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## CONTENTS

**How Do We Optimize Risk in Enterprise Architecture when Deploying Emerging Technologies? ..... 3**

Charla Griffy-Brown, Mark Chun, Howard Miller, Demetrios Lazarikos

**Video Advertising: Connection and differences between consumers? .. 14**

Sónia Ferreira, Sara Santos, Pedro Espírito Santo

**Mobility Assistants to Support Multi-modal routes in Smart Cities: A Scoping Review ..... 26**

Nelson Rocha, Ana Dias, Gonçalo Santinha, Mário Rodrigues, Alexandra Queirós, Carlos Rodrigues

**Risk management in the healthcare safety management system ... 41**

Yuriy Voskanyan, Irina Shikina, Fedor Kidalov, David Davidov, Tatiana Abrosimova

**Integrating a New Generation of Interoperability Agents into the AIDA Platform ..... 54**

Francisca Nogueira, Diana Ferreira, Regina Sousa, António Abelha, Jose Machado

# Video Advertising: Connection and differences between consumers?

Sónia Ferreira<sup>1</sup>[0000-0003-0664-1039], Sara Santos<sup>2</sup>[0000-0002-3581-6478],  
Pedro Espírito Santo<sup>3</sup>[0000-0001-8924-7912]

<sup>1</sup> Centre for Studies in Education and Innovation (CI&DEI), Instituto Politécnico de Viseu, Viseu, Portugal

<sup>2</sup> Instituto Politécnico de Viseu, Viseu, Portugal

<sup>3</sup> ESTGOH - Instituto Politécnico de Coimbra, Coimbra, Portugal

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**Abstract.** The internet search trend has caused that online user are looking for more and more enriched information. The evolution of social media has been huge and users relate to social networks differently than they did before. Currently, there are more than 4 billion active users on social networks and brands are looking to showcase their products and services. Our research found the following factors that influence social media engagement: informativeness, self-connection and advertising stimulation. Through literature review, we propose a conceptual model that has been tested in the PLS-SEM. Data were collected from 237 consumers and our survey found that engagement in social media is explained by the variables identified by our model. Important contributions to brand theory and management will be found in this investigation.

**Keywords:** Social Media Engagement, Video Advertising, Self Brand Connection.

## 1. Introduction

In recent years, the rapid expansion of the use of social networks by increasingly heterogeneous audiences have brought new challenges and opportunities in the area of advertising. The use of advertising videos for social networks in marketing strategies increasingly create engagement with the brand.

Compared to other advertising formats, videos have the possibility of becoming more personal, using creativity to optimize interaction with the public and achieve commercial goals. For that and according to Escadas [1] ads should not be only persuasive, but they must have an affective component that directs to the consumer unconsciously. Structurally, narratives must be based on a plot with incidents and surprises, on characters to whom conflicts, and events take place and at a climax moment where the resolution of the story is presented [2] and the greater conflict finally resolved. In addition, the symbiosis between the structure of the narrative and the elements of the story creates a powerful tool for transmitting information [3] and, when created effectively, allows for more favorable cognitive responses, warm feelings and positive attitudes of the narrative ad, when compared to argument advertising [4].

On the other side, consumers tend to purchase brands and products similar to them, that coincide with their ego and they could build a brand-consumer emotional relationship [5]. Consumer engagement plays a central role in social media marketing strategies, however further research is needed [6] because studies in this topic are limited [7]. In this study we analyze self-brand connection, informativeness and advertising stimulation as predictors of social media engagement on video advertising.

## **2. Literature Review**

### **2.1. Advertising informativeness and stimulation**

Technological innovation is the new context in which advertising campaigns must invest to impact the consumer. Advertising gained power, but also the responsibility to respond to the new consumer who is looking for novelty and low tolerance to consume more of it.

The direct and immediate function of advertising, which is a communication force between the product and the public, is not just to make the purchase take place.

The direct and immediate function of advertising, which is a communication force between the product and the public, is not just to make the purchase take place. Of course, it contributes to this, but its specific objective is to act on the public's state of mind and lead them to purchase [8]. Establish favorable conditions for consumption, create attributes so that, even after the purchase, the consumer feels privileged by the choice. Advertising objectives, dependent on those of marketing, respond to three established basic needs: to inform, persuade and remember [9].

According to Lee and Hong [10], the informativeness of ads is as important as creativity, often emphasized in public literature, they reveal themselves to be the main drivers of behavior favorable to advertisements on social networking services, promoting purchase intentions.

Ducoffe, in 1996, defines advertising informativeness as the ability of advertising to inform consumers about alternative product information, which can create a balance between the offers of producers in relation to the needs of consumers, creating a more efficient market. Schlosser, Shavitt and Kanfer (1999) state that there is even a positive relationship between consumers' attitudes towards advertising with informative characteristics, made on the Internet [11].

