



Trompenaar's Cultural Dimensions

During the 1980s and 1990s management consultant Fons Trompenaars conducted large-scale surveys of cultural diversity in companies operating in 50 countries. From these data, and drawing on the work of sociologist Talcott Parsons and anthropologists Florence Kluckhohn and Fred Strodtbeck, he developed a framework of seven cultural dimensions. This framework describes the relationships that people have with other people, time and the environment (Trompenaars & Hampden-Turner, 1997).

Like Hofstede's work, Trompenaars' research for the main part focused on differences in **national culture**. However, it did also address regional differences within a national culture, albeit in a limited way. One study investigated regional differences in South Africa, generating average scores for eight language/ethnic groups on six cultural dimensions. The results indicated significant cultural variations within the nation: for instance, English South Africans scored 72% on the individualism-communitarianism dimension compared with 22% for the Tsonga. In addition, a separate research strand described different kinds of organizational (or corporate) cultures: the family type, the Eiffel Tower type, the guided missile type, and the incubator type (Trompenaars & Hampden-Turner, 1997).

The cultural dimensions in Trompenaars' framework are: **universalism/particularism, individualism/communitarianism, neutral/affective, specific/diffuse, achievement/ascription, sequential/synchronic time, and inner-/outer-directed**. The following paragraphs discuss two of the dimensions that are relevant to airline operations.

Individualism-Communitarianism

Trompenaars' individualism-communitarianism dimension is similar to (but not exactly the same as) Hofstede's **individualism-collectivism**, with both measuring the extent to which people regard themselves as individuals or part of groups. Hodgetts et al., (2005) highlighted differences in the findings of the two researchers. In Hofstede's data, for example, Mexico and Argentina scored more highly for collectivism, but Trompenaars found them to be high in individualism. Given that Hofstede's data were collected much earlier, Hodgetts et al. (2005, p. 112) suggested that countries like Mexico and Argentina may have over time "moved from dominant collectivistic or communitarianistic cultural values to more individualist values".

To illustrate national differences in this dimension, Trompenaars and Hampden-Turner (1997) related the story of a "critical incident" in a factory run by an American multinational and staffed by Japanese workers. A serious error by a Japanese worker led to the loss of a production batch. After the work group accepted responsibility, the factory director – to the surprise of a Western investigator – did not try to punish or even identify the worker who caused the loss. The reason was that in Japanese culture the shame of letting the group down was considered punishment enough.

This factory anecdote illustrates a reluctance of individuals in communitarian cultures to openly accept responsibility for errors, which impacts on two aspects of airline operations. Firstly, as part of airline crew resource management (CRM) training, individual members of a flight crew are trained to communicate problems (including errors) assertively. Secondly, as part of an effective safety culture, it is essential for employees to report errors in their



organization. It is clear that attitudes to error vary significantly between cultures, which should be taken into account during training. This is of particular significance for multicultural airlines, where a range of nationalities interact on a daily basis.

Achievement-Ascription

The achievement-ascription dimension relates to the status of an individual within society. In achievement cultures (eg: the United States) people are accorded status based on work performance and recent accomplishments. By contrast, in ascription cultures (eg: Japan or China) status is accorded based on age, kinship, gender, connections and educational record. Status is thus perceived differently in different cultures, which may affect leadership and communication on the flight deck.

The achievement-ascription dimension is relevant to CRM training, which makes the assumption that captains can learn how to establish an appropriate level of authority. Ginnett (1993) outlined three techniques that captains use to set up effective teams on the flight deck:

- establish competence in the pre-flight briefing;
- disavow perfection in order to allow other crew members to take responsibility;
- engage the crew during the briefing and group formation process.

These techniques are based on NASA research with American flight crews. They may prove effective in achievement cultures but less so in ascription cultures where status, which is integral to a person's authority, is not related to work performance.

Another problem arises when there is a large difference between the status of the captain and junior officers. In this situation, a steep **authority gradient** may exist in the cockpit (Wiegmann & Shappell, 2003). This can hinder communication and decision making, and has been identified as a causal factor in accidents such as the 1977 runway collision at Tenerife. CRM programmes teach polite assertiveness techniques to help junior officers overcome the problem, but these may not be effective in ascription cultures where status derives from intrinsic characteristics such as age and gender.

Trompenaars' Country Clusters

As with Hofstede's results, Trompenaars' data may be readily analysed into country clusters. Hodgetts et al. (2005, p. 117) observed that there was "a great deal of similarity between the Trompenaars and the Ronen and Shenkar clusters". However, they also noted inconsistencies which might indicate that earlier cluster analyses (such as those of Ronen and Shenkar) were in need of revision.

Criticism of Trompenaars' Model

Trompenaars' use of survey data to identify cultural differences is open to similar criticisms to those levelled at Hofstede's work, but one difference is that business anecdotes were used by Trompenaars and Hampden-Turner (1997) to contextualize the dimensions in interpersonal interactions. Guirdham (2005) observed that while each of the dimensions is described as a continuum, in practice they are treated as dichotomies. Furthermore, the dimensions are not conceptually distinct, and Hofstede (1996) claimed that only two of them



could be confirmed statistically. Furthermore, there is overlap between this and other cultural frameworks. As noted above, Trompenaars' dimension of individualism-communitarianism is similar to individualism-collectivism in Hofstede's system. Also, Trompenaars' specific-diffuse dimension corresponds closely to Hall's concept of high- and low-context.

Applications to Aviation

In contrast to Hofstede's research, there has only been a limited application of Trompenaars' dimensions to aviation. Nevertheless, the following studies are relevant to airline training and operations.

Firstly, Jing et al. (2001) used Trompenaars' data in a correlational study of airline accident rates and attitudes to authority. The authors stated that no direct causal relation could be inferred between culture and accidents, but concluded that culture is "an indirect essential contributory factor in aircraft accidents" (Jing et al., 2001, p. 341). They found authoritarianism to be the most significant cultural variable. Strauch (2010, p. 254) cautioned that this and other studies of accident rates "are only suggestive of cultural effects on aviation" due to limitations in the generalizability of the initial survey data.

Secondly, Glover and Friedman (2014) outlined the application of Trompenaars' cultural dimensions to projects dealing with changes in **organizational culture**. One project involved the merger of a government-owned bank with a financial services company in the South Pacific region. The researchers used a scenario-based method based on cultural dilemmas elicited during focus groups and interviews "to anticipate potential merger problems and to create appropriate change initiatives to smooth the transformation" (Glover & Friedman, 2014, p. 89). This methodology could potentially be applied to the airline industry, which is characterized by regular mergers.¹ As noted by Sharma and Thomas (2015, p. 20), airline mergers and acquisitions are "loaded with difficulties", one of which is "the need of forming one coherent organisational culture".

Finally, Friedman et al. (2013) described a scenario-based programme for training military ground forces to deal with socio-cultural encounters (SCEs), or interactions between people with different cultural orientations. Each scenario presented a dilemma and four possible responses related to one of Trompenaars' dimensions. Although designed for military personnel, Friedman et al. (2013, p. 18) claimed that this approach is "applicable to any organizational and professional setting." One possibility for airline training would be to apply the methodology to flight scenarios such as those developed by Fischer and Orasanu (1999) in their studies of intra-cockpit communication strategies.

References

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¹ Between 2000 and 2016 there were 17 mergers and acquisitions in the US alone. These included the takeovers of TWA and US Airways by American Airlines in 2001 and 2013 respectively, Northwest by Delta Air Lines in 2009, and Continental by United Airlines in 2010 (Airlines for America, 2018).



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