



HOW TO BUILD NATIONAL BRAND – THE CASE OF TAIWAN FROM CULTURE PERSPECTIVE

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ABSTRACT

Nation branding has received a significant amount of attention. As Nation branding has become increasingly important every country has to make more of an effort to create a Nation Brand. Culture has been noted as the key to sustainable development of a Nation Brand which has become one of the major vectors of a nation image. In this study, DEMATEL, MMDE and ANP are adopted to analyze the criteria that influence Nation Brand. Combined DEMATEL and ANP found that "movie" and "popular music" are the most relevant and the highest weighted criteria. Therefore, Taiwan's government should build Taiwan's Nation Brand from "Film" and "Music".

Keywords: Nation branding, Culture, Decision making trial and evaluation laboratory (DEMATEL), Analytic NETWORK PProcess (ANP), Taiwan

INTRODUCTION

As globalization continues and the information age brings people and countries close (Berkowitz *et al.*, 2007). Nation branding has evolved and become increasingly important in recent years. Most governments around the world are using the concept in order to successfully face the pressures of global competition (Kotler and Gertner, 2002). Therefore globalization is considered to be the most important reason for nation branding (Widler, 2007).

Nation branding is especially relevant for developing countries in their battle to define their political, economic and social roles. More particularly, their image often determines their success in placing their exports in international markets, attracting tourists and foreign direct investment.

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Through the creation and management of positive and consistent brands, developing countries are in a better position to achieve their goals (Papadopoulos, 2004; Florek and Conejo, 2007). However, to some extent, Nation branding can help raise economic development, it is the developing countries most in need of systematic marketing (Anholt, 1998).

As described above, Nation branding is particularly important for developing countries. Therefore, it is particularly important for Taiwan as a developing country to improve its global image. The overall objective of the continuing campaign in Taiwan has been to transform an initial negative country image into a strong positive image among several target audiences around the world (Amine and Chao, 2004). It is important to begin to communicate messages - and more importantly - actions that reflect the desired image. It is this process that describes the recent development of the concept of nation branding (Berkowitz *et al.*, 2007).

Nation branding has been progressively more popular, not only with Tourism Bureaus, but more interestingly, with national governments. A national government's commitment to manage its image demonstrates the importance of all departments and stakeholders' involvement in a national brand strategy (Rawson, 2007). The central issue for a country aiming at building a brand is to harmonize the messages communicated, that is to integrate and simplify efforts not only across government departments and levels, but also with the private sector; industry associations and individual companies (Papadopoulos, 2004; Andersson, 2007). Therefore, all responsible governments need to determine what the world's perception of their country is, and to develop a strategy for managing the perception (Anholt, 2007).

Nation branding is a new area (Papadopoulos and Heslop, 2002; Shimp *et al.*, 1993; Fan, 2008). Nation branding as a concept and practice has caught the attention and financial resources of national governments in countries with established capitalist economies and emerging market economies alike (Aronczyk, 2008). In order to work effectively, nation branding has to embrace political, cultural, business and sporting activities (Jaffe and Nebenzahl, 2001).

The ANP and the DEMATEL have these advantages and have been successfully applied in many fields (Chen, Lee, and Yang, 2012; Chen, Lee, and Wu, 2012). This paper proposes an effective strategy for branding Taiwan based on a combined ANP and DEMATEL approach. The study seeks to examine Taiwan's nation brand from culture; in particular, it discusses the following: a) the cultural criterion that have the greatest relevance, b) the criterion that have the greatest weight, and. c) the criterion that have the highest combined relevance and highest weight.

LITERATURE REVIEW

Nation branding

Nation branding is a new area of interest in marketing and is related to a nation's effort to communicate to people in other countries. This concept is concerned with the country's influence on the international stage and its image in the mind of international stakeholders (Fan, 2008). Consumers know the concept of the traditional branding of products, services, and companies. Consciously or unconsciously, consumers are also affected by country brands. This influence can make an impact on everything from purchasing habits and tourism to perceptions of nationals from a particular country (Berkowitz *et al.*, 2007).

