
Investigating a framework to facilitate the implementation of city development strategy using balanced scorecard



a b s t r a c t

This paper examines a framework for facilitating the implementation of City Development Strategy (CDS). Two facets of this framework are explored; factors deduced from previous CDS experiences as having an influence on strategy implementation, and the balanced scorecard (BSC), which is a method commonly used to bridge the gap between strategy formulation and implementation. A questionnaire survey was administered to collect data from stakeholders in the CDS planning process. Partial least squares-structural equation modeling (PLS-SEM) was employed for data analysis. The results of the structural model indicated that stakeholders, financial management, institutionalization, capacity building, and leadership have significant positive effects on CDS implementation. The findings also revealed a significant causal relationship between the factors adopted from the BSC model. This study contributes to the CDS implementation literature by examining the impact of stakeholders, financial management, institutionalization, capacity building, and leadership on future CDS implementation. On a more practical level, these findings contribute to the expanding body of knowledge concerning how to implement CDS successfully in the Iranian context.

Introduction

City development strategy (CDS) is a city-based strategic planning approach which has been applied in over than 200 cities worldwide (UN-Habitat, 2009). CDS is a participatory process focusing on identifying and capitalizing on the urban opportunities available in cities, and developing sound strategies in response to economic realities in order to leverage competitive advantage (Parnell & Robinson, 2006). CDS empowers stakeholders to take a long-term view in facilitating more efficient city management, thereby attracting investments from both domestic and global markets (Asian Development Bank [ADB], 2004). Nevertheless, experiences in the use of CDS worldwide indicate varying levels of success in strategy implementation, depending on the conditions of the cities involved (Partidário, Paddon, Eggenberger, Chau, & Van Duyen, 2008). Despite the focus of CDS on implementation (Cities Alliance, 2006), several cases demonstrate a disparity between

CDS formulation and strategy implementation (Cities Alliance, 2011; Rasoolimanesh, Jaafar, & Badarulzaman, 2014). However, little attention has been given to the factors affecting CDS strategy implementation. Well-formulated strategies are only effective when they are properly implemented (Atkinson, 2006; Noble, 1999), and such success is crucial if a participating city is to achieve its goals and confront its challenges. Successful CDS implementation demands that the known success factors be considered during the planning phase, ensuring the implementation of the formulated strategy (Bryson, 2004). Previous CDS experiences from across the world have yielded several lessons for achieving successful implementation (Rasoolimanesh, Badarulzaman, & Jaafar, 2013). Without effective implementation, CDS is an exercise in futility (ECON Analysis & Center for Local Government, University of Technology, Sydney [ECON & CLG, UTS], 2005; GHK Group [GHK], 2000). As of this writing, no empirical framework addressing these success factors or the causal relationships between them has been forthcoming.

However, a number of approaches have been proposed in the strategy implementation literature to fill the gap between strategy formulation and strategy implementation, identifying a variety of factors and variables with regard to enhancing strategy implementation along the way. A review of literature has highlighted a

number of recurring factors with regard to the planning process; such as communication and coordination among players, which ensures that stakeholders understand the strategies and stay focused on the objectives and vision (Atkinson, 2006; Heide, Grønhaug, & Johannessen, 2002; Okumus, 2001). One of the more common methods for bridging this gap between strategy implementation and formulation (Johnsen, 2001) is the balanced scorecard (BSC), as proposed by Kaplan and Norton (1992). BSC focuses on the planning process and aims to identify the determinants of a strategy's success and the relationship between strategy formulation and implementation (Johnsen, 2001; Kloot & Martin, 2000).

Consequently, we aim to develop a model of the determinants of CDS implementation using BSC and to analyze the causal relationships between these determinants. The model is examined in the context of the city of Qazvin, in Iran, which is undertaking its second round of CDS implementation. We examine the factors in the planning process that contribute toward successful implementation with a view toward generalizing these factors to a wider range of CDS scenarios regardless of CDS objectives.

City development strategy

Indonesia, the Philippines, Thailand, Vietnam, and China were among the earliest recipients of World Bank funded CDS projects in the 1990s. These early CDS adopters were largely influenced by the World Bank's "Urban Strategy" paper, which focused on four key themes; livability, competitiveness, bankability, and good governance and management (World Bank, 2000). Following the example of the World Bank, Cities Alliance also promoted CDS in order to help cities respond to the challenges of globalization and decentralization by focusing on the economic development of the poor (Cities Alliance, 2000; Robinson, 2008). Consequently, the second stage of CDS implementation focused on poverty reduction and alleviation, and on economic and social development (Parnell & Robinson, 2006). Furthermore, some cities promoted improvement in local governance, sustainable development, and the pursuit of Millennium Development Goals (ECON & CLG, UTS, 2005). After two decades of experience with CDS projects worldwide, what has emerged is that every CDS project is as unique as its recipient city, relying on various themes and content, and the different building blocks and methodologies tailored to the unique requirements and conditions of a particular city (Cities Alliance, 2011).

Despite the sheer variety of CDS themes and building blocks, implementation remains a major concern for cities applying for CDS (Pillay, Tomlinson, & du Toit, 2006; Rasoolimanesh et al., 2014).

According to Cities Alliance (2006, 2011), CDS is more than simple strategy development, it is about ensuring successful implementation. In reviewing the results of over 200 CDS application from cities worldwide, certain shortcomings in CDS implementation have become apparent and the knowledge of these shortcomings contributes to our knowledge about how to move ahead successfully (Cities Alliance, 2011; Partidário et al., 2008). Identifying the determinants of successful CDS implementation allows these determinants become the drivers of CDS implementation as stakeholders endeavor to maximize their presence in future applications. These determinants or success factors have been elucidated from various CDS experiences across the globe (see Table 1).

