

## CHAPTER 2

### LITERATURE REVIEW

The purpose of this chapter is to review the relevant literature and help subsequently formulate the thesis' conceptual framework.

The chapter is divided into four parts. The first part is an overview of the concepts of health promotion and their corresponding health-promoting organizations. The second part first illustrates the concept of 'high-performance' team, and then it discusses team knowledge in terms of how teams perform and how teams learn. The third part is an attempt to explain the performance measurement of team effectiveness. The fourth part is an exposition of the Balanced Scorecard (BSC) as a performance measurement system to develop team performance indicators for Thai health-promoting teams. Finally, the thesis' conceptual framework is proposed.

#### **Part 1: The concepts of health promotion and health-promoting organizations**

The Ottawa Charter for health promotion uses the World Health Organization's definition of health promotion: "the process of enabling people to increase control over and to improve their health. To reach a state of complete physical, mental and social-well being, an individual or group must be able to identify and to realize aspirations, to satisfy needs and to change or cope with the environment." Health promotion is not just the responsibility of the health sector, but goes beyond healthy life-style to well being. Improvement in health requires a secure foundation in three

basic prerequisites: advocate, enable and mediate (World Health Organization, 1986). In addition, the Bangkok Charter identifies the strategies and commitments that are required to address the determinants of health in a globalized world through health promotion. It affirms that policies and partnerships to empower communities as well as to improve health and health equality should be at the centre of global and national development. Progress towards a healthier world requires strong political action, broad participation and sustained advocacy. To make further advances all sectors and settings must act to:

- Advocate for health based on human rights and solidarity;
- Invest in sustainable policies, actions and infrastructure to address the determinants of health;
- Build capacity for policy development, leadership, health promotion practice, knowledge transfer and research, and health literacy;
- Regulate and legislate to ensure a high level of protection from harm and enable equal opportunity for health and well being for all people;
- Partner and build alliances with public, private, non-governmental organizations and civil society to create sustainable actions (World Health Organization, 2005).

The concepts described in both charters confirm that the roles and tasks of health personnel who work in health-promoting organizations differ from those who work in health-care organizations. Health-care organizations are more concerned both with sickness or morbidity and with mortality, including an orientation towards patient care (Hogarth, 1975, p. 3). Meanwhile, health-promoting organizations

emphasize promotion of health and building policies and partnerships (World Health Organization, 1986; 2005). The important roles of health-promoting organizations include (1) people and community empowerment and (2) comprehensive social and political processes (World Health Organization, 1998, p.1). Furthermore, the developing strong political action, expanding participation and sustaining advocacy for all sectors, partners and settings are significant tasks (World Health Organization, 2005). To improve people's health, health personnel who work in health-promoting organizations fulfill three basic roles: to advocate, to enable and to mediate. Advocating health is a combination of individual and social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular health goal or program. Enabling represents taking action in partnership with individuals or groups to empower them, through the mobilization of human and material resources, to promote and protect their health. Mediation refers to a process through which the different interests (personal, social, economic) of individuals and communities, and different sectors (public and private) are reconciled in ways that promote and protect health (World Health Organization, 1998). The means for health promotion actions include five actions which include (1) building healthy public policy, (2) creating supportive environments, (3) strengthening community action, (4) developing personal skills and (5) reorienting health services (World Health Organization, 1986).

In response to the concepts of health promotion stipulated in the Ottawa Charter, many countries have established their own respective health-promoting organizations. All of them highlight the new concept of health promotion. Eleven health-promoting organizations are presented as follows:

- International Network of Health Promotion Foundations (INHPF), Australia
- Victorian Health Promotion Foundation (VicHealth), Australia
- Western Australian Health Promotion Foundation (Healthway), Australia
- California Wellness Foundation (TCWF), United States of America
- Health Sponsorship Council (HSC), New Zealand
- Kansas Health Foundation, United States of America
- Health Promotion Switzerland, Switzerland
- Fonds Gesundes Österreich (FGÖ), Austria
- British Columbia Coalition for Health Promotion (BCCHP), Canada
- Malaysian Health Promotion Foundation Initiative, Malaysia
- Thai Health Promotion Foundation (ThaiHealth), Thailand

#### **International Network of Health Promotion Foundations (INHPF)**

Founded in 1999, the International Network of Health Promotion Foundations (INHPF) was established to advance the work of health promotion foundations around the world. To accomplish this, INHPF engages in two core activities. The first core activity is enhancing the performance of existing Health Promotion Foundations (HPFs) through exchange, mutual learning and joint action. The second core activity is to mentor and support the establishment of new HPFs.

INHPF comprises organizations from around the world involved in funding health promotion activities. All full members are established as a result of an Act of Parliament, have an independent Board of Governance, and have long-term and

sustainable funding for health promotion. Members of the Network liaise on a regular basis with email discussions, two to three teleconferences per annum and a face-to-face meeting once per annum (planned to coincide with a major health promotion conference).

Only five organizations in the world are full members of INHPF. However, interest in establishing an HPF is growing as countries and regions recognize the benefits of having long-term sustainable funding for health promotion and that HPFs are a successful way of meeting Framework Convention on Tobacco Control (FCTC) commitments. As of August 2005, there were 15 countries in various stages of establishing an HPF.

The International Network of Health Promotion Foundations works to strengthen the capacities of any country or region interested in promoting the health of its population, at national and sub-national levels, through the work of health promotion foundations as defined / recognized by the Network. To fulfill its mission, INHPF is involved in two core activities: (1) enhancing the performance of existing Health Promotion Foundations through exchange, mutual learning, and joint action and (2) mentoring and supporting the establishment of new Health Promotion Foundations.

There are two levels of membership: full and associate membership. Full members are organizations that have the following key elements:

1. The organization is primarily involved in funding health promotion activities.
2. The organization has been established according to some form of legislation, such as an Act of Parliament.

3. The organization is governed by an independent Board of Governance that comprises stakeholder representation.
4. The legislation provides a long-term and recurrent budget for the purposes of health promotion.
5. The organization is not aligned with any one political group.
6. The organization promotes health by working with and across many sectors and levels of society.

The Network's current full members are (as of 21st September 2006):

- Austrian Health Promotion Foundation
- Health Promotion Switzerland
- Thai Health Promotion Foundation (ThaiHealth), Thailand
- Victorian Health Promotion Foundation (VicHealth), Australia
- Western Australia Health Promotion Foundation (Healthway), Australia

Associate members are those countries, organizations or communities that have the explicit intention of establishing health promotion organizations with the above key characteristics. Full membership and associate membership are subject to the approval of the current members, as stated in the formal network agreement and related documents. The Networks current associate members are (as of 21st September 2006):

- Health 21 Hungarian Foundation
- Korean Health Promotion Fund
- Malaysian Health Promotion Initiative

- Polish Health Promotion Foundation
- South Africa Health Promotion Foundation Initiative
- BC Coalition for Health Promotion, British Columbia, Canada

INHPF is underpinned by the following principles:

- **Mutuality:** Members are committed to sharing information and experience based on common interests and synergies in providing health promotion leadership and sustainable structures for promoting population health. Mutuality is maintained through open and transparent communication between members and based on a culture of cooperation and trust.
- **Distributive Leadership:** INHPF has a non-hierarchical structure where leadership is shared between members and consensus decision-making is adopted. Recognition is given to the core competencies of each member to provide technical support within the organization and to associate members. This principle is supported by sharing responsibilities, risks and resources on agreed areas of collaboration.
- **Promoting Health:** INHPF adopts the Ottawa Charter for Health Promotion as the guiding framework for health promotion action. The actions of INHPF are based on the understanding that population health is influenced by fundamental social, political, economic, cultural and environmental factors along with the skills and understanding of individuals and groups. INHPF acknowledges that a long-term perspective is required for achieving changes in these co-determinants of health and population health gains.

- Strategic Plan: The Network has recently completed a strategic plan which highlights the actions and directions of the Network for the coming years (International Network of Health Promotion Foundations, 2009).

### **Victorian Health Promotion Foundation (VicHealth), Australia**

The Victorian Health Promotion Foundation, best known as VicHealth, is the world's first health promotion foundation. Established by the Victorian Parliament as part of the Tobacco Act 1987, VicHealth works in partnership with organizations, communities and individuals to promote good health and prevent ill-health. The principles guiding strategic focus on the World Health Organization's directions for health promotion are set out in The Jakarta Declaration on Health Promotion on Leading Health Promotion into the 21st Century 1997 and in the Ottawa Charter for Health Promotion 1986. VicHealth envisages a community where (1) health is a fundamental human right, (2) everyone shares in the responsibility for promoting health and (3) everyone benefits from improved health outcomes. VicHealth's mission is to build the capabilities of organizations, communities and individuals in ways that change social, economic, cultural and physical environments to improve health for all Victorians and strengthen the understanding and the skills of individuals in ways that support their efforts to achieve and maintain health.

VicHealth's 2006–2009 strategic priorities build on the previous work and focus on the major health challenges that confront the organization including:

- tobacco consumption
- overweight and obesity



- physical inactivity
- social exclusion
- discrimination
- violence
- alcohol misuse
- the links between social and economic disadvantage and poor health

Health promotion requires many people working together with a shared vision for a healthier future. At VicHealth, a key role for the organization is to support, foster and connect with other organizations and individuals to work more effectively to promote the health and wellbeing of the community. VicHealth works with a wide range of partner organizations to deliver innovative programs that will impact on the complex social, economic, cultural and environmental forces that shape the health of all Victorians. In addition, VicHealth's particular focus is on developing new knowledge and raising awareness of the best practices in health promotion.

VicHealth also adds strength to other organizations working in health promotion through the provision of funding and other resources. Healthy partnerships are the all-important link to the people of Victoria. Every year, VicHealth funds hundreds of projects, with funds going to a range of organizations, both large and small. VicHealth also represents a ground-breaking model for funding of health promotion programs, and maintains a leading position worldwide. To deliver on proposed outcomes, strategy and vision, VicHealth needs a skilled, engaged and committed workforce. Thus, a group of dedicated people who embrace a clearly

defined and agreed set of values, courage, justice and creativity, is required to join VicHealth as a partner.

The management of VicHealth is based on a Board of Governance which is comprised of 11 ministerial appointments and three members elected by Parliament. Two Board Committees, several advisory panels and a dedicated and professional staff support the Board. The role of the VicHealth Board, acting on behalf of the Minister for Health, is to govern the organization so that VicHealth fulfils its statutory responsibilities and delivers on its aims and objectives while acting ethically and prudently, remaining within the law (Victorian Health Promotion Foundation, 2009).

#### **Western Australian Health Promotion Foundation (Healthway), Australia**

Healthway (the Western Australian Health Promotion Foundation) was established in 1991 under Section 15 of the Tobacco Control Act 1990 as an independent statutory body reporting to the Minister for Health. Healthway now functions under Part 5 of the Tobacco Products Control Act 2006. Healthway seeks to promote and support healthy lifestyles to reduce the burden of preventable disease in Western Australia. Its vision is “A Healthier WA (Western Australia)” and its missions is to improve the health of Western Australians by (1) promoting and facilitating healthier lifestyles, policies and environments and (2) empowering individuals, groups and communities to be healthier.

Healthway provides sponsorship to sports, arts, and racing organizations to promote healthy messages, facilitate healthy environments and increase participation in healthy activities. Healthway also provides grants to a diverse array of organizations to encourage healthy lifestyles and advance health promotion programs.

The key priorities for Healthway are reducing harm from tobacco, reducing harm from alcohol, reducing obesity and promoting good mental health. To meet its objectives, Healthway has developed a range of funding programs which include:

- arts sponsorships
- sports sponsorships
- racing sponsorships
- health promotion project grants
- health promotion research grants

Responsibility for the overall management of Healthway, including decisions about funding, is held by a Board whose members have knowledge of and experience in one or more of the functions of the Foundation. These members are nominated by health, youth, sport, arts and country organizations from government and non-government sectors. A number of expert committees have been established with a range of responsibilities, including making recommendations to the Board concerning the allocation of grants and sponsorships. The Board also has responsibility for (1) co-ordination of planning, policy and the decision making framework, (2) compliance with Corporate Governance standards and (3) striving for organizational best practice and customer service (Western Australian Health Promotion Foundation, 2009).

#### **California Wellness Foundation (TCWF), United States of America**

The California Wellness Foundation (TCWF) is a private, independent foundation. TCWF was founded in 1992, as a result of Health Net's conversion from nonprofit to for-profit status. Health Net is one of the largest managed health care

company in the U.S. Under the terms of the California Department of Corporations' conversion order approving Health Net's for-profit status, the Foundation received the equivalent of the Department's valuation of Health Net at that time — \$300 million, plus 80 percent of the equity of the holding company formed as Health Net's parent. In subsequent years, the merger of Health Net's parent company and QualMed, a U.S. quality medical systems consultancy, increased TCWF's assets dramatically.

TCWF's mission is to improve the health of the people of California by making grants for health promotion, wellness education and disease prevention.

Guided by the mission, TCWF pursues the following goals through grant making: (1) to address the particular health needs of traditionally underserved populations, including low-income individuals, people of color, youth and residents of rural areas, (2) to support and strengthen non-profit organizations that seek to improve the health of underserved populations, (3) to recognize and encourage leaders who are working to increase health and wellness within their communities and (4) to inform policymakers and opinion leaders about important wellness and health care issues.

The Board of Directors approves all grants and policy decisions. Members are community leaders in health and philanthropy, with expertise in fields critical to the operation of the TCWF.

TCWF prioritizes eight health issues for funding:

- diversity in the health professions
- environmental health
- healthy aging
- mental health
- teenage pregnancy prevention

- violence prevention
- women's health
- work and health

TCWF also provides funding for special projects that fulfill the mission, but fall outside the eight health issues (California Wellness Foundation, 2009).

### **Health Sponsorship Council (HSC), New Zealand**

The Health Sponsorship Council (HSC) is a New Zealand government agency that uses health promotion to promote health and encourage healthy lifestyles. The long-term focus of the HSC is on reducing the social, financial and health sector costs of smoking, skin cancer, problem gambling, and obesity. HSC's vision is "Healthy New Zealanders" and its mission is to promote health and encourage healthy lifestyles. HSC is currently working to focus on the following areas:

- tobacco control: reducing cancers, heart disease, chronic respiratory disease and stroke by reducing the incidence and prevalence of smoking
- sun safety: reducing skin cancers (including melanoma) and eye disease by increasing sun safe behaviors
- problem gambling: reducing mental, social and financial harms by reducing the incidence and impact of problem gambling
- obesity prevention: reducing obesity and its associated illnesses (diabetes, heart disease, kidney failure, joint deterioration etc) through better nutrition and increased physical activity

To encourage and enable people to make healthier lifestyle choices, HSC draws on the experience and success of commercial marketing and communication techniques for planning, executing and evaluating its programs. HSC uses the tried and tested approaches of the commercial sector to improve people's health. This approach is used world wide and is known as social marketing. This approach is consumer-oriented, responding to individual needs and wants. It is systematic, staged, underpinned by academic and consumer research, and is directly geared to achieving specific and measurable health goals over the short, medium and long terms.

