

Contents

1. Introduction
2. What is Team Innovation?
3. Why Pursue Team Innovation?
4. Key Elements in Team Innovation
 - 4.1. Team Leadership
 - 4.2. Team Players
5. How to Build Innovative Teams?
 - 5.1. Selecting a Team of Innovative People
 - 5.2. Selecting People with Diverse Skills and Backgrounds
 - 5.3. Creating a Learning and Development Climate
 - 5.4. Developing a Climate for Innovation
 - 5.5. Establishing Team Norms for Innovation
 - 5.6. Encouraging Reflexivity in Teams
 - 5.7. Managing Conflicts
 - 5.8. Rewards and Recognition

Case Studies

- *Tata Consultancy Services*
- *Creative Teams at Hewlett-Packard*
- *Update on Team Excellence in Singapore*

Recommended Readings

References

Please note:

This Productivity Link is provided as part of our Productivity Information Services to Members. Members are reminded not to disclose, disseminate or distribute the information to any other party. No part of the information may be reproduced in any form or by any means whatsoever, including by information storage and retrieval systems.

Fostering Team Innovation

1. Introduction

Organisations are increasingly focusing on teams to increase competitive advantage by improving productivity, enhancing creativity, increasing response times and improving decision-making. The competence of a single employee is no longer sufficient for today's complex labour market. Employees need to work together and help each other. While teamwork is a critical aspect of business strategy, innovation is no longer a value addition due to the challenging and changing business climate. Innovation is a necessity for survival, drives growth and breathes life in an industry. In today's hyper-competitive business environment, success and perhaps survival depend on innovation, speed, and organisational synergies that efficiently satisfy customer needs.

An effective team will make the difference in achieving business goals and objectives, while a dynamic team must ascend beyond the baseline characteristics and aspire to become an innovative team, where new opportunities are generated and problems are resolved using novel and creative techniques.

2. What is Team Innovation?

Team innovation "weaves together the very best of visioning, creative thinking and team building". Pursuing team innovation goes beyond improving products or services. Through innovation, the productivity, efficiency and effectiveness of the team can be increased.

For a team to be able to solve complex problems or identify new breakthrough opportunities, team innovation requires the following elements:

- **Clarity of vision**

Having a clear vision that is shared by all members of the team and a commitment to a specific purpose

- **A winning mindset**
A positive mental attitude that inspires perseverance, determination and pro-activeness
- **Support for innovation**
Every member of the team is trained in different creative thinking techniques and each person understands the importance of innovation
- **Team roles**
Individuals are selected on the basis of the collective skills required by the team and specific behavioural traits needed by each team member to achieve the specified team objectives
- **Team participation**
Each team member will be required to participate and provide input based on their knowledge and expertise in order to maximise the outcomes
- **Task focus**
A strong commitment to achieve the desired tasks and outcomes within budget and allocated timelines

Team innovation will:

- Foster a safe and open team environment
- Spark creative solutions to pressing business challenges
- Enhance feedback, communication and meeting skills
- Sharpen team problem solving skills
- Increase synergy, trust and commitment
- Clarify agreements, standards and next steps
- Provide the positive momentum for the team needs to succeed

Team innovation, however, will not:

- Degenerate into group analysis or blame making
- Force individuals into touchy-feely exercises
- Resurface the same old tired ideas
- Waste valuable time and money

3. Why Pursue Team Innovation?

Teamwork is the essence of a successful business. It is a critical aspect of a business strategy. A well working team is a key component that contributes to a successful business. Team work offers a “powerful and ubiquitous strategy” for managing organisational change, and team innovation is often the manifestation of teams’ efforts to cope successfully with the changes in their work environments. Developing team innovation will enhance an organisation’s ability to redirect and focus resources effectively, appropriately and more quickly than its competitors as it enables all members of the organisation to respond to the demands for change, and to make appropriate changes where necessary.

A well-designed, well-developed and innovative team will help businesses to: increase profits; increase employee motivation and commitment; improve processes for the recognition of team and individual contribution.

Some of the tangible benefits of team innovation for businesses include:

- New products get to market faster
- Customers get better service
- Employees gain satisfaction
- Enhances the quality of products and services
- Reduces the cost of production

4. Key Elements in Team Innovation

People and culture within the workplace are the most important drivers, while creativity and cooperation are among the key elements of team innovation.

4.1. Team Leadership

Team leaders must strive to create a positive mood in the team by being positive, enthusiastic and confident about the team and its work. A team leader with vision and warmth, supportive, confident and armed with a positive and enthusiastic attitude to the team and its work will create a team that is truly a “sparkling fountain of innovation”.

Team innovation requires strong leadership that would lead to a more innovative business. A team leader's ability to establish a climate for innovation is the key to building a strong innovative team. An innovative team leader needs to drive innovation projects, encourage and convince their team members to contribute and innovate.

Leaders' behaviour would also impact the innovation culture in the workplace. To foster innovation within the team, a leader would need to develop a deep understanding of the importance of intrinsic motivation and how to create a climate for innovation that will allow it to flourish. Leading an innovation team requires that the leader is prepared to fight for resources, win them and then courageously commit them to team members' ideas for innovations that seem highly promising. This takes courage, persistence and trust – and it also means that sometimes he or she will have to cope with failures.

Among the responsibilities of a team leader are:

- able to articulate a vision, create a clear mission, and develop goals, objectives and action plans
- ensure the completion of immediate tasks and work assignments with high quality and delivered timely
- inspire a desire to produce quality product and services
- ensure that quality and excellent customer service is provided
- supportive of others who push for risk taking and innovation

Team leaders should possess the following qualities:

- able to build trust and inspire teamwork
- able to identify and communicate goals
- able to facilitate and support team decision
- able to expand team capabilities
- able to create a team identity
- able to foresee and influence change
- able to accept criticism and adapt to changes

4.2. Team Players

Team players play an important role in determining a successful and innovative team. Team players should support the business and be willing to go all out to achieve the corporate goals and objectives. It is critical that team members understand the need to innovate. In most cases, even when the importance of innovation is communicated, innovation is inhibited due to one or all of the following reasons: ignorance of the true value addition; lack of perspective; and absence of significant incentives. However, it is possible to instil “a culture to innovate” among team members by equipping them with awareness, opportunity, ownership and recognition.

