A Practitioner's Approach to Drucker's Knowledge - Worker Productivity in the 21st Century: A New Model
(Part One)

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Abstract

This article examines productivity in the context of the 21st century, focusing on Drucker's prophecy of knowledge-worker productivity, the power of 'unified strategy', organisational interdependence and a practitioner's approach to knowledge-worker productivity based on Drucker's six determining factors. From these six factors, a nine building-block based questionnaire survey is developed to establish knowledge-worker productivity readiness status; a knowledge-worker review session to plan towards organisational interdependence and a Drucker-based knowledge-worker productivity implementation framework to manage organisational change. This proposal, intended for business organisations, should also accommodate non-business organisations.

Knowledge-worker productivity practice is designed to improve productivity, the quality of work, empowers knowledge workers to accomplish their 'tasks' and, consequently, the 'organisation tasks' by following an organisational 'unified strategy' in an interdependent way that brings about a doing the right thing, the right way approach.

This article provides answers to 'what and how organisations can do to enhance productivity' from their knowledge-workers, to embrace creativity and develop innovation to provide strategic advantage in sustaining growth in the current new economy of global competition. Team commitment is envisaged through the concept of organisational interdependence.

In conclusion, a Drucker-based knowledge-worker productivity implementation framework is proposed, as a management practice to enhance knowledge worker productivity for creativity and commitment. It further demonstrates its competitive power by achieving a unified strategy with implication for organisational change and future applications.

Keywords*:* *knowledge worker, creativity, commitment, productivity, change management, organisational interdependence, unified strategy*

JEL classification: **D24, J24, O47**

Introduction

A practitioner's approach to knowledge-worker productivity is not simply confined to knowledge management nor managing knowledge workers. The phrase "knowledge worker", first coined by Peter Drucker, refers to working with intangible resources (Drucker, 1959). Knowledge-worker productivity advances substantially from the dated productivity improvement processes developed from Frederick Winslow Taylor's scientific method. Knowledge-worker productivity does not directly derive from the seminal work of FW Taylor, Gilbreths, E Mayo, or other productivity improvement practices such as 'work enlargement,' 'work enrichment', and 'job rotation'. By any other name, the foregoing all relate to Taylor's scientific method, which sought to lessen the worker's fatigue, thereby increasing productivity. Similarly, knowledge-worker productivity does not directly emanate from 'the Japanese 'Quality Circle,' of 'Continuous Improvement' ('Kaizen'), and 'Just-In-Time Delivery' (Drucker, 1999).

Moreover, what is critically important, knowledge-worker productivity is not confined to improving 'share-holder value'. It aims to bring about the unity of a 'One Team, One Voice, One Direction' approach for any organisation addressing the 'what to do (the right thing)' and the 'how to do it (the right way)' from their 'most valuable asset—knowledge workers and their productivity' (Drucker, 1999). This economic redefinition of the 'human asset' opposes the thinking of many 20th Century companies that consider their most valuable assets to be production equipment, whilst manual workers are simply considered to be a large part of production costs (Drucker, 1999).

Drucker (1999, p. 136) stated that:

> *"Knowledge-worker productivity is the biggest of the 21st – century management challenges. In the developed countries it is their first survival requirement. In no other way can the developed countries hope to maintain themselves, let alone to maintain their leadership and their standards of living.*"

Prior to the Internet, the average life expectancy of a successful business was only 30 years (Drucker, 1999). In the present-day world of Information Technology, business life-expectancy is more likely to be measured in Internet years where one calendar year is the equivalent of seven Internet years, a view generally supported by a number of network equipment vendors meaning the current life-expectancy of a business is less than five calendar years! One key survival requirement of the more industrialised countries seems to rely more and more on their knowledge-worker productivity than advances in production equipment.

