

## Driving innovation: Public policy and human capital

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### Synopsis

Research on human capital has traditionally focused on education and training. Elements of human capital such as employees' job satisfaction, organisational commitment, and willingness to change in the workplace (all of which have been shown to drive innovation), have frequently been overlooked in economic research and by public policy interventions to date. The paper addresses this gap in two ways: First, by studying firms' human resource systems that can enhance these elements of human capital, and second, using the results of this research as a launch-pad for a public policy programme targeted at elements of human capital that have been ignored by traditional education and training interventions. The ultimate aim is to drive firm-level innovation.

### Introduction and Background

Human capital, the set of skills, knowledge, capabilities, and other attributes embodied in people that can be translated into productivity, is crucial to firms' capacity to absorb and organise knowledge and to innovate.

The human capital concept has evolved significantly, and includes attributes relevant to job performance and productivity, comprising personality traits, work attitudes and characteristics such as creativity, wellbeing, and resilience.

The expansion of the domain of human attributes that define human capital can be understood with a taxonomy highlighting the distinction between *can do* and *will do* attributes. Classic exemplars of *can do* attributes include general knowledge,

job knowledge and problem-solving skills. Classic exemplars of *will do* attributes include job-related personality traits, work attitudes and beliefs.

Despite growing evidence regarding the importance of *will do* human capital attributes in business, there has been an almost complete absence of public policy initiatives aimed at these aspects of human capital. This is in large part because the targets for public policy are less obvious when attempting to build *will do* attributes. Policy interventions addressing the *will do* aspects of human capital are a key focus of our study.

We focus on employee-managers, a cohort used in many innovation studies and regarded as key to innovation.

### Issues and Questions Considered

We address two key questions: (1) What human resource systems, policies, and practices of firms are linked to *will do* human capital attributes, such as employee-managers' job satisfaction, commitment to their organisation, and willingness to change? (2) What are the implications for public policy in terms of policy instrument interventions that can effectively promote the development and support of these human capital attributes?

Although organisations cannot directly control the perceptions and attitudes of workers, they can decisively influence these perceptions and attitudes by how they interact with their workforce. Specifically, there is established evidence that well-managed human resource systems have a strong effect on the probability of employees being satisfied,

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Our research finds a focus in the four academic departments of the School as well as in active research clusters and broad thematic descriptors. The current research clusters are: Accountability (ARC); Efficiency & Productivity Analysis; Emerging Risk Assessment & Underwriting; Human Rights & Development Practice; Interpretive Consumer Research; Psychological Science in Business; Privatisation & PPP; and Quality of Work. Research seminars are also regularly organised by the themes of Work, Knowledge & Employment and Public Policy, Enterprise, Governance & Sustainability.

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committed, and willing to make the changes, take the risks, and exert the extra effort that innovation requires.

## Methodology

Ireland's National Centre for Partnership and Performance (NCP) Workplace Survey provided the information used in our analysis.

Our estimations use a series of probit regressions. A total of 21 models are estimated to capture the effect of human resource systems on a range of specific measures of the *will do* elements of human capital constructs.

## Outcomes and Findings

Our results demonstrate that firms providing human resource systems, such as greater use of proactive work practices and greater levels of consultation with employee-managers are associated with an increased probability of job satisfaction, organisational commitment, and their willingness to change. Our results also find that bonus schemes are linked to an increased probability of human capital, as measured by job satisfaction and willingness to change. It should however, be acknowledged that some of the human resource systems we studied reveal mixed results.

Our empirical findings linking organisational policies and practices with *will do* elements of human capital (known drivers of innovation) provides a basis and justification for proposing public policy interventions to assist organisations build capacity to diagnose their own policies and practices and to implement policies

and practices that provide the strongest support for innovation.

Our proposed policy intervention, which we title *InnovativePeople4Growth*, provides organisations with assistance in starting their own processes for building aspects of human capital, taking advantage of the public sector's unique ability to offer organisations assistance and expertise in improving their own policies and practices, with an aim toward building human capital needed to support innovation.

Our proposed policy programme intervention has two key features that distinguish it from several other potential approaches to enhancing innovation-relevant human capital. First, it focuses on an aspect of human capital that has been almost completely ignored by public policy to date (Singapore and a lesser extent the UK being partial exceptions) – the *will do* elements of human capital. We develop analyses that will help organisations and policy makers focus their efforts on human resource policies and practices that are most strongly linked to these aspects of human capital, and we present a lean and efficient set of policy interventions to make maximum use of this research. Second, these interventions consist mainly of time-limited consultations designed to aid organisations in diagnosing their human resource systems and making improvements in those systems in ways most likely to promote innovation. Finally, these interventions represent a set of efforts to help organisations help themselves. That is, they focus on arranging expertise and providing organisations with the tools to build human resource systems that enhance innovation.

Details of the policy programme offer are provided in the table below.

<i>InnovativePeople4Growth</i>		
Programmes/ Activities	Objectives/Intended Outcomes	Existing/New programme
<b>1. InnovativePeople4Growth Start</b>		
Short in-firm consultancy	» Assess level of existing supports at firm-level for the <i>will do</i> , motivationally-relevant elements of human capital	New programme
<b>2. InnovativePeople4Growth Lean Start Plus</b>		
7 days of input from expert consultant on the principles of Lean Business Offer	» Reduce costs and refine process » Introduce Lean skills » Introduce mindset among all personnel that is focused on the <i>will do</i> elements of human capital	Existing programme plus: introducing the <i>will do</i> elements of human capital to management; developing strategy to implement supports for the <i>will do</i> elements of human capital
<b>3. InnovativePeople4Growth Change</b>		
Programme introducing changes to organisational structures	» Introduce Lean principles; promote merits/value of focusing on the <i>will do</i> elements of human capital through supports for employees' job satisfaction, commitment to organization and willingness to change in the workplace. » Develop innovative mindset/culture where innovation is everyone's concern	New programme
<b>4. InnovativePeople4Growth Review</b>		
Short in-firm consultancy	» Review/assess changes/benefits of a focus on the <i>will do</i> elements of human capital; identify possible future adjustments	New programme

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