DEVELOPING INNOVATION CAPABILITY MEASURES FOR THE SERVICES SECTOR: AN EXPLORATORY STUDY

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ABSTRACT
Innovation Capability (IC) describes the ability of a firm to develop new products, services, processes and systems. There are few published studies of IC and these have been undertaken in the manufacturing sector and have focused on product innovation. This exploratory research is the first stage of a larger study to investigate IC in the services sector with the Australian hotel sector as the case study. In-depth interviews were carried out with 18 hotel owner-managers in South Australia. Analysis of the accounts of innovation activities supported the hypothesis that the dimensions of IC developed in the manufacturing sector appear to apply to the hotel sector.

Acknowledgement: This research was carried out with the support of the CRC for Sustainable Tourism and the Australian Hotels Association.

INTRODUCTION
The importance of innovation to economies and to individual organizations has been addressed in the literature as far back as Schumpeter (1934, p. 142). Writers such as Huber (1984) proposed that in the post-industrial age with increasingly complex and turbulent environments, organisations will need to rely to an increasing degree on innovation and experimentation for their survival and development. In this regard, more recent research has established a positive link between innovation and firm performance (Covin & Slevin, 1989; Zahra & Covin, 1995; Dess et al., 1997).

Innovation is the mechanism by which organisations develop value through new products, processes, and systems that are needed to respond to changing markets, technologies, and modes of competition (Utterback, 1994; Dougherty & Hardy, 1996). Innovation is important to firms because innovation and competitiveness are linked (Alvarez & Barney 2001). By itself, one-off innovation is not sufficient for competitiveness. Firms need to be able to innovate on a continuing basis (Kiernan 1996; Slater 1997). In addition, firms compete not just on new products but on their capacity to develop new products (Prhahald & Hamel 1990). Firms are therefore presented with the challenge to build their capacity to support innovation on a continuing basis and, in this way, develop competitive advantage.

For this reason, there has been increasing interest in identifying and understanding the attributes of firms that enable them to support continuous innovation (see, for example, Slater 1997). This has led to the development of “innovation capability” (IC) as a construct that describes the capacity of a firm to develop new products, processes, and systems (Prhahald & Hamel 1990). This capacity assists firms to compete in dynamic competitive markets. Research has shown that firms with IC have a sustained competitive advantage and use it to achieve higher levels of performance (Alvarez & Barney 2001). Thus, it is important to understand IC so as to be able to assist firms to improve their ability to innovate and hence their abilities to survive and grow.
The relatively few published IC studies that have been undertaken have been in the manufacturing sector (Guan & Ma 2003; Yam et al. 2004). These have focused on product innovation. Yet, there is still a lack of understanding of what constitutes IC and the IC-performance relationship (Tang, 1998; Guan & Ma, 2003). This exploratory research focuses on IC in the services sector.

The services sector is represented by many sub-sectors including wholesale trade; retail trade; accommodation and food services; information, media and telecommunications; financial and insurance services; rental; hiring and real estate services; professional, scientific and technical services; administrative and support services; public administration and safety; education and training; health care and social assistance; arts and recreation services; and other services. (Australian Bureau of Statistics web site). As a first step, this research focuses on developing a service measure of IC using one particular service industry sector - the Australian hotel sector. The hotel sector is an important part of the Australian economy with 1,290 licensed hotels Australia-wide with five or more rooms as at December 2005. These employed 78,200 staff and generated annual revenues of AUD$3.049 billion from 14.1 million guest arrivals (ABS, 2005a). Globally, the tourism and hospitality sector, of which the hotel sector is a part, has become the world’s largest industry at about 6% of the world’s gross national product and growing rapidly (Lerner & Haber, 2001).

The hotel sector was chosen as the basis for this exploratory research because it is subject to rapid and continuing change and is highly competitive. In a recent Australian Bureau of Statistics (ABS) study of innovation in Australian industry, for example, the ABS concluded that businesses in the accommodation, cafés, and restaurants sectors (hotels overlap this sector) had the lowest rate of innovation of all of the sectors that were included in the study (ABS, 2005b).