Taken overall, the prime business purpose of creating customers remains unchanged (Drucker, 1996). Hence, the primary goal of knowledge-worker productivity is how best to satisfy customers or the business will fail. It is the customer who determines what a business is (Drucker, 1974, Thomas & Baron, 1994). Research into a practitioner's approach to improving productivity, with

emphasis on customers and knowledge workers, warrants its consideration squarely placed as a key management practice to enhance creativity and productivity gains in this current 24/7 world of global challenges.

Drucker (1999) pointed out that 'work on the productivity of the knowledge worker has barely begun', a view substantiated in a preliminary literature review that identified only limited works measuring knowledge-worker productivity, nor did it identify empirical research conducted in the field of enhancing knowledge-worker productivity in business operations. Acknowledging this lacuna, the purpose of this research is to examine and validate the researcher's proposition of a practitioner's approach to Drucker's knowledge-worker productivity. However, the study here is restricted to the question 'how knowledge workers can best improve their productivity in their work environment?' Measurement of knowledge-worker productivity is not the core of this research. Human Resource (HR) issues are also left for professional HR practitioners to pioneer in areas such as 'managing knowledge- worker productivity which deals with people management', 'managing knowledge workers as associates not subordinates' and 'managing full-time employed knowledge workers as if they were volunteers' (Drucker, 1999).

A Practitioner's Approach to Knowledge Worker Productivity

Drucker (1999, p. 16) defined the role of knowledge-workers as:

> "*Knowledge-workers must know more about their job than their boss does—or else they are not good at all. In fact, that they know more about their jobs than anybody else in the organisation is part of the definition of knowledge workers.*"

Given the biggest gain in productivity is likely to come from knowledge workers and hence, the biggest 21st century management challenge is to increase knowledge-worker productivity (Drucker 1999), it is critical to develop a practitioner's approach to knowledge-worker productivity for business operation, an application that builds on Drucker's six major factors determining knowledge-worker productivity (Drucker 1999, p. 123):

1. Knowledge-worker productivity demands that we answer the question: "*What is the **task**?*"
2. It demands imposing the responsibility for productivity on individual knowledge workers themselves. Knowledge workers have to be ***autonomous*** and manage themselves.
3. Creating continuous ***innovation*** is part of the work, the task and the responsibility of knowledge workers.
4. Knowledge work requires ***continuous learning and*** equally ***continuous teaching*** on the part of knowledge workers.
5. Knowledge-worker productivity is not—at least not primarily—a matter of quantity of output. ***Quality*** is at least as important.

6. Finally, knowledge-worker productivity requires the knowledge worker to be seen and treated as an 'asset' rather than a 'cost' and that they ***want*** to work for the organisation in preference to all other opportunities.

Improving productivity and indeed knowledge-worker productivity is far from being a technical problem, it has become a global economic, social and multidisciplinary policy issue (Prokopenko & North, 1996). Inspired by Drucker's six factors, a practitioner's approach to knowledge-worker productivity is developed to provide organisations with a platform for creativity and commitment originally intended for business leaders that equally applies to non-business organisations seeking knowledge-worker productivity. The following instruments are proposed:

(i) Knowledge Worker Questionnaire Survey: *Evaluating organisation readiness status based the three Dimensional Knowledge-Worker Productivity Matrix,*

(ii) Knowledge Worker Review Session: *Organisational Interdependence Planning Model*, and

