The consequences of customization on management accounting system design

Jan Bouwens a,*, Margaret A. Abernethy b

aNyenrode University, Straatweg 25, 3621 BG, Breukelen, The Netherlands
bThe University of Melbourne, Accounting and Finance, Parkville, Victoria 3052, Australia

Abstract

The understanding of the antecedent conditions influencing the design of management accounting systems (MASs) is very limited. In recent years, significant research attention has been devoted to understanding how different strategic priorities influence these systems. However, the results of these studies have been, at best, equivocal and numerous calls have been made for further research to “unravel” the conflicts that have emerged in the literature. The purpose of this study is to examine not only the relation between strategy and MAS but also to develop a theoretical model to explain how and why this relation exists. The model draws on Galbraith [Galbraith, J. (1973). Designing complex organisations. Reading: Addison-Wesley] to develop a theoretical argument concerning the inter-relations among customization, interdependence and MAS. We are particularly interested in assessing whether the relation between customization and MAS is a direct one or whether the relation operates via interdependence. The results indicate that customization affects MAS via interdependence, rather than directly. The study of 170 production and sales managers further revealed little difference in MAS use between production and sales managers facing similar amounts of customization or interdependence. © 2000 Elsevier Science Ltd. All rights reserved.

1. Introduction

To differentiate products and services from competitors an increasing number of firms, both large and small, are pursuing customer-responsive strategies such as customization or manufacturing flexibility (Gilmore & Pine, 1997; Kotha, 1995). The pursuit of such strategies poses significant challenges for the management of these firms particularly in the design of appropriate structures and information systems (Abernethy & Lillis, 1995; Brickley, Smith & Zimmerman, 1997). The purpose of this study is to examine the implications for the design of management accounting systems when firms pursue customization as a strategic priority. Customization requires the development of an organizational culture where individuals are encouraged to be innovative and responsive to customer requirements. To manage effectively in this setting requires the implementation of a sophisticated information system to ensure that managers have the information necessary to cope with continual changes in product design and processes. The pursuit of customization also changes the nature of the relation between functional subunits within the firm, as the work flows between subunits become highly
interdependent. These interdependencies create additional information requirements to ensure that these work flows are coordinated.

The challenge for management becomes one of satisfying the information needs of departments as well as co-ordinating the work-flows among functional subunits that have become highly interdependent. Management accounting systems (MASs) can play an important role in this situation. They can be designed to provide more sophisticated information that will not only facilitate decision making within departments but will also facilitate co-ordination between functional departments. While there is considerable normative support for this role of MAS (Atkinson, Banker, Kaplan & Young, 1997; Drury, 1997; Horngren, Foster & Datar, 1997) there is relatively little empirical research examining how or in what circumstances MASs can serve this purpose.¹ This study draws on the theoretical frameworks developed by Galbraith (1973) and others (Earl & Hopwood, 1981) to examine the implications of strategic choice, namely, customization for the design of MASs. It examines not only the relation between customization and use of MASs for decision making, but also explores why this occurs. The theory developed in this study argues that it is the interdependencies flowing from customization that primarily influences the relation between customization and MAS design.

The study contributes to the management accounting literature in several ways. Despite the importance of understanding the conditions that give rise to the design and use of MASs (Chapman, 1997; Kren, 1997), this is the first study, of which the authors are aware, that has examined the linkages between strategic choice, interdependence and MAS. The model pays particular attention to the way in which customization and interdependence are conceptualized. This enables the development of a more coherent theoretical model for specifying the nature of the relations examined (Chapman, 1997; Otley, 1980; Otley & Pollanen, in press). Several methodological limitations associated with prior research have also been addressed. For example, the way in which the model is operationalized limits the potential for correlated omitted variable bias. This ensures a more distinct attribution of the results to the theoretical model at test. The method used attempts to overcome threats of common-rater bias by using two different respondents for the variables of interest. The study design also pays particular attention to construct validity issues. The remainder of the paper is structured as follows. The next two sections define the constructs and develop the theoretical model ending with testable hypotheses. This is followed by the results and discussion. The final section identifies the limitations of the study and provides some direction for further research.

2. Definition of constructs

2.1. Customization

The pursuit of customization, often referred to as manufacturing flexibility, is considered to be the “new” competitive edge (Kotha, 1995). It is defined here as the extent to which a business unit allows individual customers to affect the product/service attributes the business unit produces. While customization can be pursued by producing output that is customized by combining standardized modules which are pre-specified by the organization (referred to in the literature as “mass customization”), this study focuses on the extent to which a firm is willing or able to make “customer-requested” changes (Abernethy & Lillis, 1995). This form of customization is often referred to as tailored customization (Kotha, 1995; Kotler, 1989; Pine, 1993). Customization is conceptualized in this study as a continuum. One end of the continuum represents relatively low levels of customization, that is, where customers are able to request changes to basic models. The other end of the continuum represents high levels of customization where the product/service is completely customized to suit customer requirements.

¹ Much of the empirical research in behavioural accounting has focused on the relation between contextual variables and the use of MAS for control purpose. There have been relatively few studies focusing on the decision making role of MAS.
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات