BANKING ON KNOWLEDGE

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'Employee engagement and customer satisfaction are the proxies for future growth and profitability' **-** (J.Varley, Group CEO, Barclays Bank)

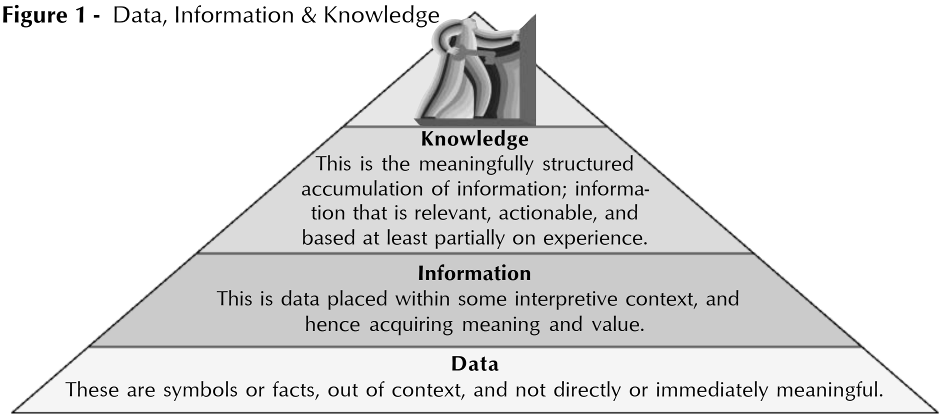
The "Knowledge Worker"[1] a term coined almost half a century ago by Peter Druker, a leading economist, described a new category of employee whose basic means of production was information or the development and use of knowledge in the workplace. Druker went on to predict that these *knowledge* workers will become the life-blood of the future company, and now in the 21st Century this prediction is none truer than in the Financial Industry.

For decades the financial sector, along with others, boosted productivity through re-engineering, automating and outsourcing. However, with rising business volumes and a demand for lower running costs, most advantages gained through these measures were short-lived as competitors caught up with similar technological and process improvements. Today, as companies search for alternate strategies, ones that are high in value and harder to copy, some are engaging the knowledge base of their employees to discover a more enduring competitive advantage.

A Knowledge Economy

The terms *information* and *knowledge* are often used interchangeably, but it is important to draw a distinction between them. (See figure 1 below). Whilst good and timely *information* is vital to any decision making process, it is the *knowledge* that plays a critical role in the quality of the deciscion.

Figure 1 - Data, Information & Knowledge



[1] Peter Druker, *Landmarks of Tomorrow: A Report on the New 'Post-Modern' World* (1959)

In the 20th century, investment in IT departments served companies well by providing employees with the much needed information for business success. However, in today's technologically savvy workplace, with vast quantities of information becoming easily and quickly available to all, the real competitive advantage is in **how** this information is used – ie. the value of the decisions made – and this hinges critically upon the calibre of employee and their *knowledge* in the workplace - an intangible mix of group and individual experiences and thinking.

RESEARCH in brief - The Impact of IT Investment on Productivity

A study of 100 randomly selected companies carried out by the ***London School of Economics*** *revealed that companies get the biggest benefit by combining IT investments with good management.*

Corporations scoring in the bottom quartile of management practices, by deploying more powerful IT resulted in productivity improvements of just 2 percent. However, companies with increased computing power and improved management practices achieved 20 percent higher productivity.

The authors concluded that better management practices could already raise productivity appreciably and boost the impact of IT investments[2].

There is growing evidence that these high-value decision makers are increasing in number and in importance in the modern organization. And unlike in the past, they are not necessarily clustered at the top of the organization – and now includes workers in roles such as managers, sales people, customer service reps and in fact any one whose tasks are anything but routine. Johnson et al[3] point out, 'the potential gains to be made by helping these employees be more effective at what they do and do it cost-effectively are huge – as is the downside of ignoring this trend'.

The most valuable of these workers are those that undertake activities such as searching, coordinating, and monitoring (with other employees, customers and suppliers) in what economists refer to as "interactions" that result in the exchange of goods, services and ideas[4]. As the complexity of the interactions increase, their ambiguity also rises and a higher the level of judgment is required to be exercised by these workers.

Workers that deal with increasing complexity are unique to the organisation that they work in, as over the years, they gain an intense brand of knowledge that is specific and exclusive to them and the organisation.

