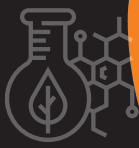
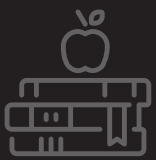
FIA FOOD INDUSTRY ASIA

FIA Food Risk Communication Toolkit

Model Process Summary





FIA FOOD RISK COMMUNICATION TOOLKIT

This Model Process is a summary of the complete FIA Food Risk Communication Toolkit. It is composed of a set of tools that allows consumers, the food industry, institutions and government agencies to explore the full range of activities in food risk communication. Great flexibility is allowed in the usage of tools as the process can be executed from a theoretical, strategic modular or tactical standpoint. The range of the Toolkit was extended to cover critical food incidents, the treatment of which has confounded responsible agencies and impacted consumer confidence in food safety and trust in food chain actors. Other points of discussion include exploring the structure and management of trust in the food sector and in individual food chain actors, and introducing the principle of optimising trust via a proposed FIA Trust Operating Model.

When used together with the full Toolkit, a comprehensive treatment of food risk challenges is presented.

FIA FOOD RISK COMMUNICATION TOOLKIT

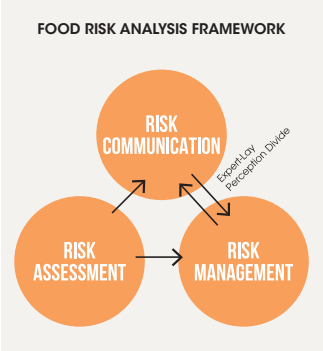
FIA FRC MODEL PROCESS

Toolset 1
THEORETICAL ALIGNMENT

Clarity & Coherence in Food Risk Communication

1 A Unified Definition of Food Risk Communication Applicable across the entire Food Sector

2 Integrating Food Risk Communication in the FAO (2007) Risk Analysis Framework



Toolset 2
STRATEGIC APPROACHES

Diagnostic (Needs-based)

I Traditional

II Modern

III Lifestyle & Nutritional

IV Critical Incident Interventions

3 4 Domains of Food Risk Communication

Toolset 3
TACTICAL INTERVENTIONS

Pragmatic & Accessible (Evidence-based)

4 Common Intervention Tools: Essential Toolkit Elements (**ETEs**) & Execution Imperatives (**EIs**)

5 Defined FRC Toolkit Aims

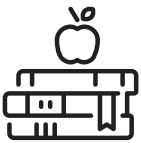
- **Manage consumer risk perception;**
- **Influence & modify behaviour;**
- **Contribute towards inclusivity of discourse:** Open, accessible, value-laden, culturally centered, responsible, positive social relationships;
- **Recovery and renewal following crisis.**

6 Trust Structure, Measurement & Management, Operationalising the 'Critical Trust' Concept through Trustworthiness Beliefs, Intentions & Behaviours

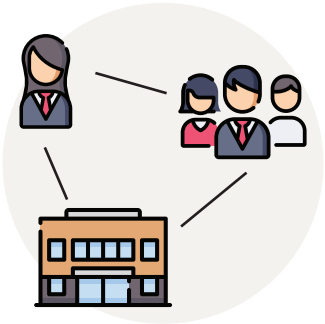
THE CENTRALITY OF
TRUST

Essential Toolkit Elements (**ETEs**) & Execution Imperatives (**EIs**) illustrate the depth and breadth of the tactical interventions in Food Risk Communication that are important summaries of actions or reference points, which may be necessary as part of strategic approaches to the toolkit.

Toolset 1
THEORETICAL ALIGNMENT



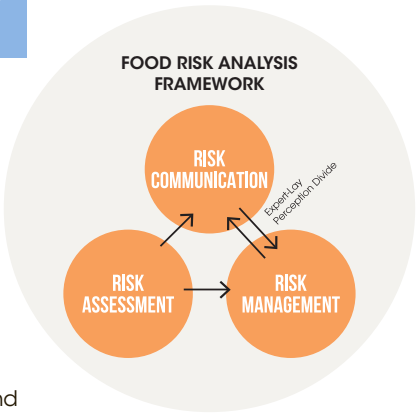
Providing a unified definition of food risk communication is a priority, since there are multiple definitions from a range of credible bodies in common usage and no canonical definition. A unified definition sets the tone, an imprinting moment that unites the process, message development and relationship building.



TOOL 1 A Unified Definition of Food Risk Communication Applicable across the entire Food Sector

Food Risk Communication is a long-term, interactive, two-way process of exchange of food risk and benefit information and opinions among individuals, groups and institutions. It involves multiple, value-laden messages about the nature of risk and food risk preceptions that express concerns, opinions, or reactions to risk messages or to legal and institutional arrangements for an integrated food risk analysis framework.

TOOL 2 Integrating Food Risk Communication in the FAO (2007) Risk Analysis Framework



While risk communication originated from risk assessment and risk perception studies, clearly neither risk assessment nor risk management research have been separate streams. Building on the FAO (2007) risk analysis framework is essential to positioning effective food risk communication at the forefront of food risk management with technical assessors and regulators. The ideal information flow between the pillars of risk communication and risk management is two-way. Feedback from food risk communication campaigns will inform risk management decisions providing updated information on policy, values and trends in risk perception. In the opposite direction, the scientific inputs of risk assessors will inform risk communication, particularly in cases of dynamic food-related risks occurring in critical incidents.

Toolset 2
STRATEGIC APPROACHES

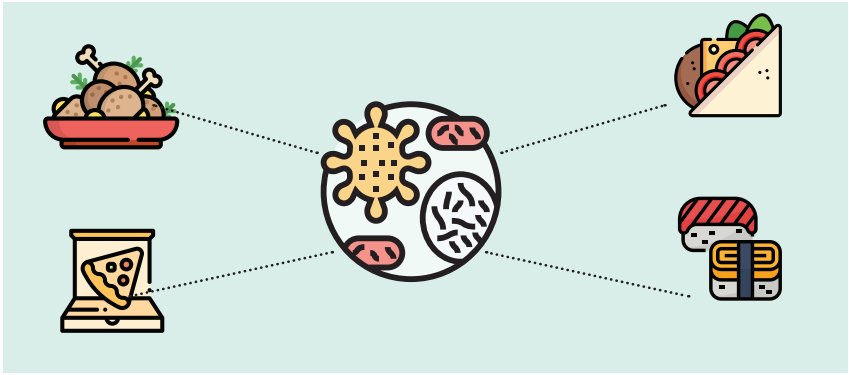
The strategic approaches segment the most important risk groupings to develop four modules with corresponding strategies, tactics and aims. There is no singular strategic or generic approach to food risk communication since the problems posed and objectives are distinct.