Theoretical background of BSC as a strategy implementation approach

Kaplan and Norton (1992) initially conceived of the BSC as a performance measurement tool for use by the private sector. Unlike traditional financial measures, the BSC incorporated financial and non-financial factors (i.e. customer, finance, internal business processes, and learning and growth) to assess the performance of these private organizations. The BSC emphasizes the idea of investing in the future to achieve visions and goals; that is, by investing in people, systems, and procedures. However, the BSC also connects the vision and strategic goals to long-term plans and annual budgets, and provides feedback systems for updates and periodical enhancement of the vision and strategy. As such, the BSC fills the gaps in the planning process by describing the process for the successful strategy implementation (Kaplan & Norton, 1996).

The BSC is highly regarded by a number of academics (Atkinson, 2006; Kloot & Martin, 2000; Sharma & Gadenne, 2011) due to its effectiveness in guiding successful strategy implementation. The success of the BSC as a strategic management system is a function of its ability to identify the determinants, or secondary objectives, of a plan which contribute to successful implementation. The results, or primary objectives, of a strategic plan refer to the strategic objectives; whereas the secondary objectives are the determinants of the success of these strategies or how best to achieve the desired outcomes. Management tools, such as the BSC, allow the success or failure of a plan to be forecast by considering the determinants of a strategy (Jensen, 2001). As a predictive tool, the primary objectives are necessarily viewed as indicators of past performance, while the determinants are what drives future performance (Atkinson, 2006; Kloot & Martin, 2000). Obviously, the primary objectives of any profit-oriented company will revolve around the financial aspects of the BSC with a view toward maximizing the return on investments for shareholders. However, for non-profit organizations and the public sector, long-term goals; such as poverty reduction or disaster management, are articulated via the organization's vision and mission statements (Kaplan & Norton, 2001). Therefore, according to Kaplan and Norton (2001), such organizational vision and mission statements serve to inform the primary objectives of a non-profit public sector organization, while the secondary objectives might be limited to the intention to achieve successful implementation. Kaplan and Norton (2001) introduced a modified BSC framework for the public sector in which the mission and vision are promoted from the top of the framework (see Fig. 1).

The financial perspective of the BSC is concerned with the estimation of funding necessary to complete implementation, as well as transparency, accountability, effectiveness, and efficiency in appropriating these funds (Kloot & Martin, 2000; Niven, 2008). The customer and stakeholder component of the BSC addresses the needs of the stakeholders, promoting their involvement in the decision-making process (Jensen, 2001; Kaplan & Norton, 2001). Valuing stakeholders is an essential part of successful strategy

Table 1
The determinants of implementation of CDS.

| Success factors | Studies that mentioned and emphasized Success factors |
|-------------------------------|--|
| Consensus building | ADB, 2004; Cities Alliance, 2002; ECON & CLG, UTS, 2005; Halla, 2007; Lipietz, 2008; Partidário et al., 2008 |
| Participation of stakeholders | ADB, 2004; Cities Alliance, 2009, 2011; ECON & CLG, UTS, 2005; Lipietz, 2008; Parnell & Robinson, 2006; Partidário et al., 2008 |
| Finance | ADB, 2004; ECON & CLG, UTS, 2005; Cities Alliance, 2006; GHK, 2000; Robinson, 2008; UN-Habitat, 2002; |
| Institutionalization | Cities Alliance, 2006, 2009, 2011; ECON & CLG, UTS, 2005; GHK, 2000; Parnell & Robinson, 2006; UN-Habitat, 2002; |
| Capacity building | ADB, 2004; Cities Alliance, 2009, 2011; ECON & CLG, UTS, 2005; Partidário et al., 2008; UN-Habitat, 2002; Watson, 2009; Wong et al. (2006) |
| Leadership | Cities Alliance, 2006, 2007, 2009; GHK, 2000; Parnell & Robinson, 2006; UN-Habitat, 2002; Watson, 2009; |

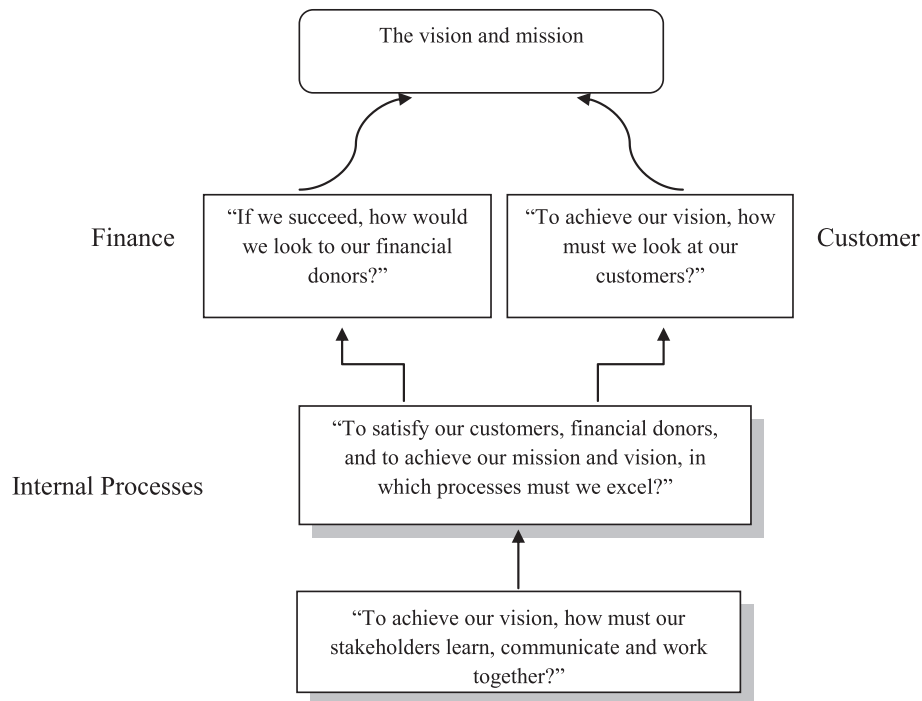


Fig. 1. The BSC framework for public sectors.
Source: Kaplan & Norton, 2001.

implementation in both the private and public sectors and increases stakeholder satisfaction. Workable organizational policies and strategies are born of stakeholder consensus, hence the importance of encouraging the participation of stakeholders and considering their views in the development of strategic plans (Kaplan & Norton, 2001; Kloot & Martin, 2000).