On the other hand, advertising campaigns also have more specific objectives, such as helping to introduce a product to the market, maintaining the market, informing about new products and their use, selling the brand image, among others. To achieve these goals, and in digital contexts, advertisers are integrating social media in planning advertising strategies in order to boost digital engagement as well. For Hilde, Noort, Muntinga and Bronner [12], one of the important variables in the analysis of this involvement is the stimulation that advertising can offer. Here, the analysis of the enthusiasm of the recipients and the seduction and originality of advertising is valued through informativeness. Therefore, a clear awareness of these variables and of public needs is fundamental to the success of an advertising campaign. Thus, we proposed the following:

H1: Informativeness has positive effects on advertising stimulation

### **2.2. Self-Brand Connection**

Brands represents who consumers are or want to be, as their life projects, goals or personal concerns [13], are perceived as brands with personality and congruent to their own personality [14].

Consumers tend to prefer brands and products that corresponds to their self-image and ego, which is an important factor in emotional relationship between consumers and brands [15].

The concept of brand-self connection derived from 'Self-Expansion Theory' and it is formed by consumers when conceptualize their self into brands to others [13]. In this way, self-brand connection is a crucial dimension of the consumer-brand relationship

[14] and it is defined by Escalas and Bettman [16] as “the degree to which consumers have incorporated the brand into their self-concept”.

Park et al. [14] conceptualize brand attachment in two dimensions: self-connection and prominence. While self-connection is the expression of individuals their selves similar to brand personality, brand prominence is the easiness and frequency that brand brought into consumers’ mind [14].

Brands are used by consumers to express their self-concept and identity, allowing differentiation from others and express of individuality [17].

Both individual connections and group connections contribute to Consumer-brand relationships [16] as they form consumer's personal identities [18]. The use of each brand and its associations is a way of individuals express their self-identity and satisfying belongingness in reference groups [19].

When consumers have a high self-brand connection also have a higher tendency to engage, refuse negative information about brand and show positive WOM [17]. As brand image and consumer’s ego image coincide it increases the intention to purchase brand and positive evaluations about it [20].

Thomson et al. [19] demonstrates that brand attachment has consequences for brands such as brand loyalty [20] and the willingness to pay a price premium. It is also reflected in emotional responses, brand responsiveness [24], commitment [23] and minimization of the effects of negative information or unethical firm behavior [22]. Therefore, we analyze advertising stimulation as an emotional response. Thus, we propose the following:

H2: Self-brand connection has positive effects on advertising stimulation.

### **2.3. Social Media Engagement**

In recent years, brands have seen changes in the way consumers interact and get engaged especially through social media [25]. Calder, Isaac and Malthouse [26] consider consumer engagement as “a multilevel, multidimensional construct that emerges from the thoughts and feelings about one or more rich experiences involved in reaching a personal goal”. As antecedents of consumer engagement in social media are pointed out: consumer involvement [27] and consumer participation [29].

Costumers’ engagement in social media is showed also “liking” a brand on Facebook, it means that individuals consider that brand as part of their online self-expression [30]. Social media is used by consumers to engage with brands, present an “ideal-self”, and build positive self-images [31].

Thus, brands must create strategies on social media that promote relevant and frequent content as well as incentives for consumer participation [32].

Engagement in social media also depends on the platform, while Facebook is considered easy-to-use and engaging [33], YouTube has less interactivity, and Instagram and Pinterest due to visual appearance provides instant feedback and comments [34].

This engagement is expressed through likes, comments or shares in brand’s posts that reflect cognitive, affective and behavioral aspects [35]. According to the Consumer Online Brand-Related Activity (COBRA) model proposed by Muntinga et al. [35] engagement can be: low (users just consume content, viewing videos and pictures, have a passive posture - lurkers), medium (users contribute, comment on posts, etc.) or high (users share and create content about the brand).

The type of posts also influences interaction, a study by [36] shows that informational posts generate more likes, comments and shares preconsumption stage while entertainment posts generate more interaction in the postconsumption stage. Building trust among users is also fundamental to fostering engagement with brands on social media [37].

In a study about advertising and engagement with social media platform, Hilde et al. [12] demonstrated that engagement is highly context specific, it depends on the experience in each platform, i.e, people evaluate advertising differently depending on the platform used and not just the ad content. Engagement with the medium or platform influences responses and engagement with advertising [29].

Engagement has several consequences for brands, and numerous studies have pointed out this [38] [39] [40]. It has impacts on brand loyalty [39] [40], brand awareness [38], commitment [41], trust [42] and perceived quality [38].

In social media, some studies demonstrated that engagement also increase brand performance [43] and influence purchase decisions and sales [44] [45].

Several studies also confirm that people high engaged can be more responsive to brand advertisements [46]. Consequently, we propose to test the following research hypotheses:

H3: Self-brand connection has positive effects on social media engagement

H4: Advertising stimulation has positive effects on social media engagement

Based on the previous information, our study aims to test the following conceptual model (see Fig. 1).

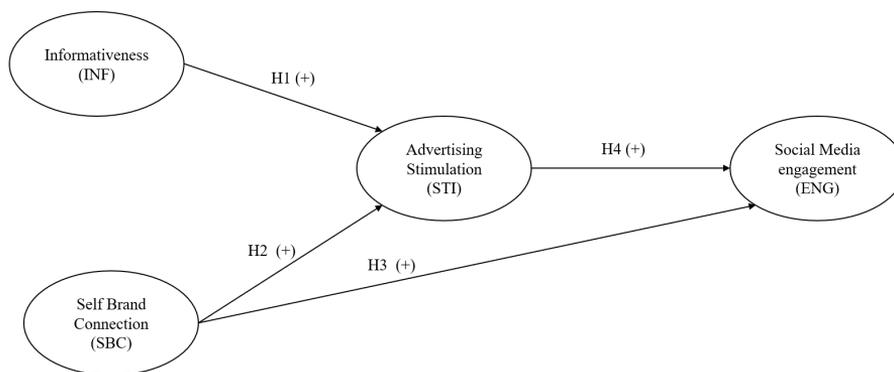


Fig. 1. Conceptual model [38-40].

### 3. Method

The proposed model was validated with collected data through a self-administered survey. The survey was conducted among Staples’ brand consumers. Staples Inc. was founded in 1986 and this company is the world’s largest network of office stores. The survey had two phases. First, we presented an advertising video to the participants, and after, we ask about the video and about the brand.

The construct was measured through previous items used in literature. The measured items for informativeness follow used items from Jeon, Lee and Hong [47]. We measured self-brand connection through items employed by Jeon, Lee and Jeong [47]. The construct advertising Stimulation was measured by items from Voorveld, van Noort, Muntinga and Bronner [37]. Finally, we measured social media engagement through Schivinski and Dabrowski [28]. All the items used in this study were measured using a 5-point Likert scales, ranging from strongly disagree (1) to strongly agree (5).

## Sample

Before we present the estimate model results, we show the sample which has 237 consumers. On table 2 we show that 59.5% are female and most of the observations (N = 185; 78.1%) and originated from individuals below 40 years old. Many of them (N = 134; 56.5%) have primary or secondary school qualifications (Table 1).

**Table 1.** Demographic profiles (N=237)

Variables	Category	N	%
Gender	Male	96	40.5
	Female	141	59.5%
Age	≤ 20	69	29.1%
	20 - 29	97	40.9%
	30 - 39	19	8.0%
	40 - 49	27	11.4%
	≥ 50	25	10.5%
Education	Primary school studies	18	7.6%
	Secondary school studies	116	48.9%
	High School	103	43.5%

## 4. Results

The estimation of the conceptual model followed the methodology through Partial Least Squares - Structural Equation Modeling (PLS-SEM). The PLS-SEM allows researchers to analyze causal relationships between constructs and is suitable for exploratory research and does not require data normality [49]. Furthermore, the PLS-SEM is robust enough for small samples.

PLS-SEM is performed in two steps. In the first step we analyze the reliability and validity of the measurement model and, secondly, we analyze the relationships between the constructs, as suggested in literature [49]. We ran PLS-SEM on SMART PLS v3.3.2.

### Common Method Bias

Responses were collected from the same respondents and, there was a possibility of common method bias. First, we performed Harman's one-factor test [50] with factor one representing 30.52% of the variance. Furthermore, we carry out a preliminary data analysis to validate VIF – Variance Inflator Factor. VIF values are ranged between 1.393 and 3.286 which is below the threshold value (VIF <5). Therefore, there is no multicollinearity. Thus, common method bias would not be a concern. Moreover, we analysed the Skewness (Sk) and Kurtosis (Ku), which reveal that the items do not diverge from normality (Sk <3; Ku <7) [51].

### Measurement Model

On first step of PLS-SEM we analyzed the measurement model and confirmed that the constructs have validity and reliability. Additionally, we con-firmed that the standardized loadings ( $\lambda$ ) are higher than the minimum value of 0.7. The reflexive constructs of the model have an average extracted variance above 0.5 and composite reliability above the minimum value of 0.7. Table 2 shows the results obtained for the measurement model. [52], which are acceptable for further analysis.

