These four frameworks are introduced in the following sections, with guidance on the analytical questions each framework helps cities address, along with practical information on how each framework can be used, the key inputs required, tips and best practice, and information on useful sources of additional information.

A brief overview of other useful frameworks is presented in table 9.1. Although developed for use in various strategic planning contexts, including regional economic development and industry and firm-level strategies, these frameworks are less widely used than SWOT analysis, problem analysis, competitive advantage analysis, and scenario planning.

**SWOT Analysis**

What Issues Are Addressed by SWOT Analysis?

The following questions can be addressed by a SWOT analysis:

- What are the overall strengths, weaknesses, opportunities, and threats faced by the city?
- What are the strengths, weaknesses, opportunities, and threats faced by the city regarding a particular issue (such as employment) or in a particular area of economic development (such as economic structure)?
SWOT analysis involves analysing both internal and external factors that affect the city, and identifies unique features of the city that set it apart from other cities and could serve as a major selling point. The SWOT approach involves organising key data and information about the city across four categories: strengths, weaknesses, opportunities, and threats, as shown in figure 9.1.

Although SWOT is sometimes used for individual-level LED indicators (sectoral structure and specialisation, for

**CASE STUDY**

**SWOT Analysis—IVANO-FRANKIVSK (Ukraine)**

Ivano-Frankivsk used SWOT analysis as its principle strategy development framework in 2005. The SWOT analysis was conducted by subcommittees of a Strategy Development Committee representing the city’s political, business, and community interests. These stakeholders shared their perspectives of the city’s economic environment and commented on the city’s strengths and weaknesses in a brainstorming session facilitated by LED experts with extensive experience in conducting participatory processes.

The committee’s initial ideas were summarised and categorised, and then discussed at length in order to set priorities and agree on which issues should feed into the strategic plan. Conducting the SWOT analysis in a participatory forum of this type is considered highly effective. It provided an opportunity for key stakeholders and community leaders to be directly engaged in the strategy development process and to contribute their own ideas. The SWOT framework was also seen as a good fit for the five- to six-month time schedule allotted for the strategic planning process.

Although SWOT is sometimes used for individual-level LED indicators (sectoral structure and specialisation, for

**Tips**

**Carefully analyse each factor** To maximise the value of a SWOT exercise, it is important to consider what each of the factors means and determine which are most likely to have the greatest impact on the local economy.

**Place the city in a dynamic context.** The SWOT framework can be supported with other tools (such as PEST analysis). This helps city administrators to consider the factors that might erode or support identified strengths and opportunities in the future.

**Place the city in a comparative context.** Think about the strengths and weaknesses of the city when compared with other cities in the region, or similar cities that might compete to attract investment. Identify opportunities that exist to develop differentiated strategies based on the city’s unique strengths.

**Involve a range of stakeholders.** The SWOT framework is most useful when part of a participatory process where synergies among stakeholders and opportunities can be maximized.
Further Information


SWOT analysis is heavily used in a business context, and there are many useful guides on the use of this framework as well as templates. For example:

- For a discussion of the use of SWOT analysis in a business context, see: http://www.themanager.org/Models/SWOT.htm.

Tips

Involve an experienced facilitator. One of the challenges of problem structuring is that it often highlights different perspectives and raises issues of political conflict among stakeholders. Managing this process in a workshop or other participatory format can be a significant challenge—if possible, make use of an experienced facilitator.

Conduct the analysis over several sessions. Effective use of the problem analysis framework (mapping links in the problem tree, for example) requires time for contemplation and often additional research. A single-day workshop may not provide the time required to undertake problem analysis.

Test with objective analysis. Test the issues raised by participants against quantitative and qualitative information obtained in surveys by using other tools and analytical frameworks that can support those data. Together, the subjective and more objective data sets should inform the assessment and provide a more complete picture.

