accounting standards and generally accepted accounting principles (GAAP) will be used to determine the accounting treatment for ICH and IP assets held by public benefit and other not-for-profit entities. We also consider determinations and advisories on Indigenous knowledge rights, and Indigenous cultural and customary rights management within Australia. We then attempt to use extant financial and non-financial data to estimate the valuation of ICH and IP using the recalculation methods devised by Bodle (2013). From this data, traditional BSC indicators based on four perspectives, including intangible assets (Kaplan & Norton, 2004) and the culturally-located set of genuine progress indicators devised by Wild (2011) will be determined. EMA processes will be used to integrate these indicators with the Sustainability (Elijido-Ten & Tjan, 2011) and the Social Enterprise (Somers, 2013) BSCs. Various descriptive and statistical analyses will be conducted to provide initial findings in terms of the research questions and the feasibility of the study.

## **3. Design**

The research design arises from respectful communication (Lui, 1998) that acknowledges the specific historical facts and experiences of individual communities of colonisation (Tuhiwai-Smith L. (Ngati Awa Ngati Porou), 1999)]. A participatory action research model (PAR) is employed whereby mutually beneficial partnerships are established (Kendall, Sunderland, Barnett, Nalder, & Matthews, 2011) with entrepreneurs working together with researchers on a study that will inform their business development plans.

#### **4. Implications: practical and social**

This research seeks to investigate the feasibility of using modelling processes to improve First Nation enterprises' valuation of their IP by quantifying environmental impacts and defining sustainable performance metrics, such as costs, benefits, risks and opportunities related to their sustainability management practices. At the same time, new knowledge gained in this context may have transferability to EMA initiatives, *not previously considered in the literature*.

Currently, most (if not all) ICH and IP owned and managed by FNSE's fail to satisfy the regulatory requirements for the recognition and measurement of assets (AASB 116, 2009; IPSASB 17, 2001). Consequently, total assets do not adequately reflect the organisation's economic or social value or its profitability especially when ICH and IP are responsible for the success of the business model and/or its business strategy. As IP is not explicitly stated on the balance sheet and investments in creating IP are usually expensed as they occur, both the earnings and the book value of equity are understated by the accounting model (Brown, Lo, & Lys, 1999; Canibano, Garcia-Ayuso, & Sanchez, 2000; Lev & Zarowin, 1999). Consequences of this are twofold. Firstly, many intangible-intensive FNSEs face increased higher costs of capital and find it difficult to pass the funding hurdle. Secondly, the management of many FNSE becomes a greater challenge since adequate information on the organisation's assets and liabilities is not available. The study also has broader implications as the demand for socially responsible investments in superannuation portfolios grows.

#### **5. Originality and value of the research**

EMA and the sustainability balanced scorecard (SBSC) (Somers, 2013) have provided a means to integrate environmental, social, and financial measures. To date research into ICH and IP held by FNSE has principally focused on the 'social good' derived through the contribution of First Nation ICH assets held in trust by the Public Sector to mainstream knowledge and culture (Adhemar, 2006; Kirshenblatt-Gimblett, 2004). However not-for-profit organisations, like FNSE, are also required to provide annual financial statements in accordance with the Australian accounting standards and the requirements of GAAP. Advantages exist for FNSE where accountability is measured similarly to organisations in the private sector. Without verifiable asset valuation of ICH and IP, accounting information lacks the possibility for managers to make sound decisions, and management practices are more likely to be misaligned with organisational strategic goals, affecting sustainability.

#### **6. Discussion and Conclusions**

Our study extends the management accounting literature by investigating the feasibility of using EMA processes and the sustainability, or social enterprise BSCs for FNSE organisations, not previously

considered. Through our study, EMA processes currently used to identify collect, calculate (estimate), analyse and report information regarding environmental costs will be extended by developing processes to incorporate indicators for costs associated with social and wellbeing sustainability of FNSE organisations (Vasile & Man, 2012). A culturally-located set of genuine progress indicators devised by Wild (2011) to measure community wellness will be adapted to enable processes that are compatible with the economic systems and worldviews of Traditional First Peoples to be applied to the Australian context.

Our study will contribute to the refinement of the BSC framework to include qualitative indicators for culturally-relevant social wellbeing sustainability values with financial performance. Based on prior literature, the Sustainability (Elijido-Ten & Tjan, 2011) and the Social Enterprise (Somers, 2013) BSCs will be assessed for applicability to the FNSE in the SEQ/Northern NSW Region. The outcome of this research will be to provide more effective internal performance measures that will be contained in external financial reporting to stakeholders on the performance of FNSE.

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