The internal process component of the BSC is concerned with the processes that add value for stakeholders, increase player effectiveness and accountability, and work toward achieving the organization's vision and mission. Ultimately, these internal processes are concerned with the implementation of the strategies (Kaplan & Norton, 2001; Niven, 2008). Also, the learning and growth aspect of the BSC is concerned with having the necessary skills and technological capacity to achieve the objectives and implement the strategies. The learning and growth component of the BSC ultimately contributes to the other three components through the alignment of human resources (Kaplan & Norton, 2001).

In summary, the strategic plan follows from a definition of the expected results, the primary objectives, as derived from the stated vision and mission. These primary objectives facilitate the identification of the secondary objectives and determinants (Kloot & Martin, 2000) which inform the process of implementation (Niven, 2008; Noble, 1999). To this end, four new management processes linking strategic targets with operational activities, have been proposed; namely translating the vision, communicating and linking, business planning, and feedback and learning (Kaplan & Norton, 2007). These four processes collude to build consensus among stakeholders concerning the vision and strategies, and align both personal and group goals with the strategies; these factors which are correlated with successful strategy implementation (Heide et al., 2002; Kaplan & Norton, 1996; Okumus, 2001). Therefore, the BSC can transform an organization's mission and vision into strategic themes and create consensus among stakeholders to ensure the achievement of strategic goals and success in implementation (Kaplan & Norton, 2001).

Conceptual framework

We aim to examine a framework for facilitating the successful implementation of CDS. This framework is built upon the factors known to affect CDS implementation. The dependent variable in this framework is a known predictor of successful CDS implementation, having been identified in the CDS literature, and is used to measure the effects of the other determinants on CDS implementation. This variable is the stakeholders' feelings of ownership over the CDS. Ownership in this context refers to the right of stakeholders participate in and exert control over the decision-making and decision-taking processes (Pierce, Kostova, & Dirks, 2001; UN-Habitat, 2007). The sense of ownership over a CDS plays a significant role in the success of its implementation. The involvement of key stakeholders, such as local authorities, NGOs, and the private sector in the process of planning fosters a sense of shared ownership and trust (Cities Alliance, 2007; Rasoolimanesh et al., 2014). According to Atkinson (2006) and Noble (1999), this sense of ownership over a plan not only facilitates strategy implementation, but is actually predictive its success. Cities Alliance (2011), having assessed a number of CDS applications, notes that "without ownership, the CDS will likely not be implemented and remain merely an exercise" (p. 3).

The customer component of the BSC, according to Niven (2008), addresses structural concerns about who is defined as a customer and how to maximize value for them in order to achieve the vision and mission. For CDS, the customers are the stakeholders and city residents whom the CDS implementation will affect. Therefore, this component of the BSC is about maximizing value for both the stakeholders and city residents, and encouraging their involvement in the planning process (Kaplan & Norton, 2001). Previous CDS experiences highlight the importance of the participation of stakeholders and of building consensus among them, both of which are determinants of CDS implementation based on the customer component of the BSC. In the conceptual framework, and based on the literature, consensus building and the participation of

stakeholders are first-order factors, thereby establishing stakeholders as a second-order factor. Therefore, the first hypothesis of this study is:

H1. There is positive relationship between stakeholder factor, including effective participation and consensus building, and the sense of ownership over the CDS.

The financial component of the BSC is concerned with the provision and mobilization of the financial resources necessary to achieve the organization's vision and satisfy the customer's needs (Kaplan & Norton, 2001; Niven, 2008). These resources can be defined via transparent financial reports and effective and innovative financial management, and satisfying financial backers and stakeholders. Conversely, the financial determinants of CDS implementation are concerned with bankability or financial soundness, which includes expenditure management, revenue mobilizing, inter-governmental transfers, financial administration, and access to credit (World Bank, 2000). Financial reports related to CDS should reflect these basic principles of financial soundness. Therefore, the second hypothesis in this study is articulated thus:

H2. Financial factor has a positive influence on the sense of ownership over CDS.

The internal process component of the BSC enhances the overall strategy planning and implementation system with a view toward increasing the probability of successful implementation (Niven, 2008). The CDS success factors that determine institutionalization address this aspect of the BSC. To explain, CDS institutionalization refers to the efforts made to incorporate the CDS into the routine city management schedule, which includes budgeting and management cycles (ECON & CLG, UTS, 2005). The institutionalization of the CDS and the establishment of basic rules and procedures is an essential part of adapting a plan to suit local and current conditions, to formulating an appropriate municipal budgets, promoting transparency, guaranteeing public participation, and ultimately achieving the planned objectives (Cities Alliance, 2006; Steinberg, 2005). Therefore, the following hypothesis describes the effect of institutionalization on CDS ownership:

H3. Institutionalization has a positive effect on the sense of ownership over CDS.

The learning and growth component of the BSC require that the following structural questions be addressed; "To achieve our vision, how must our stakeholders learn, communicate, and work together?" and, "How do we enable ourselves to grow and change, while meeting ongoing demands?" Stakeholders must to enhance their capacity to cope with the demands of the CDS and with the prevailing conditions brought about as a result of the successful implementation of the CDS. In this respect, capacity building refers to the provision of training for stakeholders to enhance their skills and technical capacities. Efforts to build upon institutional capacity can improve the ability of local authorities to implement the CDS successfully (UN-Habitat, 2002; Wong, Tanga, & van Horen, 2006). Consequently, the fourth hypothesis of this study is described in terms of the sum effect of capacity building:

H4. Capacity-building among stakeholders has a positive effect on the sense of ownership over CDS.

According to the literature, leadership is as an important factor that makes a significant contribution to the successful implementation of any strategy (Noble, 1999; Qi, 2005). In terms of CDS, leadership involves the authority and commitment of civic leaders during the planning process. A number of CDS policy documents and discussion papers highlight the importance of strong

leadership in generating a community-wide commitment to the principles of CDS, from planning through to implementation (GHK, 2000). The importance of effective leadership as a determinant of CDS success cannot be overstated such that its neglect is associated with the failure of CDS implementation. However, Kaplan and Norton (2001) BSC model does not specifically address leadership. According to Sharma and Gadenne (2011), the lack of attention to leadership has resulted in some conflicts in the application and implementation of the BSC. However, leadership would appear to be crucial in supporting the other components of the BSC (Kaplan, 2009). Therefore, leadership has been included in the current study with a view toward building upon the BSC model as described by Kaplan and Norton (2001). Fernandez, Cho, and Perry (2010) developed an integrated leadership model for the public sector that identifies five leadership roles; including task-oriented, relations-oriented, change-oriented, diversity-oriented, and integrity-oriented roles. Therefore, the fifth hypothesis in this study concerns the sum effects of leadership on the sense of CDS ownership:

H5. Leadership has a positive effect on the sense of ownership over CDS.

In developing the conceptual framework for this study, the causal relationships between the variables were adopted from Kaplan and Norton (2001), who indicated that the learning and growth component of the BSC (i.e. capacity-building) influences the internal processes (i.e. institutionalization), and that the internal processes influence both the customer and finance perspectives. Kaplan and Norton (2001) claim that these four perspectives, due to their causal relationships, facilitate the achievement of the primary objectives (i.e. mission and vision) and strategy implementation. Given that the effects of leadership are pervasive throughout the BSC, leadership was included as a variable in the framework. Fig. 2 illustrates the conceptual model. The following hypotheses have been developed to examine the causal relationships between the CDS determinants based on the BSC:

H6. Leadership has a positive effect on capacity building.

H7. Leadership has a positive effect on institutionalization.

H8. Leadership has a positive effect on finance.

H9. Leadership has a positive effect on stakeholders.

H10. Capacity building positively influences institutionalization.

H11. Institutionalization positively influences finance.

H12. Institutionalization positively influences stakeholders.

Research methodology

A quantitative survey in the form of a questionnaire was used in this study. Due to the relatively small size of the target population, participants in the planning process for Qazvin's second CDS, it was possible to conduct an entire population survey. This population included members of local authorities, NGOs, central government agencies, and local experts. Having administered the questionnaire to this population, 113 questionnaires were subsequently collected.

Questionnaire development

The primary research tool for this study was a self-administered questionnaire, which included seven constructs (i.e. latent variables); namely consensus building, effective participation, finance,

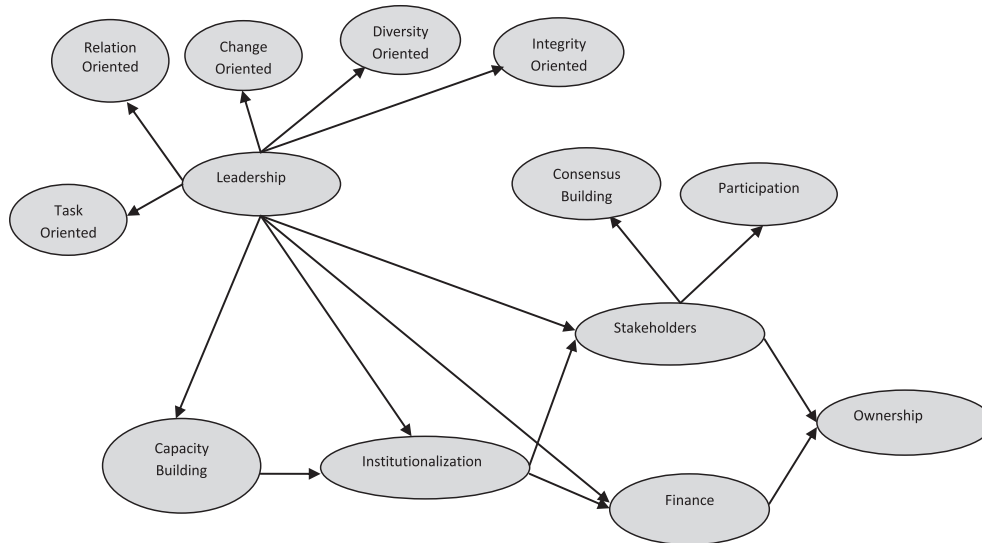


Fig. 2. The proposed conceptual framework (hypothetical model).

institutionalization, capacity building, leadership, and ownership (see Appendix 1).

The measurement items for consensus building were adapted from Innes and Booher (1999, 2010). The measurement items for effective participation were adapted from King, Feltey, and Susel (1998), Rowe, Horlick-Jones, Walls, Poortinga, and Pidgeon (2008), and UN-Habitat (2007). Studies by Cities Alliance (2006) and Kloot and Martin (2000) contributed toward the development of the finance measurement items. The measurement items for institutionalization were adapted from the work of Alexander (2005) and ECON & CLG, UTS (2005). Capacity-building measurement items were adapted from Ajjaz (2010) and World Bank (2011). Leadership measurement items were adapted from Fernandez et al. (2010). The measurement items for ownership were developed by the investigators themselves based on a report by World Bank (2011).

Partial least squares – structural equation modeling (PLS-SEM), using WarpPLS 3.0 (Kock, 2012), was used to analyze the collected data and to examine the conceptual framework. PLS-SEM facilitates theory building in studies that seek to explore causal relationships between latent variables (Hair, Ringle, & Sarstedt, 2011).