The core principles of the HSC's approach are:

- all strategies begin with the key audience
- consumer behavior is the bottom line
- programs must be cost effective
- interventions involve a number of 'P's': price, product, place, promotion, people, and public
- market research is essential for designing, pretesting, and evaluating social marketing initiatives
- the approach draws on transaction/exchange theory
- markets are carefully segmented
- the approach acknowledges the competitive environment

HSC's management system is currently governed by a board of six people who are appointed by the Minister of Health (Health Sponsorship Council, 2009).

### **Kansas Health Foundation, United States of America**

The Kansas Health Foundation can trace its roots back to the 1985 sale of Wesley Medical Center. At the time, Wesley was a nonprofit hospital associated with the United Methodist Church. Facing many changes in the health care industry, hospital and community leaders helped shape a vision for how resources could be used in the state of Kansas for health promotion and disease prevention instead of traditional, reactive medical care. This led to Wesley being sold to the for-profit Hospital Corporation of America (HCA).

From that sale, the profits went to two organizations focused on improving health in the state: the United Methodist Health Ministry Fund and the Wesley Endowment (now the Kansas Health Foundation).

Today, the Kansas Health Foundation is a private philanthropy dedicated to improving the health of all Kansans. With an eye on the future and a commitment to the state, the Foundation seeks to be a key partner in Kansas for generations to come.

The Kansas Health Foundation is a private philanthropy guided by its mission: “to improve the health of all Kansans.” Partnerships are central to meeting this mission, and in order to move toward the mission, the Foundation works statewide with nonprofit organizations, state agencies, universities, hospitals, communities and local coalitions in order to develop programs and find answers to complex health issues. Through commitment, dedication and partnership, the Foundation knows its mission is well within reach. Using a strategic grant-making approach, the Foundation seeks opportunities to invest its resources in people and projects that meet its mission and create long-term, sustainable health improvements. To accomplish its mission, the Foundation focuses the majority of its grant-making efforts in the following areas:

- promoting the healthy behaviors of Kansas children
- strengthening the public health system
- improving access to health care for Kansas children
- growing community philanthropy
- providing health data and information to policymakers
- building civic leadership

The Foundation has an emphasis on health promotion and disease prevention, which reflects the value of primary prevention, focusing on the root causes of health problems. The Foundation has two integral partners in the state: Kansas Health Institute (KHI) and Kansas Leadership Center (KLC). Through the Foundation's strategic grant making, the data and policy information provided by KHI and the leadership skills and action provided by KLC, the three organizations work in concert to improve the health of all Kansans. In addition, the Foundation also continually seeks partners in its grant making. The Foundation forges collaborations with universities, health professionals, other Kansas foundations, the United Methodist Church and other faith organizations, as well as other Kansas organizations that share its vision and goals. The Foundation serves in a variety of roles in order to maximize its effectiveness: catalyst, convenor, educator, leverager and funder.

The board of directors represents a broad spectrum of talented, devoted Kansans. These proven, seasoned professionals generously give of their time in order to improve the health of all Kansans (Kansas Health Foundation, 2009).



### **Health Promotion Switzerland, Switzerland**

Health Promotion Switzerland is a foundation financed by the Swiss cantons and insurance companies, and supervised by the Swiss government. The Foundation initiates, coordinates and evaluates policies for the promotion of public health on behalf of the Swiss government (art.s 19/20, Federal Health Insurance Act). Health Promotion Switzerland has offices in Lausanne and Bern.

Each person resident in Switzerland currently contributes CHF 2.40 per year to Health Promotion Switzerland – a small investment by each individual towards everyone's health. It is collected by the health insurance providers on behalf of the Foundation.

Health Promotion Switzerland is an institution that initiates, supports and carries out activities for the benefit of everyone's health. It brings together within a single institution representatives of the federal government, the cantons, insurers, the Swiss Accident Insurance Fund (SUVA), the medical profession, academia, associations active in the area of disease prevention, and other partners. This organization allows key stakeholders to work together to promote health and improve the quality of life.

To make efficient use of entrusted funds, the Foundation focuses on selected issues that directly address public health problems and perfectly complement commitments by other institutions. Health Promotion Switzerland's long-term strategy focuses on the following areas: (1) strengthening health promotion and prevention, (2) healthy weight and (3) mental health and stress, with a focus on health promotion at work. Two topics are considered throughout the strategy: equity of health and economic evaluation.

Health Promotion Switzerland consists of two official organs: the Foundation Council and the Advisory Board. The Foundation Council is the Foundation's highest-level executive body. It consists of 16 members representing insurance providers, the Swiss and cantonal governments, science, the medical profession, health leagues, pharmacists and consumers. Meanwhile, the scientific Advisory Board assists the Foundation Council in developing strategies and evaluating activities (Health Promotion Switzerland, 2009).

### **Fonds Gesundes Österreich (FGÖ), Austria**

Fonds Gesundes Österreich (FGÖ), or the Austrian Health Promotion Foundation was founded in 1998 as the national contact point and funding office for prevention and health promotion based on a special law that is considered a model internationally. In health promotion, FGÖ supports (1) practical and scientific projects, (2) structural development and (3) continuing training and networking. Other important tasks include: (1) to raise awareness about prevention and health promotion among as many people as possible with information, education and public relations work and (2) to support activities at the myriad of self-help organizations in Austria.

FGÖ currently has six priority areas in which it conducts activities to enhance health awareness in Austria:

- exercise
- nutrition
- mental and emotional health
- children and young people in non-school settings
- employees in small and medium-sized enterprises

- older people in regional settings (urban v rural)

These priority subjects permeate all regular activities such as project funding, networking, special events, and PR. Moreover, FGÖ initiates and coordinates efforts to develop exemplary model projects especially in these priority areas. These projects cover behaviors and conditions relevant to health which occur particularly in connection with specific characteristics such as age, gender, social status, or nationality.

Three governing bodies manage FGÖ:

- The FGÖ Board is the supreme supervisory body of the organization and is composed of 13 members. They represent specialist institutions and federal, state and local agencies.
- A competent Project Advisory Committee, made up of seven practitioners and scientists, aids the Board in the development of strategies and the evaluation of projects.
- The 17-member staff of the Administrative Office of the Foundation assures the smooth operation of ongoing activities.

FGÖ helps people in Austria enjoy healthier lifestyles and healthier environments in their day-to-day lives in all spheres of life. FGÖ address people wherever they live, love, learn, work and play. The healthy decision should be the simple and obvious decision an individual makes in whatever environment he or she lives.

And it should be a decision within everyone's reach. That is why FGÖ also strives to overcome any socially-related differences that restrict health opportunities

and that make it more difficult for people to take advantage of activities and actions that promote health.

To make health-promoting ways of thinking and acting part of people's everyday lives, FGÖ motivates individuals to do more for their own health, yet also encourages them to make healthy changes in the social structures in which they live.

With a variety of measures, activities and cooperative projects, FGÖ seeks to identify and change factors crucial for health and well-being for people and their environments. In this way, men, women and children living in Austria can optimize and fully live up to their health potential (Fonds Gesundes Österreich, 2009).

#### **British Columbia Coalition for Health Promotion (BCCHP), Canada**

The BC Coalition for Health Promotion (BCCHP) is a grassroots, voluntary nonprofit organization dedicated to the advancement of health promotion in British Columbia. The BCCHP evolved in June 2000 as a result of recommendations made by community participants in an eight-month, province-wide action research study. The work of the organization is guided by a core planning team of twelve people who are well grounded in the values of health promotion and community development. Research carried out by the Coalition indicates that community agencies and frontline personnel are primarily responsible, at the grassroots level, for addressing the social, economic, cultural, spiritual and environmental determinants of health. Yet, these groups continue to be under-funded and under-recognized for the work they do. In keeping with these findings, the BCCHP acts as a catalyst to support the efforts of those who are involved on a day-to-day basis in community health promotion activities.

The vision of the BC Coalition for Health Promotion is sustainable, coordinated, community-inspired health promotion across British Columbia and the mission is to establish a sustainable source of funding for health promotion activities that are inspired and implemented by communities across British Columbia. The goals include:

- To promote the establishment of a health promotion foundation in British Columbia that advances the empowerment of communities, their ownership and control of their own endeavors and destinies.
- To act as a catalyst for community action promoting a balanced, coordinated approach to addressing the determinants of health.
- To raise the profile of the BCCHP by increasing the number and diversity of the membership and by acquiring sufficient resources to carry out the activities of the BCCHP.

The BCCHP supports the efforts of those who are involved in community-inspired health promotion through:

- demonstration projects
- action research and participatory evaluation
- community development
- public awareness and education
- information and referral
- advocacy for health
- mentorship

The principles guiding the work of BCCHP are:

- to recognize and acknowledge the gifts that individuals, organizations and communities bring to the discussion table; to communicate openly, honestly and respectfully; to be readily accessible; and to be flexible
- to support individuals and communities in discovering and using to their advantage the strengths, resourcefulness, innovation and creativity that already exists within communities
- to employ participatory action research, popular education and community socio-economic development to promote the quality of life and health of citizens
- to support local economies and to build partnerships that are equitable and that lead to coordinated, effective, concrete community action and support
- to act in a collective, proactive manner for the rights and empowerment of communities and their citizens (British Columbia Coalition for Health Promotion, 2009).

#### **Malaysian Health Promotion Foundation Initiative, Malaysia**

The Cabinet of Ministers decided in August 2002 to establish a Malaysian Health Promotion Foundation to provide funding for health promotion activities and to replace sponsorship of sport and cultural activities by tobacco companies. The Foundation is a statutory body established under an Act of Parliament. It is governed by an independent Board consisting of representatives from relevant Ministries, NGOs, and professionals who possess expertise relevant to health promotion. The establishment of the Foundation is part of a package of measures to

strengthen tobacco control and to promote health. It was originally proposed that the fund for supporting and sustaining the activities of the Foundation would be derived from dedicated taxes on tobacco products and alcohol, as in the case of the Thai Health Promotion Foundation (ThaiHealth).

The vision of the Foundation is “A healthier and active Malaysia” and the mission is to build capacity and strengthen partnerships for health promotion through promotion of healthy lifestyles, healthy settings and a healthy population. To serve the mission, the objectives are:

- to develop and support multi-strategy programs that promote and support healthy lifestyles and healthy environments through various settings and sectors
- to develop and support programs to improve population health by preventing, reducing or stopping the use of tobacco products
- to fund research relevant to health promotion
- to fund and support sporting, recreational and cultural organizations to promote healthy lifestyles and healthy environments.

In addition, the Foundation works with and through others to develop, to implement and to evaluate more comprehensively and supports health promotion programs in the priority areas of (1) tobacco control, (2) physical activity, (3) healthy eating and (4) mental health (Malaysian Health Promotion Foundation Initiative, 2009).

### **Thai Health Promotion Foundation (ThaiHealth), Thailand**

The Thai Health Promotion Foundation, or ThaiHealth, was established by the Health Promotion Foundation Act in 2001, which placed it outside the regular government bureaucracy. Its objectives include the reduction of morbidity and mortality rates, and the production of general improvements in quality of life. The philosophy of ThaiHealth is that all Thais can attain better lives, in a self-reliant way, though increases in cooperation.

The 2001 Health Promotion Foundation Act provides ThaiHealth with considerable autonomy. The Act provides ThaiHealth with annual revenue of about US\$35 million, derived from 2 percent of the excise taxes on tobacco and alcohol.

This revenue is not subject to normal budgetary processes; instead, ThaiHealth reports directly to the cabinet and parliament each year. ThaiHealth is the only organization in Thailand to obtain revenues and report to parliament in this way.

ThaiHealth's vision is "The sustainability of health for Thai people" and the mission is to empower civic movements promoting the well-being of Thai citizens. ThaiHealth aims to support groups and organizations that have already been working on public health issues and to promote collaboration between the many different partners. ThaiHealth also acts as a coach, pushing, encouraging, supporting, coordinating and cooperating with organizations in public, private and civic sectors, and takes action as an accelerator for health promotion in Thai society to change values, lifestyles, and social environments. ThaiHealth emphasizes healthy public policies, issue-based programs, and holistic approaches. ThaiHealth fully applies the holistic meaning of 'health' as defined by the World Health Organization. ThaiHealth therefore aims not merely to reduce the cases of certain health problems but rather to



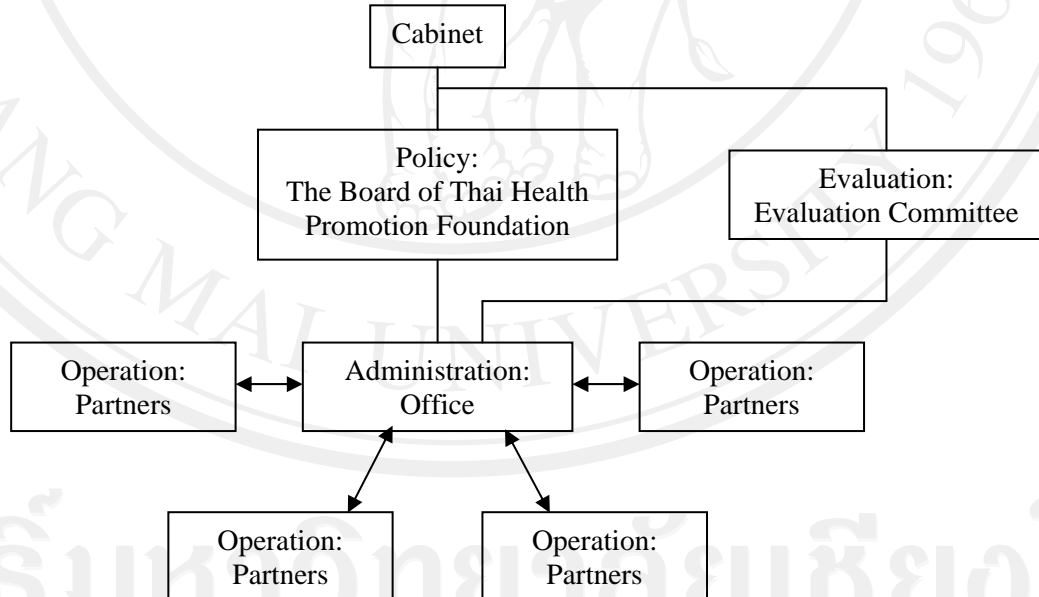
improve the people's state of 'total well-being'. ThaiHealth claims that it is a new model of a health promoting organization as “*an innovative masterpiece created in Thai society*”.