TOOL 3 4 Domains of Food Risk Communication

MODULE I-TRADITIONAL FOOD RISKS

Intro

Traditional Food Risks are risks around food safety, which includes **microbiological contamination, food spoilage during inadequate storage conditions and cross-contamination**.



Module I aims to inform and motivate audiences to activate existing knowledge and inspire a wide range of audience segments to make better decisions about food preparation, storage and handling to reduce food safety incidents.

ETE and EI: Top-3 Reference Points

EI Group

EI-1 Established FRC Maxims — All — High

In general, the PR type approach has proven successful. Short, on message, stay on message and repeat. See Module III for more PR approaches including a custom PR hybrid approach.

EI-4 Audience Psychological Variables — All (as specific project dictates) — Medium

Understanding precisely what psychological insights may assist in the campaign message development or process of delivery.

EI-1 Audience Demographics — Socio-Economic Position (SEP) — Medium

Low SEP audiences may be more constrained in their adoption of safer food practices, or may engage in behaviour more likely to cause foodborne disease (consumption of expired products etc).

ETE Group

ETE-1 New Risk Communication Perspectives — Commitment, Time & Scope, Persistence — Medium

Traditional food risks are an eternal problem requiring long-term campaigns. Innovative approaches, such as applying the Food Disgust Scale (FDS) may provide new impetus to the area.

ETE-1 New Risk Communication Perspectives — Cultural Influences & Identification — Medium

Food risk is often culturally sensitive and what may be considered "safe" or "unsafe" may be influenced by deeply held cultural factors.

Group — Item — Importance — Notes

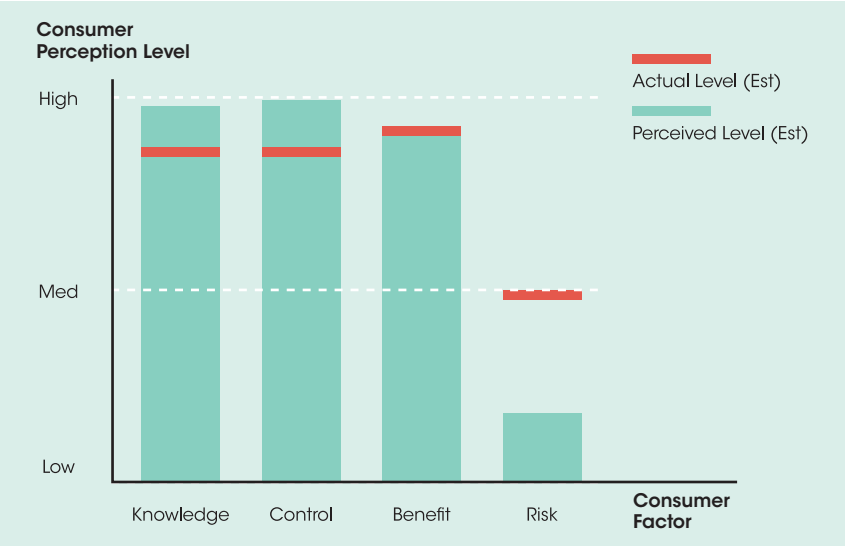
ETE-1 FRC Best Practices | A 2-way Dynamic process | High

How many food safety campaigns lay claim to be interactive or responsive to audience needs? How can a campaign assess where audiences seek food safety information as well as tailoring content as risks change over time?

Group | Item | Importance | Notes

Perceived knowledge, control, benefits & risk scenarios (KCBR Configuration)

These diagrams attempt to summarise how key factors of consumer perception in the Module generally reside, and what changes to these factors will assist in meeting the aims. During campaigns, it is important during formative research—the process of measuring certain audience characteristics and perceptions—to understand audience levels of knowledge, and how perceptions of control (individual control and control by authorities over risks), risks and benefits are distributed.

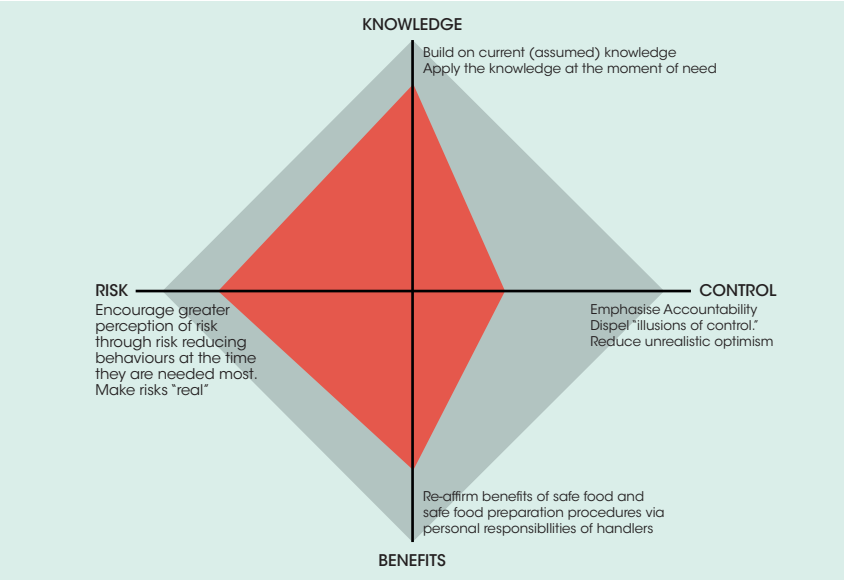


Knowledge, Control and Benefits: These three elements are generally perceived by the public as high. Audiences generally have the knowledge they need, they are in complete control and they understand the benefits of implementing such knowledge and skills learned. In reality, these variables might be lower but are completely adequate.

Risk: Public risk perception on traditional food risks is low. Public audiences feel safe with regards to such food hazards and that they are firmly in control, making informed choices based on past experience and information at hand from labels, venue hygiene certification and choice of food group. These risks are familiar, and the psychological distance (Trope & Liberman, 2003) is small. They may well feel any information on food safety does not apply to them, their own risk management steps are sufficient.