The team and team players should possess:

- clear goals and a plan to achieve them
- positive relationships with and support from other parts of the organisation
- excellent communication, openness, and trust among team members
- a blend of people, each contributing a special talent

5. How to Build Innovative Teams?

5.1. Selecting a Team of Innovative People

In building an innovative team, it is necessary to ensure that team members are inclined towards innovation. Innovative team members are known to be creative and good at implementing innovation. This group of people usually have a preference for thinking in novel ways and thinking globally instead of locally. They have appropriate intellectual abilities, which include synthetic abilities – able to see problems in new ways, escaping the bounds of conventional thinking; analytical abilities in recognising which ideas are worth pursuing; and the practical contextual abilities to persuade others of the value of their ideas. To be innovative, sufficient knowledge of the field is also required to be able to move forward.

Thus, a team should comprise members who have personality trait of openness, who think in novel and non-conventional ways, who are persuasive,

knowledgeable in their field, confident, with high tolerance for ambiguity, and who are self-disciplined and persistent. It is also important to note that innovative people tend to have a high need for freedom, control and discretion in the workplace. They would find bureaucratic limitations or the exercise of control by managers frustrating.

5.2. Selecting People with Diverse Skills and Backgrounds

Composition of the team is a determinant of success. The concept of team player also plays an important role in teamwork. Diversity can be differentiated in attributes that are relevant to the person's role or task in the organisation – organisational position or specialised knowledge, etc., and differences that are inherent in the person – age, gender, ethnicity, social status and personality. The effects of diversity on team performance are complex where task-related and relations-oriented diversity have different effects that are also dependent on the team task. For tasks requiring creativity and a high quality of decision making, task diversity is associated with better quality team decision making.

Creativity and innovation require diversity of knowledge, professional orientation or disciplinary background as the integration of diverse perspectives creates the potential for combinations of ideas from different domains. People who work together in teams have different professional training, skills, experiences and orientations. They will bring usefully differing perspectives to the group, and such a divergence of views will create multiple perspectives, disagreement and conflict. If informational conflict is processed in the interests of effective decision-making and task performance rather than on the basis of motivation to win or prevail, it generates improved performance and more innovation actions will be the result. However, diversity also demands extra efforts at integration as it creates the potential for conflicts as much as for creativity.

Hence, a team should also comprise members who have a diverse range of skills and professional backgrounds, apart from task relevant skills, and professional backgrounds to ensure the team is tightly focussed on getting the work done.

5.3. Creating a Learning and Development Climate

For teams to innovate, they must learn, be it from customers, suppliers, training experiences or any other domain. Learning means changing the understanding, and that is fundamental to innovation. Organisational learning emphasises the importance of practices that encourage 'outward focus' in order to bring new knowledge into the organisation. Recruitment and selection can help determine whether or not people are employed with the necessary attributes to make a contribution to the knowledge creation process. Induction and training activities can help shape the psychological contract, potentially enhancing motivation and developing skills as well as the required questioning, sharing and challenging behaviours. Appraisal and remuneration strategies play a role in clarifying expectations and rewarding effective performance, defined in terms of willingness to learn, take risks and communicate well. Therefore, organisations should implement activities that can help shape the learning agenda, providing the impetus and incentive for individuals to explore learning and develop their communication and team-working skills with others.

Various organisational learning mechanisms can assist in generating a variety of perspectives in teams. Presenting team members with the opportunity to visit customers or suppliers, regardless of their job role, potentially provides liaison with the external environment and provokes questioning of the appropriateness of organisational practices and goals. Similarly, intra-organisational secondments are likely to be beneficial in challenging thinking and generating the flow of new ideas. Opportunities for team members to learn outside the constraints of their immediate jobs will facilitate the transfer of knowledge internally and enrich individuals' perceptions of the challenges faced by other organisational members.

5.4. Developing a Climate for Innovation

There are five aspects of the work environment that consistently differ between a highly creative project group and less creative project group.

These are:

- **Challenge**
Regarded as a moderate degree of workload pressure that arises from an urgent, intellectually challenging problem. Time pressure may add to the perception of challenge in the work if it is perceived as a concomitant of an important, urgent project.
- **Organisational encouragement**
Comprises three aspects of the work environment. The first is encouragement of risk taking and idea generation, a valuing of innovation from the highest to lowest levels of management. The second refers to a fair and supportive evaluation of new ideas. The final aspect refers to the important role of collaborative idea flow across the organisation, participative management and decision making, in the stimulation of innovation.
- **Work group support**
Indicates the encouragement of activity through the particular work group. The four aspects thought to be relevant for this are team member diversity, mutual openness to ideas, constructive challenging of ideas, and shared commitment to the project. While the former two may influence creativity through exposing individuals to a greater variety of unusual ideas, the latter two are thought to increase intrinsic motivation.
- **Supervisory encouragement**
Supervisory encouragement measure includes goal clarity, open supervisory interactions and perceived supervisory or leader support. Goal clarity is likely to enable more focused problem-solving laying the groundwork for insightful and creative work. Open supervisory interactions as well as perceived supervisory support may influence creativity through preventing people from experiencing fear of negative criticism that can undermine the intrinsic motivation necessary for creativity.

- Organisational impediments. Internal strife, conservatism, and rigid, formal management structures represent obstacles to creativity. As these factors may be perceived as controlling, their likely negative influence on creativity may evolve from an increase in individual extrinsic motivation (a motivation through external factors but not the task itself) and a corresponding decrease in the intrinsic motivation necessary for creativity.

Senior managers should focus on managing the climate or culture of the organisation in order to increase employees' experience of positive challenge; organisational encouragement for innovation; teamworking; supervisory goal clarity, support and openness; and to decrease their perceptions of chronic organisational hostility, conservatism and rigid formal structures. Determining and increasing the factors that promote employee satisfaction may also lead to higher levels of team innovation.

5.5. Establishing Team Norms for Innovation

Support for innovation involves the expectation, approval and practical support of attempts to introduce new and improved ways of doing things in the work environment. Within teams, new ideas may be routinely rejected or ignored, or attract verbal and practical support. Such group processes powerfully shape individual and group behaviour and those which support innovation will encourage team members to introduce innovations. Teams should be encouraged to be innovative and verbally and practically support their team members' ideas for new and improved products, services, or ways of working.

5.6. Encouraging Reflexivity in Teams

A key indicator of innovation in work teams is reflexivity. Team reflexivity is the extent to which team members collectively reflect upon the team's objectives, strategies and processes as well as their wider organisations, and adapt them accordingly.