In nation branding, the goal is to create a clear, simple and differentiating idea built around emotional qualities which can be symbolized verbally and visually and understood by different audiences in a variety of situations. Nation branding affects a country's total image covering political, economic, historical and cultural dimensions. This concept is at the national level, multi-dimensional and context-dependent. The image of the nation may have little effect on the consumer, and no contact with the product(s) is offered. People may like a country or not for various reasons that may or may not affect their purchasing decisions. On the contrary, product-country image, as a kind of secondary association (Keller, 1993), is part of the product brand and closely linked with specific products or product categories. Product-country has an immediate and direct effect on people's mindset; affecting their purchase decisions (Fan, 2006).

In essence, nation branding involves applying branding and marketing communications techniques to promote a nation's image and reshape the international public opinion of a country. In fact, Nation branding is a cross-cultural communication process, very similar to the advertising process in creating: awareness – attraction – preference (Fan, 2006; 2008).

To sum up, nation branding may be instrumental, though not by necessity, in strengthening a country's competitive position. In the absence of either good market performance, or a sympathetic attitude, a country should primarily find out its shortcomings along the value chain of its foreign economic engagements. Branding initiatives become efficacious only beyond a certain level of competitive performance (Nicolescu *et al.*, 2008).

Nation-branding hexagon

Nation-branding literature is more practical than theoretical, although the literature has recently been attracting attention as a field of academic study; with a growing number of academic professionals starting the process of grounding it in theory. The theoretical foundation of nation

branding is Anholt's nation-branding hexagon, mentioned previously, which includes Tourism, People, Culture and Heritage, Investment and Immigration, Foreign and Domestic Policy and Export Brands (Anholt and Hildreth, 2004). All of these factors contribute to a country's identity and the perceptions of that identity form a country's brand in the respective views of the international audience (Rawson, 2007).

The nation brand is a summary of people's perceptions of a country across six areas of national competence. These areas make the nation brand hexagon (Fig. 1). Every country has its brand strengths and weaknesses, so there is a different factor for each point of the hexagon. The overall top nation brand is the one with the highest marks across all points of the hexagon (Anholt, 2005).

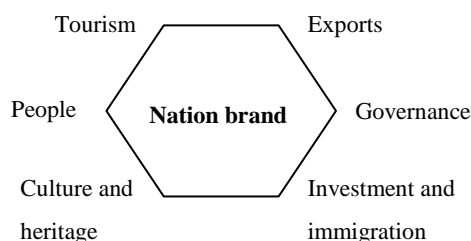


Figure 1: Nation brand hexagon

Nation branding involves not just marketing, but almost all aspects of a nation's character as well; therefore, nation branding has to embrace political, cultural, business and sporting activities to work effectively (Jaffe and Nebenzahl, 2001; Fan, 2006; Andersson, 2007).

Nation branding is an intensified, concentrated government marketing strategy. The ministers are all responsible for specific sectors of the country, which when viewed collectively, are similar to the points on the nation-branding hexagon, and the strategy links them together with a common aim (Rawson, 2007).

Culture aspect

Culture may be the object of place branding; is the perception of the country which governments want to influence and change. In place branding, culture has been adopted as a key focus area. However, at the same time, culture is the premise of brand management (Hornskov, 2007). Soft power and nation branding are two closely related concepts (Anholt, 2006; Fan, 2008). Culture itself is not soft power, but a potential source of soft power. Whether cultural assets can be converted into soft power depends on other factors (Fan, 2008).

Whether we like it or not, commercial brands are increasingly performing the role of transmitting national culture: they have become one of the major vectors of national image, and are more and more often the basis from which people form their views about national identity (Anholt, 2005).

Culture is viewed as a measure of perceptions of a country's heritage, while its contemporary cultural vibes emanate from music, films, art and literature, as well as the country's excellence in sports. Various cultural activities are presented to respondents in order to judge their strongest images of a country's cultural products (Anholt, 2009).