KCBR Reconfiguration

Emphasis is placed on increasing perception of risks and linking risk reducing behaviours directly to mitigation of risk

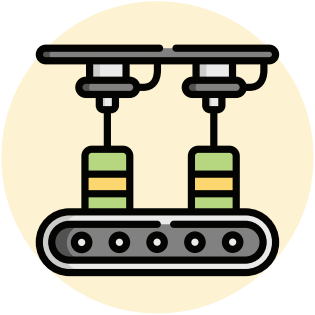


Key Strategies

- To activate high levels of existing perceived individual knowledge, information must be made to appear relevant and necessary to the individual. Tailoring of messages to specific kinds of end-users—wet market vendors, restaurant staff, retailers, family 'gatekeeper's' i.e. mothers etc—is essential to motivate and stimulate understanding and the desire to acquire new knowledge and skills.
- Unrealistic optimism about avoidance of spoilage and contamination during preparation must be overcome with not only information, but emphasis on personal control and responsibility applying to both "self" and collectively.
- Long-term patterns of information seeking on traditional food risks for specific food groups needs to be determined in order to understand their impact on food preparation and storage and how targets respond to different media.

MODULE II-MODERN FOOD RISKS

Intro



Modern food risks are diverse and can be grouped to reflect the range of modern food interventions and innovations that characterise today's production systems. 6 modern food risks groupings are presented **Modern Processing Technologies** (Food Irradiation, High pressure processing), **Artificial Ingredients, Novel foods, Chemical contaminants, Environmental contaminants, and Nanotechnology**.

Module II aims to deal with public risk perception of modern food risks, by accounting for cognitive risk factors (CRFs) identified through real-world evidence and peer-reviewed research. Through this primary strategy and in combination with others, we aim to enable balanced decision-making around risk-benefit evaluation of new food technologies to enable innovations in the food sector.

ETE and EI

EI Group

EI-2 Levels of Risk Debate | Level 3. Values, Beliefs & Worldviews. | High

Generally, concerns over risks in this module go beyond the technical, statistical or the experience and competence of regulators or the effectiveness of the risk management measures applied to the risks. Whilst these factors are important, it is clear that the needs of the audience are critical and meeting such during a risk debate is important. In this module, the risk level generally elevates to debate around worldviews, values and beliefs.

Group | Item | Importance | Notes

EI-6 Risk Subcultures | Depends on audience characteristics | High

Research points to four or five patterns of audience social response to risk, so-called "value clusters" that separate different groups in society from each other. Such groups have formed specific positions on risk topics and have developed corresponding attitudes and strategies.

EI-5 General Audience Factors | All | High

SEP, gender and some characteristics under "general attitudes" are important in completing the overall audience characterisation. Other specific audience factors to this Module are explored as part of the communication model proposed.

ETE Group

ETE-1 New Risk Communication Perspectives | Cultural Influences & Identification | High

Culture and past experiences in a local context will influence how consumers react to modern food technologies. Moral & ethical concerns may be supplanted by food safety, quality or economic factors. Research is necessary to define the impact of such.

ETE-2 Past Learnings | Primacy of Risk Perception (see EI-3) | High

Risk Perception of audiences should be confirmed as per the predominant categories identified in the Module. Many failed food risk communication efforts in this area assumed consumer rejection was based upon concerns around human health or safety, when other risk factors were far more important to audiences. Methods under EI-3 are critical, but assumptions according to past evidence may suffice, but only if formative research is impractical.

Group | Item | Importance | Notes

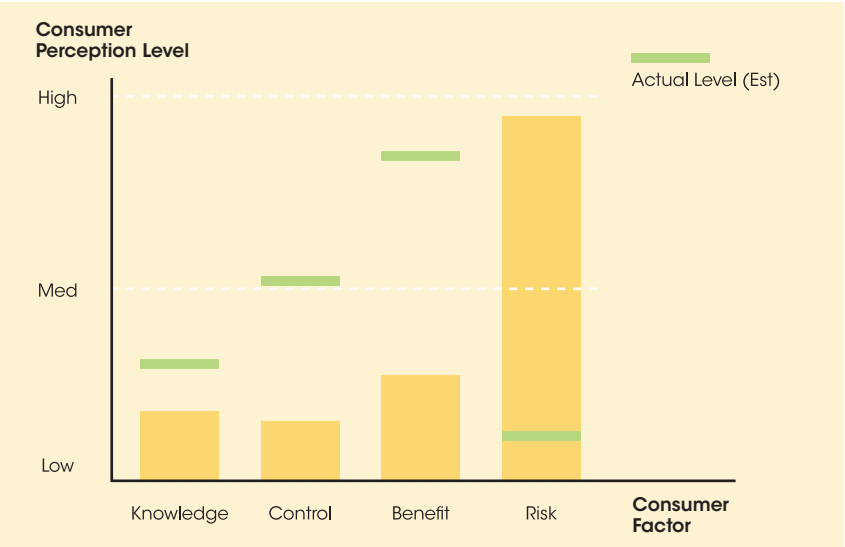
ETE-2 Past Learnings | Interactive-Inclusive Discourse Process | High

This Module should embrace the concept of defining success by the quality of social relationships with audiences. Experience has shown that these long-term challenges can only be overcome by repeated interaction and engagement.

Group | Item | Importance | Notes

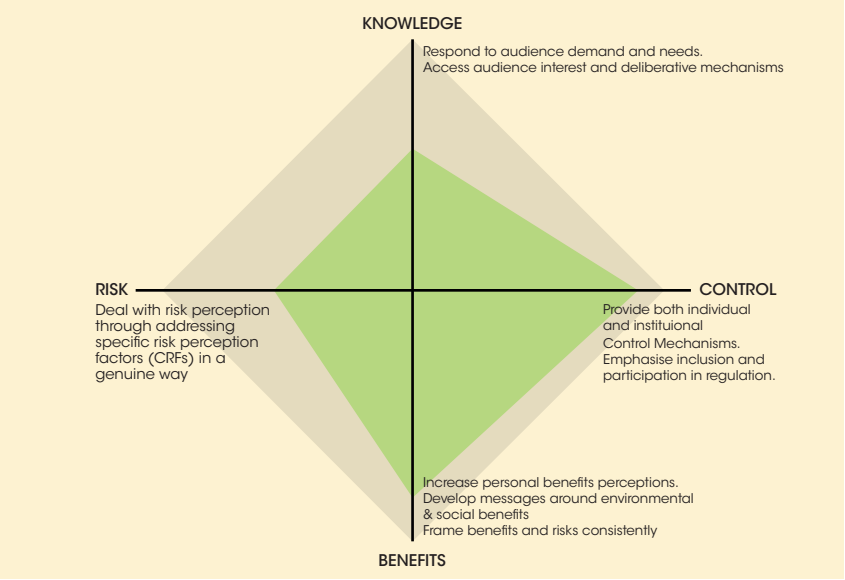
Perceived knowledge, control, benefits & risk scenarios (KCBR Configuration)

In this module, the generalised approach to KCBR makes a number of assumptions that formative research may prove to be inaccurate. However, from previous peer-reviewed research, it is clear that all of the KCBR communication variables are important in shaping discourse on modern food technologies.