Reflexivity can lead to radical change in the status quo and sometimes the creative destruction of existing processes. It requires a degree of safety however, since reflection is likely to reveal gaps between how the team is performing and how it would like to perform. Teams usually benefit from taking time out from working to reflect on their work habits, objectives, team processes and outcomes, make plans for change, implement them and reflect again. A sense of safety helps teams self-reflectively explore in this way.

5.7. Managing Conflicts

A conflict is an awareness of differences in viewpoints and opinions about a task. It is said that constructive (task-related) controversy in a co-operative group context, improves the quality of decision-making and creativity. Constructive controversy is characterised by full exploration of opposing opinions and frank analyses of task-related issues. It occurs when decision-makers believe they are in a co-operative group context, where mutually beneficial goals are emphasised, rather than in a competitive context, where decision-makers feel their personal competence is confirmed rather than questioned, and where they perceive processes of mutual influence rather than attempted dominance.

Teams should be encouraged to moderate task-related (as distinct from emotional or interpersonal) conflict along with high levels of participation since this will lead to a debate and to the consideration of alternative interpretations of information available. This in turn will prompt integrated and creative solutions to work-related problems through innovation.

There are various methods of resolving conflicts, such as problem solving. Though it is the most difficult, problem solving is potentially the most satisfying method. Also known as collaborative conflict resolution, problem solving requires acknowledgement by the team players that “some differences exist, agree to deal with the issues and not smooth them over, forgo power as a quick and easy alternative and avoid simple compromises when the problems are complex and important”.

Here are some of the steps to an effective problem solving;

- (i) Discussion
Problem solving should be initiated with a discussion, which leads to an agreement on a problem.
- (ii) Problem analysis
Problem analysis involves the participation of team players that have data and opinions.
- (iii) Generating alternative solutions
Often, teams tend to jump to the first available option without considering other possibilities. All possible alternative solutions should be laid out, and the ultimate solution selection should involve as many team players as possible. This will help to ensure the “team’s support for implementation of the solution”.

The table below indicates how conflicts can be either destructive or constructive.

Destructive	Constructive
Diverts energy from more important activities and issues.	Opens up issues of importance, resulting in their clarification.
Destroys the morale of people or reinforces poor self-concept.	Leads to the solution of problems.
Polarises groups to increase internal cohesiveness and reduce intergroup cooperation.	Increases the involvement of individuals in issues of importance to them.
Deepens differences in values.	Causes authentic communication to occur.
Produces irresponsible and regrettable behaviour such as name-calling and fighting.	Serves as a release for pent-up emotion, anxiety, and stress.
	Helps build cohesion among people sharing the conflict, celebrating in its settlement, and learning more about each other.
	Helps individuals grow personally and apply what they learn to future situations.

Source: Parker, G. M. (2008). Team players and teamwork: New strategies for developing successful collaboration. United States: Jossey-Bass.

Team players can establish a climate for civilised disagreement by:

- maintaining an objective, analytical approach to the differences
- being flexible and open to all points of view
- backing off when their views are not being accepted by the rest of the team

5.8. Rewards and Recognition

Organisational cultures that resist innovation will of course reduce the likelihood that teams will innovate. One of the most tangible marks of organisational support for innovation is whether employee's attempts to introduce new and improved ways of doing things are rewarded.

Organisations develop methods to recognise and reward both the team and individual in order to motivate, inspire and enthuse them to greater performance heights. Rewards are motivators for team members to "strive harder and aim for excellence", and recognition boosts team morale. It also works wonders for team spirit and enthusiasm. Hence, recognition and reward systems should be put in place to "enhance motivation levels and provide a stimulus for a better team performance".

However, organisations should also take note that what should be rewarded is not the success of innovation, but genuine attempts at innovation. This is to ensure that teams will not simply play safe with innovations that are neither radical nor novel and staying within existing paradigms.

Case Studies

Tata Consultancy Services

India's powerhouse, 119 year-old Tata Group, is responsible for the nation's first steel mill, power plant and airline, among its other achievements. However, when India's "long protected economy was opened" in 1991, its Chairman decided that he had to make innovation a priority for his companies to survive and thrive in a global economy. Thus, innovation was built into the DNA of the Tata Group so that "every employee at every company might think and act like an innovator". The 15 companies under Tata Group thus far have produced a range of innovative products such as the Tata Nano car and Tata Consultancy Services (TCS) – a Mumbai-based IT services and outsourcing power.

The TCS Strategy

Cultural transformation is impossible without the leadership of top executives. Hence, Tata created the Tata Group Innovation Firm (TGIF), a 12-member panel of senior Tata Group executives and some CEOs of the independently run companies. TGIF's main objective is to "inspire and share best practices".

However, the executives have also employed other strategies to build a culture of innovation within TCS. First, leaders approached the challenge both top down and bottom up, which involved establishing formal systems for encouraging innovative thinking and processing of ideas. TCS created multiple channels and managers are trained how to direct an employee's idea: incremental innovations are handled and funded by the business unit in which the idea originated; platform-level innovations that might extend an existing offering are directed to one of the company's 19 global innovation labs, while leading-edge research centres focussed on specific technology areas or business sectors.

Disruptive ideas tend to originate in the labs, but if one emerged from a business unit it would be directed to a lab or funded through an incubator fund run by the CTO's office. How all of the ideas are evaluated and funded is almost less important than the fact that TCS employees know ideas are welcome and that good ones would not die in a pile on someone's desk.

TCS has also incorporated innovation into its formal annual review process, making it one of the nine categories on which employees are evaluated. If an employee wins the

company's Young Innovator Award, he or she will see more than a salary bump.

In addition to formal systems, TCS also takes steps to stimulate innovative thinking. Its employees are trained to “think about improvement all of the time, to have a culture of creative dissatisfaction with the status quo”. TCS made innovation a component of training programs, from its leadership institute to its four-day “Technovator” workshop, where programmers are taught to think creatively.

Five hours of an employee's 45-hour week can be used for personal projects, such as learning a skill or developing an idea. To better capture nascent ideas, the company launched IdeaMax, a Digg-like social network that lets any employee submit, comment, and vote on ideas. Since it was launched last year, IdeaMax has collected 12,000 ideas, several hundred of which have become projects. The company has steadily met its innovation goals. In 2008, 10% of revenues were directly traceable to innovation activity.