2 Bloom & van Reenan (2004) - LSE's Centre for Economic Performance Study - A McKinsey Research When IT lifts productivity Dorgan and Dowdy (2004) http://www.mckinseyquarterly.com/Financial_Services/Banking/When_IT_lifts_productivity.
3 B.Johnson, J.Manyika & L.Yee, (2005) The next revolution in interactions. The McKinsey Quarterly (no.5)
4 Butler *et al*(1997) A revolution in interaction, The McKinsey Quarterly (no 1).

This type of knowledge, also known as ***Tacit knowledge***, or implicit knowledge, is deeply rooted into the organisation's operating practices and culture. And, unlike explicit knowledge (see Figure 2 below), carried out by those workers who undertake more routine interactions, tacit knowledge is much harder to detail, copy, and distribute, and as a result can be harnessed as a sustainable source of competitive advantage. This in turn makes these tacit workers highly valuable to the organisation.

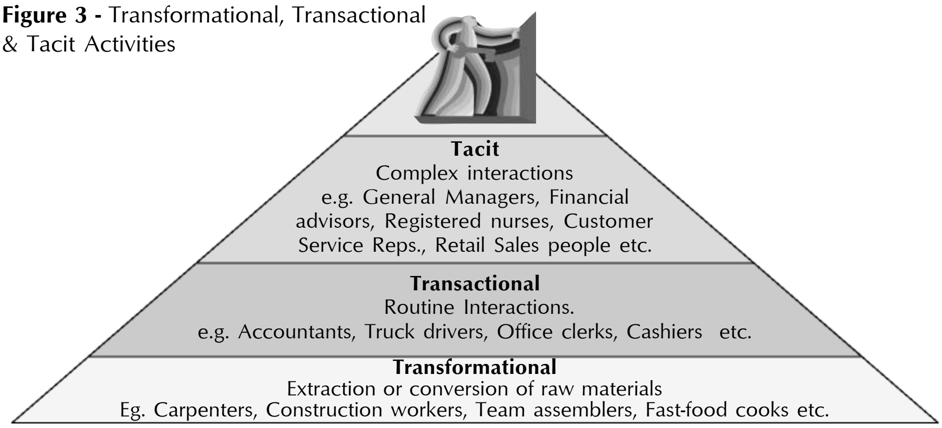
Figure 2 - The difference between Explicit and Tacit Knowledge[5]

Explicit knowledge – This is knowledge that can be formally articulated or encoded; this type of knowledge can be more easily transferred or shared; It can be abstract and removed from direct experience

Tacit knowledge (or Implicit Knowledge) – This is knowledge-in-practice and is developed from direct experience and action. This type of knowledge is highly pragmatic and situation specific, it is subconsciously understood and applied, difficult to articulate and is usually shared through highly interactive conversation and shared experience.

Douglas North (1993 & 1994) described the shift in the nature of economic activity over time. In the 20th century, he highlighted, how most non-agricultural labour involved the extraction of raw materials or their conversion to finished goods (ie. Transformational activities). However, by the turn of the 21st Century, only 15% of US employees, for example, undertook such activities, with the remainder (still in the US) being employed in activities that involved partly (ie. Transactional) or completely interactive (ie. Tacit) tasks[6] .

Figure 3 - Transformational, Transactional & Tacit Activities



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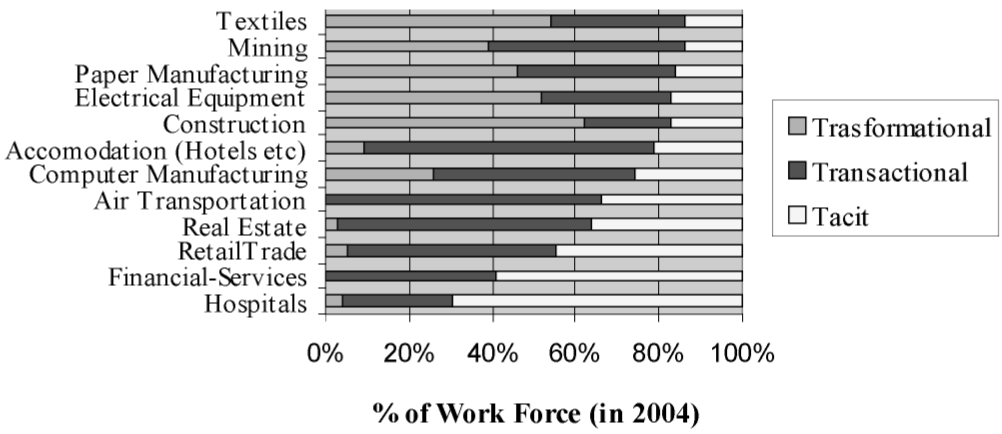
5 "Knowledge, Groupware, and Internet", Butterworth Heinemann, 2000

6 Douglass C. North, (1993-1994) "Institutions, Transactions Costs and Productivity in the long run", "Transaction costs Through Time", "Institutions and Productivity in History". – http://econwpa.wustl.edu

Over the years, with significant advances in technology, the more routine interactions (ie *transactional* interactions- see Figure 3 above) have been automated or even eliminated. The automation of these tasks has not been restricted to the more obviously clerical and accounting roles, but also in specialist areas such as IT, auditing and even biochemistry as well as many others[7]. Figure 4, below describes the mix of tasks in a selection of job roles in 2004[8].