Case study

Three Iran cities have applied CDS since 2007; namely Qazvin, Anzali, and Shahrood; enabling them to face new challenges in urban development and to negate the negative impact of previous urban planning deficits. Qazvin city was selected as the focus of the current study because it is currently undergoing its second attempt at CDS implementation. The first CDS, prepared in 2006 by the Qazvin municipality, was never implemented owing to a variety of reasons; including a lack of consensus among stakeholders, the municipality having insufficient authority with which to approve urban plans, and the lack of a clear locus for CDS in the urban planning system of Iran. Therefore, the success of Qazvin's second CDS relied on identifying a framework that would facilitate the implementation of the strategy and account for peculiarities of context in Qazvin city. Despite four decades of urban planning experience in Iran, many urban plans continue to be poorly implemented (Panahandeh Khah, Farhoodi, Gharakhlou-N, & Ghadami, 2009; Sharmand Consulting Engineers, 2003). An earlier study of Qazvin's urban planning history has confirmed the presence of a plethora of problems related to implementation

(Sharmand Consulting Engineers, 2003). Moreover, the implementation failure of Qazvin's first CDS only highlights the need to investigate what factors might contribute toward the effective implementation of Qazvin's second CDS.

Analysis and findings

Descriptive analysis

Prior to assessing the conceptual framework and examining the effects of factors influencing the implementation of CDS in Qazvin city, we performed a descriptive analysis to understand the status of these factors in the context of Qazvin. Table 2 shows that the highest mean value of the determinants of CDS implementation belonged to consensus building, followed by the integrity-oriented dimension of leadership. The mean values for the other dimensions of leadership were less than 3, and these values indicating the low level of leadership used in the process of preparing the CDS for Qazvin city. The capacity-building factor, with a mean value of 3.15, also ranked highly. The lowest mean value for factors influencing the implementation of CDS belonged to finance. Therefore, from the perspective of respondents, the least attention in the planning process of Qazvin's CDS had been given the finances necessary for the plan's implementation.

Assessment of the model using PLS

Assessing a model using PLS follows a two-step process involving the assessment of both the measurement and structural

Table 2
Results of descriptive analysis.

| Construct | Mean | Std. Dev. |
|---------------------------------------|------|-----------|
| Stakeholder (Consensus Building) | 3.25 | 0.81 |
| Stakeholder (Effective Participation) | 3.04 | 0.93 |
| Finance | 2.85 | 1.01 |
| Institutionalization | 3.02 | 0.94 |
| Capacity Building | 3.15 | 0.98 |
| Leadership (Task-oriented) | 3.06 | 1.03 |
| Leadership (Relations-oriented) | 2.98 | 0.98 |
| Leadership (Change-Oriented) | 2.86 | 1.06 |
| Leadership (Diversity-Oriented) | 2.95 | 1.04 |
| Leadership (Integrity-Oriented) | 3.24 | 0.97 |
| Ownership | 3.20 | 0.89 |

models (Chin, 2010; Hair et al., 2011). The assessment of the measurement model entails an examination of the validity and reliability of the relationships between the LVs and the associated observable variables. The assessment of the structural model is concerned with the relationships between the constructs (Chin, 2010; Hair et al., 2011).

Assessment of the measurement model

Six reflective constructs were integrated into the model used in this study. These constructs included stakeholders, finance, institutionalization, capacity building, leadership, and ownership. The stakeholder and leadership constructs were second-order factors, while the remaining constructs constituted first-order factors. The

Table 3
Results of the assessment of measurement model for first order constructs.

| Construct | Items | Factor loading | CR | Cronbach's alpha | AVE |
|----------------------|-------|----------------|-------|------------------|-------|
| Consensus Building | Con1 | 0.775 | 0.889 | 0.843 | 0.616 |
| | Con2 | 0.839 | | | |
| | Con3 | 0.752 | | | |
| | Con4 | 0.744 | | | |
| | Con5 | 0.810 | | | |
| Participation | Par1 | 0.786 | 0.914 | 0.882 | 0.682 |
| | Par2 | 0.881 | | | |
| | Par3 | 0.798 | | | |
| | Par4 | 0.875 | | | |
| | Par5 | 0.783 | | | |
| Finance | Fin1 | 0.825 | 0.927 | 0.901 | 0.718 |
| | Fin2 | 0.772 | | | |
| | Fin3 | 0.908 | | | |
| | Fin4 | 0.850 | | | |
| | Fin5 | 0.877 | | | |
| Institutionalization | In1 | 0.825 | 0.936 | 0.920 | 0.677 |
| | In2 | 0.889 | | | |
| | In3 | 0.804 | | | |
| | In4 | 0.805 | | | |
| | In5 | 0.851 | | | |
| | In6 | 0.792 | | | |
| | In7 | 0.790 | | | |
| Capacity Building | Cap1 | 0.912 | 0.899 | 0.831 | 0.749 |
| | Cap2 | 0.885 | | | |
| | Cap3 | 0.795 | | | |
| Task-oriented | LT1 | 0.890 | 0.905 | 0.843 | 0.761 |
| | LT2 | 0.852 | | | |
| | LT3 | 0.847 | | | |
| Relations-oriented | LR1 | 0.905 | 0.936 | 0.909 | 0.785 |
| | LR2 | 0.874 | | | |
| | LR3 | 0.886 | | | |
| | LR4 | 0.879 | | | |
| Change-Oriented | LC1 | 0.924 | 0.935 | 0.896 | 0.828 |
| | LC2 | 0.925 | | | |
| | LC3 | 0.88 | | | |
| Diversity-Oriented | LD1 | 0.931 | 0.93 | 0.887 | 0.816 |
| | LD2 | 0.895 | | | |
| | LD3 | 0.883 | | | |
| Integrity-Oriented | LI1 | 0.887 | 0.904 | 0.841 | 0.759 |
| | LI2 | 0.899 | | | |
| | LI3 | 0.826 | | | |
| Ownership | Own1 | 0.759 | 0.889 | 0.833 | 0.667 |
| | Own2 | 0.833 | | | |
| | Own3 | 0.829 | | | |
| | Own4 | 0.843 | | | |

stakeholder LV included two first-order factors (i.e. consensus building and participation), whereas the leadership LV had five first-order factors (i.e. task-oriented, relations-oriented, change-oriented, diversity-oriented, and integrity-oriented roles). The assessment of the measurement model was conducted via a two-step analysis. Initially, the first-order factors were analyzed together. After generating the second-order factors, a round of analysis was conducted to complete the assessment of the measurement model. The reflective measurement model evaluates the reliability and validity, measured by way of Composite Reliability (CR) and Average Variance Extracted (AVE) (Chin, 2010; Hair et al. 2011).

