# InfoSec: Satisfied?



## Abstract

Information security (InfoSec) is a term often used synonymously with cyber security. Secure actions within the cyber, informational space represents a priority for many organisations, with both the military and commercial businesses keen to ensure they operate safely and securely whilst utilizing the benefits of information sharing
This ***exploratory*** research aims to determine whether there are common themes emerging from perceptions of Infosec practices amongst professionals working in information assurance or cyber roles within defence and security settings.


## Method

*Participants:* Thirty-four participants (approx. 90% male, mean age 39) took part. A mix of military and civilian participants were sampled. All were registered students on a Cranfield University's Cyber Masters Programme (MSc Cyber Defence & Information Assurance; MSc Cyberspace Operations). All were part-time students and otherwise held professional positions relevant to information security.

*Design:* In an adaptation of the critical incident technique (Flanagan, 1954), two main questions were posed:

**What are the sources of SATISFACTION with information security within your professional working environment?**

**What are the sources of DISSATISFACTION with information security within your professional working environment?**

Procedure: All data was collected in a classroom setting. Participants were given 10 mins to generate their answers to each question on the provided record cards (2 X 10 mins). Participants could use as many record cards as desired. Most participants reported that the questions were easy enough to answer. However, some Cyberspace Operations students indicated that some of the answers they had in mind were withheld or sanitized due to security classifications.

## Results

Following transcription, 142 items were inspected. Overall, there were marginally more sources of dissatisfaction (n = 73) than satisfaction (n = 69) reported.
The items were subjected to word count and template analysis according to PESTLE criteria (e.g., Brown, 2007).

*Coding phases*:
(e.g., Braun & Clarke, 2006)

1. Transcription
2. Initial coding
3. Second coding
4. Coding review
5. Coding review.
6. Finalisation

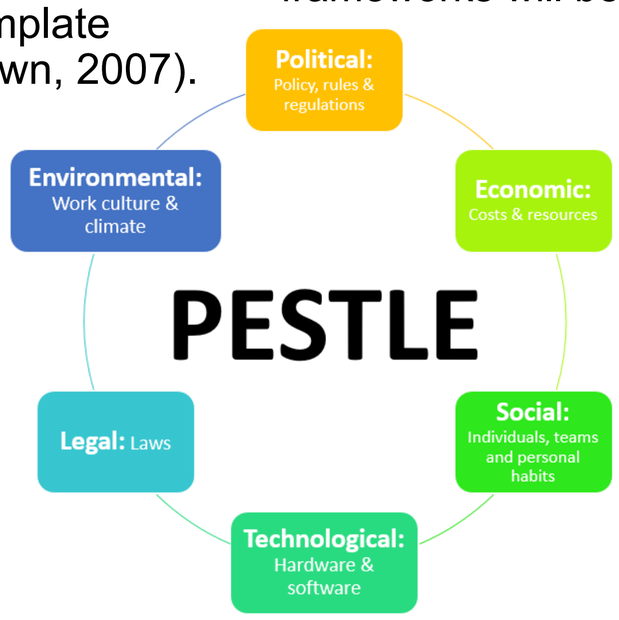
Table 1: Coding agreement

| Agreement 1st-2nd code | Final Agreement |
|---|---|
| 70% | 90% |

Items with individual codes: 105
Items with multiple codes: 23
Items that could not be coded: 14

| Code | Satisfaction | Dissatisfaction | Overall |
|---|---|---|---|
| Political | 19 (28%) | 17 (21%) | 36 (24%) |
| Economic | 0 (0%) | 2 (3%) | 2 (1%) |
| Social | 5 (7%) | 15 (19%) | 20 (14%) |
| Technological | 23 (34%) | 21 (26%) | 44 (30%) |
| Legal | 0 (0%) | 0 (0%) | 0 (0%) |
| Environmental | 21 (31%) | 25 (31%) | 46 (31%) |

*Future research:* When evaluating the coding process, Berkowitz (1997) recommends close inspection of explanatory power and anomalies. As such, and building upon this initial research, further data collection is planned. Once collated, data will be subjected to deductive template analyses with multiple InfoSec capability frameworks. Multiple coders, and spaced coding sessions will be used to ensure methodological rigor and to allow for interrater reliability to be calculated. Following this, the explanatory power of the competing frameworks will be evaluated and reported





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### Key References

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