Figure 4 - The job Task Mix



Most jobs however, have a mix of activities so that a manager's job would also have elements that are routine, such as completing expense reports or audits for example, as well as more complex tasks such as strategy meetings, for example, with direct reports, being a more tacit activity.

As automation (and outsourcing - especially in Western companies) removes and/or changes many of the transactional roles, the demand for quality tacit employees keeps growing across all sectors and in some fields in particular, such as health care, software and the financial-services (see figure 4 above)[9]. At least in the USA, researchers reveal that the change in distribution of tacit workers, between 1998 and 2004 was in excess of 8%, this is in a sector that already has a high percentage of tacit workers[10]. In a globalised economy, this is once again a trend that cannot be ignored.

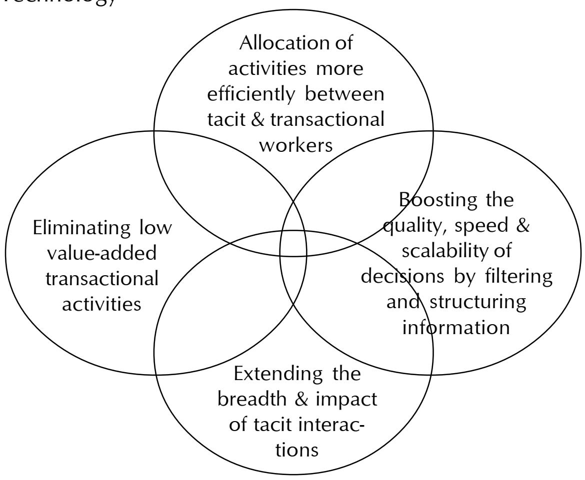
This rise in the tacit work force, and the decline in transformational and transactional roles, demands new thinking about the organisational structures that could make the best use of this shifting blend of talent.

[7] Bradford et al (2005) The next revolution in Interactions. The McKinsey Quarterly (no 4).
[8] B.Johnson, J.Manyika & L.Yee, (2005) The next revolution in interactions. The McKinsey Quarterly (no.5)
[7],[8]&[9] B.Johnson, J.Manyika & L.Yee, (2005) The next revolution in interactions. The McKinsey Quarterly (no.5)
[10] B.Johnson, J.Manyika & L.Yee, (2005) The next revolution in interactions. The McKinsey Quarterly (no.5)

After decades of using technical, procedural and hierarchical methods for managing employees, ones that often treated workers as exchangeable and easily renewable commodities, a move that considers them as a vital company asset, intrinsically linked to their competitive advantage, is indeed a significant shift in thinking for most employers.

Whilst the research and practical knowledge around the management of tacit employees is still in its infancy, there is a compelling band of evidence[11] that strongly insists upon a change in the way we approach performance improvement in the work place. With the great advances being made in technology and its widespread availability today, the new thinking in management recommends its use to boost the work of employees in a number of ways.

Figure 5 - New use of Technology[12]



Technology could be used to enhance and extend the work of tacit labour. (see Figure 5 above)

1. The removal of low value added transactional activities that keep employees from engaging in higher value work is an obvious area. For example, in the high street bank, the use of automatic cheque paying in facilities would free up banking clerks to maximise their contact time in other problem solving and advising activities with customers.
2. Technology can be used for the efficient allocation of activities between tacit and transactional workers. Transaction workers for example, with the help of automated tools, could help customers diagnose and solve general problems, then if no solution is found, could be directed towards a tacit worker.
3. Easier access to high quality & up to date filtered and structured information would save a lot of time for employees who require the information at hand for their decision-making process. Tailored information from data-bases on customer trends, general and personal,

[11]&[12] "The Role of Tacit Knowledge in Group Innovation", Dorothy Leonard and Silvia Sensiper, 1998

would help tacit employees provide a unique service to their clients, for example, in a quick and accurate way.