Tests of indicator reliability and construct reliability were conducted in order to ascertain the reliability of the reflective measurement model for SEM. In assessing indicator reliability, the loading of each indicator on its associated latent construct was examined. This loading should be greater than 0.7 for indicator reliability to be considered acceptable (Hair et al., 2011; Hulland, 1999). Table 3 indicates that the loading of each indicator on its corresponding LV was higher than 0.7 prior to the assignment of the second-order LVs.

Two coefficients are typically considered when assessing construct reliability, CR and the more common Cronbach's alpha coefficient, (Bagozzi & Yi, 1988; Chin, 2010). However, CR is more suitable of the two for PLS-SEM (Hair et al., 2011). Table 3 indicates that both the CR and Cronbach's alpha for all first-order LVs in the measurement model exceed 0.8. These results indicate that the measurement model is both internally consistent and reliable.

The validity of the reflective measurement model is a function of both convergent and discriminant validity (Hair et al., 2011). The AVE of the LVs should be higher than 0.5 for convergent validity to be considered acceptable (Bagozzi & Yi, 1988; Chin, 2010). AVE is used to measure the amount of variance in an LV as a product of its indicators (Chin, 2010). Table 3 shows that the AVE of each construct exceeded 0.5. Therefore, measurement model's convergent validity was highly acceptable.

Discriminant validity is the extent to which each construct is truly distinct from other constructs in the model (Chin, 2010). To test discriminant validity, the AVE of each construct should be higher than the highest squared correlation of the construct with any other LV in the model (Fornell & Larcker, 1981; Hair et al., 2011). A comparison of the AVE for each construct with its squared correlation to all other constructs indicates that the discriminant validity of the measurement model in this study was acceptable.

In the second step, the measurement model was analyzed by generating 2 s-order factors, stakeholders and leadership. Consensus building and participation both involve stakeholders; therefore, these variables served as indicators of stakeholders. On the other hand, task-oriented, relations-oriented, change-oriented, diversity-oriented, and integrity-oriented established leadership as a second-order LV. Consequently, the measurement model was assessed with six LVs, 2 s-order factors (i.e. leadership and stakeholders), and four first-order factors (i.e. finance, institutionalization, capacity building, and ownership). The results indicated high values for reliability, convergent validity, and discriminant validity for the six constructs post-modification, with CR values exceeding 0.899, the AVEs greater than 0.667, and the AVE of each construct also being higher than the construct's squared correlation with the other LVs.

Assessment of structural model

Two tests should be completed in order to complete a preliminary assessment of the structural model and conceptual framework; namely the R-square (R^2) measure of the endogenous constructs and the path coefficients (Chin, 2010; Hair et al., 2011).

The path coefficients must be significant; however, the R^2 can be variable depending on the research area. Chin (2010) suggested values of 0.67, 0.33, and 0.19 as measures for R^2 to be considered substantial, moderate, and weak respectively. The R^2 values of all the endogenous constructs in this study ranged from 0.63 to 0.70. Thus, these values were considered high and acceptable. The path coefficients were similarly highly significant, as shown in Table 4 and Fig. 3.

Table 4 shows the total effect, based on both direct and indirect effects, of each determinant for the ownership construct was identified in the model, and their associated effect sizes. The total effect of these success factors on the ownership construct was hypothesized in H1 to H5. Table 4 indicates that all these effects were significant. The reporting of total effects (Albers, 2010) is very important in this study because we aimed to assess the effect of each determinant or success factor on CDS strategy implementation. In addition, the findings indicated that the relationships between the success factors, earlier hypothesized H6 to H12, were significant.

The results indicate that leadership had the largest effect size and that capacity building had the least effect. The effect sizes for relationships between the success factors ranged from 0.665 for the effect of leadership on capacity building, to 0.186 for the effect of leadership on finance.

Discussion

We looked to devise a framework for the determinants and factors influencing the implementation CDS using the BSC model. Despite the importance of implementing strategic urban plans, in particular CDS, there is a significant lack of research regarding how best to link strategy planning with strategy implementation (Cities Alliance, 2011).

Based on the CDS literature reviewed concerning strategy implementation and the BSC, the most important determinants of successful strategy implementation are stakeholders, finance, institutionalization, capacity building, and leadership. In considering these determinants and success factors, it is imperative to bridge the gap between strategy formulation and strategy implementation. Here, we examined the effects of these factors on ownership as an important predictor of CDS strategy implementation. In addition, we examined the cause and effect relationships between these factors.

The results of our analysis allude to the positive and significant effects of leadership on ownership, thereby confirming previous CDS studies (Cities Alliance, 2006; Watson, 2009). The capacity of stakeholders was similarly found to have a significant effect on ownership as a predictor of CDS implementation. The effect of

capacity building on ownership has previously been reported in the CDS literature (ECON & CLG, UTS, 2005). Moreover, Heide et al. (2002), and Okumus (2001) observed the effectiveness of learning and capacity building as factors which increased the success of strategy implementation; the absence of learning and capacity building having been referred to as a “killer” of implementation (Heide et al., 2002).