Combine with other frameworks. Although problem analysis frameworks are valuable for identifying strategic issues to be addressed, they tend to overlook some critical aspects of the local economy assessment (areas of opportunity, identification of sources of competitive advantage, for example). Therefore, strategies based on problem analysis frameworks alone risk being too narrow.

What Key Inputs Are Required for SWOT Analysis?

An effective SWOT analysis can be completed with limited quantitative/statistical data input. But when these data are not available, practitioners rely on qualitative input. This input is sometimes obtained by assembling a panel of experts with specific knowledge of different sectors and aspects of the economy. Alternatively, a SWOT analysis can be undertaken in a larger participatory forum where individual input is requested. It is recommended that such an event be limited to about 60 people to enable all to participate. In these cases, the SWOT analysis requires a trained facilitator.

Ideally, SWOT analysis includes comparative data from other cities in the country or comparable international
benchmarks. This can help confirm the accuracy of identified strengths and weaknesses. Overall, SWOT analysis requires low resource intensity.

Problem Analysis

What Issues Are Addressed by Problem Analysis?
The following questions can be addressed by a problem analysis:

- What are the main issues facing the local economy?
- How are these issues related to each other and to the external environment?
- Which issues are of higher or lower priority?

How Is the Problem Analysis Framework Used?
Problem analysis is a framework used to identify core issues to be addressed in the strategic planning process. Problem in this context does not necessarily indicate weaknesses or concerns but can equally refer to opportunities and challenges—essentially it is about identifying issues that should be addressed in the city strategy. Problem analysis is most commonly used to analyse qualitative information about the local economy that has been collected through participatory processes (see participatory issues analysis on page 71). The various frameworks for problem analysis include problem trees, objective trees, and various forms of needs analysis.

   The framework usually involves four basic steps:

1. Identify a long list of problems and issues (in most cases, unsatisfactory situations are described, and a set of symptoms emerge).
2. Identify one or more core problems that are at the root of the others (the idea is to attack the core problems rather than the symptoms).
3. Determine which problems are causes and which are effects.
4. Arrange the issues in a hierarchy of causes and effects.

A problem tree is often developed from this information, which enables practitioners to visually illustrate symptoms, core problems, and interrelationships. An example is shown in figure 9.2.

What Key Inputs Are Required for Problem Analysis?
A problem analysis does not require any detailed, sophisticated assessment of quantitative data. Instead, this framework draws on qualitative information and perceptions from stakeholders. The main requirements for using this framework are:

- A trained and experienced facilitator to lead the process.

CASE STUDY

Problem Analysis—SAN FERNANDO (Philippines)

In 2001, San Fernando used the problem tree as one of two main strategic frameworks (along with SWOT analysis) to assess its local economy and develop a CDS. The problem tree framework was an analytical output of a series of workshops that used participatory issues identification tools to capture perceived issues facing the local economy.

After all relevant issues were identified, the problem tree framework was used in participatory workshops in an effort to trace problems back to a set of core issues and to map causes and effects.

Overall, the city found problem tree analysis somewhat difficult to use compared to SWOT analysis. Stakeholders were generally able to identify problems effectively, but separating symptoms from the core problems was more difficult. Similarly, mapping the relationships between problems often required substantial resources and effective facilitation. However, the framework was found to be highly valuable in showing linkages between key issues and in defining the city’s strategic priorities.
Participants with a good knowledge of the local economy.

Facilities to host participatory processes such as seminars and workshops.

Problem analysis does not require econometric expertise or in-depth experience using similar frameworks. Therefore, the overall resource requirements of this tool are relatively low.

### Competitive Advantage Analysis

**What Issues Are Addressed by Competitive Advantage Analysis?**

The following questions can be addressed by competitive advantage analysis:

- How competitive is the local economy?
- How well is the local economy performing relative to a competing economy (based on employment, exports, government efficiency, GDP, innovation, and productivity)?