Taiwan's cultural

Music

The pop music penetrates into different cultures and social classes rapidly, becoming the foundation of entertainment industry (Vogel, 1998). Due to the characteristics of low cultural gap, pop music industry plays a critical role in the whole cultural and industrial system. Nowadays, with the global prevalence of Chinese learning, Taiwan's pop music is also an important part in the Chinese pop music (Li and Jian, 2006). In the creative cultural industries, musical industry is the most helpful to promoting the national brand (Chen, 2006).

Films

Movies

Movie industry is one of the indicators for the cultural progress of a country (Jhao, 2004). The movie industry combines the elements of music, visual art and performing art horizontally. The movie could further develop into multi-media videos, TV content or publications. It constructs the giant hierarchical structure to develop the creative cultural industries. It seems to act as the leading role of the creative cultural industries (Chang, 2004). The works of many directors have been highly evaluated in the international film festivals in recent years. It doesn't only infuse some vitality into Taiwan's movies, but also gain fame in the worldwide movie industry. Moreover, it is also a great encouragement to Taiwan's creative cultural industries (Zeng, 2008).

TV Drama

With the primary purpose to draw people's attention, it is mostly based on the normal life of the common people, so TV Drama is considered as an art of popular culture (Wu, 2006). In recent years, by referring to the experience got from the industries of drama, album and broking, Taiwan's idol drama offers a new possibility of the TV drama industry in Taiwan (Lin, 2002). When a lot of TV dramas are broadcast in the TV channels of other countries, it will make the world know more about Taiwan.

Art and literature

Artwork

Artwork is the creative object with artistic values and the fruits of the talented artists, who develop the new fields for human civilization and enlighten the human beings to step towards the new civilization milestone (Liao, 2008). In Taiwan, National Palace Museum is more than a representative of Taiwan's artworks, where a great variety of historic national treasures of China are collected. From the cultural perspective, the National Palace Museum doesn't only keep the history and cultural relics, but also recruits professional research scholars and experts, which have a profound study and professional contribution to the indications of cultural relics (Lin, 2009).

Theatre

The most representative theatres of Taiwan are Cloud Gate Dance Theatre and Ming Hua Yuan Arts and Cultural Group with local theatrical characteristics. Taiwanese Opera is a kind of local and traditional theatre developed in Taiwan, among which the most representative Ming Hua Yuan Arts and Cultural Group presents vivid and delicate stage performance and ethnic cultural spirits (Kang, 2002).

Publishing

It's been more than 80 years since the New Taiwan Literature Movement started in 1920. Through the social, political, economic and humanistic dimensions reflected in the literature works of Taiwan, the people all over the world could recognize the development and current situation of Taiwan and have a deeper impression of Taiwan. Moreover, with the elegant words, Taiwan presents its literature strength to the whole world (Jhang, 2005).

Evaluation methods

In this section, the DEMATEL, the MMDE and the ANP are briefly described to ensure the reader is familiar with each of the processes. This study firstly sorts out the literatures studying on nation brand and culture. Then we work out the study framework based on 3 dimensions and 6 criteria with Taiwan's special characteristics. It includes music (pop music), film (movie, TV drama), and art & literature (artwork, theatre, publishing). After that, it converts the dimensions into the matrix structured questionnaire of DEMATEL. According to Teng (2002), 5-15 of experts will be appropriate for group decision making, so we conduct questionnaire survey onto 15 experts from the culture field. The questionnaire results are then conducted with correlation analysis by DEMATEL approach, which could lower the complexity of the problems. MMDE approach is adopted to determine the threshold. According to the network relations among dimensions obtained by the DEMATEL method, then we construct ANP questionnaire and

conduct survey again. The ANP methodology was used with professional software; “Super Decisions” to calculate the super matrix. The results will provide a more accurate modeling for branding Taiwan, and provide priority of criteria to make strategy more effective.