Institutionalization was shown to have a significant effect on CDS implementation. This finding is consistent with previous studies stressing the importance of institutionalization in successful CDS implementations (Cities Alliance, 2009, 2011; Watson, 2009). Finance was also found to have a significant effect on CDS strategy implementation. Findings attesting to this relationship confirmed the earlier work of Cities Alliance (2011) and Poister and Streib (2005). This component of this model addresses the estimation of funds, as well as transparency, accountability, effectiveness, and efficiency in appropriating financial resources (Kloot & Martin, 2000; Niven, 2008). The CDS and public sector BSC literature stresses the importance of funding factors in successful strategy implementation (Cities Alliance, 2011; Kloot & Martin, 2000; Poister & Streib, 2005).

The findings of this study allude to the significant effect of stakeholders, including consensus building and effective participation, on ownership. Several previous studies had similarly observed a significant relationship between stakeholders and CDS implementation (de Graaf & Dewulf, 2010; Halla, 2007; Lipietz, 2008; Steinberg, 2005). Therefore, the five constructs adopted from the CDS literature had a positive effect on the sense of ownership. The leadership and stakeholder constructs had greatest effect size on ownership, followed by finance and institutionalization with a moderate effect size, and capacity building with a small effect size.

The framework articulated in this study describes the causal relationships between four constructs; namely stakeholders, finance, institutionalization, and capacity building as adopted from Kaplan and Norton (2001). Analysis of the framework indicated that the learning and growth components (i.e. capacity building) had an effect on the internal processes component (i.e. institutionalization) and, in turn, the internal processes component had an effect on the customer (i.e. stakeholders) and finance components. These results allude to a significant relationship between capacity building and institutionalization, as well as between institutionalization and stakeholders, and between institutionalization and finance. Therefore, the results of this study were consistent with the framework as proposed by Kaplan and Norton (2001). Several recent BSC studies (Kaplan, 2009; Sharma & Gadenne, 2011) highlight the conflicts that ensue in the application and implementation of BSC when there is a lack of clear leadership. These studies emphasize the role of leadership in supporting much of the BSC. Likewise, the CDS literature stresses the role of leadership in achieving successful CDS implementation (Cities Alliance, 2006, 2007, 2009). The results of this study allude to the positive and significant effect of leadership on stakeholders, finance, institutionalization, and capacity building. Comparatively, leadership has the highest effect on capacity building and the lowest effect on finance. These results demonstrate the crucial role of leadership on other determinants and success factors in the model.

Theoretical and practical contributions and future researches

The most important theoretical contribution to emerge from this study is the identification a framework for the facilitation of CDS implementation. The CDS literature indicates an array of problems plaguing CDS implementation efforts worldwide. And while a number of studies have attempted to explore the factors

Table 4
Results of hypothesis testing.

| Hypotheses | Direct/Total effect | p value | Effect size | Supported |
|---|---------------------|---------|-------------|-----------|
| H1 Stakeholders- > Ownership | 0.61 | <0.01 | 0.489 | Yes |
| H2 Finance- > Ownership | 0.29 | <0.01 | 0.203 | Yes |
| H3 Institutionalization- > Ownership | 0.35 | <0.01 | 0.297 | Yes |
| H4 Capacity Building- > Ownership | 0.16 | <0.01 | 0.112 | Yes |
| H5 Leadership- > Ownership | 0.68 | <0.01 | 0.500 | Yes |
| H6 Leadership- > Capacity Building | 0.82 | <0.01 | 0.665 | Yes |
| H7 Leadership- > Institutionalization | 0.42 | <0.01 | 0.335 | Yes |
| H8 Leadership- > Finance | 0.25 | <0.01 | 0.186 | Yes |
| H9 Leadership- > Stakeholders | 0.54 | <0.01 | 0.419 | Yes |
| H10 Capacity Building- > Institutionalization | 0.45 | <0.01 | 0.361 | Yes |
| H11 Institutionalization- > Finance | 0.61 | <0.01 | 0.490 | Yes |
| H12 Institutionalization- > Stakeholders | 0.29 | <0.01 | 0.213 | Yes |

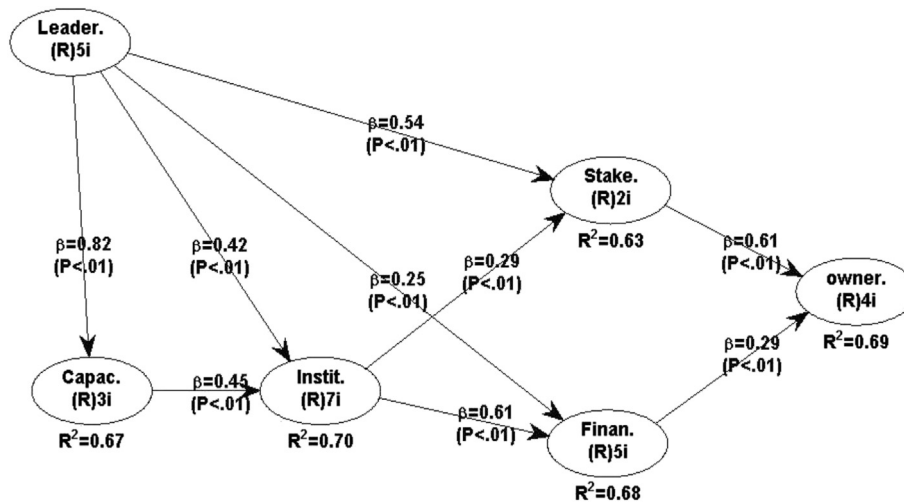


Fig. 3. Results of the structural model.

contributing to successful CDS implementation; until this study, there had been no framework to describe the causal relationships between those factors. Furthermore, in addition to being the first to devise a framework of CDS implementation success factors and the causal relationships between these factors, this study was the first attempt to examine these relationships using the powerful PLS-SEM statistical method, which is well suited for model development. The results of this study confirm the validity of the model of determinants and success factors, and substantiate the effect of these factors on ownership as a predictor of CDS strategy implementation. Ownership, which relates to the stakeholders' participation in decision-making and taking action, is at the core of successful CDS strategy implementation.