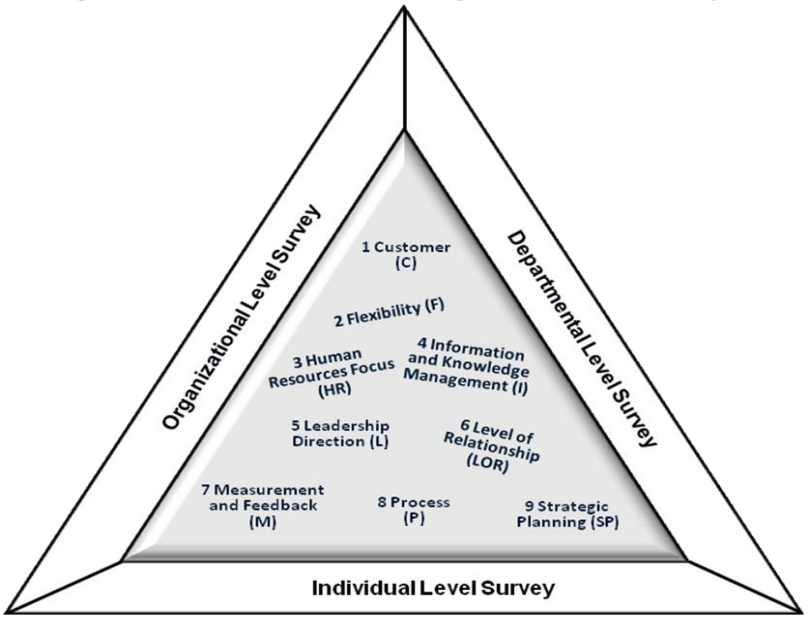
(iii) Knowledge-Worker Productivity Change Management: *The Five-Phase Drucker-Based Knowledge-Worker Productivity Implementation Process*

The foregoing is currently understudied to see how they can be used for business leadership team to provide continuing performance gain and develop a productivity enhancement environment within an organisation.

Evaluating Business Readiness Status

One way to understand how well an organisation possesses ability to deliver its business goals is to measure its business at an organisational level by analysing such issues as its quality of leadership, quality of motivation and quality of capabilities. However, to understand why a business is performing the way it does, is to observe it at its individual levels (Thomas & Barron, 1994, Rittenhouse, 1992). The rationale here is even though it is about inquiring the performance of the whole business, individual units or indeed individuals sometimes participate in particular ways governed by their attitude, knowledge and skill (Bloom, 1956). To obtain a true picture of how and why a business is performing is to employ a three dimensional knowledge-worker productivity matrix with its descriptive building blocks (Figure 1: Three Dimensional Knowledge-Worker Productivity Matrix adapted from Baldrige 2006) proposed for this organisational readiness survey. This survey is developed from Drucker's six determining factors, Baldrige's 2006 Criteria for Performance Excellence and Balanced ScoreCard (Kaplan and Norton, 2004) using the nine descriptive building blocks for questionnaires directed at organisational, departmental and individual levels.

Fig 1:Three Dimensional Knowledge-Worker Productivity Matrix



Source: *Adapted from Baldrige (2006) for this research*

Figure 1 Knowledge-Worker Productivity Building Blocks

The concept of building blocks as criteria to judge performance or productivity is not new. They are often used by institutions such as the American Society for Quality as criteria in their highly prestigious Baldrige National Quality Program for Performance Excellence Awards for US organisations (Baldrige National Quality Program, 2006). Nine building blocks is considered a sufficient number to describe complicated issues (Holland, 1995) that can be regarded as a common yardstick for knowledge workers to describe issues relating to productivity within their organisation, regardless of their roles. The following is a detailed explanation of the terms and definitions of the nine building blocks (adapted from the Baldrige National Quality Program, 2006).

Terms and Definitions

These terms and definitions are used in the design of the questionnaire survey for all three dimensions at organisational, departmental and individual levels.

(1) Customer (C): The primary goal of any business is to satisfy customers or it will fail. It is the customer who determines what a business is (Drucker, 1974, Thomas & Baron, 1994). Without customers, work will have no meaning. There has to be a customer for task to have meaning. Customers can be internal or external to the organisation. Who is or who should be the customer? Is customer

focus a primary initiative of the business that is mutually shared throughout the organisation? How often are customer "Moments of Truth" examined and validated? Are customer satisfactions measured and customer opportunities developed by the various units working together? Are relevant products and services focused on short and long-term market validation?

(2) **Flexibility (F):** Change is a fact of life today. E-business, globally competitive business environment demands agility with the capacity to cater for rapid changes and organisation flexibility. To stay competitive, business organisations should be expected to embrace change to face ever-shorter product lifecycle while governmental organisations have to respond rapidly to new and emerging social issues. Cross-trained and empowered employees have to be viewed and treated as vital assets not costs in today's demanding environment. Do employees support change? Are they trained for change? Are they motivated for change?