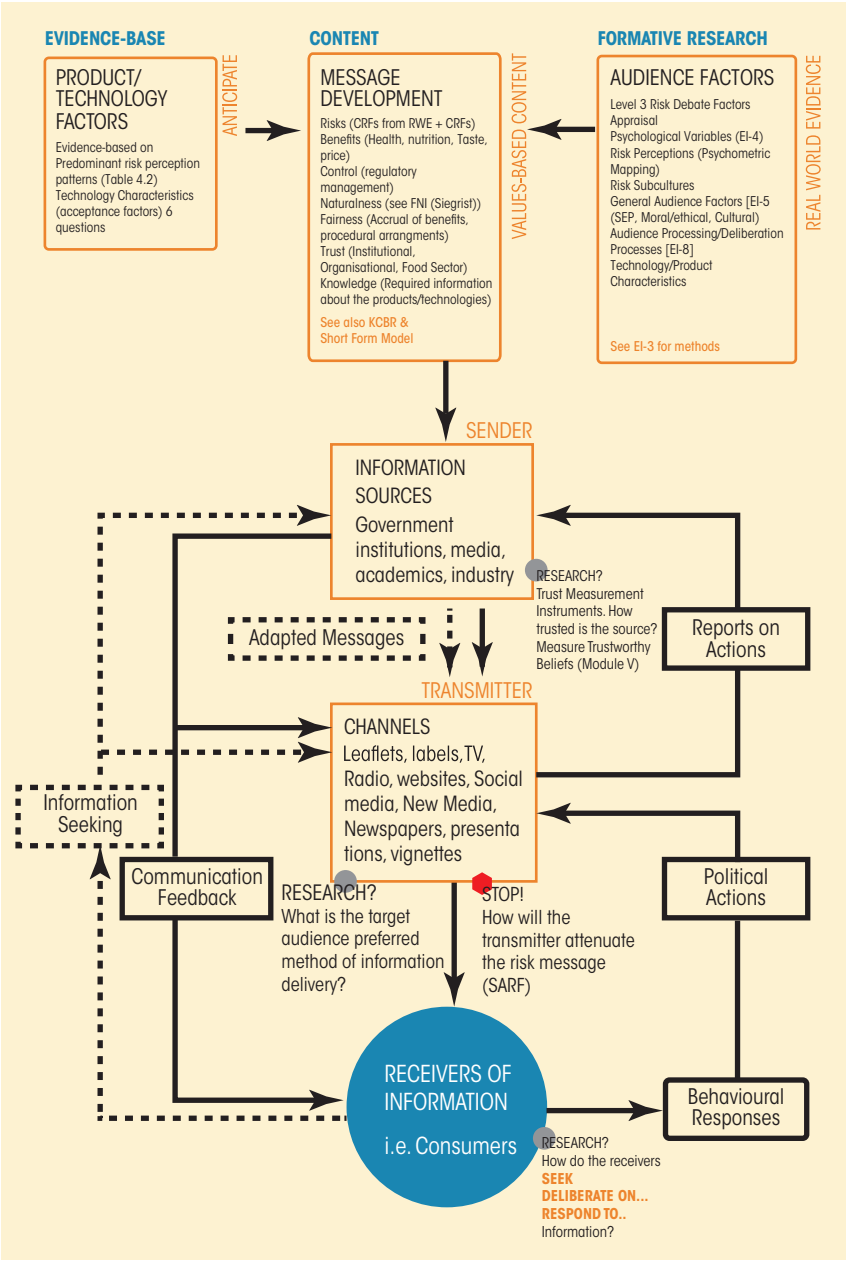
- **Knowledge**: Consumers have little knowledge about modern food technologies and usually such information is perceived as overly-complex and difficult to find in their preferred or usual sources of information.
- **Benefit**: The benefits from the broad range of modern food technologies are appreciated to some extent, but as a general point consumers may view the benefits as being negligible and accruing to others. In reality, benefits are far more tangible and have transformed modern food production systems to the benefit of most consumers in ways they could well understand (convenience, cost, nutrition, environmental protection and increased choice) but may not appreciate given the balance of risk and benefit. The typical configuration of both risk and benefit may be perceived as being inconsistent and hard to comprehend (*van kleef et al., 2006*)
- **Risk**: There are some very significant risk perception factors around many of the technological applications as part of the six groups identified, hence the 'high' risk perception bar in the KCBR figure. These CRFs decrease risk tolerance of audiences, and there is very significant risk perception around modern food risks
- **Control**: Consumers often feel they lack control in relation to modern food risks in two distinct ways. First, a lack of involvement in processess of regulation by government agencies, and second lack of individual ability to control exposure. Some of the control issues stem from being unable to detect "slow agents" through experience. Lack of trust or confidence in the institutions charged with regulation and control is common. In reality, consumers have more control that they perceive but many perception issues around 'control' centre on the 'voluntariness' of exposure to risks, which is a key factor in acceptance.