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**Further Information**


For basic information and an example of a problem tree analysis derived from the context of urban upgrading from GTZ and NORAD, see: [http://web.mit.edu/urbanupgrading/upgrading/issues-tools/tools/problem-tree.html](http://web.mit.edu/urbanupgrading/upgrading/issues-tools/tools/problem-tree.html).


For an introduction to problem tree analysis and other materials from the Overseas Development Institute, see: [http://www.odi.org.uk/Rapid/Tools/Toolkits/Policy_Impact/Index.html](http://www.odi.org.uk/Rapid/Tools/Toolkits/Policy_Impact/Index.html).

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**Tips**

*Involve an experienced facilitator.* One of the challenges of problem structuring is that it often highlights different perspectives and raises issues of political conflict among stakeholders. Managing this process in a workshop or other participatory format can be a significant challenge, though an experienced facilitator can help guide the process.

*Conduct the analysis over several sessions.* Effective use of the problem analysis framework (mapping links in the problem tree, for example) requires time for contemplation and often additional research. A single-day workshop may not provide the time required to undertake problem analysis.

*Test with objective analysis.* Test the issues raised by participants against quantitative and qualitative information obtained in surveys by using other tools and analytical frameworks that can support those data. Together, the subjective and more objective data sets should inform the assessment and provide a more complete picture.

*Combine with other frameworks.* Although problem analysis frameworks are valuable for identifying strategic issues to be addressed, they tend to overlook some critical aspects of the local economy assessment (areas of opportunity, identification of sources of competitive advantage, for example). Therefore, strategies based on problem analysis frameworks alone risk being reactionary.
CASE STUDIES

Competitive Advantage Analysis

ADEN (Yemen)

The Aden Competitiveness Assessment, one of the foundation studies for the Aden CDS, framed competitiveness around the Porter’s Diamond framework. The primary data input to the analysis came from the results of the city’s competitiveness survey, which was designed around the four main components of the Diamond framework, as were the discussions held in the later competitiveness seminar. Aden officials found this framework easy to use because it did not require complex analytical methods. The process was also easily understood by a range of stakeholders, so it was easily adapted in participatory exercises.

DURBAN (South Africa)

The city of Durban regularly used both the Porter’s Diamond framework and the related Five Forces as strategic frameworks in assessing competitiveness in Durban, especially in analysing specific sectors and clusters in the city. Durban has found these frameworks to be valuable in engaging the private sector on competitiveness issues, because they provide an accessible yet rigorous approach that is more in line with private sector thinking than some of the more static frameworks, such as SWOT analysis.

Tips

1. Mix data and participatory inputs. Understanding competitiveness requires objective data and qualitative inputs from local stakeholders. When data are not available, cities risk making assessments based on perceptions only. And without qualitative input from local stakeholders, they risk not understanding the specific issues (often intangible) that can influence competitiveness—and will not be prepared to make effective strategic implications. When identifying competitive strengths or weaknesses of the local economy through a participative process, look for objective evidence (data and information) to support it.

2. Assess future trends. A status quo assessment of competitiveness is useful but lacks predictive power. Remember that a city’s sources of competitive advantage today will not necessarily remain competitive in the future. Therefore, it is important to ensure that the local-level analysis focuses on external trends (general and sector specific) that drive competitiveness. It is also important to identify the fundamental sources of competitiveness that will enable the city to become and remain dynamic by changing to meet future demands.

3. Assess against the existing vision. The competitive advantage framework can provide a powerful assessment of the city’s sources of competitive advantage and disadvantage. Therefore, it is important to look at these sources of advantage in reference to the city’s existing vision and strategic direction. Does the vision still fit local strengths? Does the city’s direction need to change in order to reflect its core sources of competitive advantage?
How well are firms in the local economy performing with regard to the firms in a competing economy (based on employment, exports, innovation, and productivity)?

How does the business environment of the local economy perform relative to that of a competing economy (based on financial infrastructure, location, nature of local market, physical infrastructure, and size)?