Currently, ThaiHealth has developed 13 major proactive programs (Thai Health Promotion Foundation, 2009). Most of them have been implemented. However, some still are in the process of strategic planning and key partner identification. Priorities are in tobacco and alcohol control. The plans and activities consist of:

1. Tobacco Consumption Control Plan
2. Alcohol Consumption Control Plan
3. Traffic Accident Prevention Plan
4. Health Risk Factors Control Plan
5. Health Promotion in Communities Plan
6. Health Literacy Plan
7. Health Promotion in Organizations Plan
8. Physical Activities Promotion Plan
9. Social Marketing Plan
10. Supporting General and Innovate Projects Plan
11. Health Promotion through Health Service System Plan
12. Developing Social Capital and Supportive System plan
13. Integrated National Public Health Policy

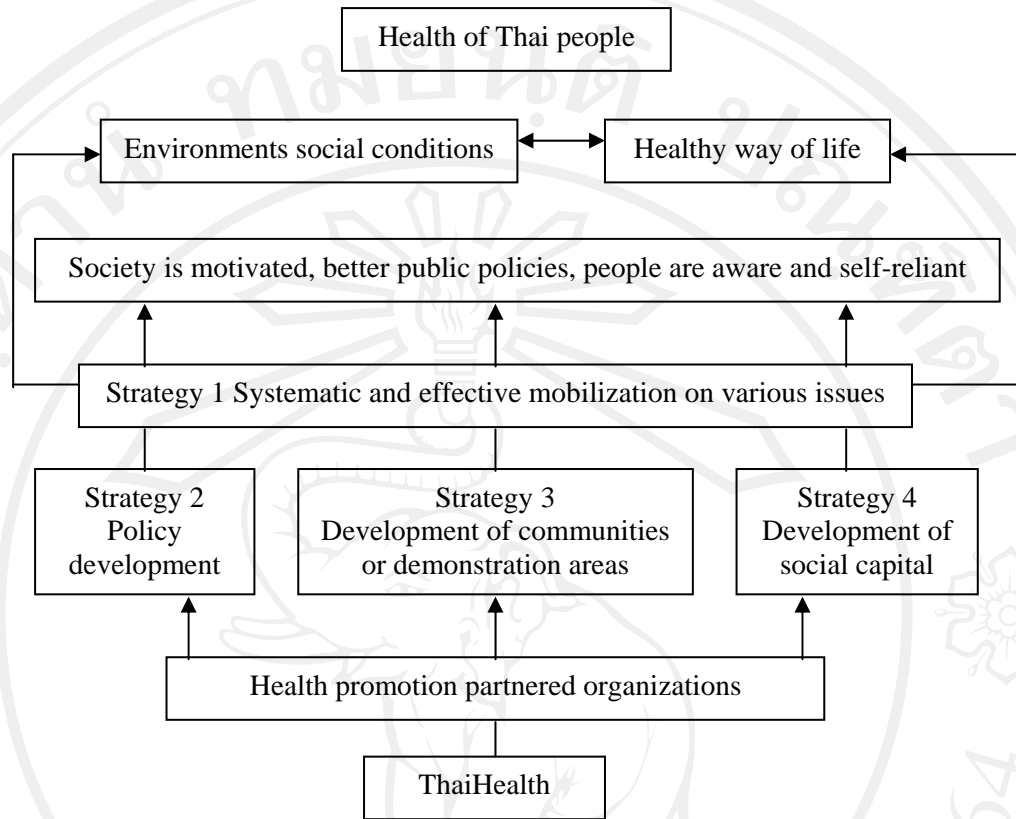
In accordance with the Health Promotion Foundation Act 2001 and to reach the organization's goals, ThaiHealth has two boards. Besides the Governing Board (21 members) which the Prime Minister chairs, ThaiHealth has an independent Evaluation Board (seven members), which evaluates the performance of ThaiHealth.

The two Boards maintain equal authority as both are appointed by the Royal Thai Cabinet. ThaiHealth has 80 staff and consists of nine sections, classified according to their working approaches and work-related responsibility. The organizational structure is divided into four components, with four main functions: policy making, administration, operation and evaluation (Figure 1.1). Both health and non-health professionals work together as teams from the Board of Directors to partners of the organization. In addition, four strategies are set up for managing and funding support (Figure 2.2). These strategies consist of (1) systematic and effective mobilization on various issues, (2) policy development, (3) development of communities or demonstration areas and (4) development of social capital (Thai Health Promotion Foundation, 2005; 2006a, 2007).



Source: Thai Health Promotion Foundation, 2005

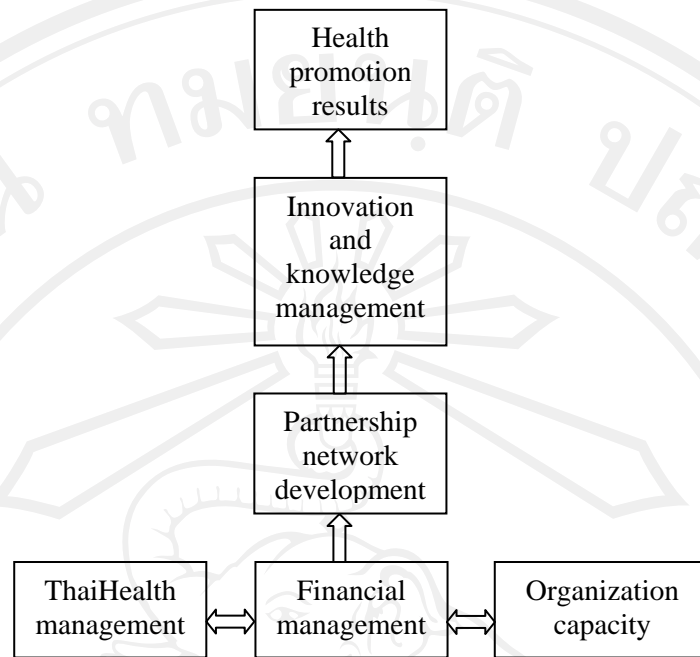
**Figure 1.1** Organizational structure of Thai Health Promotion Foundation



Sources: Thai Health Promotion Foundation, 2005

**Figure 2.1** Strategies of Thai Health Promotion Foundation

To indicate and measure performance, the first evaluation system was developed for all levels of the operation in the ThaiHealth master plan 2006-2008. In this plan, the performance measurement was based on six key perspectives which are presented with their relationships in Figure 2.3. The key performance indicators, or KPIs, measured the degree of success of whether the projects met their objectives in raising people's awareness of health risk control as well as applying surveillance measures for change (health risk control indicators) and responding to changes (output) (Thai Health Promotion Foundation, 2006b). However, those indicators were employed specifically at the ThaiHealth organizational level.



Sources: Thai Health Promotion Foundation, 2006b

**Figure 1.2** Six perspectives for performance measurement of Thai Health Promotion Foundation

In the second ThaiHealth master plan 2007-2009, the performance measurement was expanded and categorized into four levels: (Thai Health Promotion Foundation, 2007)

- The social level (driving society) emphasized policy advocacy and mobilizing mass participation.
- The network level emphasized building capacity of the key groups concerned with each issue, alliances and the mass media.
- The office level emphasized proactive plan development, knowledge application, coordinating with the policy units and building relationships with the networks.

- The organization level meant the Board setting policy, the stability of the foundation, information for management, a system of support operations and good government focusing on being a learning organization.

According to these 11 health-promoting foundations, the new concept of health promotion is obviously converted into action. These foundations are both similar and different in many aspects as follows:

- The characteristics of every foundation are similar. Each of them is a non-profit and philanthropic organization.
- The management system of every foundation is the same. The foundations are autonomous organizations and are monitored by a Board that takes responsibility for the overall management, including decision-making about funding.
- Vision, missions, roles and objectives of every health-promoting organization are not significantly different. All of them focus on promoting the health and wellbeing of people.
- Most of the foundations, except INHPF, use a strategic grant-making approach. They act as funding agencies for supporting, fostering and connecting with other organizations as networks to promote health. Meanwhile, INHPF acts as a center for improving the organizational performance of existing Health Promotion Foundations and acts as a mentor and supportive center for the new ones.
- The budgets of each foundation are derived from different sources. For instance, the main budgets of VicHealth, Healthway, Malaysian Health

Promotion Foundation and ThaiHealth are derived from taxes on tobacco products, whereas Health Promotion Switzerland's budget is collected from the contributions of each person resident in Switzerland.

- Target groups and health issues vary with the health problems in each country, so every foundation focuses on many health issues. Each foundation promotes differently health issues. For example, the major health issues of VicHealth consist of (1) tobacco consumption, (2) overweight and obesity, (3) physical inactivity, (4) social exclusion, (5) discrimination, (6) violence, (7) alcohol misuse and (8) the links between social and economic disadvantage and poor health. TCWF interests include (1) diversity in the health professions, (2) environmental health, (3) healthy aging, (4) mental health, (5) teenage pregnancy prevention, (6) violence prevention, (7) women's health and (8) work and health. Some issues overlap and some issues are different. For instance, mental health is a common health issue of Healthway, TCWF, Health Promotion Switzerland, FGÖ and Malaysian Health Promotion Foundation. Meanwhile, tobacco consumption is a shared focus of VicHealth, Healthway, HSC, Malaysian Health Promotion Foundation and ThaiHealth.
- The performance measurement of every foundation, including ThaiHealth, focuses at the organizational level. Goal indicators and organizational outcome indicators are set to indicate and measure performance at the organizational level.

The performance measurement system and indicators at the team level are controversial. Therefore, it is a challenge to develop team performance indicators for the health-promoting teams. This study focused on health-promoting teams and selected the specific operational level of ThaiHealth, 'Sweet Enough Network' and its health-promoting teams, as a case study. The objective of the network is to reduce the upsurge of health problems, such as obesity, diabetes and dental caries in Thailand resulting from sugar over-consumption (Nutrition Division, 2000; Dental Public Health Division, 2002; Thamronglouthaphun, 2004).

The network represents ThaiHealth in terms of organizational structure and strategies. The organizational structure of ThaiHealth consists of four components, policy making, administration, operation, and evaluation, whereas the 'Sweet Enough Network' is comprised of four layers, the steering committee, a core management team, the provincial teams and an evaluation team. In each component of ThaiHealth and the 'Sweet Enough Network', health and non-health professionals work together as teams. The strategies of ThaiHealth and of the 'Sweet Enough Network' follow the Ottawa Charter and their corresponding actions involve building healthy public policy, creating supportive environments, strengthening community action and developing personal skills. In addition, to develop team performance indicators requires team knowledge, such as the experiences of how teams perform and how teams learn. The provincial teams of the 'Sweet Enough Network' have these experiences. The achievement of teams is accepted at both the organizational and social level. Thus, the 'Sweet Enough Network' and its health-promoting teams were selected for this study.

## Part 2: Team and team knowledge

### Team

The root of the word “team” can be traced back to the Indo-European word “deuk” (to pull); it has always included the meaning of “pulling together.” The modern sense of a team, “a group of people acting together,” emerged in the sixteenth century (Senge, Kleiner, Roberts, Ross & Smith, 1994, p. 354). Many definitions of team are documented in the literature. There has been no significant change in the definition of team since 1994. Most of the definitions explain and emphasize the relationships between any group of people and their tasks. For example, Ingram (1996) defined a team as “two or more people who co-operate together with a common aim” and Conti & Kleiner (1997) indicated that “a team has two or more people; it has a specific performance objective or recognized goal to attain; and co-ordination of activity among the members of the team is required for the attainment of the team goal.” Cohen & Bailey (1997), Senge (1998, p. 4), Senior & Swailes (2004) and Katzenbach & Smith (2005) also added outcomes, results or accountability into their definitions. Kur (1996) mentioned a state of tension between change and stability while Holpp (1999, p. 3-8) included power in his definition. These definitions confirm that a team refers to a group of people who connect to each other by means of tasks.

Teams tend to be significant organizational structures. In the beginning, teams in business were formal and created to react to the environment, especially market and customer needs (Bedeian, 1984, p. 51-61; Gerloff, 1985, p. 190-197). Palmer & Andrews (1997) and Hunter, 2002 proposed that teams can improve an organization’s performance, whereas Hong (1999) supported the idea that teams are important



structures for organizational learning. Furthermore, Youngblood (2000), Attaran & Nguyen, 2000 and Morgan (2006, p. 33-114) agreed that an organization adapts to the knowledge age by using a team-based structure.

The team is an increasingly important organizational structure to confront the information technology period and to survive in a rapidly changing environment. Drucker (1988) defines this change as “the knowledge economy.” A team in business evolves itself by synchronizing specialists or knowledge workers to work together and by requiring self-discipline (decentralizing into autonomy). A team can learn, analyze and solve problems, make decisions and process information by itself, autonomously (Morgan, 2006, p. 71-114). A team plays important new roles in generating and sharing knowledge to create innovation (Nonaka, 1991; Nonaka & Takeuchi, 1995, p. 160-196; Nonaka, von Krogh & Voelpel, 2006). A team also endeavors to promote employees’ empowerment (Palmer & Andrews, 1997; Hong, 1999; Attaran & Nguyen, 2000) and advocate participation at the same time (Palmer & Andrews, 1997; Attaran & Nguyen, 2000; Morgan, 2006, p. 33-114).

In addition, teams can be categorized into many types. Many authors have identified the types of team differently. For instance, Conti & Kleiner (1997) propose team types based on different goals, whereas Cohen & Bailey (1997) differentiate teams by organizational level and function. Guzzo & Dickson (1996) and Katzenbach & Smith (2005) classify teams by task orientation. In addition, Borrelli, Cable & Higgs (1995) recommend a “team quadrant” which identifies teams in relation to the characteristics of the team’s drivers. Holland, Gaston & Gome (2000) also suggest teams as a spectrum. At one end of the spectrum are multifunctional working groups drawn from a rigidly functional organization and at the other end there are teams

consisting of full-time members reporting to a full time leader, having considerable autonomy and authority. Furthermore, Banker, Field, Schroeder & Sinha (1996) and Tata (2000) categorize teams in terms of levels of team autonomy.

However, in response to rapid change, a specific team type is formed. This team type is the self-directed team. Self-directed teams (Tata, 2000) are also known as: self-managing teams (Roufaiel & Meissner, 1995), self-managed teams (Conti & Kleiner, 1997; Fitch & Ravlin, 2004), self-maintaining teams (Banker, Field, Schroeder, & Sinha, 1996), autonomous work groups (Guzzo & Dickson, 1996), self-regulating groups (Margulies & Kleiner, 1995), highly performing teams (Katzenbach & Smith, 1993), empowered teams, superior teams, self-leading teams (Cooney, 2004) and many other types. Margulies & Kleiner (1995), Roufaiel & Meissner (1995), Cummings & Worley (2001, pp. 352- 369) and Cooney (2004) reviewed the concept of the self-directed team. They found that the self-directed team has been described as originating primarily from the socio-technical systems approach theory. Briefly, this theory emphasizes production systems as comprised of both technological and social parts. The task requirements and the psychological needs of employees, which represent production and humanly satisfaction, respectively, are considered in designing the team (Cummings, 1978).