Learning Points

Here are some of the key learning points from TCS on building a culture of innovation:

- **Leadership lays the foundation**
The CEO is the cornerstone of any effort to build a culture of innovation. He/she needs to communicate the importance of innovation directly to managers and to celebrate innovative efforts, including those that failed but were valiant attempts.
- **Hire the right people, but...**
In a targeted effort to build its capacity for breakthrough innovations, TCS hired more PhD graduates. However, the processes are just as important as the people when it comes to building a culture of innovation.
- **Build innovation into the organisation**
A culture of innovation would not take root if one does not have clear systems for approving and funding of ideas, or an employee review process that includes innovation criteria.
- **Use social media to tap ideas and encourage collaboration**
In addition to IdeaMax, TCS has also created Just Ask, a platform that allows employees to post and answer questions internally. TCS reported that ten

thousand questions were asked and answered within the first few months of its launch.

- Celebrate innovators
In addition to Tata Group-wide Innovista innovation competition, TCS also runs its own Young Innovator Awards to reward and recognise successful innovators.

Creative Teams at Hewlett-Packard

Hewlett-Packard's success in delivering excellent and quality products and production methods is achieved through "integrating change, cross-functional teams and creativity".

Their creative-team process includes the following six stages:

1. Team formation
2. Defining the project mission
3. Imagining the future
4. Defining "breakthrough" objectives and critical success factors
5. Creative phase
6. Identifying core processes and gaining commitment

Team Formation

Hewlett-Packard dedicates a lot of "time and effort to forming teams and eliminating communication barriers between team members". Team members are required to attend short lectures, which include exercises on creativity, teamwork and approaches to problem solving. "The company also ensures that prospective team members know the purpose of the team and the potential contribution of each team member".

Mock exercises are also conducted for employees who have not worked in a Hewlett-Packard team before. Fictional problems are used for them to "transform the organisation of a small business, such as pizza-delivery firm operating in a highly competitive environment, by focussing on marketing, design and company operations". This exercise highlights

problem-solving techniques and fosters communication and team spirit.

Defining the Project Mission

One critical aspect in developing a successful team is to manage different perceptions and views, and “to develop a common view of the project goals”, which is called a project mission. The team’s project’s mission “gives the team its identity and help to foster the commitment of team members”, and must be communicated to the team and company members.

Imagining the Future

At Hewlett-Packard, team members are encouraged to “peer into the future”, and emulate solutions which are non-existent to date. Members of the team will “predict what the world will be like in ten years time, what they themselves will be doing, what customers will expect and what technological developments will have occurred”. Such visions that are gathered by the team are “related back to the competitive environment in which the team operates, to create a view of a shorter-term future about two or three years ahead”.

This process allows team members to identify the strategic impact, which their project might have on Hewlett-Packard as a whole. At the same time, members will gain a better understanding of the business pressures driving the need for change, and helps to create a sense of urgency among team members.

Defining “Breakthrough” Objectives and Critical Success Factors

The Hewlett-Packard team members define breakthrough objectives. They also reflect upon the effects of such breakthroughs on the company as a whole, before identifying five to ten factors, which will make the breakthrough a reality. Through the breakthroughs and critical success factors correlations, the team can identify gaps and rank priorities.

Creative Phase

The creative phase is a thinking process that involves “reflecting on the role of factors such as technology in actually delivering the potential breakthroughs which have

been identified". It is then translated into a few high-level business models to gain a more complete picture of the impact of breakthrough on the company and its employees.

Identifying Core Processes and Gaining Commitment

Integration of activities is achieved at Hewlett-Packard through condensation, consolidation and clustering. Individual member's activities are collected and "condensed into processes, which are summarised in the consolidation phase". Processes that have been identified as a result of high-level business model are then clustered into related areas. Through clustering, team members are able to "identify their potential contribution to the project as a whole", which in turn "fosters team commitment".

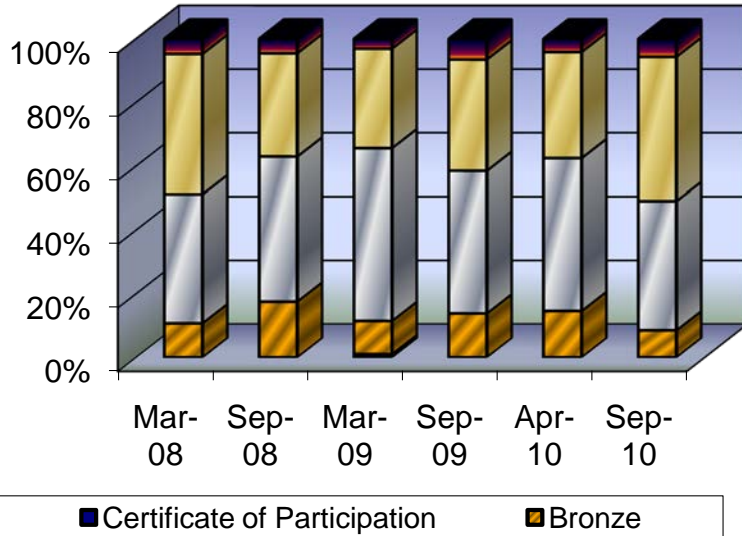
Update on Team Excellence in Singapore

The Team Excellence Symposium is organised twice a year by the Singapore Productivity Association. It is a platform where teams from different organisations come together to showcase their projects on productivity and innovation and also to share knowledge on best practices and promote team excellence in their organisations, learn from the 'best of the best' and scale new heights; to network and exchange ideas, knowledge and experiences on continuous improvement and innovation through the power of teams.

Team Innovation is Alive and Kicking

From March 2008 to September 2010, some 80% of all the teams that participated in the symposium were awarded Silver and above based on IQC judging criteria. Please refer to Chart 1 overleaf.

CHART 1: Team Projects and Achievements



Innovation & Value Created

From 2007 to 2010, a total of 1886 teams took part in the Team Excellence Symposium. The results achieved are in Chart 2 below.

CHART 2: Teams' Contribution to Innovation and Value Creation



- Team Projects presented at national convention from March 2007 to September 2010, now called the Team Excellence Symposium



No. of Teams	\$ Savings / Value Created
1886	600.4 million

Upcoming Plans and Events

Plans are underway to:

- a) Introduce a National Team Competition
- b) Recognise Organisation and Individuals through Team Excellence Awards

Upcoming Events include:

- a) International Exposition on Team Excellence (IETEX) from 14th to 17th June 2011 at Resorts World Sentosa. You can find out more details on IETEX here - <http://www.burnaby-solutions.com/ietex2011/home.html>
- b) The 2nd Team Excellence Symposium for 2011 will be in August. More details will be made available by June.
- c) International Conference of Quality Control Circles from 11th to 14th September 2011 in Yokohama, Japan. More details on the conference can be found here - <http://www.juse.or.jp/e/conventions/125/>

Join the Team Excellence Initiative today!