How Is the Competitive Advantage Analysis Framework Used?

Competitive advantage is an umbrella term for a range of frameworks that assess a local economy based on its potential to create sources of advantage (low cost, high innovation, or differentiation) for area firms. The most popular competitive advantage analysis frameworks are those developed by management theorist Michael Porter, especially his diamond framework of national competitiveness and the related five forces of firm rivalry, bargaining power of suppliers and customers, threat of new entrants, and substitute products. The diamond framework examines four factors that determine the competitiveness of a city and can be influenced by government:

1. **Factor conditions**: the availability of inputs such as skilled labour, infrastructure, and capital.
2. **Demand conditions**: the level and sophistication of local demand.
3. **Business/sector structure, strategy, and rivalry**: the degree of competition.
4. **Related and supporting industries**: the availability and degree of linkages between core and supporting activities.

There is no standardised methodology for analysis conducted using the diamond framework, but the process typically involves combining descriptive statistics and qualitative assessment for each of the components shown in figure 9.3. Many cities follow more generic, informal, competitive advantage models that consider elements of the diamond framework and other factors.

The diamond framework and other competitive advantage models can be useful in structuring a participatory workshop to get a snapshot of the local economy. Using this approach, the participants comment on strengths and weaknesses of the local economy and provide other observations.
on each of the defined factors of competitiveness. A benefit of this approach is that it encourages local actors to see their current situation and economic potential in a different way; considering economic development possibilities from a demand side can be especially helpful for both local organisations and surveyors.

The competitive advantage analysis framework tends to make extensive use of benchmarking analysis, as competitiveness is almost always defined with regard to reference economies. This framework also has close links with cluster strategies and thus makes extensive use of cluster mapping tools.

Note: In addition to assessing the competitiveness of a city’s overall economy, competitive advantage models are also more commonly used to analyse the competitiveness of individual sectors in a local economy.

What Key Inputs Are Required for Competitive Advantage Analysis?

Using the competitive advantage analysis framework effectively requires quantitative and/or qualitative data on the main components of the Porter’s Diamond framework, including employment data, inter-firm linkages, size and nature of the local market, financial infrastructure, and the skill and educational levels of the local labour force. It is also valuable to obtain similar data from at least one of several other cities considered to be the city’s main competitors or peers.

Competitive analysis requires an understanding of competitiveness theory and how it is applied in urban and regional economies. But an understanding of complex econometrics is not required, and there are no requirements for specific software or other analytical resources. When data availability is not a problem, this framework has moderate resource intensity.

Scenario Planning

What Issues Are Addressed by Scenario Planning?

The following questions can be addressed by scenario planning:

- What factors could influence the city’s future economic development, and how?
- What is the desired future for the city? What needs to change to get there?

How Is Scenario Planning Used?

Scenario planning is a strategic planning framework used to predict potential changes and understand the implications of those changes to identify strategies that might be used to adapt to these changes. This approach can be an effective framework for testing the existing assessment of the local economy and for challenging the LED strategy from the standpoint of uncertain future environments.

Scenario planning highlights major forces that may shape the future and provides insight on how these forces may interact; it does not attempt to predict one specific outlook. The sources of changes considered can be relatively predictable (trends in local demographics) or unpredictable (global economic conditions, for example). In scenario planning, a scenario describes a plausible future that can incorporate a range of qualitative and quantitative information. There is no set number of scenarios to be developed, but scenario planning exercises typically develop at least two or three contrasting future scenarios.