In addition, our findings have practical implications for improving CDS implementation efforts in Iran and Qazvin city. With CDS in Iran still very much in its infancy, little to no research had been conducted to investigate the determinants and success factors for CDS implementation in Qazvin or other Iranian cities. This study highlights the influence of the determinants and success factors on ownership as a predictor of CDS strategy implementation in Qazvin City and in the Iranian context. Therefore, these results contribute toward the identification of a guideline for the successful implementation of CDS.

There are a number of potential areas for further investigation that can be elucidated from this CDS implementation study. While

this study focused on the determinants and success factors in the CDS planning process, we have not explored other dimensions of success related to the context, content, or outcome of CDS. Similarly, we examined the effects of the determinants and success factors of CDS implementation in relation to ownership as a predictor of implementation success. A future study might evaluate the effects of the determinants and success factors on CDS implementation longitudinally. In addition, the framework proposed in this study was drafted with Qazvin city and Iran in mind. More research is necessary to test the validity of this framework in different contexts and to generalize the framework of success factors for the strategic implementation of CDS in other cities. Such findings would make a significant contribution to the CDS literature.

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Appendix 1. Adapted items used to measure the constructs

Consensus building

- Con 1. Inclusion of all agents and stakeholders who have power or could be affected by the outcomes of the process during planning.
- Con 2. A dialog where all are heard and respected and equally able to participate.
- Con 3. Dependence of the stakeholders to a significant degree on the other stakeholders in a mutual way.
- Con 4. Stakeholder engagements that can mutually assure that the claims of stakeholders are legitimate, accurate, comprehensible, and sincere.
- Con 5. An understanding that "consensus" is reached only when all interests have been explored and every effort has been made to satisfy these concerns.

Participation of Stakeholders

- Par 1. Participation of all stakeholders and interests in the process of planning.
- Par 2. Participation of stakeholders in all stages of planning from the outset to the end.
- Par 3. Equality of participants and stakeholders in discussions, decision making, and decision taking.
- Par 4. The relationship between outcomes and the result of discourses of all agents and stakeholders.
- Par 5. How much consensus about the plan was built due to participation among stakeholders

Finance

- Fin 1. The forecast of revenues including local revenues, intergovernmental transfers, and access to capital market to implement CDS.
- Fin 2. Various scenario to implement CDS based on different level (Low- Medium- High) of revenues forecasts
- Fin 3. The forecasts of expenditures to implement CDS, including current and capital spending.
- Fin 4. Relationship between annual municipal budget and financial report of CDS.
- Fin 5. Proper and transparent resource allocation and stewardship mechanism in the plan

Institutionalization

- In 1. Integrating the CDS into the corporate plans and budgets of those organizations that have accepted responsibility for projects and programs
- In 2. Establishing and maintaining working partnerships, cooperation, and coordination of efforts.

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(continued)

| | |
|-------------------------------|--|
| In 3. | Relationship between the plan and other municipal plans. |
| In 4. | Linking the activities of different levels or spheres of government (“joined up government”). |
| In 5. | Continuing to build the capacity required, whether in terms of enhancing skills, marshaling resources, or creating new institutions and processes, for planning and implementation. |
| In 6. | Suitable monitoring and evaluation system to control the strategic direction of the plan |
| In 7. | Ensuring that the CDS remains highly visible and that all stakeholders and especially the community at large are kept informed about progress |
| Capacity Building | |
| Cap 1. | Trained and expert staff in local authority to conduct the process of planning |
| Cap 2. | The capacity of local authorities on leadership, participatory and collaborative planning, financial management, and networking |
| Cap 3. | The effectiveness of organizational arrangements of plan comprises the systems, rules of action, processes, personnel, and other resources |
| Leadership | |
| L1. Task-Oriented | |
| LT 1. | As a stakeholder, I know how my work relates to the plan's goals and priorities. |
| LT 2. | Managers promote communication among different work units (for example, about projects, goals, and needed resources). |
| LT 3. | Team leaders provide employees with constructive suggestions to improve their task in the plan. |
| L2. Relations-Oriented | |
| LR 1. | Making opportunity for stakeholders to improve their skills in the process of planning. |
| LR 2. | Providing opportunities for participants and staff to demonstrate their leadership skills. |
| LR 3. | Participant and stakeholders have a feeling of personal empowerment with respect to work processes. |
| LR 4. | Team leaders in work groups and plan units support participant and staff development. |
| L3. Change-Oriented | |
| LC 1. | Feel encouraged to come up with new and better ways of doing things. |
| LC 2. | Creativity and innovation are rewarded. |
| LC 3. | The capability of local authorities to cope with the changes and adjust the plan to these changes. |
| L4. Diversity-Oriented | |
| LD 1. | Local authorities seek the diversity of citizen “voices” and include these in decision making as well as in stimulating citizen action to help themselves. |
| LD 2. | Local authorities work well with stakeholders and participant of different backgrounds. |
| LD 3. | Effective participation of different stakeholders in the process of planning. |
| L5. Integrity-Oriented | |
| LI 1. | Plan leaders maintain high standards of honesty and integrity in the process of planning among stakeholders. |
| LI 2. | Prohibited personnel practices (for example, illegally discriminating for or against any employee/applicant, obstructing a person's right to compete for employment, and knowingly violating veterans' preference requirements) are not tolerated. |
| LI 3. | Possibility of protesting to the plan if it is against the citizens' rights. |
| Ownership | |
| Own 1. | The feeling of ownership of CDS among stakeholders. |
| Own 2. | Compatibility of social norms and values. |
| Own 3. | Stakeholders demand for accountability. |
| Own 4. | Transparency of information about the development goals to stakeholders. |

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