The idea of self-directed teams has been known in various forms, such as participative management, in the 1970s and early 1980s, and employee involvement in the late 1980s and early 1990s (Tata, 2000). Participation, or employee involvement, is a crucial management approach for self-directed teams (Appelbaum, 1997; Cummings & Worley, 2001, pp. 313-314). Margulies & Kleiner (1995) also emphasized that the concept of self-directed teams is related to the concept of

employee empowerment. Self-directed teams increase employee commitment, ownership of decisions, and job and social satisfaction and decrease stress, absenteeism, turnover and sabotage rates. Many authors confirm that the responsibilities of team members in terms of participative management and employee empowerment are important characteristics of self-directed teams as follows:

- Team members are responsible for a whole product or process, from planning to evaluation (Hunter, 2002)
- Team members set their own goals, determine the problems to be dealt with and hold greater responsibility for their own success (Conti & Kleiner, 1997)
- Team members perform highly related or interdependent jobs, are identified and identifiable as a social unit in an organization, and are given significant authority and responsibility for many aspects of their work, such as planning, scheduling, assigning tasks to members, and making decisions with economic consequences (Guzzo & Dickson, 1996)
- Team members can self-regulate work on their interdependent tasks and have control over the management and execution of an entire set of tasks (Banker, Field, Schroeder, & Sinha, 1996)
- Team members take responsibility for the regulation, organization and control of their jobs and the conditions immediately surrounding them. They have unique characteristics such as responsibility for an entire task, possession of a variety of skills relevant to the group task, discretion over decisions such as methods of work, task schedules and the assignment of

members to different tasks and team-based compensation and feedback about performance (Margulies & Kleiner, 1995)

- Team members extend their responsibilities to issues such as work scheduling (what, where, and when), work assignments (who), and the management of relationships between the group and other individuals and groups in the organization. The team members themselves determine which roles each will play in accomplishing their primary task. These roles are generally subject to frequent change and revision (at the discretion of the team), based on the particular skills and preferences of team members (Roufaiel & Meissner, 1995)
- Team members make such decisions on their own authority. The number of hierarchical levels (and specialists) is reduced to a minimum; ideally, only a group representative is chosen (Amelvoort & Benders, 1996)
- Team members are most fully empowered, controlling aspects of their structure, composition, and process (Cohen & Bailey, 1997)

Based on increasing team members' sense of responsibility and ownership of their work, the self-directed teams increase team effectiveness (Tata, 2000). Gunar, Sullivan & Baugh (1999) also found that self-directed teams increase productivity and team members' satisfaction. The self-directed team tends to be the new organizational structure that is most appropriate for reacting to the changing environment and that emphasizes the human perspective.

According to the 'Sweet Enough Network', the health-promoting teams' characteristics are consistent with the characteristics of self-directed teams. Team members in each team are comprised of dentists and dental nurses who work at the Provincial Dental Health Office. Each team is responsible for performing particular tasks. Each team manages themselves autonomously by taking responsibility for the whole process from planning to evaluation. Participative management is used as an approach for managing their teams and team members are also empowered to involve themselves in team tasks. These specific characteristics confirm that the health-promoting teams in this study were self-directed teams.

#### **Team knowledge: How teams perform**

How to enhance a team to be a high-performance team requires serious consideration in a number of ways. Many authors suggest both theoretical and practical models for team performance. Each model reveals many particular aspects that relate to the performance of teams as follows.

- Champion, Medsker & Higgs (1993) adopted a work design perspective on groups which is consistent with a psychological approach and is thus intended to increase satisfaction and related outcomes. Five common themes or clusters of team characteristics that relate to team effectiveness were suggested. These themes are (1) job design as self-directed management, (2) interdependence between task and feedback, (3) composition of the team, (4) context and (5) team process.
- Borrelli, Cable & Higgs (1995) identified a potential framework of factors associated with effective team performance. Nine factors were proposed:

(1) autonomy, (2) recognition, (3) team balance, (4) leadership, (5) overcoming hurdles, (6) shared understanding of goals, (7) full circle feedback, (8) reward and (9) team relationship.

- Guzzo & Dickson (1996) reviewed the literature and focused on team performance in different kinds of organizational contexts, especially work organizations. They proposed seven factors that relate to team performance: (1) cohesiveness, (2) group composition, (3) leadership, (4) motivation, (5) goals, (6) feedback and (7) communication
- Conti & Kleiner (1997) suggested essential components to increase team performance in organizations. These components cover (1) organizational structure, (2) team goals, (3) visible support and commitment from top management, (4) training, (5) culture and (6) communication.
- Cohen & Bailey (1997) reviewed the literature and focused on the dependent variables and various dimensions of team effectiveness. They proposed a model of team effectiveness which categorizes factors as (1) task design, (2) group composition design, (3) organizational context design, (4) environmental factors, (5) internal group processes, (6) external group processes and (7) group psychological traits.
- Castka, Bamber, Sharp & Belohoubek (2001) reviewed critical factors affecting the successful implementation of high-performance teams. These factors were grouped into two categories. The first group included system factors: (1) organizational impact, (2) defined focus, (3) alignment and interaction with external entities and (4) measurement of performance. The

second group included human factors: (1) knowledge and skills, (2) needs of individuals and (3) group culture.

- Cordery (2003) identified three main variables associated with the creation of high-performance teams: (1) team task characteristics as autonomous and self-managed teams, (2) team composition as specific knowledge skills and abilities, the personality of team members, the size of a team and the fit between the components of team membership, and (3) interdependence of task and team environment.
- Dionne, Yammarino, Atwater & Spangler (2003) proposed a model focused on team performance as process-type performance or a teamwork process-based construct. The factors that they related to team performance are: (1) leadership, (2) team shared vision, (3) team commitment, (4) empowerment of the team environment, (5) functional team conflict, (6) cohesiveness, (7) communication and (8) conflict management.
- MacBryde & Mendibil (2003) determined and categorized the drivers of team performance into three main components. Firstly, team tasks are comprised of interdependence, technology requirements, task significance, skill variety and autonomy. Secondly, team characteristics and processes include structure and composition, internal processes and external processes. Thirdly, organizational context consists of organizational support, external monitoring and stakeholder contribution
- Senior & Swailes (2004) summarized the concepts of team performance which focus on the management team. Seven factors that represent team performance are: (1) team purpose, (2) team organization, (3) team

leadership, (4) team climate, (5) interpersonal relationships, (6) team communication and (7) team composition.

- Alberts (2007) identified several factors that contribute to successful team performance and clarified the relationships between interactions, knowledge creation, and team performance. Eight factors that contribute to successful team performance in a knowledge creating organization are: (1) clarity of mission, (2) involvement of key experts, (3) multidisciplinary understanding, (4) effectiveness of team processes, (5) group well-being, (6) the team's relationship to product users, (7) leadership and (8) organization support.

These models are developed from different disciplines. Based on their assumptions, background and concepts, how to increase the effectiveness of team is categorized into different types. Although the models were developed from various disciplines, common components emerge that are significant for team performance. These components represent how teams perform. As this study focused on the self-directed team, these components were grouped into five categories by using the organization structural design described by Cummings & Worley (2001, pp. 280-369) as follows:

- Team tasks: As the self-directed team takes responsibility for the whole process from planning to evaluation, team members should be involve in developing tasks, goals and missions. Sharing understanding and clarifying tasks, goals and missions of team are the first step in forming teams.



- Team work design: The significant and specific characteristic of a self-directed team is autonomy.
- Team composition: The self-directed team requires different types of people, or a heterogeneous team, as different tasks require different knowledge and skills. The heterogeneous mix of people and the variety of their knowledge and skills help to increase team performance.
- Team process: In the self-directed team, empowerment of the team and its environment and participation are the most important concepts. The concept of team empowerment views task characteristics as a powerful source of performance motivation for the team as a whole. It can be assumed that empowering task characteristics are translated into increased motivation and performance by team members. Team members are given significant authority and responsibility for many aspects of their work, such as planning, scheduling, assigning tasks to members, and making decisions with consequences. They also typically perform interdependently. The significant roles of team leaders consist of (1) empowering team members by using positive communication, (2) monitoring and feedback to the team and (3) creating and setting a team environment for learning.
- Team support systems: The support systems should be set in terms of (1) training and (2) recognition and reward.

Most of the components of these five categories were developed from a business perspective, in business settings, and from different backgrounds and

concepts. No models have been constructed for health-promoting teams consisting of health professionals. Besides, no models have described the details of “how teams perform,” or techniques for team performance. The health-promoting teams are different characteristics from teams in business. This study identified how health-promoting teams perform, in terms of techniques, or team knowledge, and used the team knowledge as inputs to develop team performance indicators for health-promoting teams.

#### **Team knowledge: How teams learn**

Senge (1998, p. 4) mentioned that “The team that becomes great didn’t start off great - it learned how to produce extraordinary results.” Teams that learn produce extraordinary results and team members learn and grow (Senge, 1998, p. 10). An in-depth analysis of most organizational learning concepts makes it clear that the key to organizational learning is the team-learning process (Reinhardt, 2002, p.191). Kolb (1984), Mezirow (1997) and Knowles, Holton & Swanson (2005) believe that individual learning is important for teams. However, learning at the individual level is inadequate for enhancing a team to be a high-performance team. The process of learning at the team level is required. Many scholars have suggested how teams learn through various learning processes. Three contemporary learning theories are presented as follows:

The first theory is team learning, in the fifth disciplines identified by Senge. Senge (1998, p. 236) defines team learning as “the process of aligning and developing the capacity of a team to create the results its members truly desire.” Team learning requires three critical dimensions: the intelligence of teams, the need for innovation

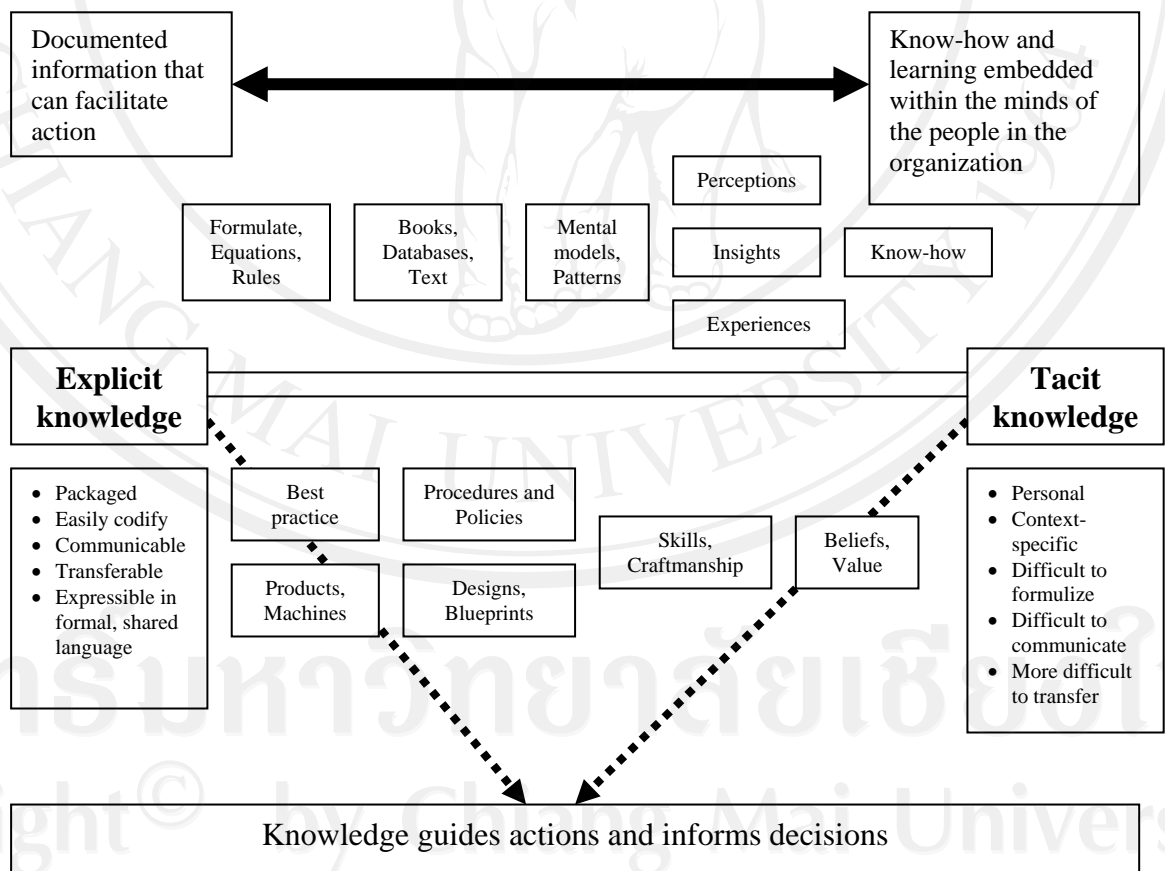
and the roles of team members on other teams. Team learning is also a collective discipline which involves dialogue and discussion as important tools for teams to learn (Senge, 1998, pp.236-249). According to Senge's learning discipline, team learning consists of three levels: (Senge, 1998, pp. 373-377)

- Practices, or what you do, are comprised of (1) suspending assumptions, (2) acting as colleagues, (3) surfacing one's own defensiveness and (4) practicing;
- Principles, or guiding ideas, and insight include (1) dialogos, (2) integrate dialogue and discussion and (3) defensive routines;
- Essences, or the state of being, of those with high levels of mastery in the discipline are associated with collective intelligence and alignment.

This theory emphasizes the interaction of individuals via dialogue and discussion as collective regulation to prevent defensive routines. Argyris (1999, p.4) argued that Senge's perspective requires "the realization of human potential in a mixture that has a distinctly Utopian flavor." Team learning from Senge's perspective is one of his five disciplines. The others are systems thinking, personal mastery, mental models and building shared vision. The most important discipline for learning organizations is systems thinking, which is the principle of leverage and integration of all of the disciplines together. The process of learning by using dialogue and discussion are insufficient for teams' growth in becoming high performance teams.

The second theory is the idea of knowledge creation proposed by Nonaka. Nonaka (1991) characterizes learning as occurring in places where "inventing new knowledge is not a specific activity...it is a way of behaving, indeed a way of being,

in which everyone is a knowledge worker.” Knowledge can be created and transferred via four modes of knowledge conversion which are an important process for learning in an organization. The knowledge in this knowledge conversion refers to explicit and tacit knowledge (Nonaka & Takeuchi, 1995, pp. 62-73). Explicit knowledge is the knowledge that can be express in formal and systematic language and shared in the form of hard data, scientific formulae, manuals and such like. In contrast, tacit knowledge is highly personal and hard to formalize and is deeply rooted in action, procedures, routines, commitment, ideals, values and emotions (Nonaka, Toyama & Konno, 2000). Kidwell, Linde & Johnson (2000) also proposed a model to use as a guideline for understanding tacit and explicit knowledge as shown in Figure 2.2.



Source: Kidwell, Linde & Johnson (2000)

**Figure 2.2** Tacit and explicit knowledge model

This theory focuses on how to create innovation by converting tacit and explicit knowledge. Li & Gao (2003) pointed out that this theory was developed in Japanese business company contexts that mainly relate to assembly lines and one specific structure: “hypertext” organizations. Meanwhile, knowledge in this model is categorized into discrete elements (McAdam & McCreedy, 1999). Yolles & Iles (2000) also commented that the knowledge conversion cycle appeared as “rational schizophrenia.” Teams form and develop under the control and command lines of top and middle managers. The main objective of each team is innovation. Each team’s unique knowledge is how to create innovation. How to enhance performance teams into high-performance teams is inconsequential in this theory.

The third theory is the learning theory proposed by Argyris & Schön. Since the experience and actions of individuals are the keys for organizational learning, Argyris & Schön (1978, p.29) believe that members of the organization play three roles. Firstly, they act as learning agents for organizational learning. Secondly, they take action to make changes in both the internal and external environments of the organization by detecting and correcting errors. Thirdly, they establish the results of their inquiry in private images and shared maps of the organization. These roles lead to three forms of learning: single-loop, double-loop and deuterio learning (Argyris & Schön, 1978, p.8-29; Argyris, 2001; Reinhardt, 2002).