Three broad scenario planning frameworks are used, sometimes in combination, in cities:

1. Qualitative scenario planning. In this setting, a facilitated group-based process typically involves policymakers, planners, and internal and external experts. The main steps include determining which macroeconomic forces exist and how they might interact to change the external environment. Scenarios are then created and analysed for their implications on the local economy.
2. Quantitative scenario planning (scenario forecasting). A technique traditionally used mainly for spatial planning, quantitative scenario plans use economic forecasting techniques to analyse how different macroeconomic scenarios might shape the structure and performance of the local economy. This typically is an analytical exercise, but it is often conducted in combination with qualitative scenario planning.
3. **Futures.** The futures approach can be seen as scenario planning in reverse. In these scenarios, futures are first defined, and stakeholders agree to a short list of possible futures for the city. With these futures as the goal, the strategy process then works in reverse (back to the status quo analysis) in order to clarify the strategic path needed to reach the desired future. This framework tends to be both qualitative and participatory.

Cities can also use scenario planning as an ongoing analytical process to monitor specific indicators. Then, as time passes, actual events and developments can be assessed...
against the selected scenarios, new scenarios can be developed, and new decisions or policies can be made to address changing conditions.

**What Key Inputs Are Required In Scenario Planning?**

A scenario planning exercise can range from an informal planning activity based on a qualitative discussion of “what if” scenarios to a highly analytical exercise in which econometric methods and computer simulation programs are used to quantify the outcomes of different scenarios. The following are the minimum needed to conduct a scenario planning exercise:

- A trained and experienced facilitator to lead the process.
- Participants with a good knowledge of the theme for the exercise.

More complex scenario planning exercises are generally advisable only for cities and city-regions with considerable experience. To quantify city scenarios, considerable data and expertise may be required.

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**Tips**

*Keep it simple.* It is generally advisable to limit the number of scenarios developed for a city. Ideally there should be no more than about four. This makes it easier for the participants to separate the scenarios and makes the framework more potent for political communication.

*Choose a dynamic and creative team.* Including participants who are creative thinkers in the exercise may lead to surprising scenarios and provide the participating policymakers, experts, and planners with unusual but good ideas not brought to the table by participants with a more traditional point of view.

*Combine qualitative and quantitative approaches.* As always in economic analysis, it is best to mix objective, quantitative analysis (scenario forecasting) with qualitative and participative approaches that can broaden understanding of the underlying mechanics of how different scenarios might affect the local economy.

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**Further Information**


For an accessible guide to scenario planning, see *Foresight Futures Scenarios: Developing and Applying a Participative Strategic Planning Tool*, by Frans Berkhour and Julia Herin (March 2002, Greener Management International); article available for purchase from Greenleaf Publishing at: http://www.greenleaf-publishing.com/page21/Journals/GmiHome.

What Other Strategic Frameworks Are There?

This Resource Guide has focused on the most widely used strategic frameworks. But other frameworks developed for use in strategic planning contexts, including regional economic development, industry and firm-level strategies, can also be useful. Please note that the frameworks listed in table 9.1 have not been used by the 15-city reference group presented in this Guide.