For further enquiries, kindly contact:

Mr Ashley Chen
Marketing and Events Executive
Tel: 6375 0931
Email: ashley.chen@spa.org.sg

Articles can be retrieved from
NLB's e-Resources –
<http://eresources.nlb.gov.sg>

Books are available at the Lee
Kong Chian Reference Library.

Recommended Readings

Adair, J. E. (2007). *Leadership for innovation: How to organize team creativity and harvest ideas*. London: Kogan Page.
[RBUS 658.4063 ADA]

Ancona, D. G. (2007). *X-teams: How to build teams that lead, innovate, and succeed*. Boston: Harvard Business School Press.
[RBUS 658.4022 ANC]

DeGraff, J. T. (2007). *Leading innovation: How to jump start your organization's growth engine*. New York: McGraw-Hill.
[RBUS 658.4063 DEG]

Engestrom, Y. (2008). *From teams to knots: Activity-theoretical studies of collaboration and learning at work*. Cambridge: Cambridge University Press.
[RBUS 658.4022 ENG]

Parker, G. (2008). *Team players and teamwork: New strategies for developing successful collaboration*. San Francisco: Jossey-Bass.
[RBUS 658.4022 PAR]

Sloane, P. (2007). *The innovative leader: How to inspire your team and drive creativity*. London: Kogan Page.
[RBUS 658.4092 SLO]

References

Prather, C. (2010). *Manager's guide to fostering innovation and creativity in teams*. New York: McGraw-Hill. Retrieved April 25, 2011, from NLB Digital Media.

Bachiochi, P. D., Rogelberg, S. G., O'Connor, M. S., & Elder, A. E. (2000). The qualities of an effective team leader. *Organization Development Journal*. 18(1): 11-28. Retrieved April 25, 2011, from <http://www.orgscience.uncc.edu/sgrogelb/The%20Qualities%20of%20an%20Effective%20Team%20Leader.pdf>

Business innovation resource kit. (2010). Retrieved April 25, 2011, from <http://www.innovationmain.com/eBook.html>

Castka, P., Bamber, C. J., Sharp, J. M., & Belohoubek, P. (2001). Factors affecting successful implementation of high performance teams. *Team Performance Management*. 7(7/8): 123-134. Retrieved April 25, 2011, from Emerald Insight database.

Creative teams at Hewlett-Packard. (1997). *Management Development Review*. 10(7): 258-260. Retrieved April 25, 2011, from Emerald Insight database.

Facilitating effectiveness in teams. (2008). Retrieved April 25, 2011, from <http://www.teambuildingportal.com/articles/effective-teams/facilitate-effectiveness.php>

Fostering innovation. (n.d.). Retrieved April 25, 2011, from <http://www.executionmih.com/leadership/competency-foster-innovation.php>

Hanlan, M. (2004). *High performance teams: How to make them work*. United States: Greenwood Publishing Group, Inc.

Hartenian, L. S. (n.d.). Personal and organizational correlates of team knowledge, skills and abilities: How do team players get that way?. Retrieved April 25, 2011, from www.midwestacademy.org/Proceedings/2002/papers/Hartenian.doc

Heracleous, L., & Wirtz, J. (2010, July/August). Singapore Airlines' balancing act. *Harvard Business Review*. Retrieved May 11, 2011, from <http://hbr.org/products/R1007P/R1007Pp4.pdf>

Niemela, C., & Lewis, R. (2001). *Leading high impact teams: The coach approach to peak performance*. California: High Impact Publishing.

Parker, G. M. (2008). *Team players and teamwork: New strategies for developing successful collaboration*. United States: Jossey-Bass.

Scanlon, J. (2009, August 19). How to build a culture of innovation. *Bloomberg Businessweek*. Retrieved April 25, 2011, from

http://www.businessweek.com/innovate/content/aug2009/id20090819_070601.htm

Singapore Airlines. (n.d.). Retrieved May 11, 2011, from

<http://www.businessweek.com/adsections/2002/sap/sia.htm>

Singapore Airlines innovating transcontinental air travel. (n.d.). Retrieved May 11, 2011, from

http://artigos.netsaber.com.br/resumo_artigo_20096/artigo_sobre_singapore_airlines_innovating_transcontinental_air_travel

Smyrnios, K. (2008, May 27). 10 ways to foster innovation in your company. *Smartcompany*. Retrieved April 25, 2011, from

<http://www.smartcompany.com.au/Premium-Articles/Top-Story/20080527-10-ways-to-foster-innovation-in-your-company.html>

Tarricone, P., & Luca, J. (2002). Employees, teamwork and social interdependence: A formula for successful business? *Team Performance Management: An International Journal*. 8(3/4): 54-59. Retrieved April 25, 2011, from Emerald Insight database.

Team innovation: Getting your team turned on, tuned in and tooled up!. (2011). *Idea Champions*. Retrieved April 25, 2011, from

http://www.ideachampions.com/team_innovation.shtml

Transcript: Support for innovation. (2006). Retrieved April 25, 2011, from

<http://www.abs.aston.ac.uk/newweb/podcasts/transcripts/support-for-innovation.asp>

West, M. A., & Sacramento, C. A. (2006). Flourishing in teams: Developing creativity and innovation. Retrieved April 25, 2011, from

http://www.sagepub.com/upm-data/11445_03_Henry_Ch03.pdf

THE CERTIFIED PRODUCTIVITY PRACTITIONER COURSE

PRODUCTIVITY • COMPETITIVENESS • PROFITS

- What keeps you awake at night?
- Is it the constant pressure to generate a greater yield?
- Problems with leading productivity changes in the workplace?
- Need to improve the quality of your products and services?



Productivity is the answer to all these burning issues.

Entailing efficiency and effectiveness, productivity is crucial in fulfilling the raison d'être of all companies – delivering ever-growing business goals. It is imperative for business leaders to be constantly committed to productivity improvement and take the lead in driving productivity and innovation to sharpen the company's competitive edge by ensuring the most efficient utilization of resources at all times and consistently creating optimum value for customers.