DEMATEL

Decision Making Trial and Evaluation Laboratory (DEMATEL) was developed by the Battelle memorial association of the Geneva research center (Fontela and Gabus, 1976; Gabus and Fontela, 1973), and it is used to resolve complex and difficult problems in the world, such as racial bias, hunger, environmental protection, energy issues among others (Fontela and Gabus, 1976). This method can convert the relationship between the causes and effects of criteria into a comprehensible structural model (Tzeng *et al.*, 2007). Therefore, it is feasible and beneficial to visualize the structure of complicated causal relationships with matrices or diagrams (Tsai *et al.*, 2010). The study briefly describes the structure of DEMATEL and the calculation steps.

- **Define the quality feature and establish the measurement scale**

The measurement scale established for the causal relationship and paired comparison among quality characteristics is divided into five respective levels 0, 1, 2, 3, and 4, which respectively represent “no impact”, “low impact”, “medium impact”, “high impact” and “great impact”.

- **Establishment of a direct-relation matrix**

When there are ‘n’ quality characteristics, conduct the paired comparisons of the variables which are dependent on their influence relationships and level based on expert opinion as survey from questionnaire, then we got the direct-relation matrix, Z, of $n \times n$. In the direct-relation matrix, Z, a_{ij} represents the variable, the level of i impact variable j , and the diagonal variable a_{ii} of the direct-relation matrix, Z is set to 0

$$Z = \begin{bmatrix} 0 & a_{12} & \dots & a_{1n} \\ a_{21} & 0 & \dots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{n1} & a_{n2} & \dots & 0 \end{bmatrix}$$

- **Calculation of normalized direct-relation matrix**

The method of normalized direct-relation matrixes, Tzeng *et al.* (2007) used the biggest sum of the column/row vector as the normalized base.

Set

$$\lambda = \min \left(\frac{\mathbf{1}}{\max_{1 \leq i \leq n} \sum_{j=1}^n z_{ij}}, \frac{\mathbf{1}}{\max_{1 \leq j \leq n} \sum_{i=1}^n z_{ij}} \right)$$

$$X = \lambda \times Z$$

From the calculation shown above, the direct relation matrix Z is multiplied with λ value, and the normalized direct relation matrix X can be obtained.

- **Calculation of total relation matrix**

According to the following calculation, the total-relation matrix, T, or total-relation matrix can be obtained.

$$T = \lim_{k \rightarrow \infty} (X + X^2 + \dots + X^k) = X(I - X)^{-1} ; \quad \text{Where } \lceil I \rceil \text{ is an identity matrix.}$$

Maximum mean de-entropy algorithm (MMDE)

In the DEMATEL total-relations, an appropriate threshold value is necessary to obtain a suitable map of impact-relations and adequate information for further analysis or decision-making. In the traditional method, the threshold value is determined by asking experts or the researcher(s). Choosing a consistent threshold value is time-consuming, if the impact-relations maps are similar when the change of threshold values is slight. The researcher sets up an appropriate threshold value and then redraws the impact-relations map to discuss whether the impact-relations map is suitable for the structure of the problem. If not, the threshold value is substituted by another value, and another impact-relations map is created until a consensus is achieved.

Therefore, Lia and Tzeng (2009) recommend the maximum mean de-entropy (MMDE) algorithm to find a threshold value for creation of the impact-relations map. In this algorithm, the approach of entropy is used, which has been widely applied in information science, but define another two information measures: de-entropy and mean de-entropy (Lia and Tzeng, 2009). The information entropy was developed by Shannon (1948), in which the physical entropy used in thermodynamics is more or less closely related to the concept of information used in communication theory. Therefore, he defined the information entropy to measure uncertainty (Jiang *et al.*, 2010).

The study referred to the study of Lia and Tzeng (2009), and briefly describes the calculation steps of MMDE.

- **Transform the total relation matrix into an ordered triplet**

Transforming the $n \times n$ total relation matrix T into an ordered set $T, \{t_{11}, t_{12}, \dots, t_{21}, t_{22}, \dots, t_{nn}\}$, rearranging the element order in set T from large to small, and transforming to a corresponding ordered triplets (t_{ij}, x_i, x_j) set denotes T^* . Every element of set T, t_{ij} , can also be seen as an ordered triplet (t_{ij}, x_i, x_j) as (influence value, dispatch-node, receive-node).