<table>
<thead>
<tr>
<th>Strategic framework</th>
<th>Description</th>
<th>Further Information</th>
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<tbody>
<tr>
<td><strong>Systemic competitiveness</strong></td>
<td>Examines a range of factors that determine the evolution of economic systems at various territorial levels. It uses four levels of analysis to measure the current state of the local economy and develop a strategic plan (GTZ):</td>
<td>For more information see: Systemic Competitiveness Revisited: Conclusions from Technical Assistance in Private Sector Development at: <a href="http://www.mesopartner.com/english/e-publ.html">http://www.mesopartner.com/english/e-publ.html</a>.</td>
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<td></td>
<td>- Meta-level: Local actors’ capacity to cooperate and trust / degree to which they can agree upon shared objectives</td>
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<td>- Macro-level: Financial (budgetary) capacity and management</td>
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<td></td>
<td>- Meso-level: Existence of local economic support (incubators, business assistance, etc.)</td>
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<td></td>
<td>- Micro-level: Linkages between firms/stakeholders in the local economy (clusters)</td>
<td>For an explanation of the theory and application of systemic competitiveness, see: Systemic Competitiveness. New Governance Patterns for Industrial Development, by K. Esser, W. Hildebrand, &amp; J. Meyer-Stamer (German Development Institute)</td>
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<tr>
<td><strong>Multisector quantitative analysis (MSQA)</strong></td>
<td>Framework which combines qualitative (expert opinion surveys) and quantitative techniques to identify opportunities for growth in the local/regional economy.</td>
<td>The analytical framework is explained in full in Regional Economic Development—Analysis and Planning Strategy, by R. J. Stimson, R. R. Stough, &amp; B. H. Roberts (2002, Springer)</td>
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<td></td>
<td>Most relevant for identifying sectoral or cluster opportunities in a local/regional economy; involves expert surveys and then categorical scoring of regional sectors according to a set of performance criteria. Each sector is ranked as strong, average, or weak in each criterion, based in part on input-output tables, expert interviews, and other data sources. Criteria are then weighted to derive overall results.</td>
<td>For a discussion and practical application of MSQA, see: Regional Risk and Economic Development at: <a href="http://hds.canberra.edu.au/cities/research.html">http://hds.canberra.edu.au/cities/research.html</a></td>
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<tr>
<td><strong>Regional competitiveness performance cube</strong></td>
<td>Measures regional competitiveness in a dynamic way by looking at three dimensions:</td>
<td>For a brief overview of the framework, see: <a href="http://www.ersa.org/ersaconfs/ersa04/PDF/697.pdf">http://www.ersa.org/ersaconfs/ersa04/PDF/697.pdf</a>.</td>
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<td></td>
<td>- Leadership (strong vs. weak)</td>
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<td>- Institutions (effective vs. ineffective)</td>
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<td></td>
<td>New technique that has not been used yet as part of a city strategy process; provides a broad framework for assessing territorial (rather than sectoral) competitiveness.</td>
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<td>Strategic framework</td>
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<tr>
<td>Balanced business scorecard (Norton and Kaplan)</td>
<td>Business planning and monitoring framework that focuses on ensuring that strategies are balanced around four perspectives: 1) financial performance; 2) customers (service); 3) business processes (efficiency); and 4) learning and growth. Monitors performance across a balanced set of indicators (the specific categories can be redefined to meet the specific needs of LED); Currently used in San Fernando for assessing governance and institutional quality as part of the International Solidarity for Asia’s (ISA) Public Governance Scorecard (PGS) programme.</td>
<td>For an introductory discussion of balanced scorecard, see: <a href="http://www.balancedscorecard.biz/Introduction_BSC.html">http://www.balancedscorecard.biz/Introduction_BSC.html</a>. For a step-by-step guide on assessing the suitability of this approach for an organisation and its purpose, see: <a href="http://www.centre-for-egovernment.com/balscore.htm">http://www.centre-for-egovernment.com/balscore.htm</a>. For an accessible set of guidelines, see: <a href="http://www.audit-scotland.gov.uk/index/99ms_01.asp">http://www.audit-scotland.gov.uk/index/99ms_01.asp</a>.</td>
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<tr>
<td>Core competencies/ white spaces (Hamel and Prahalad model)</td>
<td>A framework that involves identifying the core competitive strengths of the region, and identifying “white spaces” (or unexploited areas of potential) for the region. Designed originally for firm-level strategy, but can be adapted for sector or regional strategies; most appropriate for identifying and prioritising sectoral opportunities.</td>
<td>For an accessible step-by-step guide, see: <a href="http://www.cipher-sys.com/hofhelp/Hamel%20Prahalt/hamel-prahaladhelpfile.htm">http://www.cipher-sys.com/hofhelp/Hamel%20Prahalt/hamel-prahaladhelpfile.htm</a>. For a detailed explanation of the framework, see: Competing for the Future by G. Hamal and D. K. Prahalad (1994, Harvard Business School Press)</td>
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