4. Technology (such as broadband, video-conferencing and collaborative software) can be used to great effect to facilitate the all important communication process between tacit employees, customers and suppliers, to share ideas, interact and collaborate among communities of interest, within and outside of the company.

Technology – no longer a panacea for all

However as stressed throughout this article, technology alone will not be able to enhance productivity in the 21st Century. Procedural techniques, as used in the past for improving productivity, were designed mostly with transformational and transactional roles in mind. Whilst technology helped, even in the past, it had a limited role to play in improving tacit roles. Thus as the importance of tacit roles escalate, it is a reality that organisations will have to change the way they manage their staff to encourage and facilitate this growth. Tacit models are however new territory, but it is clear that any new methods identified, developed and used to make the best use of tacit interactions would be highly valuable and also be unique to its organisation.

'Trust your hunches. They're usually based on facts filed away just below the conscious level' – Dr. Joyce Brothers

Tacit knowledge, by its very definition is 'subconsciously understood and applied' and usually 'shared through highly interactive conversation and shared experience'. Thus creating and exchanging this knowledge and intangibles through interaction with their peers is at the very heart of what these workers do. Any organisation attempting to promote this process of in-house creativity and innovation would also have to create a fertile environment and organisational culture to encourage such growth.

Bryan & Joyce[13] argue that today's big companies are actually ill–equipped to handle their tacit workers, and describes the typical vertically organised hierarchy as one of the most significant barriers to tacit worker productivity. They for example, highlight problems encountered by professionals who, having worked together (horizontally) with peers, must then search for expert knowledge or collaborators (vertically) up the hierarchy, and negotiate for their support. Worse still, they suggest, are those matrix structures where the worker must appease two bosses, each with divergent agendas. Leonard and Sensiper[14], add that in vertically arranged management structures, knowledge and wisdom are assumed to be endowments accrued at the top of the hierarchy. But when managing tacit workers, who are in themselves experts in their respective areas, this basic presumption does not typically hold true. Consequently, different assumptions and strategies must be used to support the productivity of the 21st Century work force.

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[13] L. Bryan & C. Joyce (2005) 'The 21st Century Organization' The McKinsey Quarterly (no.3)
[14] "The Role of Tacit Knowledge in Group Innovation", Dorothy Leonard and Silvia Sensiper, 1998

See Figure 6 below for some of these authors' observations on organisational barriers to the sharing of tacit knowledge[15].

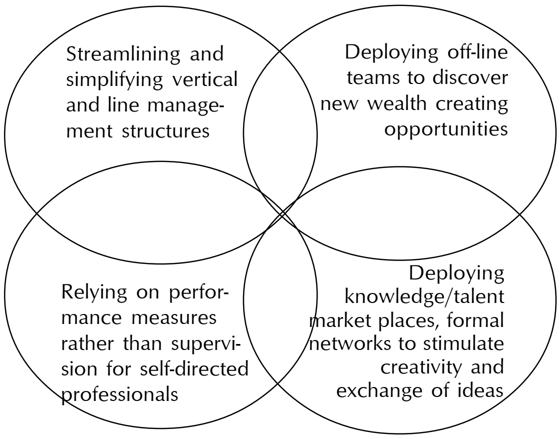
Figure 6 – Organisational Barriers to sharing of tacit knowledge

Organisational Barriers	to Sharing of Tacit Knowledge
Hierarchies	when they implicitly assume wisdom accrues to those with the most impressive organizational titles
Strong preferences for analysis	discouraging employees to offer ideas without "hard facts" to back it up
Penalties for failure	discouraging experimentation
Communication	Strong preferences for a particular type of communication within working groups
Fear of expression	Fear of failing to express the inexpressible when trying to convert tacit knowledge into explicit one
Status	Inequality in status among the participants is a strong in hibitor for tacit knowledge sharing, especially when exacer bated

A new Organisational model

Bryan & Joyce[15], in their writings on the 21st Century organisation, suggests that companies by modifying the vertical structures of the traditional hierarchy to allow different groups of professionals to focus on clearly defined tasks, with clear accountability, can heighten the value of those who collaborate and innovate with peers to create a competitive advantage. (see Figure 7 below)