There is little published research on innovation in services in general and in the hotel sector in particular (Ottenbacher & Gnoth, 2005). The studies in this sector have been largely carried out in the United States and Europe, and have typically investigated large hotel chains and large individual hotels to identify general principles of innovation management for new products or services (Jones, 1996; Ottenbacher & Gnoth, 2005). Other studies have been carried out into best practice in hotels, with the aim to ‘foster innovation in current management thinking’ (Dubé et al., 1999, p. 14) in areas including architecture, environmental management, food and beverage management, information technology, marketing, hotel operations, human resources and service quality (Enz & Siguaw, 1999; Siguaw & Enz, 1999b, 1999a, 1999e, 1999d, 1999c; Dubé et al., 2000; Enz & Siguaw, 2000a, 2000b). Although these studies included hotels ranging from budget through economy to deluxe, the best practice ‘champions’ that were selected from 115 in-depth cases came largely from well-known and well-resourced chains in the United States. This makes the findings from these studies less applicable to smaller groups and to individual hotels with fewer resources.

There are no published studies of IC and the IC-firm performance relationship in the services and hotel sectors, although there are conceptual papers addressing the “innovation orientation” of hotels (Siguaw et al., 2006; Simpson et al., 2006), and these are discussed below. This research, therefore, contributes to building an improved understanding of innovation in the hotel sector specifically. More broadly, it provides the basis for future research to apply the IC measures developed in this research to other services based industry sectors. Thus, the information collected from this research will be used to better understand the extent to which validated IC manufacturing measures can be adapted to the services sector.

The paper proceeds as follows. First, we discuss the IC construct and the underlying theoretical foundations of the research. Second, we provide an overview of the research method and results. Finally, we discuss the results achieved in terms of how adaptable IC manufacturing measures are to the services sector.

**THE INNOVATION CAPABILITY CONSTRUCT**

Innovation activity in the firm involves the interaction between three key aspects of the firm’s operations. These include the resources of the firm including knowledge, processes and products, the firm’s external linkages with societal and market changes, and the creative input of individuals in the firm (Trott, 2005).

IC describes the attributes that a firm needs in order to support this innovation activity. These attributes give it the ability to quickly and successfully adopt new processes and methods, and
develop and introduce new and improved products to compete more effectively in a rapidly changing environment. Because innovation itself is a complex activity, IC has many dimensions or components and draws on a wide range of assets, resources and abilities.

Hurley and Hult (1998, p.44) define the *capacity to innovate* as “the ability of the organization to adopt or implement new ideas, processes or products successfully”. They also propose that “firms that have a greater capacity to innovate are able to develop a competitive advantage and achieve higher levels of performance”. Lawson and Samson (2001, p. 384) define IC as “the ability to continuously transform knowledge and ideas into new products, processes and systems for the benefit of the firm and its stakeholders”. This is the definition that is used in this research.

Innovation capability has similarities with “innovation orientation”, that has been described “as a set of understandings about innovation built into the fabric of a firm’s knowledge structure that influences organizational activities, but not as a specific set of normative behaviors” (Siguaw et al., 2006, p. 560). In particular, innovation orientation is proposed to develop a set of “innovation competencies” including resource allocation, technology, employee competency, market competency and operations competency. It is also proposed that there should be a positive relationship between innovation orientation and innovation performance as well as overall business performance. However, there are no published empirical studies to develop and test this construct and to compare it with innovation capability. For this reason, this research focuses on innovation capability.

**THEORETICAL FOUNDATIONS**

Several different theoretical approaches have been used to create measures to operationalise the IC construct including technical product innovation, open systems theories of the firm, organisation innovation theories, the resource based view of the firm, and dynamic capabilities theories. An overview of these theories appears in Figure 1. The specific theories are reviewed below.

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**Technical Product Innovation and IC**

Cormican and O’Sullivan (2004) drew on models of technical product innovation, such as the New Product Development (NPD) model developed by Cooper and others (Cooper, 2001), to develop a “product innovation management scorecard” based on a study of reasons for failure of new product projects. The authors proposed a scorecard comprising 50 measures grouped under the headings of strategy and leadership, culture and climate, planning and selection, structure and performance, and communication and collaboration. This obtains managers’ perceptions of their firm’s performance on each measure to produce a map of the product innovation management performance of the firm for diagnostic, benchmarking and improvement purposes. This scale was alpha tested with eight technology-based organisations.

Chiesa, Coughlan et al (1996) proposed a “technological innovation audit” that was based on a similar model of technical innovation process (or NPD process) that was in turn influenced by the EU Quality Award framework. This approach resulted in a scorecard that included two to four dimensions under each of the following headings: product innovation, product development, process innovation, technology acquisition, leadership, resourcing, systems and tools, and increased competitiveness. This was used by managers to assess their firm performance according to four levels of performance for each individual measure.