(3) **Human Resources Focus (HR):** Today's an organisation's sustainability and success depend more and more on the diverse ethnic backgrounds, knowledge, skills creativity and motivation of its global employees and business partners. Human Resources Focus increasingly commits to employees' satisfaction, development and their well-beings. How do organisation's work and jobs enable all employees and the organisation to achieve high performance? How are compensation, career progression, and related work practices enable employees and the organisation to achieve high performance?

(4) **Information and Knowledge Management (I):** In this era of the internet world, an organisation needs information and innovation to stay competitive. Having access to information helps form an agile business. What information is needed, who has it and where is it? How, when and where to communicate and with whom? Is innovation and creativity encouraged?

(5) **Leadership Direction (L):** Leadership Direction indicates the leadership's focus on the organisation's task, functions, thoughts, ethics, mission, purpose, strategic plans, ideas, culture, values and business goals. Does the leadership provide clear identity of the company? Do employees know *what* and *who* they are? Do the leaders lead by example? Is participation openly invited so that contributions are not restrained by top-down policies and procedure?

(6) **Level of Relationship (LOR):** Relationship reflects how a business is run. To understand relationship is to analyse its context and its meaning. Context comes from the environment where the business is located and its operations. Meaning can be drawn from context such as how significant funds and key initiatives are allocated to critical functional groups for example Sales? Marketing? Channel Partner

Sales? Research and Development (R&D)? On-Line Operations? Traditional Operations? or others. Meaning turns context into knowledge. Meaning helps individuals, functional groups and other related organisations navigate around obstacles and issues. Meaning tells organisational interdependence status as to whether particular functional groups or individuals are open or closed to each other. Understand relationship potentially unlock common meaning from which other related meanings originates.

(7) **Measurement and Feedback (M):** Measurement and feedback should mirror the current performance status and whether a business operation is on track. They reveal customer outcomes, financial and market outcomes, Human Resource focus, employee plans, partner and supplier outcomes and others. Other factors to be included are for example, what will be measured, the frequency of measurement and feedback, who is to be accountable and so on. Feedback should also involve customers, partners and others' view of the organisation.

(8) **Process (P):** For an organisation to be effective requires collaboration between its functional groups. No individual or group should perform alone. Business tasks happen because of deeply interdependent collaborations of interaction. Organisations operate in a process world. It's about the singing from the same song sheet. Does process make doing business easier in planning, ordering, fulfilling, compatibility, synchronization, sales partnering etc.? How open are organisational processes? Between individuals (whom)? Between functional groups (which groups)?

(9) **Strategic Planning (SP):** Strategic planning indicates how organisations establish their strategic objectives and challenges. It determines the extent to which an individual or functional group defines and creates organisational goals, policies, rules, standards, culture and processes. Which individuals or functional groups are the key participants? How are key issues, such as organisation's strengths, weaknesses, opportunities and threats, collected and analysed? What are organisational short- and longer-term planning time horizons and how is it addressed?

Knowledge-Worker Productivity Questionnaire Survey

These nine building-blocks are developed into a self-administered questionnaire survey to identify organisational readiness status on Knowledge-Worker Productivity. Formality includes consultation with the participating organisation to select up to 30 participants from not more than five functional groups. It is anticipated that most organisations will normally prefer their Sales, Finance, Corporate, HR or IT to be involved. It is critical that the most senior executives participate in both the survey and the review sessions (Conner, 1992,

Prokopenko, 1996). For this research study, the knowledge-worker productivity building blocks will be used to construct the three-part survey questionnaire, as well as to provide a template for the follow-up review session. First, is the three-part self-administered questionnaire survey (anonymous and confidential).

Part A consists of twelve groups of questions set at the organisational level (ten minutes to complete).

Part B provides another twelve groups of questions set at a departmental level (ten minutes to complete).