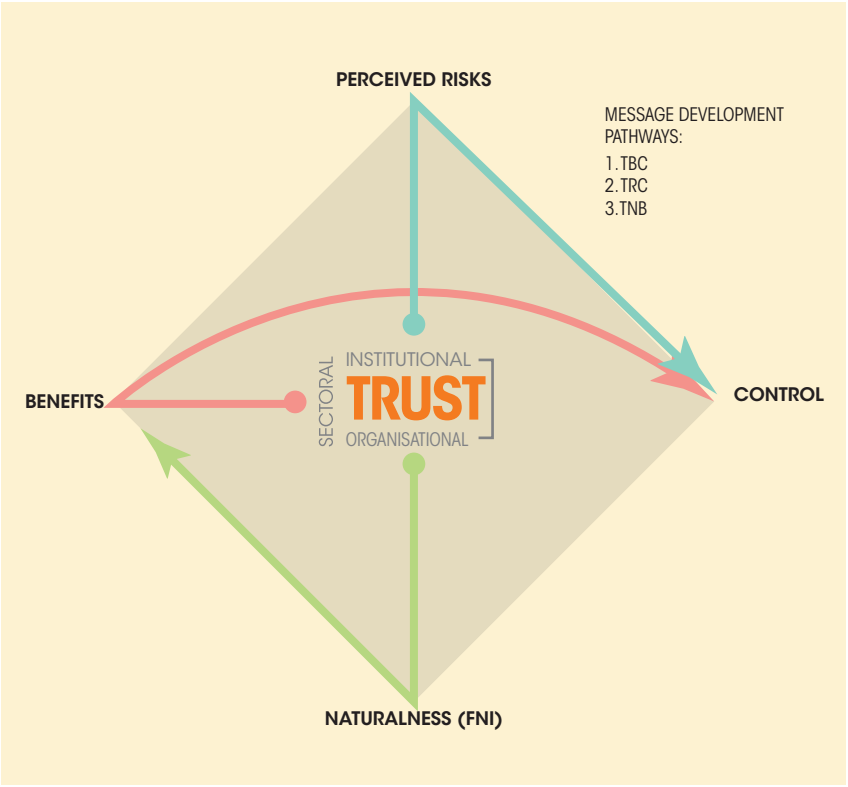
KCBR Reconfiguration



- **Knowledge**: Increasing knowledge in an interactive setting to show managed or reasoned transparency, avenues for individual control and effective management of risks is desirable as part of efforts to promoted dialogue. In this respect, **audience interest** is the **most significant element** while planning for the related knowledge transfer process.
- **Control**: Controlling exposure to risks as a matter of personal choice is important. Consumers must be **given the choice** where possible and practicable, **to control exposure** via labelling or other forms of transparent information provision (traceability measures). Apart from **personal control, institutional control** over modern food risks is paramount. In the area of chemical and environmental contaminants, consumers must know there are valid, effective control systems in place to monitor residues and reject contaminated produce.
- **Benefit**: To increase benefits perception. **Deliver messages around personal benefits for consumers, environment and society**.
- **Risk**: To manage risk perception through addressing specific risk perception factors in a genuine way.

Key Strategies

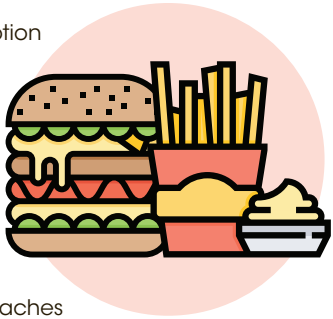




- Employ a **formative research** process using available sources to identify as many of the variables in the process as possible.
- Employ evidence from peer-reviewed literature to develop insight into the dominant **risk and benefit perception patterns** for the **6 modern food risk grouping**
- **Partnering with Trust Guarantors**: Build perceptions of effective food risk management by partnering with risk management authorities.

MODULE III-NUTRITION & LIFESTYLE RISKS

Intro



Nutritional & Lifestyle Risks include the over-consumption of "traditional" food risks like **sugar, salt, red meat, saturated/trans fats and processed foods**. They are usually accompanied by other risk behaviours – **sedentary lifestyles, tobacco, and alcohol consumption**.

To influence and positively change individual behaviour around food consumption risks, both in terms of curbing over-consumption and enhancing nutrition. To bring needs and evidence-based approaches to communicating lifestyle food risks. Introducing asymmetrical interventions, commonly referred to as "nudges", as a promising approach to behaviour change when combined with precautionary advocacy. To propose a multi-faceted set of strategic tools—including three empirically supported models—to tackle the eternal challenges around nutritional and lifestyle risks.

ETE and EI

EI Group

EI-1 Established FRC Maxims | All | High

In general, the public relations (PR) type approach has proven reasonably successful. The PR approaches advocated in this Module should form the basis for campaigns targeting various problem areas and audiences. Clarity of message is very important.

EI-7 Key Decision Heuristics | All | Medium

Decision-making under risk and uncertainty has been shown to depart from "rationality," and the common sources of bias are noted under EI-7. The use of "authority figures" and "social proof" are likely integral parts of any informational campaign.

Group | Item | Importance | Notes

EI-5 Audience Factors | All | Medium

Whilst an extensive 'formative research' process to evaluate the audience may not be necessary in this Module, understanding key audience factors or targeting certain audience segments according to such factors is desirable. Are there links between the most vulnerable populations and certain audience factors?

ETE Group

ETE-1 New Risk Communication Perspectives | Commitment, Time & Scope, Persistence | Medium

Health promotion around food choices is a long-term commitment that requires multiple campaigns targeting specific behaviours within designated target groups. Such need to continue for decades—like anti-smoking efforts for example—to take hold.

ETE-3 FRC Best Practices | Multiple messages | High

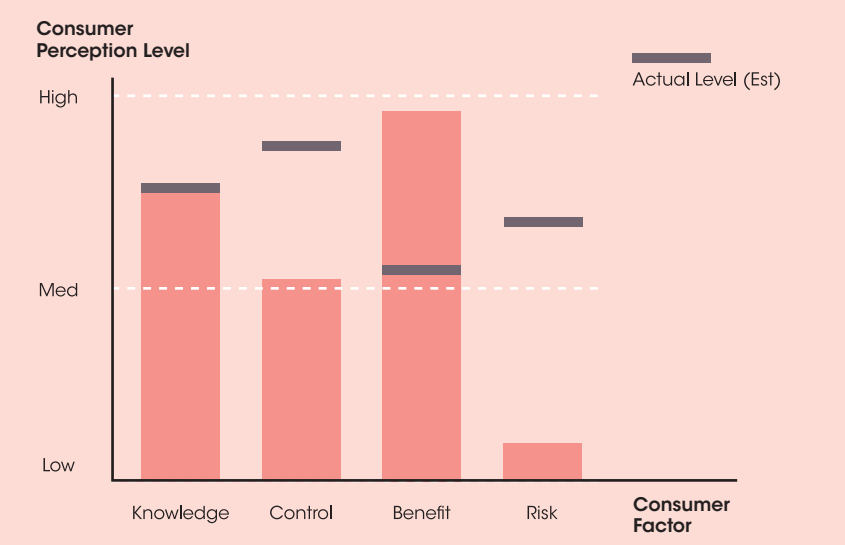
Message development over a wide range of risks require different themes of message, most likely targeting narrow audience segments. With various means, these multiple messages can be evaluated for effectiveness and refined.