- **Find the set of the dispatch-node**

Taking the second element as the dispatch-node, from the ordered triplets of the set T^* , and then obtaining a new ordered dispatch-node set, T^{Di} .

- **Calculate mean de-entropy of the dispatch-node**

Taking the first t elements of T^{Di} as a new set T_t^{Di} , assign the probability of different elements, and then calculate the H^D of the set $T_t^{Di}; H_t^{Di}$. The mean de-entropy is calculated using the following formulas;

$$MDE_t^{Di} = \frac{H_t^{Di}}{N(T_t^{Di})} \cdot \text{Where } H_n^D = H\left(\frac{1}{n}, \frac{1}{n}, \dots, \frac{1}{n}\right) - H(p_1, p_2, \dots, p_n)$$

$$H(p_1, p_2, \dots, p_n) = -\sum p_i \lg p_i \ ; \ \sum_{i=1}^n p_i = 1 \ ; \ p_i \lg p_i = 0 \ \text{if } p_i = 0$$

- **Find the maximum value of mean de-entropy**

In $C(T^{Di})$ mean de-entropy values, choose the maximum mean de-entropy and its corresponding T_t^{Di} . This dis-patch-node set, with the maximum mean de-entropy, is denoted as T_{max}^{Di} .

- **Find the receive-node set and calculate mean de-entropy of the receive-node**

Similar to Steps 2-4, an ordered receive-node set T^{Re} and a maximum mean de-entropy receive-node set T^{Re} maximum can be determined.

- **Find the threshold**

Use the first u elements in T^* as the subset, T^{Th} , which includes all elements of T^{Di} maximum in the dispatch-node and all elements of T^{Re} maximum in the receive-node, the minimum influence value in T^{Th} is the threshold value.

ANP

ANP (Analytic Network Process) is a generalization of the AHP (Analytic Hierarchy Process) (Saaty, 1996). AHP is a comprehensive framework to meet the intuitive, rational, irrational, and

when we make multi-objective, multi-criterion, and multi-actor decisions, with or without certainty for any number of alternatives. The basic assumptions of AHP are that it can be used in functional independence of an upper part or cluster of the hierarchy from all its lower parts and the criteria or projects in each level (Meade and Sarkis, 1999). Whereas AHP represents a framework with a unidirectional hierarchical relationship, ANP allows for the measurement of complex interrelationships among decision levels and attributes. The ANP feedback approach supersedes hierarchies with networks in which the relationships between levels are not easily represented as higher or lower, dominant or subordinate, direct or indirect (Meade and Sarkis, 1999). For instance, not only the importance of the criteria determines the relationship with alternatives, as in a hierarchy, but also the importance of the alternatives may affect the importance of the criteria (Saaty, 1996). Therefore, ANP methodology can improve and support a complex, networked decision-making model with various invisible criteria (Hallikainen *et al.*, 2006).

Saaty (2001) developed the ANP methodology for decision-making priorities without making assumptions about a unidirectional hierarchical relationship among decision levels. The ANP can show interdependences of higher-level elements from lower-level elements, as well as the independence of the elements within a level, by getting the comprehensive weights through the development of a super matrix (Hallikainen *et al.*, 2006). In addition to this, the final weights can be calculated by using matrix operations, especially where the numbers of criteria in the model are relatively few. Matrix operations are used in order to communicate with ease the workings of the methodology and how dependencies are worked out. Supermatrix is undoubtedly the better choice when the number of elements increases (Yüksel and Dağdeviren, 2007).

The process of ANP involves three steps, as follows (Shyur, 2006; Yüksel and Dağdeviren, 2010).