Both of these approaches were designed to helped managers to identify where shortcomings occurred and what actions needed to be taken to improve firm performance. The form of these scorecard measures, however, does not lend this approach to use for benchmarking or for quantitative analysis.

**Open Systems Theory of the Firm and IC**

Other authors have drawn on the open systems theory of the firm to propose a definition of innovation capability that integrates the human aspects of the organisation with its technology dimensions (Ettlie, 1983; Judge et al., 1997). This approach treats organisations as open systems that receive inputs and produce outputs through the interactions of its members that are influenced by the environment and the organizational culture (Katz & Kahn, 1978; Lawrence & Lorsch, 1986). In
particular, changes in one component of the organisation system can lead to changes in others (Katz & Kahn, 1978).

The open systems theory of the organisation has been used by researchers to examine the behaviour and the operation of teams in the work environment as a way of understanding the factors driving innovation in companies. For example, West developed and tested an inputs-processes-outputs model of group innovation that identified the importance of group (or team) capabilities and process in determining the level of innovation output. Eckermann, Nagalingam et al (2002) developed a measure of “five cultural capabilities that an organisation must embrace in fostering innovation” (Eckermann et al., 2002, p. 727). The five capability scale sets in Eckermann et al’s (2002) measure included visionary, knowledge, entrepreneurial, social, and synergistic capabilities. This measure was validated using a sample of 84 manufacturing companies in South Australia. The research identified a positive relationship between innovation capability as defined by these five factors and the innovation performance of these firms, using a combination of four innovation performance measures (Eckermann et al., 2003). This approach, however, did not take into account technical, resourcing, and other areas of capability that have been shown to be important for supporting innovation in a firm. In addition, the details of their measures have not been published.

Organisation Innovation Theories and IC
Tuominen and Hyvönen (2004) developed a measure of innovation capability based on organisation innovation theories, drawing on the literature addressing firm strategy, structure and competitive position as well as on empirical evidence. The authors proposed that firms pursue two separate dimensions of technological innovation (relating to product and technical processes that create value for customers) and of managerial innovation (relating to strategy development and organisational management that create value for the firm). The authors identified a positive relationship between this form of innovation capability and competitive superiority (measured in terms of financial performance and value-adding performance. The ten individual measures developed in this study, however, are actually measures of the innovative behaviour of the firm rather than measures of its capability. This instrument is therefore of no use in investigating the “innovation capability” of firms (as defined in this research).

Resource Based Theory of the Firm and IC
The resource based theory of the firm proposes that a firm’s resources are important in supporting its competitive advantage and in implementing corporate and marketing strategy. To be successful, a firm needs to have resources that are valuable, are rare, are difficult for other companies to imitate and are also difficult to substitute (Barney, 1991). A capability can be defined as an integration of the firm’s different resources that it manages to take advantage of external business opportunities (Peteraf, 1993), and it is the superior resources and capabilities that will allow the firm to be competitive in its environment.

Using the resource based theory, IC can be described as a special asset of a firm that gives it the ability to quickly and successfully adopt new processes and methods and develop and introduce new and improved products to compete more effectively in a rapidly changing environment (Lawson & Samson, 2001). Because innovation itself is a complex activity, IC has many dimensions or components and draws on a wide range of assets, resources, and abilities (Sen & Egelhoff, 2000).

Adler and Shenbar (1990) defined IC in terms of a range of resources or capacities. These include the ability to develop new products that meet market needs, the capacity to apply the appropriate processes to produce these new products, the ability to adapt product and process technologies to meet future needs, and the ability to respond to unexpected opportunities arising from technology change and competitor activities. Christensen (1995) proposed four distinct and generic categories of assets for technological innovation. These included scientific research assets, process innovative assets, product innovative application assets, and aesthetic design assets. He also proposed that successful innovation needs the combination of more than one of these assets that are spread over different parts of the firm.

Capaldo et al (2003) proposed a method for evaluating ICs in a firm using four resource sets. These were entrepreneurial resources, human resources, resources arising from external linkages, and economic resources. These sets were allocated into two groups that are needed to support the ability of the firm to enhance and innovate in its markets in the short and long term and to support the ability
of the firm to carry out technological innovation. This approach was illustrated by three case studies using qualitative assessment of scores of the businesses on the dimensions used. The value of this approach appears to be limited as the measures consider only a very limited range of firm resources.