ETE-3 FRC Best Practices | Different levels of risk tolerance | Medium

Denial or ambivalence to risks around obesity and NCDs are common, doing something now (eating less) that will pay off in the longer term. Full knowledge of the consequences may not lead to change or even concern about the message.

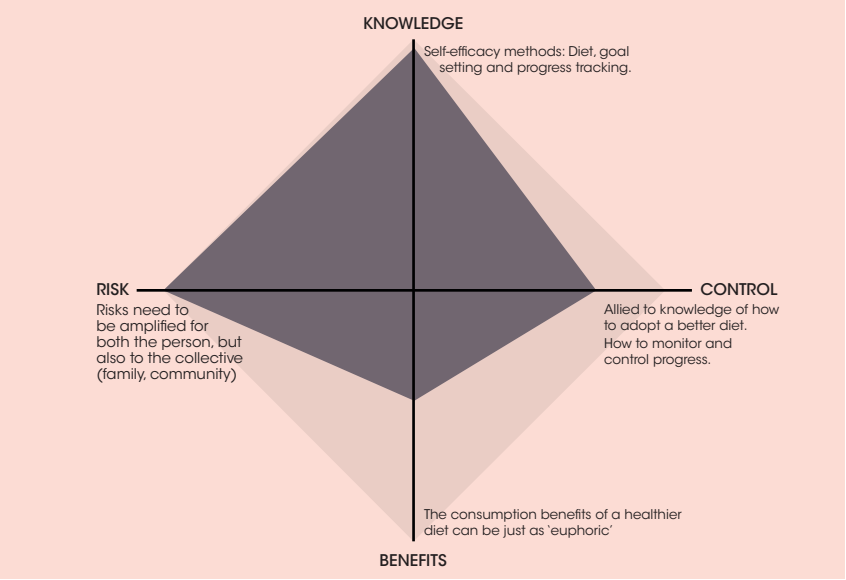
Group | Item | Importance | Notes

Perceived knowledge, control, benefits & risk scenarios (KCBR Configuration)

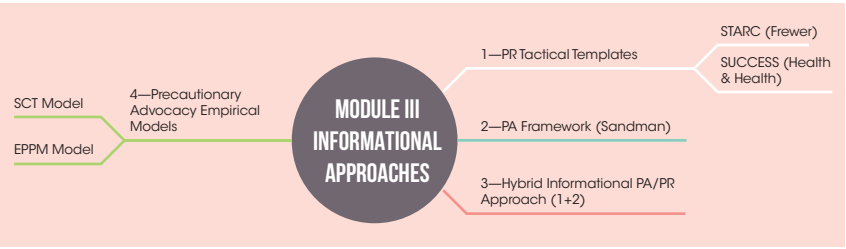


- **Knowledge**: Usually, individuals are in a reasonable position to understand the facts regarding the prominent food risk groups regarding over-consumption (sugar, salt and fats for example), and some of the consequences, but not how to reduce risks through diet, exercise and goal setting. The overall level of knowledge is variable, but the "reconfiguration" may not necessitate increases in knowledge. More specific pockets of knowledge on areas of improvement, "how to do it" may be more important.
- **Control**: Individuals are in full control; but **self-control may be lacking**. The process of choice, availability and access are issues of food security (economic and physical access notwithstanding).
- **Benefit**: Full benefit perception, including euphoria in terms of experience of consumption. In reality, benefits of over-indulgence and poor diets are self-defeating nutritionally, but the perception clearly overrides nutritional considerations.
- **Risk**: Low perception of risk. Individuals need to properly associate diet with consequences, particularly in the long-term, for themselves and for their families. Public campaigns around T2D may provide some important data around societal risk messaging for diet.

KCBR Reconfiguration



Key Strategies



- PR Templates, PA Frameworks and Empirical models are combined;
- A range of informational approaches are detailed in the full Toolkit;
- Non-informational methods, like asymmetrical interventions promise a great deal in making incremental improvements to consumption patterns and complementing informational routes, which will remain the mainstay of driving decision-making in this critical area.

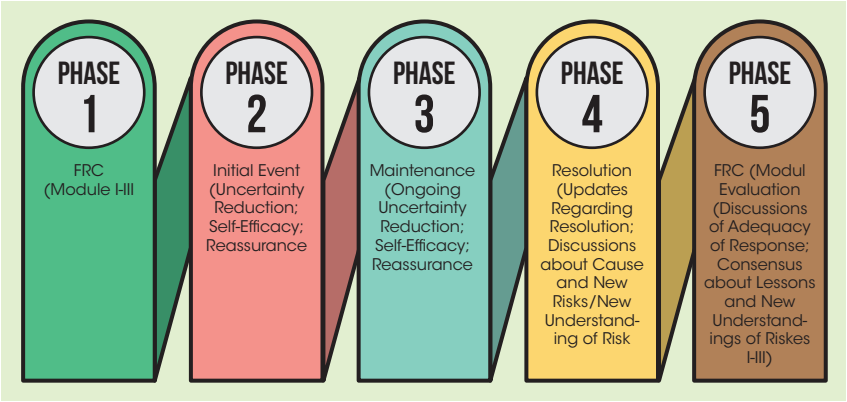
MODULE IV-CRITICAL INCIDENT INTERVENTIONS

Intro

Module IV offers food stakeholders a means to prepare for and respond to food-related public health crises that are characterised by their emerging, poorly understood (initially at least) and dynamic nature in addition to severity.

CERC Model applied to Critical Food Incidents

CERC model is an integrative framework that seeks to merge strategies of risk and crisis communication



Implementing CERC

The module should be used in addition to Modules I-III as a full situational solution to food safety risk communication and crisis challenges.

