

Impact of using social media at work

A recent TNO study found that using social media at work encourages innovative, active work behaviour among Dutch employees but does not increase emotional exhaustion due to information overload. Researchers discovered that social media use favoured innovative work most if its use was not in the context of company-wide information and communication technology (ICT) such as workflow or enterprise resource planning (ERP) software, which standardise work practices.

Background

With increasing use of innovative information and communication technology (ICT) in the workplace and associated changes in business processes, use of social media (the newest ICT trend) can be one way of providing workers with immediate communication and information, and supporting innovative work behaviour. However, there are concerns that use of social media may increase emotional exhaustion due to information overload. Conversely, the introduction and use of company-wide (ICT) such as workflow or enterprise resource planning (ERP) software since the 1990s has standardised company practices, leaving little room for innovative behaviour and encouraging passive behaviour.

Regression analysis of data from a multi-year cohort study on social innovation (CSI) has been used by researchers from the independent Dutch research organisation, [TNO](#), to investigate the consequences for innovative work behaviour and employee well-being from the use of these seemingly contrasting tools, that is, social media and company-wide ICT.

Methodology

Two waves of the CSI were used, designated 'Time 1' (2008) and 'Time 2' (2009). Data were collected from an existing panel of potential participants via online questionnaires completed by 3,327 Dutch employees. Response rates were high (84% in 2008; 24% in 2009 due to attrition).

The key independent variables were:

- use of social media;
- use of company-wide ICT.

These were assessed by a multiple-answer question on computer programmes used by employees in their work. The answer categories included:

- 'instant messaging, Microsoft® SharePoint®, wikis and/or blogs';
- 'workflow software';
- 'ERP software';
- '(other) professional accounting software'.

The dependent variables were:

- 'innovative work behaviour' (IWB);

- employee well-being – conceptualised as ‘emotional exhaustion’ (EE).

IWB was assessed using a four-item self-reporting scale on explorative and exploitative behaviour concerned with products and processes, of which one example was ‘I contribute significantly to the renewal of products/services for my organisation’ (1 = never to 7 = always).

Results

Table 1 presents the results of the multiple linear regression conducted on Time 2 IWB and EE, with Time 1 IWB and Time 1 EE, and socio-demographics, respectively, as predictors in Model 1 (M1). The main effects of the use of social media (significant on IWB) and the use of company-wide ICT were added in M2; M3 contains their interaction term. Table 2 shows the results of the regressions on (EE) with the four models. The results are shown as the regression coefficient (β), together with an indication of the degree of significance (probability value, p).

The results were robust in the M4 adjustment for other work organisation measures. The figure below on innovative work behaviour visualises the significant, interaction between ‘use of social media’ and ‘use of company-wide ICT’. However, the analyses show that the concept of ‘innovative work behaviour’ is quite stable over time. The results shown in Table 2 indicate no effects on ‘emotional exhaustion’ from the ‘use of social media’ and ‘use of company-wide ICT’.

	Time 2 IWB (2009)			
	M1	M2	M3	M4
Independent variables	β	β	β	β
Time 1 IWB (2008)	0.58 ***	0.57 ***	0.57 ***	0.55 ***
Time 1 Use of social media (0=no; 1=yes)		0.03 *	0.04 *	0.03 *
Time 1 Use of company-wide ICT (0=no; 1=yes)		0.02	0.02	0.02
Time 1 Use of social media × use of company-wide ICT			-0.03 *	-0.03 *
Time 1 Quantitative job demands				0.06 ***
Time 1 Task autonomy				0.06 ***
R²	0.43	0.43	0.43	0.44

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Analyses adjusted for sex, age, educational attainment and occupation.

Source: CSI 2007, 2008, 2009

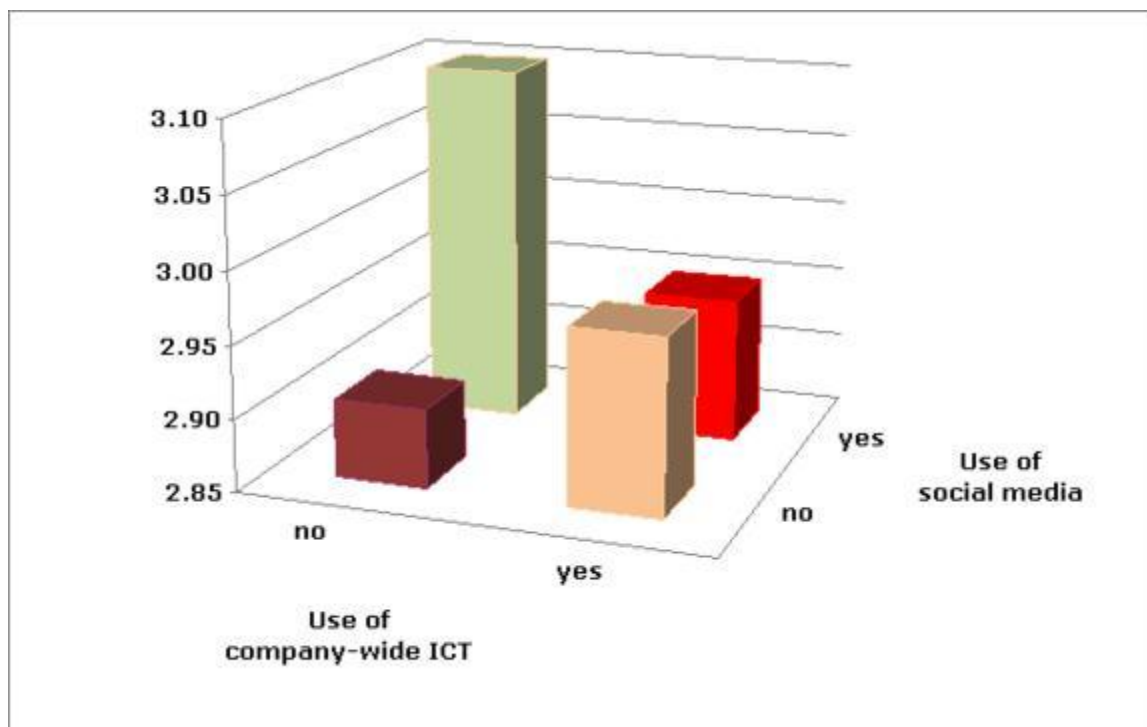
Table 2: Regression on emotional exhaustion (EE)				
	Time 2 IWB (2009)			
	M1	M2	M3	M4
Independent variables	β	β	β	β
Time 1 EE (2008)	0.64 ***	0.64 ***	0.64 ***	0.64 ***
Time 1 Use of social media (0=no; 1=yes)		0.02	0.02	0.02
Time 1 Use of company-wide ICT (0=no; 1=yes)		-0.01	-0.01	-0.01
Time 1 Use of social media \times use of company-wide ICT			0.00	0.00
Time 1 Quantitative job demands				0.06 ***
Time 1 Task autonomy				-0.03 *
<i>R</i> 2	0.41	0.41	0.41	0.42

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Analyses adjusted for sex, age, educational attainment and occupation.

Source: CSI 2007, 2008, 2009

Innovative work behaviour predicted by use of social media and company-wide ICT



Source: Kraan et al (2011a)

Conclusions

This study revealed that:

- emerging technologies such as social media can enhance innovative work behaviour (IWB) but there is no such effect from the use of company-wide ICT;
- in a work organisation context not resulting from 'blueprint' workflow or ERP solutions, use of social media yielded the most favourable IWB;
- there was no support for the supposed adverse consequences on emotional exhaustion from the use of 'information overloading' social media.

References

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