Single-loop learning requires only a one-dimensional question to extract a one-dimensional answer and includes correction of deviations from actual performance concerning prescribed standard levels of performance.

Double-loop learning adds follow-up steps by turning the question back on the questioner to understand the reasons and motives behind the facts and actions. It is

based on an analysis and the change of actual organizational “theory-in-use” and includes assumptions and rules that guide action, contrary to the espoused theory of the firm.

Deutero learning includes learning that reflects the learning processes and is a prerequisite of the norms, values and assumptions for sustainable change. The criterion for success in single-loop learning is effectiveness, whereas new effective norms are developed in double-loop learning. The result of deutero learning is the interactions between the organization’s behavioral world and its ability to learn. Organizations learn double-loop learning via governing variables which are “the variables that could be inferred by observing the actions of individuals acting as agents for the organization to drive and guide their actions” (Argyris, 1999, p.68).

This theory is based on a psychological approach. It is problematical and ambiguous in action at the team level. It focuses only on solving problems that are complex and ill-structured. The learning process attempts to change the underlying values, assumptions and norms of organizations, but alone, is inadequate for teams to become high-performance teams.

These theories are problematical in practice in different contexts. To tailor the learning strategy is one of the crucial tasks in management. Team leaders seek practical guidelines to put theories to work. Garvin (2000) suggested a set of processes to guide managers into putting the learning organization to work. He described a learning organization as “an organization skilled at creating, acquiring, interpreting, transferring and retaining knowledge and at purposefully modifying its behavior to reflect new knowledge and insights” (Garvin, 2000, p.11). Garvin’s

learning in action includes more “practical” learning processes and techniques for leaders to build a learning organization.

From theory to practice, Garvin (2000) showed how different organizations put different learning strategies to work. He argued that at the heart of organizational learning lies a set of processes that could be designed, deployed, and led. He suggested a set of instructions as a tool or technique to be applied in real organizations. His instructions consisted of a list of supporting steps and activities, including the challenge of leading learning. He clarified his ideas through (1) the stages of learning, (2) the types or modes of learning and (3) the leadership challenge, as follows:

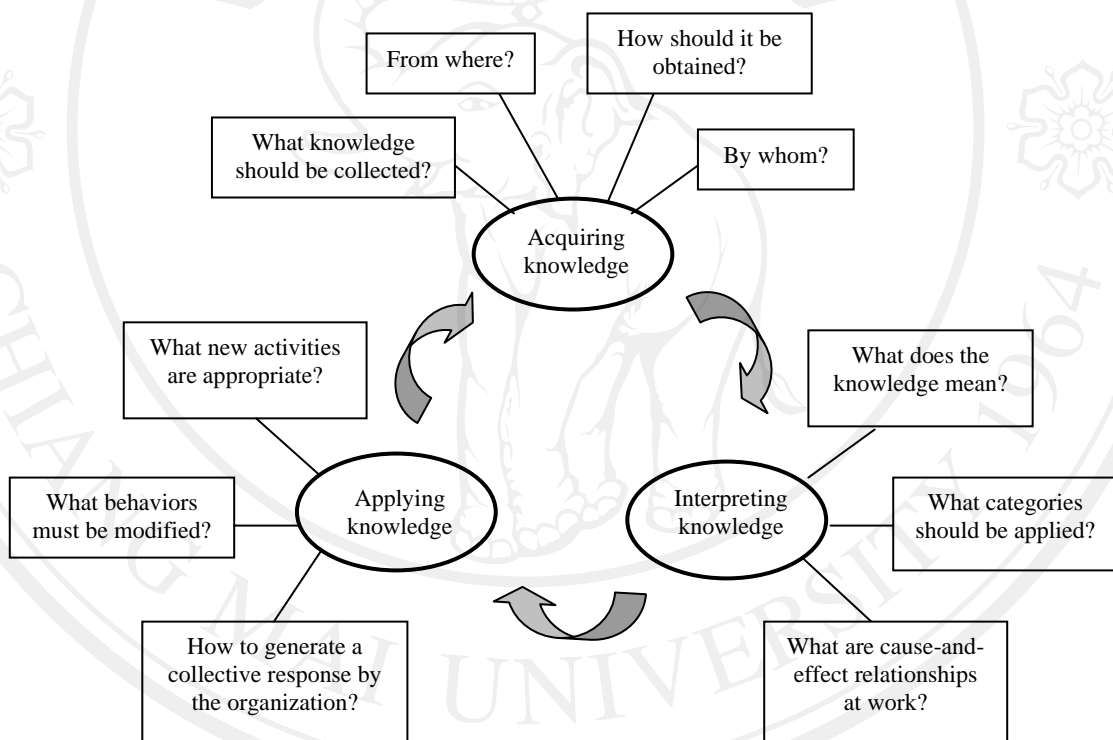
Firstly, in the stages of learning, Garvin (2000, p. 20-28) categorized every learning organizational process into three basic steps which consist of acquiring, interpreting and using or applying information in different ways (Figure 2.3). Organized information eventually transforms into knowledge. Therefore, this study focused on knowledge instead of information. Each stage of learning is described in detail:

Organizations must acquire knowledge, assembling facts, observations and data. At this stage, the raw material of learning is gathered. The crucial questions include what knowledge we should collect, from where, how it should be obtained, and by whom.

Next, organizations interpret knowledge, produce perspectives, position and refine understanding. The raw materials are processed and reviewed. The important questions are: what the knowledge means, what categories should be applied and what

cause-effect relationships are at work. This stage means to interpret and classify knowledge as well as to identify cause-effect relationships of knowledge.

Finally, organizations apply knowledge in tasks, activities and new behaviors. At this stage, analysis is translated into action and the essential questions consist of what new activities are appropriate, what behaviors must be modified and how to generate a collective response by the organization.



Source: Adapted from Garvin (2000)

**Figure 2.3** Stages of Learning

Secondly, types or modes of learning in the organization are divided into three modes: intelligence gathering, experience, and experimentation. Different modes of learning fit into different orientations (Table 2.1).



**Table 2.1** Types of Learning

| <b>Types of learning</b> | <b>Aimed at</b> | <b>Organizational knowledge</b>                                       | <b>Learning methods</b>  |
|--------------------------|-----------------|---|--|
| Intelligence gathering   | The present     | Attend to currently available information and knowledge               | <ul style="list-style-type: none"> <li>• Search</li> <li>• Inquiry</li> <li>• Observation</li> </ul>       |
| Experience               | The past        | Draw lessons from activities that have already taken place            | <ul style="list-style-type: none"> <li>• Reflection and review</li> <li>• Experiential learning</li> </ul> |
| Experimentation          | The future      | Look ahead, trying out new designs or theories to test their validity | <ul style="list-style-type: none"> <li>• Exploration</li> <li>• Hypothesis testing</li> </ul>              |

Source: Adapted from Garvin (2000)

The first mode of learning is intelligence gathering, which is aimed at the present. The organization attends to currently available information and knowledge.

This type of learning collects and interprets knowledge that exists outside the organization by gathering data through search, inquiry and observation.

- Search relies on public sources or documents; the primary skills involve careful analysis and research. This method is well suited to settings where needed information has already been published or is there for the taking.
- Inquiry relies on interviews or surveys; the primary skills include framing and asking insightful questions. This method is well suited to a setting where facts or insights have yet to be collected but key sources can be readily identified and questioned.
- Observation relies on direct contact with users in which attentive looking and listening skills are essential. This method is well suited to settings where questions are likely to produce incomplete or misleading responses but insights can be gained by watching people at work or play.

The second mode of learning is experience, which refers to the past. The organization draws lessons from activities that have already taken place. This type of learning involves reflection and review, and experiential learning. The results of these processes reveal a set of lessons learned that can be used in future work.

- Reflection and review take place after the final step of activities and all tasks have been completed. The self-learning strategy or “After Action Review” presents the technique for repetition.
- A well-designed education process for learning motivates learners and ensures active participation by using real or simulated problems. This method is called experiential learning, problem-centered learning or action learning.

The third mode of learning is experimentation, which relates to the future. The organization looks ahead, trying out new designs or theories to test their validity. Systematic trials and comparisons are designed to generate knowledge. Experimentation is categorized into two types: exploration and hypothesis testing.

- Exploration seeks existing knowledge, collects impressions and develops a detailed picture of the surrounding world. It involves a carefully constructed demonstration or test: an innovation product, process or organization that stretches the boundaries of current practice and probes for reactions.
- Hypothesis testing discriminates among alternative explanations and confirms or discounts prevailing views. Proof, not discovery, is the desired end.

Thirdly, in this theory, leaders (1) decide what knowledge to look for, (2) figure out where to look, assemble the raw material, determine its meaning and implications and then (3) disseminate their findings to relevant parties. Leaders initiate the environment for learning. They also create and support learning situations. Garvin recommended three tasks as the guidelines for leaders to lead learning in organizations. These tasks include creating opportunity, setting the tone and leading the discussion (Table 2.2).

**Table 2.2** Leaders' tasks and tools

| <b>Leaders' tasks</b>  | <b>Tasks</b>  | <b>Tools</b>   |
|------------------------|---|--|
| Creating opportunity   | Design settings and events that prompt the necessary activities                         | <ul style="list-style-type: none"> <li>• learning forums</li> <li>• exploratory assignments</li> <li>• shared personal experiences</li> </ul>  |
| Setting the tone       | Cultivate the proper tone, fostering desirable norms, behaviors and rules of engagement | <ul style="list-style-type: none"> <li>• challenge and dissent</li> <li>• security and support</li> <li>• open communication</li> </ul>  |
| Leading the discussion | Must personally lead the process  | <ul style="list-style-type: none"> <li>• discussion:               <ul style="list-style-type: none"> <li>○ questioning</li> <li>○ listening</li> <li>○ responding</li> </ul> </li> <li>• framing the debate</li> <li>• posing questions</li> <li>• listening attentively</li> <li>• providing feedback and closure</li> </ul> |

Source: Adapted from Garvin, 2000

First, leaders must create opportunities for learning by designing settings and events that prompt the necessary activities. They can take many forms such as learning forums, exploratory assignments and shared personal experiences.

Second, they must cultivate the proper tone, fostering desirable norms, behaviors and rules of engagement. Setting the tone or creating climates for

encouraging learning requires: (1) challenge and dissent (2) security and support and (3) open communication.

Third, they must personally lead the process of discussion, framing the debate, posing questions, listening attentively, and provide feedback and closure. Questioning, listening and responding are the crucial skills for effectively leading the discussion.

All of Garvin's case studies came from business organizations. The health-promoting teams in this study acted as learning teams in different contexts. It was useful to apply the stages of learning, types or modes of learning and the leadership challenge as a framework for analyzing how the health-promoting teams learn. This study identified how teams learn in terms of techniques, or team knowledge. The techniques of how teams learn, in addition to the techniques of how teams perform, were used as inputs to develop team performance indicators for health-promoting teams.

This part of the literature review reveals that the team is a significant organizational structure, especially the self-directed team. According to the literature, team knowledge in terms of how teams perform and how teams learn is related to team performance. The health-promoting teams in this study possessed the characteristics of self-directed teams. How the health-promoting teams perform was considered in five categories: (1) team tasks, (2) team work design, (3) team composition, (4) team process and (5) team support systems. Garvin's learning theory was used as a framework for identifying how the health-promoting teams learn. The

techniques of team knowledge were used as inputs to formulate team performance indicators for the health-promoting teams.

The following part reviews the relevant performance measurement systems and selects an appropriate system for health-promoting teams.

### **Part 3: Performance measurement**

In order to be a high performance team, team performance should be set and measured appropriately. To measure team performance, many scholars have developed models and tools such as:

- Belbin's team role model: A team role is defined as a pattern of behavior characteristic of the way in which one team member interacts with another in order to facilitate the progress of the team as a whole (Belbin, 1981; Aritzeta, Swailes & Senior, 2007). The team role concept, which is a preference to behave in a particular way with other team members while performing tasks, should be distinguished from the concept of the functional role, which refers to the technical skills and operational knowledge relevant to the job. Several people may have the same functional role but vary greatly in their role(s). In this model, a role is defined by six factors: personality, mental ability, current values and motivation, field constraints, experience, and role learning.
- Team management systems mode: A measure has been developed through eight types of work or team roles (Margerison, McCann & Davis, 1995). The team roles are represented in the Team Management Wheel (Rushmer,

1997). This wheel demonstrates how people relate to the work functions that must necessarily be carried out by an effective team (Rushmer, 1996). The Margerison-McCann Team Performance Index, which has 54 questions to measure team performance factors, was developed from these roles. This index is a self-assessment approach.

- Millward and Ramsay's team survey: This team survey was originally generated and piloted in industry by Millward and Ramsay in 1998. The theoretical grounds for developing this team survey involved (1) the cognitive-motivational model, (2) the shared mental models of the team and team interaction, (3) team potency and (4) team meta-cognition in terms of perceptions of current and future team goals (Millward & Jeffries, 2001). This survey includes seven dimensions and 43 items and specifically highlights team effectiveness in a psychological matrix.
- Team reflexivity measure: Schippers and Den Hartog (2007) proposed a team reflexivity questionnaire to measure team effectiveness. Based on reflection concepts, the measurement includes a variety of items, which consist of a reflexivity scale, adaptation, feedback-seeking behavior, and the level of proactive personality and of the reflector learning style within the team. The team reflexivity questionnaire is the first step in establishing and measuring reflexivity as a team-level construct.
- The team questionnaire: Higgs and Dulewicz (1998) measured team performance based on an input-process-output model. This team questionnaire emphasizes two factors such as team outcomes and team processes by using two questionnaires. Team outcomes measure three

factors: team cohesion, improvement orientation and team achievements.

Team processes involve 12 factors: team relationships, team focus, performance approach, leadership style, team discipline, team decision making, team confidence, contribution, decision focus, social contact, process focus and consistency.

- A self-report inventory: Rickards, Chen and Moger (2001) measured the performance of project teams by collecting self-reports on seven sets of three items for the seven team factors. A five-point scaling method was used to measure each item. Seven team factors consisted of: a platform of understanding, a shared vision, a create climate, a specified idea owner, resilience, network activators and learning from experience. In addition, they added two factors, team leadership and performance criteria, in the inventory. Team leadership is comprised of transformational and transactional leadership, while performance criteria include creativity and productivity.
- Profile Package: Twelve categories and 43 indicators have been defined for measuring performance of departments, specifically in the Jellinek Center in Amsterdam, which is a service specializing in the treatment of people with addiction problems. Critical indicators for each department in this organization were proposed, such as admission, productivity, drop out, sick-leave and costs (Nabitz & Walburg, 2002).
- Key performance indicators for measuring construction success: Chan and Chan (2004) developed a specific framework for measuring the success of construction projects. A set of key performance indicators indicates both

objective and subjective performances. The objective measurement involves construction time, speed of construction, time variation, unit cost, percentage net variation over final cost, net present value, accident rate and environmental impact assessment scores. Whereas the subjective measurement consists of quality, functionality, end-user satisfaction, client satisfaction, designed team satisfaction and construction team satisfaction.