The tone for successful incident responses are set in the first 48 hours. Clear directives towards reduction of uncertainty and what to do are vital.

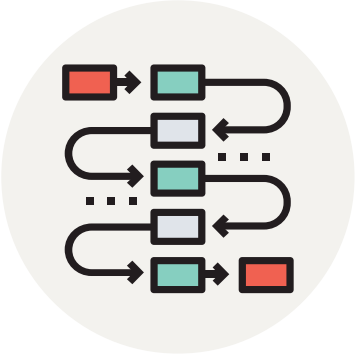
Successful critical incident responses evolve as more concrete information becomes available but always start with:

- Acceptance of responsibilities;
- Empathy for those affected;
- Clear actions.

Toolset 3
TACTICAL INTERVENTIONS

The practical elements of the Toolkit allowing common approaches, defined aims and the essential factor that gels it all together, TRUST.

TOOL 4 Common Interventions Tools: Essential Toolkit Elements (ETEs) & Execution Imperatives (EIs)



ETEs and EIs illustrate the depth and breadth of the tactical interventions in FRC that are important summaries of actions or reference points that may be necessary as part of modules of the toolkit. In essence, the ETEs and EIs are summaries for implementation and effectiveness. Practitioners should be aware of the factors and research questions posed and determine if they are applicable in the particular case presented to them.

TOOL 5 Defined FRC Toolkit Aims

Absolute clarity of aims and goals are essential in any communication process. Although a range of opinions exists in the academic literature and practitioner manuals over the aims and objectives of food risk communication, the four aims of the FIA FRC Model Process are stated openly:

- Manage consumer risk perception
- Influence & modify behaviour
- Contribute towards inclusivity of discourse:
  Open, accessible, value-laden, culturally centered, responsible, positive social relationships
- Recovery and renewal following crisis

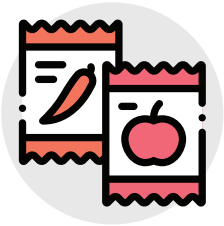
TOOL 6 The Centrality of Trust

The entire Toolkit is premised around the 'centrality' of trust. With the advent of more complex technologies comes more uncertainty. Personal experience of risk has been replaced by information about risks and individual control over risks by institutional risk management. In this context people rely more than ever on the credibility and sincerity of those from whom the receive information about risk (Barber, 1983). Thus, trust in institutional performance is a major key for risk responses (Earle & Cvetkovich, 1995).

MODULE V-TRUST

Intro

We aim to analyse, quantify and promote understanding of the nature and management of trust to be applied in the food industry. We explore trust in the food sector and trust in individual food chain actors. We introduce the concept of optimising trust through a key concept of "critical trust" and operationalise trust via the FIA Trust Operating Model.



Trust definition

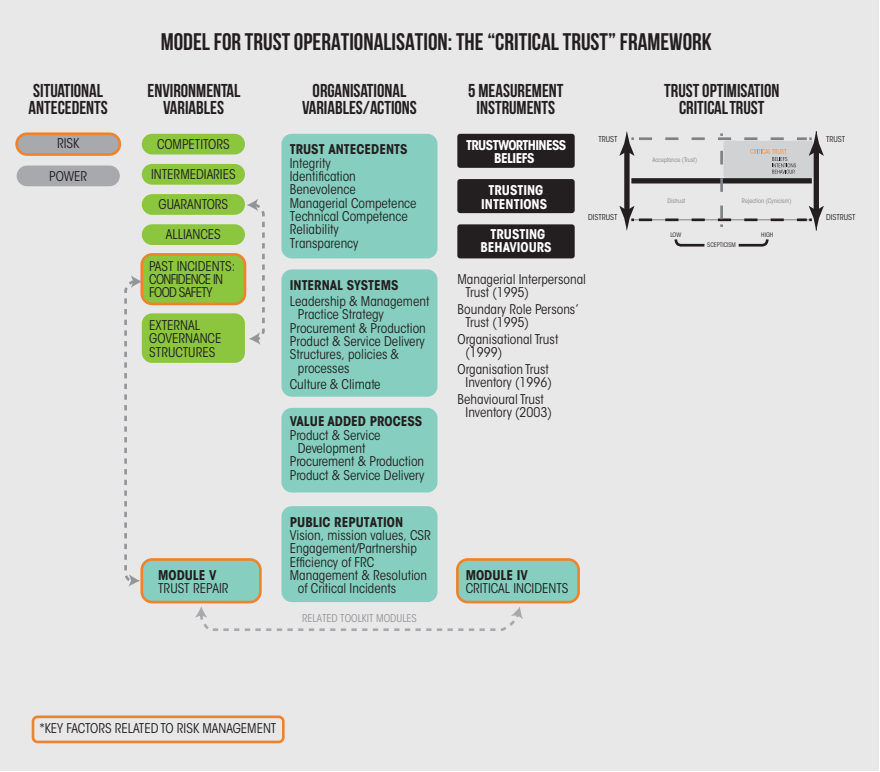
Two definitions of trust, which highlight the willingness to be vulnerable and the expectation of favourable treatment by another party can be applied to the food sector or to individual organisations:

- **Positive Expectations Definition**: "Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviours of another." (*Rousseau, Burt, Sitkin, & Camerer, 1998*).
- **Monitor & Control Definition**: "Trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party." (*Mayer, Davis, Schoorman, 1995*).

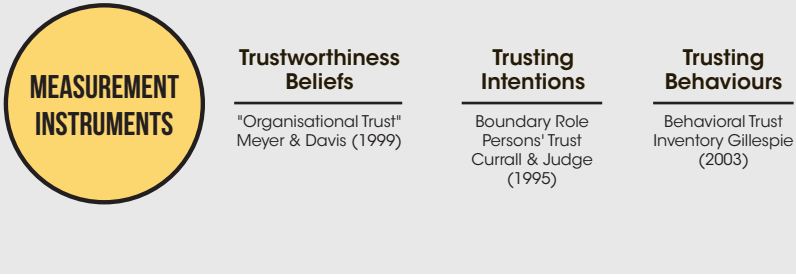
FIA Trust Operating Model (Include Measuring Trust)

FIA has developed a **framework model for operationalisation of trust** for food organisations. The framework consists of **five columns** that outline the core variables in terms of situations or context, external environment, internal environment and actionable areas, measurement instruments and finally, the critical trust goal.