Capabilities have to be developed to deliver higher productivity and training and education is required to develop those credentials and keep the cycles of improvement rolling.



The **Certified Productivity Practitioner** course is the answer to developing the awareness, concepts, skills and techniques, and most importantly, mindset, required to build up those capabilities.

Why CPP?

- It is focused on solving productivity issues at **the enterprise**.
- A **diagnostic approach** is taken, so that Strengths and Areas for Improvement are identified and interventions can be decided easily.
- It **teaches** productivity techniques, tools and methodologies.
- Participants will undertake a company project for their own company on a previously identified productivity issue, for which **project guidance** is provided.

“These sessions provided excellent insight into the fundamentals of productivity, history and importance of productivity in Singapore” – Neil Todd, Courts

“I recommend this course to those who want to know the overview of productivity implementation and its framework. Very experienced trainers make this course a must to attend before engaging on productivity journey.” – Ng Lye Kiat, Acco Technology

About the Course

At the Singapore Productivity Association, we recognise that there may be specific industries that face different sets of KPIs from others. As such, the course content for the CPP will be contextualized for these industries. Currently, we have developed a general CPP course that will be suitable for most industries, as well as the CPP (Retail), which we have contextualized specially just for the Retail sector. The course content can be found below:

CPP (General)	CPP (Retail)
<p>Module 1: Understanding Productivity (Duration: 1 day)</p> <ul style="list-style-type: none"> • Introduction to Productivity and Quality Concepts • Factors Affecting Enterprise Productivity • Productivity Movement in Singapore • Productivity Promotion in Companies • Productivity Challenges <p>Module 2: Productivity Tools, Techniques & Management Systems (Duration: 3 days)</p> <ul style="list-style-type: none"> • Business Excellence • Productivity Measurement & Analysis • Process management: <ul style="list-style-type: none"> ▪ Cost of Quality ▪ Lean Six Sigma ▪ Process Mapping & Analysis • Integrated Management Systems <p>Module 3: Innovation & Service Excellence (Duration: 3 days)</p> <ul style="list-style-type: none"> • Knowledge Economy & Innovation • Service Excellence • Team Excellence <p>Module 4: Critical Success Factors (Duration: 1 day)</p> <ul style="list-style-type: none"> • Management Commitment • Managing & Sustaining Change • Overcoming Resistance to Change • Training and Education • Planning for Implementation and Control of Productivity Improvement Programme • Briefing on project assignment & Role of Productivity Practitioner 	<p>Module 1: Understanding Productivity (Duration: 1 day)</p> <ul style="list-style-type: none"> • Introduction to Productivity and Quality Concepts • Factors Affecting Enterprise Productivity • Productivity Movement in Singapore • Productivity Promotion in Companies • Productivity Challenges <p>Module 2: Productivity Tools, Techniques & Management Systems (Duration: 3 days)</p> <ul style="list-style-type: none"> • Delivering Service Excellence • Productivity Measurement & Analysis • Process management: <ul style="list-style-type: none"> ▪ Cost of Quality ▪ Lean Six Sigma ▪ Process Mapping & Analysis <p>Module 3: Service Excellence & Sales Productivity (Duration: 3 days)</p> <ul style="list-style-type: none"> • Introduction to Service Excellence & Sales Productivity • Store Management & the Roles of a Store Manager • Minimising Operational Constraints & Focusing on Sales • Setting Goals & Analysing Statistics • Coaching & Motivating Sales Staff • Service Behaviours that Encourage Business <p>Module 4: Critical Success Factors (Duration: 1 day)</p> <ul style="list-style-type: none"> • Management Commitment • Managing & Sustaining Change • Overcoming Resistance to Change • Training and Education • Planning for Implementation and Control of Productivity Improvement Programme • Briefing on project assignment & Role of Productivity Practitioner

As part of the CPP curriculum, participants are required to implement a productivity improvement project upon completion of the in-class component. Project guidance will be provided by a professional consultant assigned for this purpose and is for a total of 2 man-days.

Funding & Payment

The course is supported by the Singapore Workforce Development Agency (WDA). Funding is available at 70% and 50% of the course fees respectively for SMEs and MNCs/LLEs/Statutory Boards. Please find the prices payable in the net fee table below:

For SMEs:	Net Fee	Nett Fee with GST
SPA Member (S\$3,700)	S\$1,110	S\$1,187.70
Non-Member (S\$3,950)	S\$1,185	S\$1,267.95
For MNCs/LLEs/Statutory Boards	Net Fee	Nett Fee with GST
SPA Member (S\$3,700)	S\$1850	S\$1979.50
Non-Member (S\$3,950)	S\$1975	S\$2113.25

**Funding applicable for up to 2 participants (Singaporeans/PRs only) from any single company.*

Course Schedule

The schedule for the second quarter of 2011 is appended below:

CPP (June 2011)		
Date	Module	Time
Wednesday, 1 June 2011	Module 1	9-5 pm
Friday, 3 June 2011	Module 2	9-5 pm
Wednesday, 8 June 2011		9-5 pm
Friday, 10 June 2011		9-5 pm
Wednesday, 15 June 2011	Module 3	9-5 pm
Friday, 17 June 2011		9-5 pm
Wednesday, 22 June 2011		9-5 pm

CPP (July 2011)		
Date	Module	Time
Wednesday, 6 July 2011	Module 1	9-5 pm
Friday, 8 July 2011	Module 2	9-5 pm
Wednesday, 13 July 2011		9-5 pm
Friday, 15 July 2011		9-5 pm
Wednesday, 20 July 2011	Module 3	9-5 pm
Friday, 22 July 2011		9-5 pm
Wednesday, 27 July 2011		9-5 pm
Friday, 29 July 2011	Module 4	9-5 pm

CPP Food Services (June 2011)		
Date	Module	Time
Tuesday, 7 June 2011	Module 1	9-5 pm
Thursday, 9 June 2011	Module 2	9-5 pm
Tuesday, 14 June 2011		9-5 pm
Thursday, 16 June 2011		9-5 pm
Tuesday, 21 June 2011	Module 3	9-5 pm
Thursday, 23 June 2011		9-5 pm
Tuesday, 28 June 2011		9-5 pm
Thursday, 30 June 2011	Module 4	9-5 pm

CPP Retail (July 2011)		
Date	Module	Time
Tuesday, 5 July 2011	Module 1	9-5 pm
Thursday, 7 July 2011	Module 2	9-5 pm
Tuesday, 12 July 2011		9-5 pm
Thursday, 14 July 2011		9-5 pm
Tuesday, 19 July 2011	Module 3	9-5 pm
Thursday, 21 July 2011		9-5 pm
Tuesday, 26 July 2011		9-5 pm
Thursday, 28 July 2011	Module 4	9-5 pm

Core Faculty Members

MR. WONG KAI HONG MBA IN STRATEGIC MARKETING (HULL), BSC (NUS)

Kai Hong is a business consultant, management trainer and company director. He has spent almost 2 decades in the consumer products industry, having worked with retailers like Isetan, Metro, Royal Sporting House, The Athlete's Foot and Sunglass Hut; brands like Reebok and Doc Martens; and technology group Wearnes Technology. He has been involved with various functions including operations, business development, project management, human resource, training, marketing, logistics, budgeting and general management. He has developed businesses in Singapore and many Asia cities such as Seoul and Beijing.