- The team performance diagnosis: The team performance diagnosis was developed for various teams in industry by Ahmed, Siantonas & Siantonas (2007). One question is asked with regard to each indicator. In the full team performance diagnosis, 12 questions are asked about each of the 13 indicators. The key performance indicators cover (1) team size, (2) clear objectives and purpose, (3) openness, trust, confrontation and conflict resolution, (4) cooperation, support, interpersonal communication and relationships, (5) individual and team learning and development (6) sound inert-group relations and communications, (7) appropriate management/ leadership, (8) sound team procedures and regular review, (9) output, performance, quality and accountability, (10) morale, (11) empowerment, (12) change, creativity and challenging the status quo and (13) decision-making and problem-solving.

Belbin's team role model, the team management systems model, Millward and Ramsay's team survey and the team reflexivity measure investigate each team member's various roles that need to be played for the team to be successful. These models are based on the idea that different types of people interact in different ways.



These models are useful during team building and emphasize the composition of each role in teams which are identified by self-perception inventory tests. The tests provide indicators of an individual's natural tendency toward filling each role, as in psychometrics. Meanwhile, the team questionnaire, the self-report inventory, the profile package, the key performance indicators for measuring construction success and the team performance diagnosis are designed to measure team performance by relating some team factors, such as team size, leadership, outputs and outcomes, to team performance. Each model proposes indicators for specific teams, but, they lack a system to develop the indicators. These models and indicators may not be generalized to other teams, especially the health-promoting teams in this study. Furthermore, none of the indicators in these models are linked to strategy or to team objectives. The dimensions of the learning and growth of teams and the feedback about strategic management are not key concepts of these models.

These models and tools are also developed to answer the question “Where are we now?” which is insufficient for responding to the changing environment. In the 1980s, a new concept for measuring performance emerged (Neely, 2005). The reasons for measuring performance were expanded to answer additional questions, such as “Where have we been?” “Where do we want to go?” “How are we going to get there?” and “How will we know we got there?” In addition, performance measures must be created for different users and for different purposes such as:

- for the manager/measurer/measured: learning and self improving;
- for others in the lateral partnerships: dynamic coordination of actions and continuous improvement;

- for supervisors: integration of local measures to create aggregated or, eventually, corporate-wide measures, monitoring of actions delegated to others for continuous improvement and control and feeding the reward system;
- for all actors in the organization: creating a sense of belonging and feeding discussions as a basis for continuous improvement;
- for some external stakeholders: customers, suppliers and some financial institutions as well as some regulatory agencies may require that some measures about how the organization is and will be doing be made available (Lebas, 1995).

Many systematic processes for performance measurement have been developed. The definition of performance, performance management and performance measurement are clarified systematically.

Performance is defined as the potential for future successful implementation of actions. Performance is constructed by the management system and by managers. Performance management is a philosophy which is supported by performance measurement and is correlated to performance measurement (Lebas, 1995).

Performance measurement is all about understanding what is happening inside the organization and working out, how to introduce improvement (Powell, 2004). It also can be defined as “the process of quantifying the efficiency and effectiveness of action” (Neely, Gregory & Platts, 2005). Four fundamental processes of performance measurement include (1) performance measurement system design, (2) implementation, (3) management through measurement and (4) refreshment of the

measurement system (Powell, 2004). The first step in design is the challenge of choosing the right performance measurement system.

As many new performance measurement systems have emerged over time, the performance measurement system for each organization or team should be considered appropriately. Pun & White (2005) and Ghalayini & Noble (1996) suggested many characteristics to consider for a new performance measurement system, such as:

- Based on company strategy
- Mainly non-financial measures
- Valued-based
- Performance compatibility
- Customer-oriented
- Long-term orientation
- On-time metrics
- Prevalence of team measures
- Intended for all employees
- Prevalence of transversal measures
- Simple, accurate and easy to use
- Lead to employee satisfaction
- Improvement monitoring
- Aim at evaluation and involvement
- Intended to improve performance
- Have no fixed format
- Vary between locations

- Change over time as the needs change
- Stress continuous improvement

Following these characteristics, Wongrassamee, Gardiner & Simmons (2003) categorized the new performance measurement systems into two groups. The first group highlights self-assessment and quality assurance. The systems in this group are (1) the Deming Prize in Japan and Asia (Deming, 2004), (2) the Baldrige Award in the USA (NIST, 2004) and (3) the European Foundation for Quality Management (EFQM) Award using the EFQM Excellence Model in Europe (EFQM, 2004). The second group is designed to help managers measure and improve business processes.

Hudson, Smart & Bourne (2001), Pun & White (2005) and Garengo, Biazzo & Bititci (2005) recommended 16 systems in this group as follows:

1. Strategic Measurement Analysis and Reporting Technique (SMART) or Performance Pyramid (PP)
2. Performance Measurement Questionnaire (PMQ)
3. Results and Determinants Matrix (R&DM)
4. The Balanced Scorecard (BSC)
5. Comparative Business Scorecard (CBS)
6. Cambridge Performance Measurement Process (CPMP)
7. Consistent Performance Measurement Systems (CPMS)
8. Integrated Performance Measurement Systems (IPMS)
9. Dynamic Performance Measurement Systems (DPMS)
10. Integrated Performance Measurement Framework (IPMF)
11. Integrated Measurement Model (IMM)

12. Performance Measurement Matrix
13. Organizational Performance Measurement (OPM)
14. Integrated Performance Measurement for Small Firms or Framework for Small Business (FSBPM)
15. Integrated Dynamic Performance Measurement System (IDPMS)
16. Performance Prism

As this study focused on helping team leaders to improve performance at the team level, the second group should be considered. However, which system is appropriate for teams? To select an appropriate performance measurement system for teams requires a guideline. Typologies, or systems for dividing things into different types, can be used as guidelines for consideration. Many authors have proposed typologies which include evaluation criteria.

Hudson, Smart & Bourne (2001) and Pun & White (2005) have recommended a general typology for evaluating performance measurement systems. This typology is divided into three categories: (1) development process requirements, (2) characteristics of performance measurement and (3) dimensions of performance. The details of each category are as follows:

1. Development process requirements:

- evaluation/existing performance measurement audit;
- key user involvement;
- strategic objective identification;
- performance measure development;
- periodic maintenance structure;

- top management support;
- full employee support;
- clear and explicit objectives;
- set timescales.

### 2. Characteristics of performance measurement:

- derived from strategy;
- clearly defined with an explicit purpose;
- relevant and easy to maintain;
- simple to understand and use;
- fast and accurate feedback;
- operations linked to strategic goals;
- stimulation of continuous improvement.

### 3. Dimensions of performance:

- quality;
- flexibility;
- time;
- finance;
- customer satisfaction;
- human resources.

Meanwhile, Garengo, Biazzo & Bititci (2005) suggested 13 criteria to evaluate performance measurement systems. These criteria are comprised of:

1. Strategy alignment: strategy is the key dimension in the model. The

performance measurement system must ensure the measures adopted are coherent with the strategy.

2. Strategy improvement, performance measurement helps improve pre-defined objectives and strategy.
3. Focus on stakeholders: stakeholders' requirements are one of the main starting points in the design of the performance measurement system.
4. Balance: the performance measurement system uses different perspectives that are based on the type of measure (financial or non-financial) and/or the objective of the measure (internal or external).
5. Dynamic adaptability: review systems of measures and objectives are included in the performance measurement system. These review systems aim to ensure the performance measurement system quickly responds to changes in internal and external contexts.
6. Process oriented: the organization is not seen as a hierarchical structure but as a whole set of co-ordinated processes which create a system.
7. Depth: measures are disaggregated into detailed indicators (the single operational activities involved in each process are measured).
8. Breadth: the whole organization is the object of the performance measurement. A broad number of functions (or macro-processes) are included.
9. Causal relationships: results and their determinants have to be measured to quantify the 'causal relationship' between them, and to support the control of actions and the improvement process.
10. Clarity and simplicity: the fixed objectives and the measures and

methodology to be used to gather and process information are clearly defined and communicated to those involved in the performance measurement system.

11. Vertical architectures: models that are strictly hierarchical (or strictly vertical), characterized by cost and non-cost performances on different levels of aggregation, till they ultimately become economic-financial.
12. Balanced architectures: several separate performances are considered independently; these performances correspond to diverse perspectives of analyses
13. Horizontal architectures (by process): models which are focused on the value chain and consider the internal relationship of customer/ supplier.

Some criteria in Hudson, Smart & Bourne's and Pun & White's typology are similar to some in Garengo, Biazzo & Bititci's; some are different. Both typologies were developed at the organizational level. MacBryde & Mendibil (2003) and Mendibil & MacBryde (2005) proposed a specific typology for teams, based on the general typology of Hudson, Smart & Bourne (2001) and Pun & White (2005). They added eight requirements in the development process:

- enable identification of team's stakeholders' requirements;
- enable the identification of team strategy/purpose;
- focus on areas that the team is accountable for;
- involve key users of the performance measurement system;
- have full team member support;
- facilitate the identification of key drivers of team performance;



- assign individual responsibility for the measurement, communication and improvement tasks associated with each goal;
- be flexible and require low resource consumption.

They also included seven performance measurement characteristics:

- derived from the stakeholders represented within the team membership;
- clearly defined data collection and methods of calculating the level of performance;
- clearly defined frequency of measurement;
- applied at team and individual level;
- related to outcomes, process and drivers of team performance;
- capture the dynamic nature of teamwork;
- reliable, valid and acceptable.

The dimensions of performance are more specific at the team level than in the general typology. Four dimensions were proposed by MacBryde & Mendibil (2003) and Mendibil & MacBryde (2005) in terms of:

- Team effectiveness (process outcome)
- Team efficiency (internal team processes)
- Team learning and growth
- Team member satisfaction

Using the specific typology for teams, an appropriate performance measurement system was selected from the 16 new performance measurement

systems of Hudson, Smart & Bourne (2001), Pun & White (2005) and Garengo, Biazzo & Bititci (2005). Twelve performance measurement systems were excluded (Table 2.3). The reasons for excluding these performance measurement systems were:

- The new performance measurement system was based on strategy management, so the systems that did not emphasize strategy were excluded. The criteria that relate to strategy include (1) are not derived from strategy; (2) do not enable strategic objective identification; (3) do not set strategy alignment; (4) do not improve strategy.
- This study focused on the team. Human resources were considered a significant dimension of performance to be measured. The systems that were unable to measure human resources were excluded.
- Team members should support the systems. The systems that did not have full employee support were excluded.
- The systems that did not have clear and explicit objectives were excluded.

**Table 2.3** Comparison of the 12 excluded performance measurement systems

| Exclusion criteria                            | SMART | PMQ | CPMS | FSBPM | Performance measurement matrix | IPMS | Performance prism | OPM | IMM | R&DM | IPMF | IDPMS |
|---|-------|-----|------|-------|--------------------------------|------|-------------------|-----|-----|------|------|-------|
| 1. Derived from strategy                      |       | X   |      | X     |                                |      |                   |     |     |      |      |       |
| 2. Enabled strategic objective identification | X     |     | X    | X     |                                |      |                   |     |     |      |      |       |
| 3. Set strategy alignment                     |       |     |      | X     |                                | X    | X                 | X   |     |      |      |       |
| 4. Improved strategy                          |       |     |      | X     | X                              |      |                   | X   |     |      |      |       |
| 5. Measure human resources                    |       | X   | X    |       |                                |      |                   |     |     | X    | X    |       |
| 6. Have full employee support                 |       | X   |      |       |                                |      |                   |     |     |      |      | X     |
| 7. Have clear and explicit objectives         |       | X   | X    |       |                                |      |                   |     | X   |      |      |       |

Sources: Ghalayini & Noble, 1996; Pun & White, 2005; Franco-Santos et al., 2007

Four performance measurement systems remained for consideration in detail. Both the strengths and the weaknesses of the four performance measurement systems were also considered in parallel. These systems were (1) Dynamic Performance Measurement Systems (DPMS), (2) Cambridge Performance Measurement Process (CPMP), (3) the Balanced Scorecard (BSC) and (4) Comparative Business Scorecard (CBS).

DPMS (Pun & White, 2005) was developed from IPMS, which was built on several different concepts (Neely, 2005). DPMS identifies four requirement systems: an external monitoring system, an internal monitoring system, a review system and an internal deployment system. These four basic systems are also used for exploring the use of information technology (IT). As DPMS is a derivative of IPMS, its weakness is that the strategy alignment is questionable. Also, DPMS stresses only processes

(Neely, 2005) and is unable to clarify the dimensions of measurement. Therefore, it was excluded.

CPMP seemed to fulfill all the criteria of the typology and described a comprehensive process for the development of a strategic performance measurement system (Neely, 2005). The development of this system is divided into three main phases: the design, the implementation and the use of performance measures (Pun & White, 2005). However, Bourne et al. (2000) claimed that overlap between two phases, especially between implementation and use, could occur. Therefore, some measures can be implemented before all the measures are completely designed. The process is not a simple progression for challenging strategy. It requires development and review at a number of different levels as the situation changes. It remained for consideration.

The Balanced Scorecard (BSC) is “an integrated framework for describing and translating strategy through the use of linked performance measures in four balanced perspectives: customer, internal processes, employee learning and growth and financial” (Niven, 2003, p. 293). This system links short- and long-term objectives, financial and non-financial measures, lagging and leading indicators and external and internal performance perspectives (Kaplan & Norton, 1996c, p. viii). A strategy map is used as a key tool to describe the interrelationships among perspectives that are weaved together to illustrate an organization’s strategy. The measurement focuses of the scorecard accomplish four critical management processes: (1) clarify and translate vision and strategy, (2) communicate and link strategic objectives and measures, (3) plan, set targets and align strategic initiatives and (4) enhance strategic feedback and learning (Kaplan & Norton, 1996c, p. 10). The

Balanced Scorecard concept aims to align corporate values with operational objectives, customer satisfaction, shareholder value and expectations, and individual employees' objectives, competencies and aspirations (Pun & White, 2005). However, the causal relationships and linkage of the perspectives in the strategy map seem to be problematic and controversial (Pun & White, 2005; Neely, 2005). The Balanced Scorecard provides good coverage of the dimensions of performance but it provides no mechanism for maintaining the relevance of defined measures (Hudson, Smart & Bourne, 2001; Pun & White, 2005). It remained for consideration.

CBS is based on the Balanced Scorecard by extending the four perspectives of BSC. These four perspectives, which are developed for business, are: delight the stakeholder, stakeholder value, process excellence and organizational learning (Kanji, 1998; Kanji & Moura e Sá, 2002). In comparison with the Balanced Scorecard, this system proposes a deeper understanding of how achievements in the different areas feed each other to form a cycle of continuous improvement, and its implementation helps organizations to develop, cascade and implement an organization's strategy. Nonetheless, this system is primarily designed for senior managers to provide them with an overall view of performance and does not offer explicit guidance on how to develop and implement a performance measurement system effectively (Pun & White, 2005). It was, therefore, excluded.

Two specific performance measurement systems at the team level were considered in particular. Using a specific typology for teams (MacBryde & Mendibil, 2003; Mendibil & MacBryde, 2005), a comparison of the two remaining performance measurement systems revealed that both CPMP and BSC seemed not to be significantly different. CPMP excelled in three specific characteristics: (1) clearly

defined data collection and methods of calculating the level of performance, (2) clearly defined frequency of measurement, and (3) being reliable, valid and acceptable. However, BSC outperformed CPMP in measuring team learning and growth and team member satisfaction. BSC is appropriately used and applied at both team and individual levels.