- **Conduct the pair-wise comparison matrix**

Without assuming interdependence among the criteria, the decision-makers are asked to evaluate all proposed criteria pair-wise. The responses were presented numerically and scaled on the basis of Saaty's 1-9 scale. Each pair of criteria is judged only once. A reciprocal value will be assigned to the reverse comparison, automatically. Once the pair-wise comparisons are completed, the local weight vector w_l is calculated by computer as the unique solution of

$$AW_{ij} = \lambda_{\max} W_{ij} ;$$

where λ_{\max} is the largest eigenvalue of the pair-wise comparison matrix A. The resulting vector is further normalized by dividing each value by its column total to represent the normalized local weight vector w_2 .

- **Calculate the eigenvectors**

Next step is to resolve the impact of the interdependence that exists between the evaluation criteria. Decision-makers examine the impact of all the criteria on each other by using pair-wise comparisons as well. Various pair-wise comparison matrices are made for each of the criterion. These pair-wise comparison matrices are needed to identify the relative impacts of criteria for interdependent relationships. The normalized principal eigenvectors for these matrices are calculated and displayed as column component in interdependence weight matrix of criteria B, where zeros are assigned to the eigenvector weights of the criteria from which a given criterion is given.

- **Obtain the weights**

The interdependence weights of the criteria are obtained through synthesizing the results from previous two steps as follows:

$$w_e = Bw_2^T.$$

There are many studies in the literature using ANP to solve decision making problems (Meade and Sarkis, 1999; Sekitani and Takahashi, 2001; Shyur, 2006; Hallikainen *et al.*, 2006; Yüksel and Dağdeviren, 2007; Wu, 2008; Yüksel, and Dağdeviren, 2010; Tsai *et al.*, 2010; Büyükköçkan and Öztürkcan, 2010).

EMPIRICAL RESULTS

Application of DEMATEL

The information was gathered from 15 professionals and allocated into a certain category, the mean is calculated and a direct-relation matrix is established (Table 1). After standardizing the direct-relation matrix, the total relation matrix can be calculated (Table 2).

Table 1: The direct-relation matrix

	A. Music	B. Film	C. Art & literature
A. Music	0	3.8000	3.1333
B. Film	3.5333	0	3.2667
C. Art & literature	3.4000	3.4667	0

Threshold value

The threshold value results are shown below:

(1) After transforming the total relation matrix T, shown above, the ordered triplets set T* was obtained $\{(1.7455,1,2), (1.7359,3,2), (1.6736,2,1), (1.6571,3,1), (1.5841,2,3), \dots, (0.3210,4,4)\}$.

(2) According to the results of (1), the ordered dispatch-node set T^{Di} can be calculated as $\{1,3,2,3,2,1,2,1,3,4,4,4,2,3,1,4\}$.

(3) Based on the set T^{Di}, a collection of sets T_t^{Di}, in which t is from 1 to 16, can be obtained. After all of the H^D values of the sets T_t^{Di} are calculated, a set with 16 mean de-entropy values is derived $\{0,0,0,0.0196,0.0146,0,0.0065,0.0055, 0,0.0181,0.0033,0,0.0021,0.0026,0.0018,0\}$.

(4) From (3), the maximum mean de-entropy value is 0.0196 and the corresponding dispatch-node set is $T_{max}^{Di} = \{1,3,2,3\} = \{1,2,3\}$.

(5) Similar to (2)–(4), the ordered receive-node set T^{Re} = $\{2,2,1,1,3,3,2,1,3,2,1,3,4,4,4\}$, the de-entropy value set of T_t^{Re}, a set with 16 mean de-entropy values is calculated as follows $\{0,0,0.0283,0,0.0146,0,0.0065,0.0055,0,0.0032,0.0029,0,0.0253,0.0086,0.0018,0\}$ and corresponding receive-node set $T_{max}^{Re} = \{2,2,1\} = \{1,2\}$.