MR. LAM CHUN SEE B. ENG IN INDUSTRIAL & SYSTEMS ENGINEERING (UNIVERSITY OF SINGAPORE)

Chun see manages his own consultancy practice, Hoshin Consulting and is also an associate consultant/trainer to the PSB Corporation and Singapore Productivity Association. Prior to running his own practice, he has had years of experience as an industrial engineer with Philips, and trainer and consultant with the then National Productivity Board, APG Consulting and Teian Consulting. He was conferred the Triple-A Award in 1989 for helping to transfer Japanese know-how, particularly in the area of 5S, into local programmes and packages. Throughout his years of consultancy experience, Chun See has assisted many companies in analyzing their productivity and quality objectives and performance; primarily through the application of the PDCA technique and basic QC tools.

MR. LEE KOK SEONG M.SC. IN CHEMICAL ENGINEERING (IMPERIAL COLLEGE, LONDON UNIVERSITY), B.SC. IN CHEMICAL ENGINEERING (NATIONAL TAIWAN UNIVERSITY)

Kok Seong has accumulated vast experience in the areas of productivity training and management consultancy throughout his 30 years of experience with the Standards, Productivity and Innovation Board (SPRING). He has provided consultancy assistance and training for numerous organizations both within and outside of Singapore in the areas of Productivity Management, Operation and Production Management, total Quality Management, Total Productive Maintenance, Shopfloor Management, Occupational Safety Management, Industrial Engineering Applications and Supervisory Management. He has also been greatly involved in the pinnacle Singapore Quality Award (SQA) initiative since its inception in 1993. His track records include the assessments and site visits of award recipients like Micron Semiconductor (formerly Texas Instruments), Motorola, Baxter Healthcare, Philips Tuner Factory and Teck Wah Industrial Corporation Ltd. Mr. Lee is currently a certified SQA Senior Assessor, as well as a resource person for Basic and Advanced Training Courses for Productivity Practitioners, a position he has taken on since 2007.

MR. LOW CHOO TUCK

M.SC. IN INDUSTRIAL ADMINISTRATION (UNIVERSITY OF ASTON, UK); B.SC. IN PHYSICS (NUS); DIP IN QUALITY CONTROL INSTRUCTORS (INTERNATIONAL QUALITY CENTRE, NETHERLANDS); CERTIFICATE IN PRODUCTIVITY DEVELOPMENT (JAPAN PRODUCTIVITY CENTRE); CERTIFICATE IN ADVANCED MANAGEMENT DEVELOPMENT (INSEASD)

Choo Tuck currently provides training and advisory services in productivity and quality management to companies and government in the Asean region and Middle East. He was previously the Executive Director of the Restaurant Association of Singapore as well as the Singapore Productivity Association, and was also the Director for Strategic Planning in SPRING Singapore. During his many years of service with SPRING Singapore, he gained wide experience in productivity training, management consultancy and productivity promotion, and has helped more than a 100 companies in improving productivity, quality control and business excellence, including organizations such as Cycle & Carriage, Motorola, PUB and DBS. On top of that, he has also served as an Asian Productivity Organisation (APO) expert on Productivity for several APO member countries, and was part of a team of experts engaged by the Singapore cooperation Enterprise to provide productivity expertise to the Government of Bahrain in 2007 and 2008.

MR. QUEK AIK TENG

For more information on the course, please visit the Singapore Productivity Association at www.spa.org.sg, or write to us at CPP@spa.org.sg. Alternatively, you could also contact our secretariat:

Ms. Leanne Hwee Mr. Ashton Chionh
DID: 6375 0938 DID: 6375 0940

B.ENG (HON.) IN MECHANICAL ENGINEERING (UNIVERSITY OF SHEFFIELD); DIP. IN BUSINESS EFFICIENCY (INDUSTRIAL ENGINEERING_ (PSB-ACADEMY); CERTIFIED MANAGEMENT CONSULTANT (CMC); PRACTISING MANAGEMENT CONSULTANT (PMC); MEMBER, INSTITUTE OF MANAGEMENT CONSULTANTS (IMC) SINGAPORE

Aik Teng currently manages his own consultancy, AT Consulting Services. One of his most recent projects includes being the LEAD Project Manager for the Singapore Logistics Association. Prior to running his own consultancy, he has been with SPRING Singapore for 20 years, and was the Head of the Organisation Excellence Department from 2004-05. He was also SQA Lead Assessor and Team Leader up till 2008 and has been involved in the SQA initiative since its inception in 1993. tasked to start up the consultancy unit within the then Productivity & Standards Board (PSB) to provide training and consultancy services to organisations, his consulting team assisted close to 30 organisations during that period. He was also involved in a project coordinated by the Singapore Cooperation Enterprise (SCE) to assist the Bahrain Labour Fund in their Labour Reform strategy, which included helping the Bahrain government to initiate a Productivity Movement as well as develop the productivity of the local enterprises. In addition, he was appointed as Project Manager to assist the Government of Botswana to implement a national Productivity Movement, from 1994 to 2003. Botswana is currently held as a model of Productivity in the Pan-Africa region.