Both performance measurement systems were developed in business. However, this study emphasized health-promoting teams in non-profit sectors, which are different from business. BSC is more appropriate performance measurement system than CPMP. BSC was selected for the following reasons:

- it is derived from strategy and reflects strategic management;
- it provides a useful framework which is simple in terms of the process of performance measurement system design;
- it is a performance measurement system modified for using in public and non-profit organizations, especially in health organizations;
- it is a performance measurement system that is presented as a measurement approach to knowledge management;
- it is used both as a performance measurement system and as a feedback and learning system as double-loop learning, which is more complicated than single-loop feedback;
- it is the most influential and dominant concept in performance measurement and has been frequently cited in articles over the last 10 years.

Therefore, the comparisons of the various performance measurement systems with the explanations provided above, revealed that the appropriate performance measurement system for health-promoting teams in this study should be BSC. However, the original Balanced Scorecard used in business was developed for use at the organizational level; this system was modified for employment at the team level in non-profit, health-promoting organizations.

#### **Part 4: The Balanced Scorecard**

Based on the evaluation of the criteria for performance measurement systems, including the analysis of objectives, processes of performance, dimensions of performance, strengths and weaknesses of the performance measurement systems, the Balanced Scorecard (BSC) was found to be the most appropriate performance measurement system, for many reasons. The next section explores the Balanced Scorecard in detail.

It is a challenge to develop appropriate measures to communicate with people without threatening, and to use evidence-based data as a way of understanding what is working in a specific management situation, what is not, and what people need to do differently in the future (Powell, 2004), especially in competitive business. Kaplan and Norton (1992; 1993; 1996a; 1996b) declared the Balanced Scorecard as a performance measurement system in the late 1980s to early 1990s in the USA. It was distributed and became popular in the UK and then throughout Europe in the mid-1990s to early 2000s. However, it was slower to catch on in Asia (Powell, 2004). Kaplan and Norton developed this system and added value by utilizing strategy and

vision as a principle. This system also offers a coordinated approach to link an authority's declared strategic priorities and goals for continuous performance improvement. So the Balanced Scorecard becomes a strategic performance management system rather than simply a performance measurement system (Wisniewski & Olafsson, 2004). It acts as a measurement system, a strategic measurement system and a communication tool (Kaplan & Norton, 1992; Niven, 2003). The evolution of the Balanced Scorecard changes from having a pure financial focus to include more comprehensive business perspectives, such as customer, internal processes and employee learning and growth perspectives (Neely, 2005; Franco-Santos et al., 2007). Looking and moving forward instead of backward is crucial for performance improvement when combining financial and non-financial measures (Kaplan & Norton, 1992). This system also "...allows us to determine whether or not the knowledge management initiative is working the way we intended" (Swanstrom, 2002).

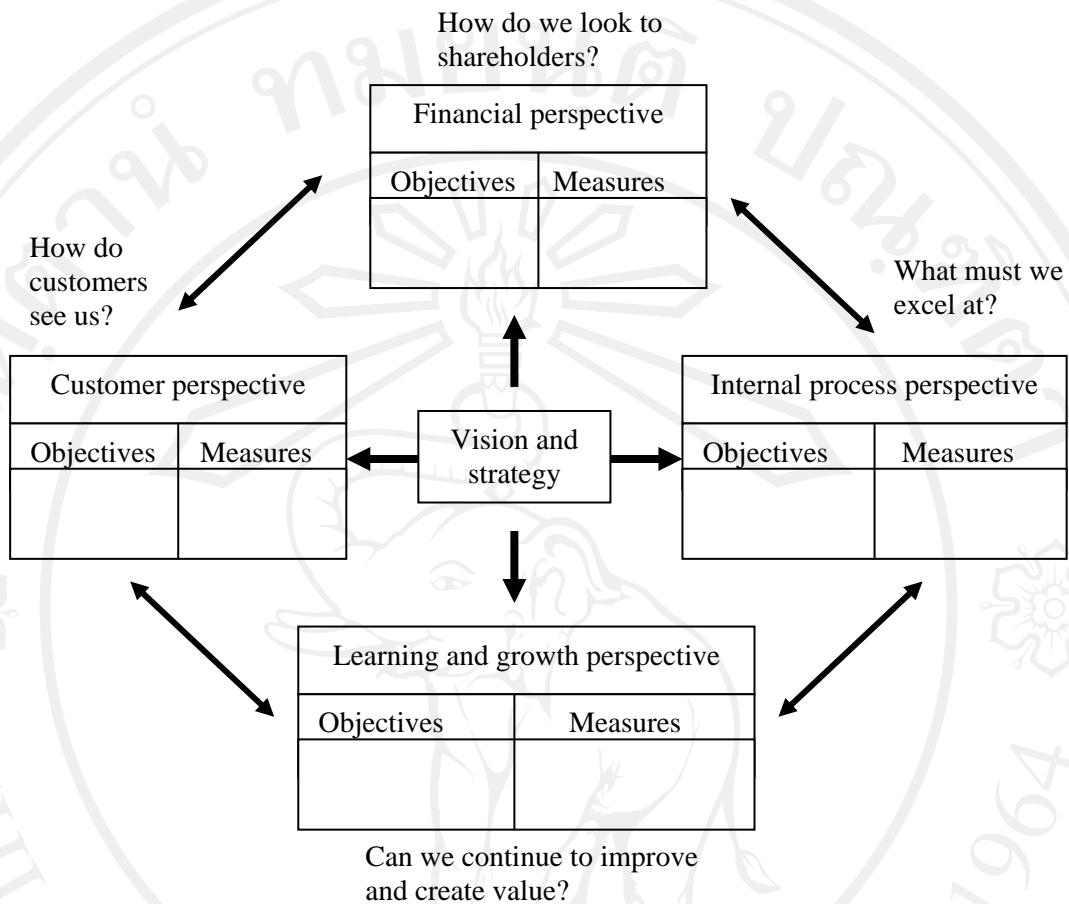
The Balanced Scorecard is defined as an integrated framework for describing and translating strategy through the use of linked performance measures in four balanced perspectives. Originally, these four perspectives are called "financial," "customer," "internal process" and "innovation and learning," but the last two have been renamed "internal business process" and "learning and growth" in the 1996 documents (Kaplan & Norton, 1992; 1996a; 1996b). The objectives and measures of the Balanced Scorecard view performance from four basic questions (with the objectives in parentheses) and each question represents each perspective as follows: (Kaplan & Norton, 1992; 1996c, p. 9)



1. How do customers see us? (Customer perspective): To achieve our vision, how should we appear to our customers?
2. What must we excel at? (Internal business perspective): To satisfy our shareholders and customers, what business processes must we excel at?
3. Can we continue to improve and create value? (Learning and growth perspective): To achieve our vision, how will we sustain our ability to change and improve?
4. How do we look to shareholders? (Financial perspective): To succeed financially, how should we appear to shareholders?

These perspectives relate to vision and strategy, as shown in Figure 2.4.

Objectives are set for each perspective while performances of each objective are measured.

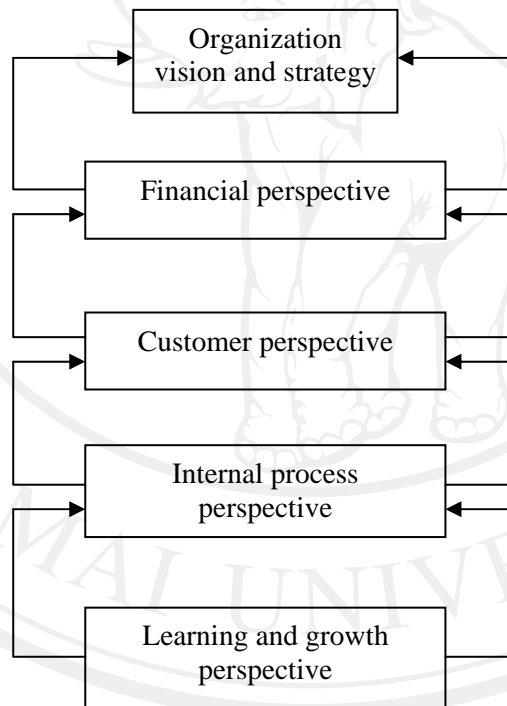


Source: Kaplan & Norton, 1992

**Figure 2.4** The Balanced Scorecard links performance measures

The cause and effect relationships between perspectives are formulated in terms of a strategic linkage model or a strategy map (Kaplan & Norton, 1996a; 1996c, p. 167-189). A sequence of *if-then* statements can express cause and effect relationships. The Balanced Scorecard describes the relationships (hypotheses) among objectives (and measures) in all perspectives. The strategy map serves as a starting point for using the Balanced Scorecard at the organizational level. It integrates the complex set of cause-and-effect relationships among the critical variables, including leads, lags, and feedback loops, that describe the trajectory or the flight plan of the

strategy (Kaplan & Norton, 1996a; 2004, p.54). The causality of the strategy map enhances performance by helping the organization focus on what it has to do well in order to become a high performance organization. The four original perspectives relate to each other as a strategy map, which is a general representation of the cause-and-effect linkages among objectives in the four perspectives (Kaplan & Norton, 2004, p. 9). The financial perspective is the most important for profit organizations. Thus, it is at the top of the strategy map (Figure 2.5).



Source: Kaplan & Norton, 2004, p. 8

**Figure 2.5** The original strategy map for profit organizations

In accordance with the cause and effect relationships between perspectives, the Balanced Scorecard also acts as a measurement system. The relationships show how the multiple measures provide the instrumentation for strategy. The indicators are

formulated for measuring the performance of each perspective. “Outcome” and “performance driver” measures are defined as lagging and leading indicators, respectively. The outcome measures or lagging indicators relate to the past performance of the organization's strategy, but provide little guidance for the future, whereas performance driver measures or leading indicators communicate how the outcomes are to be achieved and describe how a business process is intended to change (Kaplan & Norton, 1993; 1996a). Niven (2003, p.190) also explained that lagging indicators focus on results at the end of a time period, normally characterizing historical performance. They are normally easy to identify and capture but are historical in nature and do not reflect current activities. They lack predictive power.

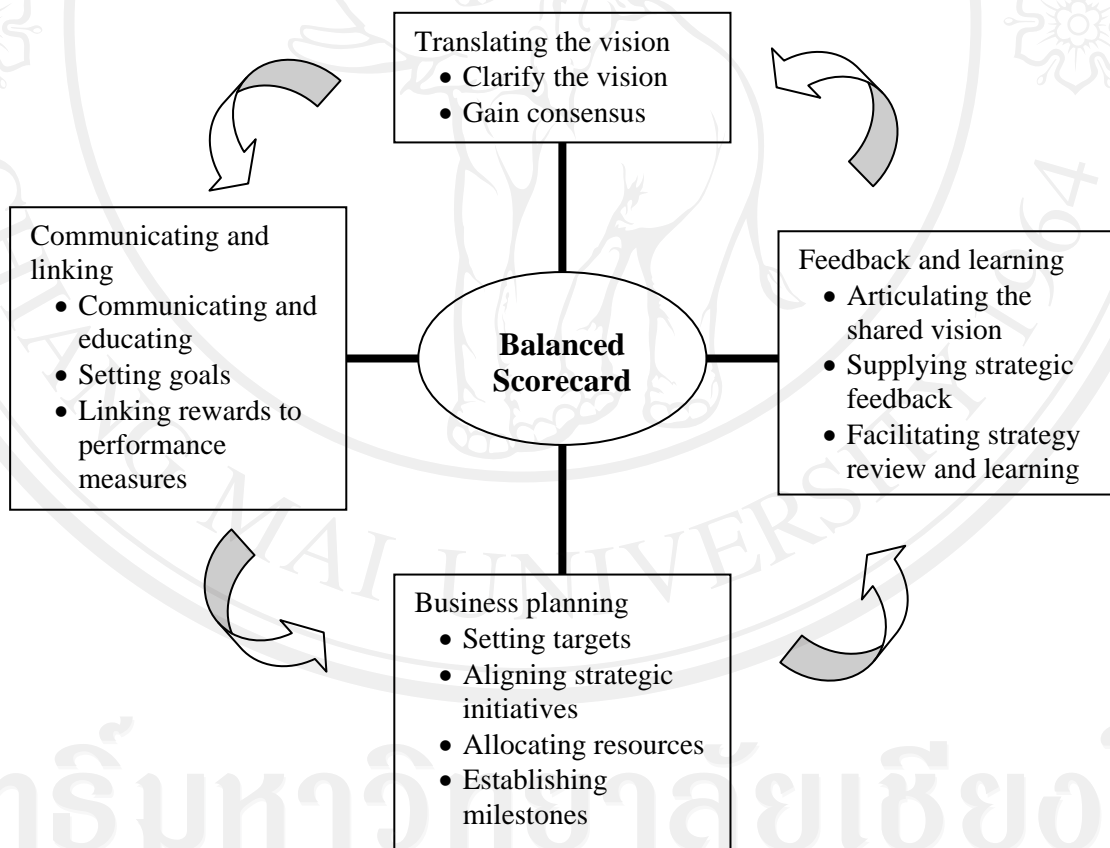
Leading indicators measure “drive,” or lead to, the performance of lag measures. They normally measure intermediate processes and activities. They are predictive in nature and allow the organization to make adjustments based on results. They are, however, new measures with no history at the organization and may prove difficult to identify and capture.

To manage the Balanced Scorecard in organizations requires four new management processes. These processes link long-term strategic objectives with short-term actions (Kaplan & Norton, 1996b). These processes are comprised of:

(Figure 2.6)

- Translating the vision by (1) clarifying the vision and (2) gaining consensus;

- Communicating the concept of BSC and linking vision and strategy to performances by (1) communicating and educating, (2) setting goals and (3) linking rewards to performance measures;
- Business planning by (1) setting targets, (2) aligning strategic initiatives, (3) allocating resources and (4) establishing milestones;
- Feedback and learning by (1) articulating the shared vision, (2) supplying strategic feedback and (3) facilitating strategy review and learning.



Source: Kaplan & Norton, 1996b

**Figure 2.6** Four strategic management processes of the Balanced Scorecard

Scholey (2005) recommended a practical management processes for managing the Balanced Scorecard in organizations. His recommendations include six steps as follows:

- Step 1: choose the overriding objective. The objective is defined in clear terms. In business, the overriding objective is almost always financially oriented, which refers to the “financial vision statement.”
- Step 2: select appropriate value proposition. The strategy is defined in the context of how the organization will add value to the target markets.
- Step 3: determine general financial strategies to follow. The key is to choose an optimum mix or blend of the financial strategies that maximizes value to the target markets while at the same time demonstrates fiscal responsibility and profitability.
- Step 4: determine customer-focused strategies. Specific decisions are made in terms of what attributes will be offered to customers (namely, price and functionality, as well as quality and selection levels). Strategic decisions must also be made about which relationship level to pursue with customers.
- Step 5: decide how internal processes will support execution of strategies chosen. Operations management processes such as production and delivery of goods and services must be tailored to support the value proposition. Innovation processes are also keys here. The organizational processes must be focused on performance specifically within the context of how they execute strategy.
- Step 6: implement the skills/capabilities and employee programs that are required to achieve the strategy. This step is to decide which programs are

necessary and implement them. General programs that assist the organization in attracting and retaining the best people, and that establish a culture of loyalty and commitment, can apply to all organizations. More specific development programs are often linked to the choice of value proposition, and should be implemented in the context of that value proposition.

