The Ten Commandments and Information Security Culture

Towards the Human Firewall

Prof Rossouw von Solms
Nelson Mandela Metropolitan University
South Africa
Towards the Human Firewall

AGENDA

1. What is the problem?
2. Why a human firewall?
3. What is a human firewall?
4. How can this be achieved?
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The objective of this presentation is to provide some guidance towards answering these questions.
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1. What is the problem?

– Lack of senior management involvement and commitment
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1. What is the problem?

– BUT, strong indications that senior management is accepting their responsibility in this regard

• Codes of Practice
• Legislation
• Corporate Governance
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1. What is the problem?
   - Senior management commitment only the start of the solution
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– Senior management commitment only the start of the solution

– Total involvement and commitment from ALL employees are required
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1. What is the problem?

- Senior management commitment only the start of the solution
- Total involvement and commitment from ALL employees are required

How can this be achieved?
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2. Why a human firewall?

– Employees are responsible for most security breaches – up to 80%

– Kevin Mitnick in The Art of Deception: “The employees are the target!”
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3. What is human firewall?

Proper policies, procedures, rules, regulations
(a framework of acceptable behaviour)
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Proper policies, procedures, rules, regulations
(a framework of acceptable behaviour)

+ Awareness of above by employees
(knowledge of acceptable behaviour)
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Proper policies, procedures, rules, regulations  
(a framework of acceptable behaviour)

+  

Awareness of above by employees  
(knowledge of acceptable behaviour)

+  

Total commitment of ALL employees to above  
(desire towards acceptable behaviour)
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3. What is human firewall?

Proper policies, procedures, rules, regulations
(a framework of acceptable behaviour)

+ Awareness of above by employees
(knowledge of acceptable behaviour)

+ Total commitment of **ALL** employees to above
(desire towards acceptable behaviour)

= Desired Employee Behaviour / Human Firewall
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4. How can this be achieved?

– Through the creation of an Information Security Culture amongst all employees
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4. How can this be achieved?

– Through the creation of an Information Security Culture amongst all employees

– What would an Information Security Culture be?
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4. How can this be achieved?

Common moral standards, respects, interests, ways of doing things, etc.
(a framework of ‘acceptable’ behaviour)

+ Knowledge about the above
(educated and drilled till inherent to individual)

+ Commitment to abide to the above by everybody

= Culture
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4. How can this be achieved?

Culture dictates Behaviour!
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4. How can this be achieved?

How can a security culture be cultivated?
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4. How can this be achieved?

Analogy:

Security Culture vs Religious Culture
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The Moses Model – Example from the Christian / Judaism religion

Christianity (like any other religion) has influenced the culture of many nations over many years – in fact it became a culture in many countries!

How did this happen?
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The Moses Model

Religious Culture
God announced the commandments as to how He wants to be served (Ex 20:1)
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The Moses Model

Religious Culture
God announced the commandments as to how He wants to be served (Ex 20:1)

Security Culture
Top Management must announce the way their employees must serve the organisation
Religious Culture

Ten commandments were given (Ex 20:)
The ten commandments stayed static over thousands of years
Towards the Human Firewall
The Moses Model

Religious Culture
Ten commandments were given (Ex 20:)
The ten commandments stayed static over thousands of years

Security Culture
The Corporate Security Policy should not be too bulky
The policy should be fairly static over time
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The Moses Model

Religious Culture

The Book of the Covenant (Ex 21-24) spells out many laws (613 in total). These laws are based on the 10 commandments. These laws directed the lives of the people and ensured that it is in line with God’s will (10 commandments).
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The Moses Model

Religious Culture
The Book of the Covenant (Ex 21-24) spells out many laws (613 in total)
These laws are based on the 10 commandments
These laws directed the lives of the people and ensured that it is in line with God’s will (10 commandments)

Security Culture
Lower level statements
More specific
More dynamic
Quite detailed
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The Moses Model

Religious Culture

The laws are supported by a series of directions (Ex 25-32)

The directions stipulate *how, when and where* God must be served

The directions are grouped for different groups of people
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The Moses Model

Religious Culture
The laws are supported by a series of directions (Ex 25-32)
The directions stipulate *how, when* and *where* God must be served
The directions are grouped for different groups of people

Security Culture
Dictating behaviour
Non-technical
Group specific
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The Moses Model

Religious Culture
The ‘framework’ of acceptable behaviour

Security Culture
The ‘framework’ of acceptable behaviour
Towards the Human Firewall
The Moses Model

Religious Culture
The commandments, laws and directions must:
1. “Never forget these commands”
2. “Teach them to your children”
3. “Repeat them
   • when you are at home
   • when you are away
   • when you are resting
   • when you are working”
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The Moses Model

Religious Culture
The commandments, laws and directions must:

4. “Tie them to your arms”
5. “Wear them on your foreheads”
6. “Write them
   • on the door-posts of your houses
   • and on your gates”

(Deut 6:6-9)
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The Moses Model

**Religious Culture**
The commandments, laws and directions must be read and educated to the people (Deut 6:6-9)

**Security Culture**
Security awareness and education
- Regular
- Continuous
- Everywhere
- Any time
- Reminders everywhere
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The Moses Model

Religious Culture
The education towards acceptable behaviour

Security Culture
The education towards acceptable behaviour
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The Moses Model

Religious Culture
Failure to commitment lead to punishment
(Deut 8:20)
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The Moses Model

**Religious Culture**
Lack of commitment lead to punishment (Deut 8:20)

**Security Culture**
Lack of commitment should lead to disciplinary actions
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The Moses Model

Religious Culture
The commitment towards acceptable behaviour

Security Culture
The commitment towards acceptable behaviour
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Security Culture - The Current Situation

- Proper policies, procedures, rules, regulations
  + Awareness of above by employees
  + Total commitment of ALL employees to above

= Human Firewall / Security Culture
Towards the Human Firewall

Effective Information Security requires a Human Firewall

A Human Firewall requires a Security Culture

To grow a Security Culture

• Framework of policies and procedures
• Education
• Commitment
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Effective Information Security requires a Human Firewall

A Human Firewall requires a Security Culture

To grow a Security Culture

- Framework of policies and procedures ?
- Education ?
- Commitment ?

How ?
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Thank you