Guan and Ma (2003) used the resource based view of the firm to develop a detailed operational representation of IC in terms of a set of seven “innovation drivers”. These were learning, research and development, resource management, manufacturing, marketing, organisational structure and systems and strategy and leadership (Guan & Ma, 2003; Yam et al., 2004). In this framework, learning capability is the capacity to identify, absorb, and use existing and new knowledge for competitive success. Research and development capability measures the ability of the firm to adopt new technologies and systems. Manufacturing capability describes the ability of the firm to apply its R&D results into products that meet market needs as well as technical and production constraints. Marketing capability refers to the ability to identify current and future customer needs and to promote and sell the firm’s products in a competitive environment. Resource management capability is the firm’s ability to organise and manage its technology, human, and financial resources. Organisation structure and systems capability refers to the ability to develop, structure, and manage all activities to meet organisational objectives and increase the speed of the company’s innovation processes. Strategy and leadership capability is the ability to form, adapt, and lead the right strategies for commercial success in a competitive environment. This measure was validated using a sample of 213 Chinese industrial (manufacturing) firms. A positive relationship was found between the dimensions of IC and export performance except for the dimension relating to manufacturing capability. In addition, the study identified the different impact of two groupings of innovation capability. These were a set of core and complementary innovation assets, using a framework proposed by Teece (1986). This approach with its published measures lends itself to replication and to benchmarking studies in the manufacturing sector.

**Dynamic Capabilities Approach and IC**

The dynamic capabilities approach builds on the resource based theory of the firm. It can be defined as “the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments” (Teece et al., 1997, p. 516). Competitive advantage is described as a function of the process that is particular to the firm by which its assets can be deployed and redeployed in changing market circumstances. Lawson and Samson (2001) draw on this framework to propose a model of IC that is made up of a number of processes within the firm. These are grouped into seven major dimensions that include vision and strategy, harnessing the competence base, organisational intelligence, creativity and idea management, organisational structure and systems, culture and climate and the management of technology. Lawson and Samson propose further research to develop empirical measures for these dimensions.

Tang (1998a) developed an “integrative” model of innovation in organisations with six key constructs of information and communication, behaviour and integration, knowledge and skills, project raising and doing, guidance and support, and external environment. These constructs were operationalised in the form of an innovation capability inventory of 46 items, and this was validated using a sample of 871 professional engineers. This study resulted in nine measures that were leadership, support mechanisms for innovation, task variety and autonomy, group attitude and behaviour towards innovation, integration between functional areas, project screening and selection, project management, staff knowledge and skills, and information gathering and communication. A positive relationship was found between this measure of innovation capability and respondents’ perceptions of their company innovation effectiveness and innovation effectiveness (Tang, 1998b). The measure developed and published by Tang has been adapted and applied in a study of the relationship between firm innovation capability and the implementation of total quality management (Perdomo-Ortiz et al., 2005).

Romijn and Albaladejo (2002) developed a model comprising two major inputs into product innovation capability. The first set of inputs included internal sources, encompassing the professional background of the founders or managers, the skills of the workforce and a measure of internal R&D efforts to improve technology. The second set of inputs included external sources comprising measures of intensity of networking, proximity advantages relating to networking and receipt of business support from government and industry bodies. The model was piloted with 33 electronics firms and a number of these factors was found to be related positively to measures of innovative
performance. The measures used in the Romijn and Albaladejo (2002) study, however, have not been published.

Theoretical Underpinnings of This Research: Resource Based Theory

In summary, different theoretical bases have been used to develop definitions of innovation capability. None of these theories are mutually exclusive. However, the resource based theory approach is preferred for this research as it provides a robust and systematic approach for analysing the firm as a set of resources and capabilities. This means that research findings can be used to develop diagnostic tools as a practical outcome of this research. These tools can be used at the individual firm level to identify resource gaps that can be presented in terms that managers can readily understand and act on to improve their firm’s innovation capability. A further reason for preferring the resource based theory approach is that this was used by Guan and Ma (2003), who are the only researchers who have published details of their innovation capability measure and its relationship with business performance measures. These are the measures that provide the basis for this study.

One hypothesis was examined in this research:

H1: IC as defined as a manufacturing sector construct has a similar meaning and application in the services sector generally and in the hotel sector specifically.

RESEARCH METHOD

This research is part of a larger project into IC and the IC-firm performance relationship in service businesses.