Thus, the important characteristics of the original Balanced Scorecard are that:

- it has been developed in business for use at the organization level;
- it is linked to the strategy;
- it consists of four perspectives: (1) financial perspective, (2) customer perspective, (3) internal process perspective and (4) learning and growth perspective;
- it links four perspectives in terms of a strategic model, which is the cause and effect relationships between perspectives;
- the financial perspective is the most significant of the cause and effect relationships between perspectives;
- it measures performance from four balanced perspectives by combining both financial and non-financial measures;
- it requires four new management processes for linking long-term strategic objectives with short-term actions: (1) translating the vision, (2) communicating BSC and linking vision and strategy to performances, (3) business planning and (4) feedback and learning.

Many non-profit organizations utilize and apply the Balanced Scorecard in their organizations. The non-profit organization requires a system that not only counts the inputs and outputs of the system, but one that provides an opportunity to assess progress in reaching the organization's true mission. In business, performance measurement begins by applying the Balanced Scorecard to the organization's vision; in non-profit organizations, the mission is more significant than the organization's vision (Niven, 2003, p.32). The modification of the profit sector scorecard framework for the non-profit sector should be considered to fit with the nature and the focus of each non-profit organization. The application includes re-labeling and modifying perspectives to conform to the vision and strategy of non-profit organizations. For example, the Naval Undersea Warfare Center (NUWC) in the USA selects five perspectives for its organization: (1) financial/budgetary perspective, (2) stakeholder perspective, (3) customer perspective, (4) internal perspective and (5) employee/learning and growth perspective (Niven, 2003, pp. 158). The Mayo Clinic in the USA names five perspectives: (1) clinical productivity and efficiency, (2) Mutual respect and diversity, (3) social commitment, (4) external environment assessment and (5) patient characteristics (Gurd & Gao, 2008). According to the recent literature, these re-labeling perspectives are grouped together and matched with the original perspectives. The learning and growth perspective can be divided into two perspectives; individual or personal, and organizational learning. Table 2.4 compares the original perspectives with re-labeled perspectives in non-profit and in health organizations. However, they use the Balanced Scorecard only at the organizational level and all of the health organizations are health-care organizations, which are different from health-promoting organizations in principle, concepts and objectives.



**Table 2.4** Comparison of original perspectives with re-labeled perspectives in non-profit and health organizations

| Original Perspectives           | Perspectives in non-profit organizations  | Perspectives in health organizations  |
|---------------------------------|---|---|
| Financial perspective           | <ul style="list-style-type: none"> <li>• Fiduciary perspective</li> <li>• Donors' perspective</li> <li>• Budgetary perspective</li> <li>• Resources perspective</li> </ul>  | <ul style="list-style-type: none"> <li>• Research, education and teaching</li> <li>• Research</li> <li>• Clinical productivity and efficiency</li> <li>• Cost/utilization</li> <li>• Economy</li> <li>• Cost perspective</li> </ul>   |
| Customer perspective            | <ul style="list-style-type: none"> <li>• Clients' perspective</li> <li>• Patients' perspective</li> <li>• Patrons' perspective</li> <li>• Partners' perspective</li> <li>• Target beneficiaries' perspective</li> <li>• Constituents' perspective</li> <li>• Stakeholders' perspective</li> </ul> | <ul style="list-style-type: none"> <li>• Patients and Community</li> <li>• Volume and market share growth</li> <li>• Patient and quality</li> <li>• Patient/client indicators</li> <li>• Patient characteristics</li> <li>• Quality and patient satisfaction</li> <li>• Clinical</li> <li>• Access/continuity</li> <li>• Satisfaction</li> <li>• Patient focus</li> <li>• Customer/patient</li> <li>• User perspective</li> <li>• Client perspective</li> </ul> |
| Internal process perspective    | <ul style="list-style-type: none"> <li>• Operational perspective</li> <li>• Enabling processes perspective</li> </ul>   | <ul style="list-style-type: none"> <li>• Quality</li> <li>• Quality improvement</li> <li>• Process improvement</li> <li>• Care and service</li> <li>• Process and efficiency</li> <li>• Mutual respect and diversity</li> <li>• External environmental assessment</li> <li>• Process and efficiency</li> <li>• Operational</li> <li>• Technical</li> <li>• Clinical focus</li> <li>• Process/productivity</li> </ul>  |
| Learning and growth perspective | <ul style="list-style-type: none"> <li>• Building for our future perspective</li> <li>• Internal infrastructure perspective</li> <li>• Organizational capacity perspective</li> </ul>   | <ul style="list-style-type: none"> <li>• Business and development</li> <li>• Organizational health</li> <li>• Innovation and growth</li> <li>• Systems integration</li> <li>• Organization healthcare and learning</li> <li>• Organization indicators</li> <li>• Social commitment</li> <li>• Learning/innovation</li> <li>• Workplace excellence</li> </ul>  |
|                                 | <ul style="list-style-type: none"> <li>• People enablers' perspective</li> <li>• Employee perspective</li> </ul>  | <ul style="list-style-type: none"> <li>• Staff and clinicians</li> <li>• Staff indicators</li> <li>• People</li> <li>• Capacity and capability</li> <li>• Patient, clients and staff</li> </ul>   |

Sources: Kaplan (2001); Niven (2003, pp. 158-159, 181, 274); Kaplan & Norton (2004); Moe, Moe, Gehbauer, Senitz & Mueller (2007); Gurd & Gao (2008)

As well, the cause and effect relationships between perspectives are modified. Because being a successful business is measured in terms of finance, the most important perspective is the financial perspective, which is located at the top of the relationship. Non-profit organizations are different. Their most important perspective depends on each organization's mission, purpose, objective or culture. For instance, the Dallas Family Access Network set five perspectives for its organization: (1) health care perspective, (2) social service perspective, (3) operational perspective, (4) consumer perspective and (5) financial perspective. Of these five perspectives, the health care perspective is most important, while the financial perspective is the least important (Niven, 2003, pp. 159). Table 2.5 gives examples of the relationships between perspectives in various non-profit organizations.

**Table 2.5** Relationships between perspectives in different non-profit organizations

| Organizations   | Balanced scorecard framework |
|---|------------------------------|
| Naval Undersea Warfare Center (NUWC) Division Newport |                              |
| American Diabetes Association (ADA)                   |                              |
| Boston Lyric Opera (BLO)                              |                              |
| Royal Canadian Mounted Police (RCMP)                  |                              |

Sources: Niven (2003, p.158); Kaplan (2004, p.26, 414, 433)

Whereas Scholey (2005) recommended six steps for managing the Balanced Scorecard in business, Niven (2003, p. 70) suggested ten steps to develop the Balanced Scorecard in non-profit organizations. These steps include:

- Step 1: develop or confirm the mission, values, vision and strategy;
- Step 2: confirm the role of the Balanced Scorecard in the performance management framework;
- Step 3: select the perspectives;
- Step 4: review relevant background materials;
- Step 5: conduct executive interviews;
- Step 6: create the relationships between perspectives;
- Step 7: gather feedback;
- Step 8: develop performance measures;
- Step 9: develop targets and initiatives;
- Step 10: develop the ongoing implementation plan.

Niven's suggestion gives some more steps than Scholey's recommendation.

Niven's Step 1 is the same as Scholey's Steps 1: choose the overriding objective and 2: select appropriate value proposition. Step 2 helps the leaders to appropriately manage the Balanced Scorecard in the organization. Niven's Steps 3, 4, 5, 6, 7 and 8 are expanded from Scholey's Steps 3, 4 and 5. Niven's Steps 9 and 10 are similar to

Scholey's Step 6.

This study highlighted health-promoting teams in a non-profit organization. To modify the Balanced Scorecard for health-promoting teams is a challenge. The Balanced Scorecard, used in business or profit organizations at the organizational level, should be modified for health-promoting organizations at the team level. Based on the strategy of health-promoting teams, appropriate perspectives were selected for the team level. How teams perform and how teams learn as team knowledge was used to formulate indicators for each perspective.

### **The conceptual framework for generating team performance indicators**

This preceding review and discussion reveals that health-promoting organizations emerge to respond to the new concept of health promotion. Team-based design is important for these organizations. Based on participation and team members' empowerment, the self-directed team is the most effective team type for health-promoting organizations. Working as self-directed teams is genuinely different from functioning as working groups. The self-directed team manages itself autonomously by taking responsibility for the whole process from planning to evaluation. To form and develop a high performance self-directed team requires time and specific management. Team performance relates to team knowledge. In this study, significant team knowledge was defined as how teams perform and how teams learn. The techniques of how teams perform were divided into five categories by using the organizational structural design. These categories are (1) team tasks, (2) team work design, (3) team composition, (4) team process and (5) team support systems. The techniques of how teams learn were identified by using Garvin's learning theory. This study emphasized team knowledge as intangible assets to be measured. To measure

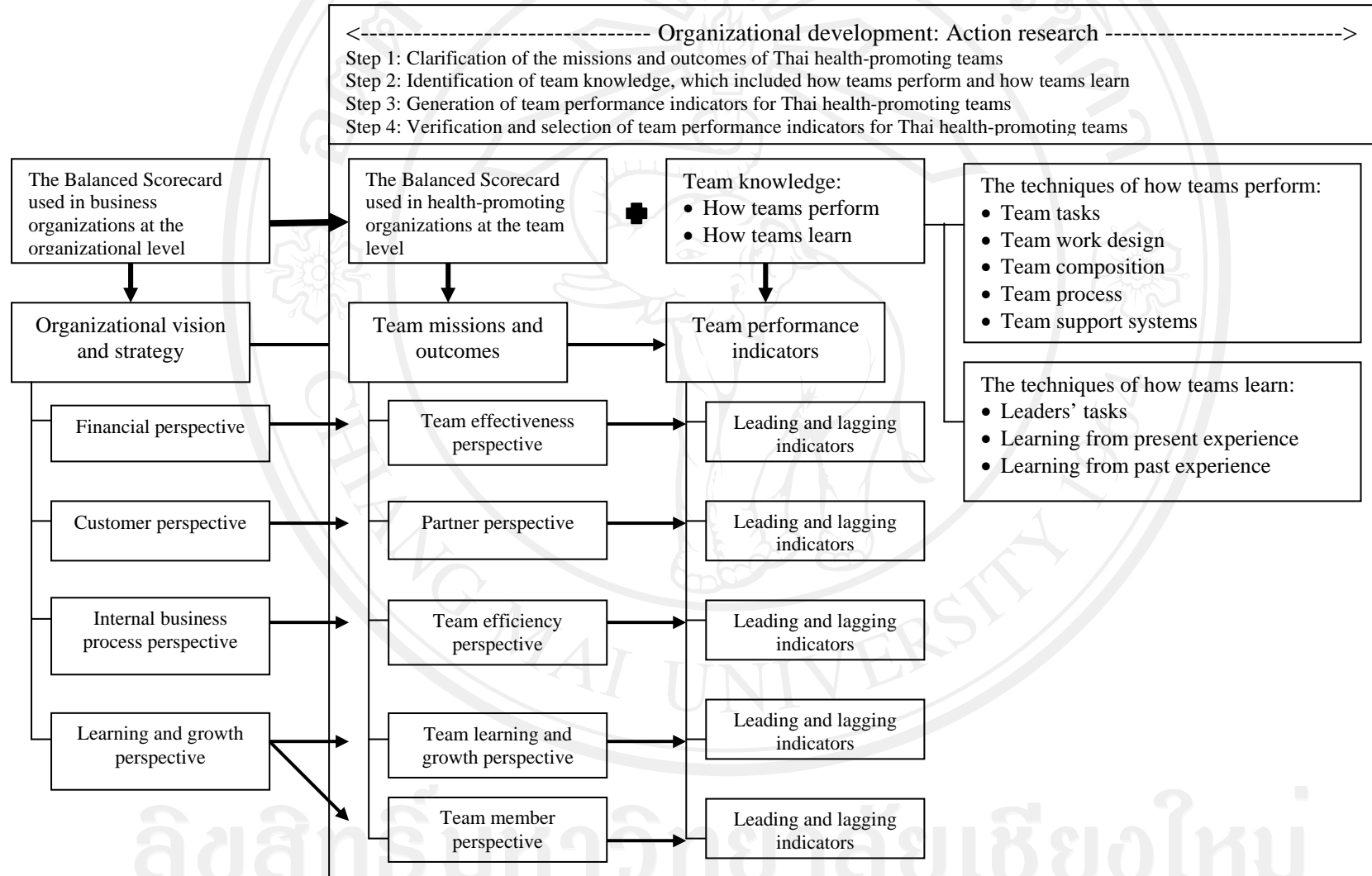
team performance requires a specific performance system. The review illustrates that many performance management systems have been developed for use at the organizational level. These performance management systems are selected by using typology. Finally, the Balanced Scorecard was selected as the performance management system for this study. However, there is no evidence to show that the Balanced Scorecard has been modified for use at the team level. The challenge was to employ the Balanced Scorecard used in business at the organizational level for use with health-promoting organizations at the team level. Team knowledge was also used as inputs to formulate indicators in this study. Thus, the thesis' conceptual framework is formulated and described in detail as follows.

Figure 2.7 presents the conceptual framework for generating team performance indicators for Thai health-promoting teams. In accordance with the Balanced Scorecard used in business at the organizational level, four perspectives were used for translating organizational vision and strategy. The four perspectives of the Balanced Scorecard are financial, customer, internal business process and learning and growth perspectives. At the team level in health-promoting organizations, these perspectives were based, for this study, on team missions and outcomes. In concordance with team performance measurement system, MacBryde & Mendibil (2003) and Mendibil & MacBryde, (2005) proposed the specific perspectives for teams. These perspectives are (1) team effectiveness or process outcome, (2) team efficiency or internal team processes, (3) team learning and growth and (4) team member satisfaction. The perspectives for teams in this study were re-labeled and categorized into five perspectives. To compare with the original perspective, financial perspective was represented by team effectiveness perspective. As team missions in the health-

promoting organization in this study emphasize partners, customer perspective was re-labeled to partner perspective. Internal business process was replaced by team efficiency. Learning and growth perspective was divided into (1) team learning and growth perspective and (2) team member perspective. At the team level, human resources are an important perspective of performance to be measured, so team member perspective represented the measurement for human resources. These five perspectives were used as a template for generating leading and lagging indicators.

Meanwhile, team knowledge, in terms of how teams perform and how teams learn, was used as inputs to formulate indicators. The techniques of how teams perform consisted of five components: (1) team tasks, (2) team work design, (3) team composition, (4) team process and (5) team support systems. The techniques of how teams learn covered leaders' tasks, learning from present and past experience. To generate the indicators, organizational development via action research was used for this study.

This conceptual framework shows the systematic process for capturing and managing team knowledge. Team performance indicators were formulated through the performance measurement system. The Balanced Scorecard was used as the performance measurement system. The Balanced Scorecard used in business at the organizational level was modified for use with a health-promoting organization at the team level.



**Figure 2.7** The conceptual framework for generating team performance indicators for Thai health-promoting teams