(6) According to the results of (4) and (5), the elements {1, 2, 3} are the dispatch-nodes and the elements {1,2} are the receive-nodes in the impact-relations map. Based on these two constraints, the required subset, TTh, of the ordered set T* is $\{(1.7455, \boxed{1}, \boxed{2}), (1.7359, \boxed{3}, 2), (1.6736, \boxed{2}, \boxed{1})\}$. In above set TTh, the nodes in the shaded box are the required dispatch-nodes shown the first time in the ordered set TTh, the nodes in the non-shaded box are the needed receive-nodes shown the first time in the ordered set TTh, and the minimum influence value in TTh is the threshold value, 1.6736.

In this case, we chose a value greater than the threshold value of 1.6736, as shown in Table 3:

Table 2: The total-relations matrix

	A. Music	B. Film	C. Art & Literature
A. Music	1.3730	1.7455	1.5596
B. Film	1.6736	1.4665	1.5841
C. Art & literature	1.6571	1.7359	1.3081

Note: Bold value is >= threshold vallue

According to the threshold value table, shown above (Table 2), obtained values were greater than chosen threshold as follows; 1.7455 1.7359 and 1.6736, and then the decision structure (Fig. 2) was shaped for evaluating Taiwan's nation brand.

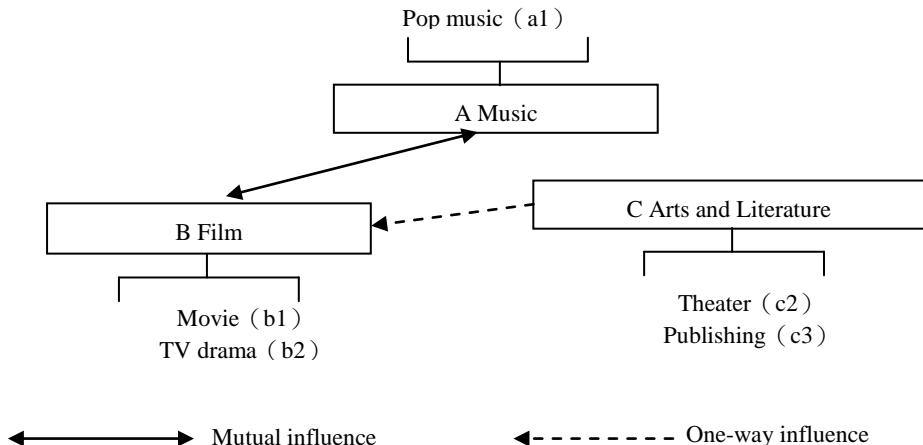


Figure 2: Decision structure for the Taiwan's Nation Brand

Application of ANP

After determining the relationship structure with the DEMATEL methodology, the ANP method is adopted to calculate the weight of each criterion. For obtaining the relative influence between elements, the decision-making group of experts respond to a series of pair-wise comparisons with Saaty’s 1-9 scale where 1 represents equal importance and 9 represents extreme importance that favors one element over another. If the element has a weaker impact than its comparison element, the scale ranges from 1 to 1/9 shown indifference. In order to focus their assessments, the geometric mean method was adopted for the ANP, while the arithmetic mean method was used for the DEMATEL.

The consistency ratio (CR) values of the obtained results are all acceptable and the eigenvectors are then used to provide the super matrix. The pair-wise comparison and eigenvectors of "(B) movie" under "(A) Music" and "(C) Arts and Literature" are given in Table 3, Table 4, Table 5 and in Table 6, shown below.

Table 3: The comparison matrix and eigenvectors of "B movie" criteria under "a1 Popular Music"

a1	b1	b2	eigenvector
b1	1	1.61	0.61686
b2	1/1.61	1	0.38314

Table 4: The comparison matrix and eigenvectors of "B movie" criteria under "c1 Artwork"

c1	b1	b2	eigenvector
b1	1	3.3	0.76744
b2	1/3.3	1	0.23256

Table 5: The comparison matrix and eigenvectors of "B movie" criteria under "c2 Theater"

c2	b1	b2	eigenvector
b1	1	1.43	0.58848
b2	1/1.43	1	0.41152

Table 6: The comparison matrix and eigenvectors of "B movie" criteria under "c3 Publishing"