Part C contains 15 questions set at individual levels (ten minutes to complete).

This overall survey can be completed either over three separate ten-minute sessions or in one single thirty-minute session. Part A and Part B employ a forced-choice ranking and a six-point Likert rating scale is preferred over a five or six-point Likert scale (Gwinner, 2006). For Part A and Part B, the nine-building blocks are structured in a set of 12 groups of business scenarios. The participants are asked to compare three scenarios per group and they are asked to make a forced-choice ranking appropriate to their company strategy (Part A) and to their department (Part B). Part C is still a six-point Likert scale where participants assess each building block statement appropriate to their company strategy. Following is a sample of the survey questions (Fig 2 Sample Survey Questions).

Part A: Organisation Level

Company Strategy: Please write here what you feel to be your company strategy

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Group 1: (*Select by underlining only one score per column per group*)	Most		Next Appropriate		Least	
1a: Our leadership provides clear vision and values that guide and sustain the organisation.	6	5	4	3	2	1
1b: Our strategic planning process helps identify potential blind spots.	6	5	4	3	2	1
1c: Our organisation has a system to identify and pursue customers, customer groups, market segments, channel and alliance partners.	6	5	4	3	2	1

Part B: Department Level

Department Strategy: Please write here what you feel to be your department strategy

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Group 13: (*Select by underlining only one score per column per group*)	Most		Next Appropriate		Least	
13a: My department commits to the organisation's vision and value that is reflected in our personal actions.	6	5	4	3	2	1
13b: My department's most important goals address organisation's strategy.	6	5	4	3	2	1
13c: In my department, I know who my customers are (customers could be internal and/or external).	6	5	4	3	2	1

Part C: Individual Level

Company Strategy: Please write here what you feel to be your company strategy

_____

25: My work environment fosters learning and development that contributes to the above-mentioned company strategy.	**6 5 4 3 2 1**
26: My performance goal and targets already comes from the Above-mentioned company strategy.	**6 5 4 3 2 1**

Figure 2 Sample Questionnaire Survey

An expert group review was conducted at the Graduate College of Management, Southern Cross University, with the input of three academics, six DBA candidates and three administrative staff. Data collected from Part A and Part C were used to generate the summary report (to be discussed in Part Two). Data collected from Part B survey was used to generate a collection of inter and intra departmental alignment reports (to be discussed in Part Two). These two sets of reports form the basis of a follow-up consultative report review session where the first stage to enhance knowledge-worker productivity is expected to happen. Inputs from this expert group review resulted in changes to the questionnaire design where a seven-point Likert scale was recommended. Further enhancement to the questionnaire where additional questions based on Balanced ScoreCard (BSC) was also suggested to compare the coherence of this knowledge-worker productivity survey and BSC. The revised questionnaire is currently understudied between three Australian organisations and one Chinese organisation.

Planning for organisational interdependence

Results from the survey, for business application, form the basis for a consulant-led review session as a first step to enhancing knowledge-worker productivity by working towards organisational interdependence (Fig 3 Organisational Interdependence Planning Model).