The research that is the focus of this study involves developing an IC measure for service firms that will be used in the larger project. This was carried out using in-depth interviews with owner/managers of representative hotel firms.

Participants

In-depth interviews were held with 18 owners and managers of hotels in South Australia. These included participants involved with individual hotels or small hotel groups. The larger study focuses on “general hotels” and excludes the large chains, such as those owned by Coles and Woolworths, and the deluxe chains, such as the Hilton and Hyatt. For this reason, these organisations were not included in this exploratory study. Participants were from the Adelaide metropolitan area as well as regional South Australia. Table 1 provides an overview of participant demographics.

To facilitate the research, contact was made with the National Director of the Australian Hotels Association (AHA). He then provided an introduction to the South Australian AHA Branch. After meeting with the South Australian AHA President and Chair, the South Australian AHA Branch office provided the research team with participant introductions. The sample frame was proposed by the research team, and was deliberately biased to include hotels that were known to be innovative in operating their businesses and those less so; some in the metropolitan area and some in the country; some that operated in competitive environments (with other hotels close by) and some that were relatively isolated; some sole operators and some that were involved with more than one hotel.

Measures

The basis for developing a hotel services IC instrument was that developed and validated by Guan & Ma (2003). The original questionnaire was in Chinese and this was translated into English. The instrument contains 70 items addressing seven dimensions of IC: learning, research and development, resource management, manufacturing, marketing, organisation structure and systems and strategy and leadership. The items are of the form “we systematically monitor technology development trends” and use single-ended Likert scales where ‘1’ = Strongly Disagree through to ‘7’ = Strongly Agree. On the original scale, all the Cronbach alpha values for these dimensions exceeded 0.93.
The first step in this study was to explore the applicability of the dimensions of the IC construct to the hotel services sector. As a starting point, participants were asked to describe innovation in their own businesses and the manner in which these innovations were initiated, developed and evaluated. Participants were then asked to describe impediments to, or constraints on, their innovation activities and to identify how their businesses could better support innovation activities. The duration of each interview was approximately one hour. Notes were taken by the researcher during the interview and the interview was audio recorded. Written transcripts of the interviews were made subsequently.

Transcripts were then analysed using the “realist evaluation” process as described by Pawson (2002a; 2002b) and others (Julnes et al., 1998; Tilley, 2000) and illustrated by applications of this approach in policy and program evaluations (Ho, 1999; Stame, 2004). This approach is based on identifying from the participant’s unprompted comments the elements of the mechanism that is being investigated (in this case the different dimensions of innovation capability), relating these to the outputs (the innovations that were the focus of the participant’s comments), and taking into account the context (the external and internal constraints on innovating activities). As a part of this process, insights also were obtained as to how innovation is measured in the hotels sector. Key comments were summarized in tabular form, and an example of a summary for one participant appears in Appendix 1.

**RESULTS**

Each of the participants could identify a number of innovations in their businesses in areas including products, services, methods and systems. Analysis of the summaries indicated that all of the dimensions of innovation capability as developed by Guan (2003) could be identified in the comments made by the majority of participants in reference to the range of innovations in their respective businesses.

The hypothesis H1 that IC as defined as a manufacturing sector construct has a similar meaning in the services sector generally and in the hotel sector specifically was confirmed.

**DISCUSSION**

Although the IC measures developed by Guan & Ma (2003) were tailored to the manufacturing sector, this first stage of the study indicates that the same dimensions of innovation capability appear relevant for the hotels services sector. This is a significant finding, as it suggests that the innovation capability construct that has so far been tested in larger organisations with several layers of management appears to be applicable to the smaller organisations (in terms of the size of the management team) that typify this sector. In addition, the dimensions of IC appear to be relevant across the range of business activities that area carried out by hotels. This is significant, because hotels are unusual businesses in that even small ones include several different types of revenue streams or business units, such as accommodation, functions, meals, bar, entertainment, take away alcohol, and gaming. This means that innovation can occur in each of these several areas, as well as in the operating systems and methods of the whole organisation. In addition, this finding applies across hotels that differ in terms of the size of their group, their location and the research team’s perception of their level of innovation, and the number and range of innovations identified by participants.

This result provides a basis for the next step in this study which is to modify the individual items that make up the seven dimensions of innovation capability, as they are manufacturing oriented and are couched in terms that are relevant to larger multi-department businesses with several layers of management. This will be carried out by using follow-up in-depth interviews with these hotel owner/managers to check that the modified items are clear and understandable, and are interpreted by participants in the way that is consistent with their conceptualisation. Phase 2 of the larger research project involves administering the modified measures to another group of participants in the hotel sector as a quantitative study. Factor analyses will be conducted, items removed, and new items inserted where appropriate to produce a reliable and valid IC scale for the hotel services sector.

