



10 May 2013

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Dear Geoff

Boosting Productivity in the Services Sector – Issues Paper

Thank you for the opportunity to comment on the Commission's inquiry in to the services sector. We support the Commission considering ICT related productivity issues further.

While it's difficult to divorce ICT related productivity benefits from the enabling technologies and innovation, recent telecommunications sector research suggest ICT uptake makes a significant contribution to a firm and economic productivity. However, ICT uptake varies across businesses and sectors. With large businesses already making significant ICT investments, most benefit is likely to come from considering whether more can be done to encourage greater adoption of mobile and ICT services by small to medium businesses.

Research on productivity gains

In the issues paper, the Commission summarises US research relating to ICT intensity and productivity and notes it is keen to understand whether there is a similar link between New Zealand ICT investment and productivity.

The Commission may wish to augment this research with recent telecommunications related studies where, in the context of broadband policy, policy makers have considered productivity benefits. This research is likely to capture the benefits of ICT investment. In part, this is because policy makers are increasingly looking beyond ICT access, itself, to policies that maximise the adoption, utilisation and impact of ICT services. Further, it is also difficult to isolate the impact of ICT from the facilitative role played by broadband, and from the business transformation – or innovation – associated with ICT investment.

For example, Analysys Mason (AM) undertook, as part of a 2013 study for the European Commission, a literature review of the social-economic benefits of broadband uptake.¹ While AM was asked to identify the benefits of broadband uptake, it refers to several studies that capture business productivity benefits only possible through associated ICT investment. For example, one referenced study found that companies in the services sector adopting broadband-based processes can improve their employee's productivity by 10%.

Booz and Company further explore the link between "digitisation" of an economy (effectively an index relating to access, availability and adoption of ICT services) and productivity, and suggest a 10 percent improvement in the index can lead to a 0.75 percent growth in per capita GDP.² Likewise a recent World Economic Forum report notes that, based on a sample of 14 countries, if countries had doubled the per connection consumption of mobile between 2005 and 2010, they would have experienced a growth rate of GDP 0.5 percentage points each year.³

At the firm level, Deloitte Access Economics recently found that digitally (web) engaged Australian small businesses are two times more likely to be growing revenues and earn two times more revenue per employee than those with low engagement.⁴

ICT adoption in New Zealand

ICT adoption varies across industries and firms. The Booz and Company report suggests that the degree of digitisation varies by up to 50% across European industries.⁵ Further, larger companies tend to adopt ICT services more readily than small to medium size businesses. In part, this is because smaller businesses likely lack the technical focus or scale to readily adopt ICT based solutions. Overall, it's unclear whether ICT uptake by New Zealand firms lags that of high performing countries and this could be considered further by the Commission further.

In any case, the emergence of new Cloud based services and availability of smart mobile devices is changing how large firms use ICT and reducing barriers to ICT adoption by small to medium businesses.⁶ For example, within a modern workspace, 'work' becomes something we do regardless of location, because technology has created flexibility in how we work. Personal devices are increasingly used for work activities. A recent IDC survey found the IT business responders believed that only 34% of staff used smart phones for business activities, while 69% of information workers surveyed said they already were. The demarcation between business and personal devices is blurring. Further, the availability of standardised Cloud services and smart mobile devices reduces the technical and cost barriers for small to medium businesses to adopt ICT in their business.

Service providers see this as a growth area and are making significant investments in capability to support Cloud based services, mobile capability and applications. For example, we continue to develop our cloud capabilities; investing heavily in local data centre hosting, security, integration, aggregation and fixed and mobile network services. We also plan to launch a new 4G mobile

¹ See Analysys Mason report *The Social Economic Impact of Bandwidth* at page 38 <http://ec.europa.eu/digital-agenda/en/news/study-socio-economic-impact-bandwidth-smart-20100033>.

² See Booz and Company report *Digitization and Prosperity*. <http://www.strategy-business.com/article/00127?pg=all> and reported at 1.2 of the World Economic Forum (WEF) report *The Global Technology Report 2013*. <http://www.weforum.org/issues/global-information-technology>

³ See 1.6 of the WEF report.

⁴ Deloitte. Connected Small Businesses. April 2013 http://www.deloitte.com/view/en_AU/au/insights/browse-by-content-type/media-releases/353dcb8dd760e310VgnVCM1000003256f70aRCRD.htm

⁵ See Booz and Company 2012 update http://www.booz.com/media/file/BoozCo_The-2012-Industry-Digitization-Index.pdf

⁶ Cloud services are services, such as email, which are hosted within a central facility rather than the end users device.

broadband network starting in Auckland from October 2013. Alternatively, application providers such as Xero are developing innovative services that encourage businesses to take up ICT services.

This is a dynamic area and it's unclear whether any specific initiatives are required by Government. There are already any number of service providers focused on delivering ICT services to firms. However, areas for further consideration could include:

- Whether there are any regulatory impediments to the adoption of Cloud based services? For example, the Government is currently considering lawful interception requirements for communications services. That policy process needs to properly consider the issues and implications for remotely hosted Cloud services. Further, clarity around the firm's data storage obligations and opportunities would likely give firms further confidence to use cloud based services.⁷
- Whether enough is being done to educate or promote to small to medium businesses the benefits of ICT (or adopting digital business models)? To make the most of ICT requires existing firms to consider the benefits beyond what they currently do, i.e. develop a vision beyond their current needs. This is not necessarily easy to do. While the ICT industry has an incentive to promote ICT adoption, there may be some facilitative role for policy makers to educate and promote uptake.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'JWS', is positioned above the typed name and title.

John Wesley-Smith
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⁷ See Frost and Sullivan media release <http://www.frost.com/prod/servlet/press-release.pag?docid=269925173>