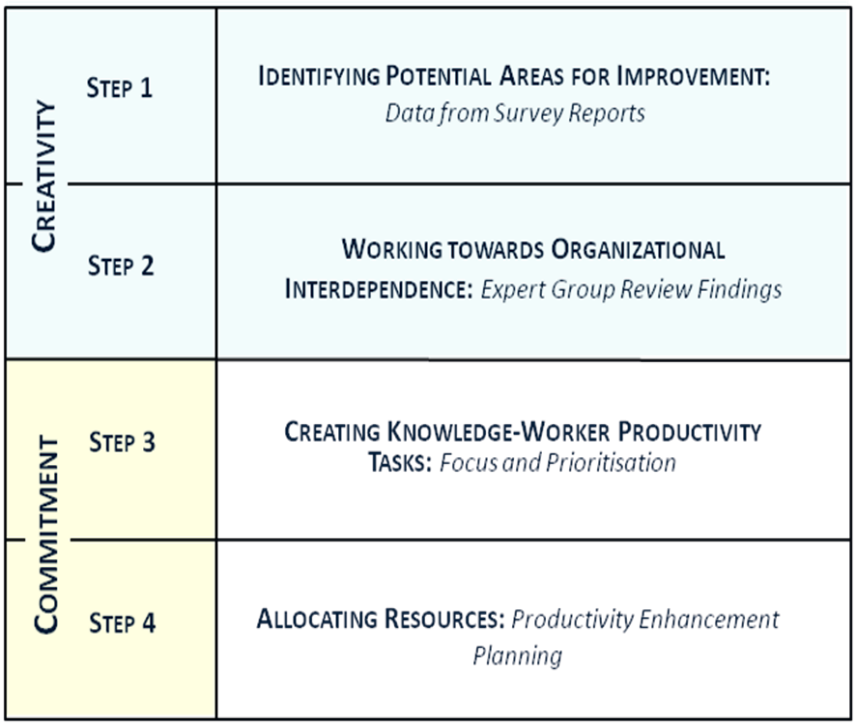

Figure 3 Organisation interdependence planning model

Conclusion

Subject to research examination and validation, this knowledge-worker productivity execution framework for management is now available. 'Unified strategy' does not have to be a marketing pitch. Drucker's prophecy on knowledge-worker productivity works and its practice is within reach. Not only can knowledge-worker productivity improve productivity and quality of work, it should also empower knowledge workers to accomplish their 'tasks' and, thus, the organisation tasks by doing the right thing, the right way following the organisational unified strategy in an interdependent way. However, the power equation within any organisation may shift from managers to knowledge workers. One implication of this power shift: the success of this knowledge-worker productivity process will eventually necessitate a change in both leadership and followership's attitude even in an organisation that is politically deep-rooted in command and control culture. It will be a futile attempt trying to close the Pandora box after it is opened. Thus, once knowledge workers are liberated from manual-worker performance constraints, there can be no turning back to the antiquated management thinking of the last century.

This knowledge-worker productivity process is about bringing out the creativity and commitment of knowledge-workers. 'Share-holder' value is no longer the sole reason for growth. Exploration into this pioneer territory of knowledge-worker productivity, growth and 'share-holder value' may just be a natural result of organisations doing the right thing, the right way. Knowledge-worker productivity practice provides an environment for knowledge-workers to continually create opportunities for themselves and their organisations. Once again "people only support what they create" (Wheatley 2006) plays a major role in achieving the next wave of productivity growth from knowledge workers. In an organisation that embraces creativity and innovations, knowledge workers get the opportunities they created and the chance of working interdependently with other teams of knowledge-workers, they will become highly motivated. They will remain loyal to their organisation. Job security no longer equates as the prime reason why knowledge-workers stay in their jobs. Knowledge workers will feel proud to be connected to a great organisation of knowledge-workers with whom they associate (Edersheim 2007).

The purpose of this paper is to map out Drucker's six determining factors in knowledge-worker productivity for it to be practical as a management tool. Hence the scope of this paper is limited to the application aspect of knowledge-worker productivity to bring out productivity through the creativity and commitment through interdependence of knowledge workers. As proposed in this paper, knowledge-worker productivity application is here today. Any organisation could become the forerunner of Drucker's knowledge-worker productivity. All 21st century organisations seeking to embrace challenges from this borderless world have a means to create tomorrow (Edersheim 2007). However, both Human Resource Management (HRM) applications in the management of knowledge-

workers and the measurement of knowledge-worker performance remain to be explored and fast. This practitioner's approach to knowledge-worker productivity also sets quantifiable tasks which can be explored in future research into the measurement of knowledge-worker productivity. Knowledge-workers should not have to wait for organisations to decide whether to move in Drucker's direction of knowledge-worker productivity. Organisations today need knowledge workers more than they need them. Knowledge workers will have mobility. The balance of power may well have shifted (Drucker 1999).

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