**Research Contributions**

The research makes a contribution at two levels. At a scholarly level, the information collected from this research will be used to better understand the extent to which IC is similar to and different across manufacturing and services sectors, and how it can be applied effectively to smaller enterprises such as the typical hotel. In this regard, the research contributes toward the development of a more holistic IC theory. From a practical perspective, the results provide the basis for profiling individual hotels
over time and against other hotels of a similar size in terms of IC. This will help individual operators to evaluate their positioning against the industry and consider how to take corrective action where appropriate. In addition, the research results will provide the basis for developing a hands-on hotel training program to improve the ability of hotel operators to innovate, and to improve their hotel performance.

**SUMMARY**

The purpose of this exploratory research was to understand how the dimensions of innovation capability differed between the manufacturing and services sectors. To this end, a validated IC instrument developed by Guan and Ma (2003) for the manufacturing sector was used as a basis for this research. A research question underpinning the research was “to what extent can a manufacturing oriented IC instrument form the basis for developing a services IC instrument?” The results show that the dimensions making up the manufacturing IC instrument developed by Guan and Ma (2003) provides a solid base for developing a services sector instrument.

**REFERENCES**


Utterback, J. 1994, Mastering the Dynamics of Innovation, Harvard University Press, Boston MA.
Figure 1: IC Theoretical Foundations
<table>
<thead>
<tr>
<th>Details</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Hotels in “Group”:</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2 to 4</td>
<td>6</td>
</tr>
<tr>
<td>4 to 17</td>
<td>6</td>
</tr>
<tr>
<td>Location:</td>
<td></td>
</tr>
<tr>
<td>CBD/ Inner Metropolitan</td>
<td>9</td>
</tr>
<tr>
<td>Outer Metropolitan</td>
<td>6</td>
</tr>
<tr>
<td>Country</td>
<td>4</td>
</tr>
<tr>
<td>Type of Participant Interviewed</td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>6</td>
</tr>
<tr>
<td>Owner</td>
<td>4</td>
</tr>
<tr>
<td>Owner/Manager</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 1: Participant Demographics
## Appendix 1
Examples of Summarised Participant Transcript Worksheet

<table>
<thead>
<tr>
<th>ID</th>
<th>1. Innovation Definition and types</th>
<th>Innovation Importance - why you do these things</th>
<th>2. Ways to innovate 'better'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Changes in physical facilities (take account of regs eg smoking, disability requirements), Structural (software systems, loyalty programs, staff management, involvement in the business)</td>
<td>Critical. Only way to have point of difference and compete with chains</td>
<td>Manager is responsible for the venue and makes decisions on how to operate (not just supervise), Coordinated marketing programs from the centre. Strategic decisions based on operating information (ROI for the venue)</td>
</tr>
<tr>
<td></td>
<td>Hard to measure (like productivity). No real separate measures. Do measure things such as staff retention.</td>
<td>EG developed loyalty and point of sales system by self. Receive R&amp;D tax concessions for this. Have patents and trade marks - take up 30% of person's time.</td>
<td>Group Marketing Manager coordinates activities across the group, manages website. Internet use is just starting - for liquor sales, show menus. GMM one brand for the group.</td>
</tr>
<tr>
<td></td>
<td>Staff need to understand what we do and how. Have training. EG need to get managers to learn how to use information from loyalty system. Encourage Union membership; have induction for all staff involving union.</td>
<td>Multiskill and develop staff to move them from one area to another. EG from buffet to restaurant or bar to bottle shop (important for staff development). Physical facilities (hotels) need to be renovated every 3 to 4 years. Revue gaming machines on ongoing basis. Also review stock levels of liquor products. Review operating systems - continuous improvement</td>
<td>Balance staff in different locations/markets - each area has its own needs. Can move staff from one to another.</td>
</tr>
</tbody>
</table>

### IC Measures
- **IC Learning**
- **IC R&D**
- **IC Manufacturing/Operations**
- **IC Marketing**
- **IC Organisational**
- **IC Strategic/Leadership**

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### IC Learning
- Exploiting IC
  - Manufacturing/Operations
  - Marketing
  - Organisational
  - Strategic/Leadership