c3	b1	b2	eigenvector
b1	1	1.8	0.64286
b2	1/1.8	1	0.35714

After the focus, the unweighted super matrix can be formed as shown in Table 7. The calculations of the super matrix can be solved by using professional software called "Super Decisions", and then the overall priorities were obtained from the limit super matrix (see Table 13): $W_a=(a1)=(0.50000)$, $W_b=(b1,b2)=(0.30843, 0.19157)$, $W_c=(c1,c2,c3)=(0, 0, 0)$, Therefore, the most important and considered purpose criterion was a1 (Pop music) due to the highest priority of 0.50000; and the desired substitute was criterion b1 (Movie) due to the highest priority of 0.30843.

Table 7: The unweighted super matrix

	a1	b1	b2	c1	c2	c3
a1	0.00000	1.00000	1.00000	0.00000	0.00000	0.00000
b1	0.61686	0.00000	0.00000	0.76744	0.58848	0.64286
b2	0.38314	0.00000	0.00000	0.23256	0.41152	0.35714
c1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
c2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
c3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 8: The limit super matrix

	a1	b1	b2	c1	c2	c3
a1	0.50000	0.50000	0.50000	0.50000	0.50000	0.50000
b1	0.30843	0.30843	0.30843	0.30843	0.30843	0.30843
b2	0.19157	0.19157	0.19157	0.19157	0.19157	0.19157
c1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
c2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
c3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

DISCUSSION

According to the weight sequence table, shown above (Table 9), the discussion results of Taiwan's nation brand are summarized as follows.

First, "popular music (a1)" has the heaviest weight. That is, because the professionals believe that "popular music (a1)" will most affect the nation branding, and it has the fewest cultural barriers it is most likely to spread. So in nation branding from culture, "popular music (a1)" is the fastest and most effective criterion.

Secondly, "movie (b1)" is the desired alternative. That is because "movie (b1)" is an indicator of a country's cultural development as well as the flagship of the cultural industries; movies can be effectively building a nation's brand. So in nation branding from culture, "movie (b1)" is an essential factor.

Thirdly, "drama (b2)" is also a criterion which experts value as important. "drama (b2)" also symbolizes the country's culture. When a large number of TV dramas are shown on other country's TV channels, the national image will certainly be disseminated, and this will make the world understand Taiwan more. So in nation branding from culture, "drama (b2)" should not be ignored.

Table 9: The weight sequence table

Dimensions	Criteria	Weight	Rank
Music (A)	Pop music (a1)	0.50000	1
	Movie (b1)	0.30843	2
Film (B)	TV drama (b2)	0.19157	3
	Artwork (c1)	0.00000	-
Arts and Literature (C)	Theater (c2)	0.00000	-
	Publishing (c3)	0.00000	-

CONCLUSION

Taiwan is a small land, which lacks prestige in the world; creating many challenges for Taiwan to compete with other countries in the international marketplace for tourists, investments as well as talent. For the sake of Taiwan's overall development, nation branding of Taiwan becomes extremely important. It may not be easy, but Taiwan has enough cultural conditions to create a nation brand of Taiwan. So Taiwan's government should make more effort to create and promote this nation brand.

In this study, the view of officials from the Department of Cultural Affairs and academics were used along with the analysis techniques of the DEMATEL and ANP approaches to help develop a deeper understanding of the nation branding of Taiwan. The conclusions of the study are as follows.

The results of the ANP analysis clearly demonstrate that "popular music (a1)", has the highest weight is "movie (b1)", is second and "TV drama (b2)" are third. Popular music has no cultural barriers, movie is an indicator of as well as the flagship of a country's cultural development and TV dramas can send the country's image into the rest of the world, therefore Taiwan's government can develop the nation brand from these three factors. Clearly Taiwan's government should put most of its focus on movies or popular music to help nation branding of Taiwan from culture.

There is little study about how to build nation brand. This research investigates this issue from the perspective of culture. Later researches can formulate a complete strategy of building nation brand by investigating from different views such as exports, governance, people, immigration and investment.

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