Figure 7 - The 21st Century Organisation



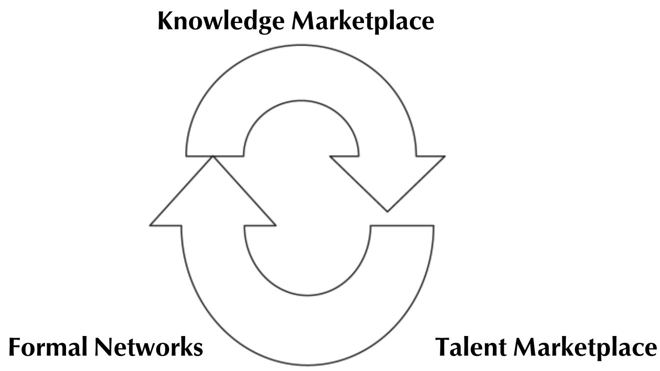
[15] "The Role of Tacit Knowledge in Group Innovation", Dorothy Leonard and Silvia Sensiper, 1998
[16] L. Bryan & C. Joyce (2005) 'The 21st Century Organization" The McKinsey Quarterly (no.3)

These authors recommend that a company must establish a clearly dominant axis of management and eliminate the matrix and ad hoc organisational structures that often muddle decision-making authority and accountability.

Once the vertical structures have been simplified, they propose that line managers be allowed to limit their attention to meeting near-term earning expectations, whilst having other professionals focusing on the long-term creation of wealth. These authors argue that long-term ideas creation require a different mindset (one that is allowed to wander) to the short-term/ routine day-to-day living mindset. And as such should be allowed their separate operating spaces. They suggest that, once an initiative is ready to be scaled up, they can be placed in the main line structure.

The development of in-house markets and networks, these authors suggest, will help its professionals work horizontally across the whole organisation – 'exchanging knowledge, collaborating and developing communities that create those intangible assets'. The establishment of a knowledge market place, talent market place and formal networks, each mutually supportive of the other, it is suggested, would help companies work horizontally in a very cost effective way.

Figure 8 - Investing in creativity



The above mechanism for facilitating the creation, development and exchange of tacit knowledge, is one that its authors recommend, would have to be actively created within an organisation, with encouragement and investment, as they point out, it is not necessarily a system that would naturally exist within a company (Figure 8).

For example, the knowledge market place would produce high quality 'knowledge objects' as the 'buyers' (other in-house professionals) must be able to access easily, information that is insightful and relevant to them. Similarly, the talent marketplace must offer employees opportunities to seek and offer their talents to projects or new positions within the organisation. There are of course many formal networks already in existence that bring people with similar interests in to the same forum, however, company investment in to them would boost their value by formalising its role within the organisation.

The final set of ideas for the 21st Century organisational model surrounds performance measures. In the old model, supervisory evaluation was the industry norm. However, in managing tacit workers, who are specialists in the areas of their profession, a certain degree of self-direction is recommended. It has been suggested that 'performance metrics, protocols, standards, values and consequence-management systems' would be more effective in managing tacit workers, as such an approach would enable these workers to problem solve using creativity and lateral thinking, in a way that best suits the situation – and bring the best competitive advantage to the company.

Inspired leadership, rather than intrusive management, is the way forward for increasing the productivity of future professionals. These authors suggest that it will become increasingly important to motivate, measure and reward collaborative behaviours in individuals. Workers who are effective at developing the abilities of other talented people or at contributing distinctive knowledge, would be more highly valued in the new organisational model, than those who are equally good at doing their own work but not at developing talent or contributing knowledge.

So, as we race towards the end of the first decade in the 21st Century, it is already becoming clear that we are in need of a different approach to managing the changing face of our modern work-force. As workers become increasingly dissatisfied with outdated management practices, reminiscent more of the Victorian era, it leaves them feeling 'unfulfilled' and 'unappreciated'. Thus the onus has returned to the employer to **select** the best and **develop** and **manage** and **retain** them effectively within the organisation.

Aided by technology, but no longer controlled by it, the management of the knowledge worker, is hugely reliant upon employers appreciating the unique contribution they can and do make to their organisation. At a time when turn over is high, employers must remember that tacit knowledge is protected from competitors only whilst it remains with the organisation, and when key individuals leave, this valuable knowledge is lost to the competition!

In Sri Lanka, as in many other fast developing economies, we have the luxury of learning from the experiences of the older economies in the West. As the playing field equalises, with our expanding knowledge, significantly aided by technology, we must adapt faster and better to the changing forces of the global economy.

The effective management of the tacit worker is still a very new concept to the modern organisation. Many leading organisations, even in the West, are only just realising that they must address this need are on the cusp of exploring ways of harnessing this huge in house energy. It is an energy that all organisations, with talented employees will have, and although we do not as yet have a direct line in to this energy, it is an area that all organisations must seriously consider. Those who are brave enough to invest in their tacit workers stand to gain the 21st Century advantage - one that will surely place the Sri Lankan economy back on the global map.