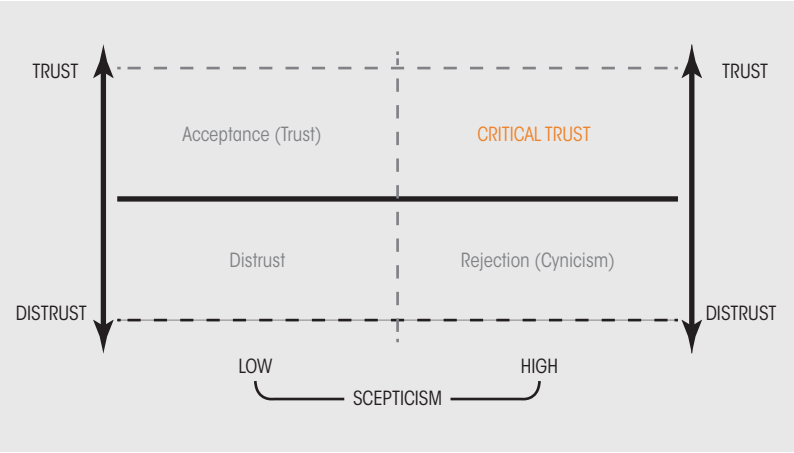
1. **Situational Antecedents**: Fundamental factors related to stakeholders and have a significant modulation on trust.
   - Risk: Are stakeholders comfortable taking risks and accepting uncertainty? Modern food risks are most prevalent in this area, the key risk factors comprise voluntariness, control, reversibility, origin, procedural justice, and personally relevant benefits.
   - Power: Do stakeholders have a choice to avoid interaction with the organisation, or go to other lower risk alternatives? Balance of power is important situational antecedent in organisational trust.



2. **Environmental Variables**: Comprised of trust mediating forces, that may shape a trusting environment or the "trust system." These external variables will act as forces to modify perceptions, feelings or calculations of whether a general environment to trust is possible.
   - Competitors: Firm performance or behaviour affects the trust system.
   - Trust Intermediaries: Individuals or Institutions that provide information regarding an organisation's pragmatic and ethical conduct. Audit and oversight bodies, boards of directors, NGOs, and the media are typical trust intermediaries.
   - Trust Guarantors (regulators, government agencies, and secondary standards bodies): Trust guarantors serve a regulatory function and are described as individuals or bodies that attempt to limit non-compliance with rules, laws and regulations, and to minimise opportunistic behaviour. These include watchdogs, such as judicial and law enforcement bodies.
   - Sectoral Alliances: Trade associations, multi-stakeholder partnerships.
   - Past Incidents: Past Incidents which influence consumer confidence
   - External Governance Structures: The local regulatory climate and appropriate reactions to it.
3. **Organisational Variables/Actions**: High trust companies demonstrate intense commitment to the trust-promoting values (excellence, empowerment, integrity, fairness, transparency). The companies will drive the commitment through various areas:
   - Trust antecedents
   - Internal systems
   - Value added processes
   - Public reputation



4. **Measurement Instruments**: A key benefit of adopting these instruments to measure the decision to trust is that they are multi-dimensional, which is particularly important if decisions regarding the willingness to be vulnerable can be manifest in different ways.
   - Trustworthiness beliefs: An expectation or belief about another party, which is perceptual or attitudinal
   - Trusting Intentions: A willingness to make oneself vulnerable, which is intentional or volitional
   - Trusting Behaviours: A risk-taking act
5. **Trust optimisation (critical trust)**: Critical trust can be conceptualised as: A practical form of reliance on a person or institution combined with some healthy scepticism. For the F&B sector, the continuum view of trust and distrust leads towards settings where "optimisation" of trust, especially in apparently "low trust" settings are a more realistic option.



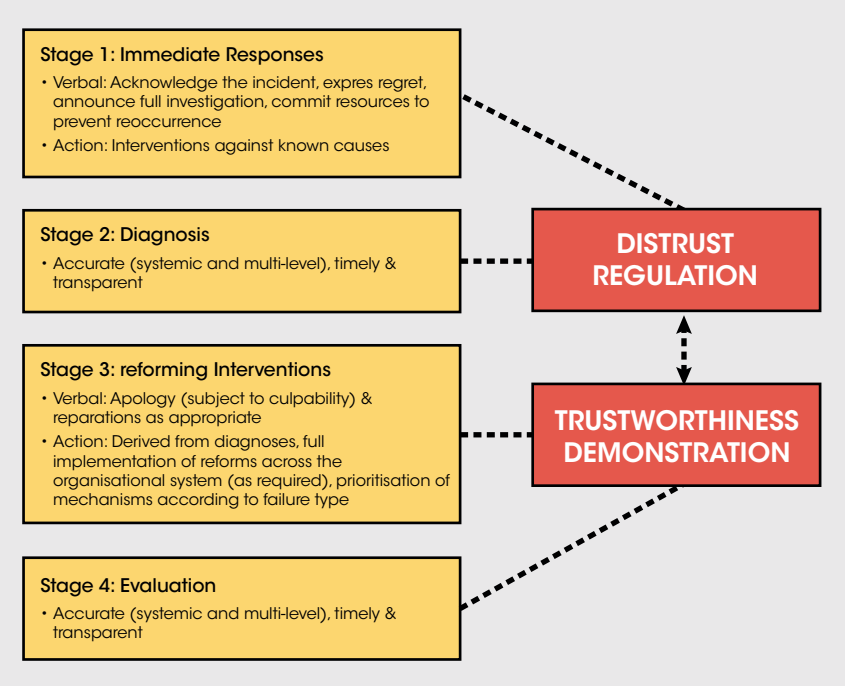
Source: Portinga & Pidgeon (2003)

Trust repair (under trust operating model)

Two complementary strategies for repairing organisational trust. The organisation needs to be self-regulate to ensure no further trust failures occur (**distrust regulation**), and promote anew positive indicators of its ability, benevolence and integrity (**trustworthiness demonstration**).

- **Distrust Regulation**: Actions designed to prevent future trust transgressions, by dealing with the faults that led to the failure—both direct and contributory.
- **Trustworthiness Demonstration**: Actions and statements designed to actively demonstrate the organisation's (renewed) ability, benevolence and integrity, and that employees can anticipate desirable and beneficial conduct in the future.

Four stages of effective trust repair which involved **both strategies** are:



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