The Singapore Productivity Association Productivity Seminar

BASICS OF PRODUCTIVITY

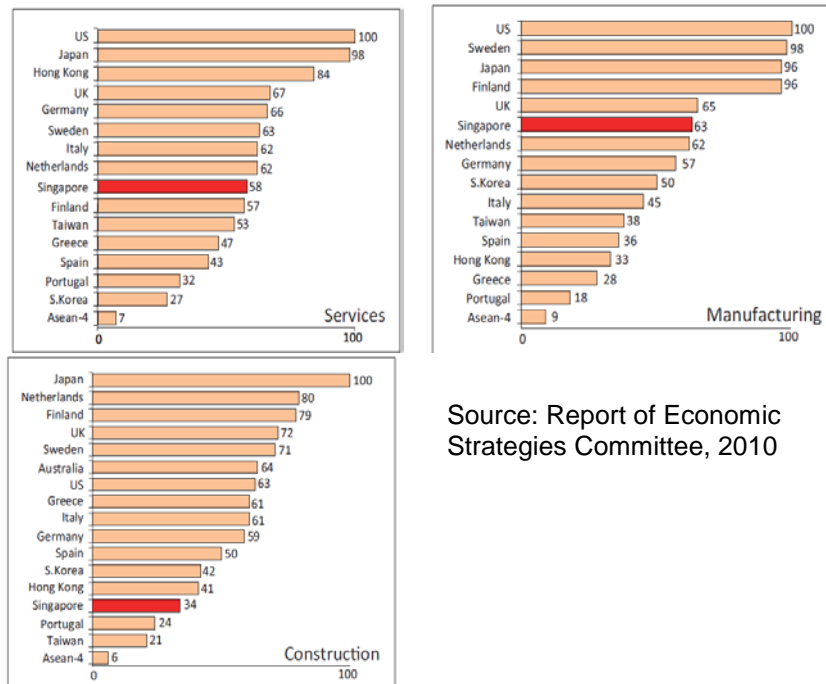
Why a Productivity Seminar?

Singapore businesses and the workforce are gearing up to address productivity challenges that have arisen in the past decade.

Key findings from the recently disseminated Report of the Economic Strategies Committee highlighted that:

“In absolute levels, Singapore’s productivity in manufacturing and services are only 55 to 65 percent of those in the US and Japan (see Figure 1). In the retail sector for example, our average level of productivity is about 75 percent of that in Hong Kong and one-third that of the US. In construction, productivity levels are half that of the US and one-third that of Japan.”

Figure 1: Cross Country Productivity Comparisons⁵



Source: Report of Economic Strategies Committee, 2010

What is the Seminar about?

The Singapore Productivity Association has developed this Seminar for the purpose of providing information to all parties on the basics of productivity. Specifically, the seminar aims to:

- Refresh – everyone on the meaning and concepts of productivity
- De-myth – explain what productivity is and is not, especially in the current day context
- Inform – about the Tools, Techniques and Methodologies

What would you learn?

At the end of the seminar, you would understand:

- the key productivity concepts, including how productivity is measured
- the relevance and types of tools available to improve productivity
- the way forward to implementing productivity in your company.

Who should attend?

This seminar is targeted at employee that needs to understand the importance and relevance of productivity at work. They may be involved in developing and managing; or are part of teams that implement Productivity initiatives.

Targeted employee could include:

- Managers
- Senior Executives
- Supervisors
- Senior workers with team leadership responsibilities.

When and Where would this be held?

Please look out for our schedule on our website: www.spa.org.sg or contact Ms Leanne Hwee at DID: 6375 0938; Email: leanne.hwee@spa.org.sg

How to register?

To register, please fill out our Registration Form here:

<http://www.spa.org.sg/images/events/downloads/RegistrationForm-PS.doc>

Contact us

For more information about the seminar or future runs, please contact:

Ms Leanne Hwee at DID: 6375 0938; Email: leanne.hwee@spa.org.sg



International Exposition on Team Excellence IETEX 2011
14 - 17 June 2011 Resorts World Sentosa
Theme: Team Excellence – Enabling Innovation and Productivity

REGISTRATION IS OPEN!

IETEX provides a platform for quality experts, quality circles practitioners and enthusiasts from all over the world to learn from the experiences and good practices of international organizations and teams.

Programme outline:

Date	Morning	Afternoon	Evening
14 June (Tue)	Pre-convention Seminar	Pre-registration	Free & Easy
15 June (Wed)	Opening Ceremony Concurrent Sessions	Concurrent Sessions	Free & Easy
16 June (Thur)	Concurrent Sessions	Plenary Session	Gala Dinner
17 June (Fri)	Industrial Visit (Location to be confirmed)		

Please note that programme is subject to changes

Objectives of IETEX 2011:

- Share knowledge on best practices in promoting teaming excellence in organizations
- Provide an opportunity to learn from the 'Best of the Best' circles and scale new heights
- Network and exchange ideas, knowledge and experiences, on continuous improvement and innovation through the power of teams

Registration and Fees

Date	Registration Fee (Per Participant)
	Local Participant
14 June 2011 Pre Convention	S\$120 (Half Day)
15-16 June 2011 2 Days Convention Gala Dinner on 16 June 2011	S\$400 (Speakers) S\$400 (Competition and Presenting Circle - Max of 4 Members) S\$600 (Participants)
17 June 2011 Industrial Visits (Location to be confirmed)	S\$50 Per Visit
* Fees indicated are subject to prevailing 7% GST	

Date	Registration Fee (Per Participant)
	Overseas Participant
14 June 2011 Pre Convention	S\$150 (Half Day)
15-16 June 2011 2 Days Convention Gala Dinner on 16 June 2011	S\$580 (Speakers) S\$580 (Competition and Presenting Circle - Max of 4 Members) S\$750 (Participants)
17 June 2011 Industrial Visits (Location to be confirmed)	S\$90 Per Visit
* Fees indicated are subject to prevailing 7% GST	

To Register:

- Please email your registration request to ietex@spa.org.sg
- For programme brochure, please click:

Local

<http://www.burnaby-solutions.com/ietex2011/downloads/local-delegate.pdf>

Overseas

<http://www.burnaby-solutions.com/ietex2011/downloads/overseas-delegate.pdf>



Contact Information

IETEX 2011 Secretariat

Mr Ashley Chen
Singapore Productivity
Association
DID: +65 6278 3344
Fax: +65 6272 5095
Email: ietex@spa.org.sg
Website: www.spa.org.sg

For Registration and Travel

Arrangements

Ms Chee Yi Lim
Burnaby Solutions Pte Ltd
Tel: +65 6848 1345
Fax: +65 6848 1357
Email: limcheeyi@burnaby-solutions.com
Website: www.burnaby-solutions.com

Thank you and SEE YOU AT IETEX 2011!!

Organising Committee

International Exposition on Team Excellence-IETEX 2011