Table 2. Items, Descriptive Statistics, and coefficient loadings (N=237)

	<b>Mean</b>	<b>SD</b>	<b><math>\lambda</math></b>	<b>t values</b>	<b>p values</b>
<i>Informativeness (a =0.905; <math>\rho_A</math>=0.905; CR=0.934; AVE=0.778)</i>					
INF01	3.36	0.910	0.859	39.000	0.000
INF02	2.82	1.160	0.819	33.462	0.000
INF03	3.34	0.980	0.904	57.152	0.000
<i>Self Brand Connection (a =0.826; <math>\rho_A</math>=0.826; CR=0.896; AVE=0.742)</i>					
SBC01	2.22	1.075	0.890	46.568	0.000
SBC02	2.55	1.209	0.887	42.610	0.000
SBC03	2.53	1.174	0.900	46.472	0.000
SBC04	2.29	1.162	0.885	42.637	0.000
<i>Advertising Stimulation (a =0.913; <math>\rho_A</math>=0.922; CR=0.939; AVE=0.793)</i>					
STI01	3.13	1.063	0.786	27.536	0.000
STI02	2.77	1.113	0.773	21.754	0.000
STI03	3.50	1.060	0.701	12.686	0.000
STI04	3.01	1.169	0.726	16.921	0.000
STI05	2.67	1.086	0.874	60.179	0.000
<i>Social Media Engagement (a =0.820; <math>\rho_A</math>=0.845; CR=0.874; AVE=0.583)</i>					
ENG01	2.50	1.174	0.857	37.282	0.000
ENG02	2.06	1.106	0.908	58.753	0.000
ENG03	2.31	1.170	0.880	39.287	0.000
ENG04	2.22	1.156	0.883	36.732	0.000

Note: All items are measured with a 5 point Likert Scale ranging between (1) strongly disagree and (5) strongly agree

SD= Standard Deviation;  $\alpha$ =Cronbach’s Alpha;  $\lambda$  =Standardized Loadings; AVE= Average Variance extracted; CR= Composite Reliability; INF=Informativeness; SBC= self-brand connection; STI= Advertising Stimulation; ENG= Social Media Engagement.

Table 2 also shows that Average Variance extracted (AVE) (ranging from 0.583 to 0.793) and composite reliability (CR) (ranging from 0.874 to 0.939) are above the threshold values (AVE>0.5; CR>0.7) [53]. These values showed convergent validity and reliability for all constructs. To validate the measurement model, the analysis of discriminant validity is an essential step. In our study, we analyzed discriminant validity using three methods. Discriminant validity was confirmed in three ways.

Firstly, we present the data obtained to verify the Fornell and Larcker criterion [54] (Table 3). The results obtained suggest that the correlations between the latent variables are below the values of the square root values of the AVE (Table 3).

Table3. Discriminant validity: Fornell and Larcker criterion [54]

	ENG	INF	SBC	STI
ENG	0.882			
INF	0.548	0.862		
SBC	0.544	0.442	0.890	
STI	0.674	0.679	0.584	0.764

INF=Informativeness; SBC= self-brand connection; STI= Advertising Stimulation; ENG= Social Media Engagement.

In the second step, we analyzed the Cross-Loadings values (Table 4) [55]. Table 4 confirms that, for all items, cross-loadings with other constructs are below than standardized loadings ( $\lambda$ ).

Table 4. Cross-Loadings

	ENG	INF	SBC	STI
INF01	0.436	0.859	0.353	0.553
INF02	0.550	0.819	0.428	0.619
INF03	0.422	0.904	0.355	0.575
SBC01	0.576	0.436	0.890	0.557
SBC02	0.397	0.352	0.887	0.456
SBC03	0.445	0.403	0.900	0.477
SBC04	0.492	0.374	0.885	0.570
STI01	0.522	0.446	0.457	0.786
STI02	0.509	0.470	0.491	0.773
STI03	0.319	0.353	0.303	0.641
STI04	0.476	0.624	0.411	0.726
STI05	0.673	0.638	0.529	0.874
ENG01	0.857	0.524	0.497	0.605
ENG02	0.908	0.467	0.504	0.572
ENG03	0.880	0.460	0.449	0.622
ENG04	0.883	0.481	0.468	0.576

INF=Informativeness; SBC= self-brand connection;  
STI= Advertising Stimulation; ENG= Social Media Engagement.

The third way we used to assess discriminant validity was the examination through the Heterotrait-Monotrait correlation ratio (HTMT). In Table 5 we confirm that all HTMT values are below the threshold value of 0.9. and, therefore, discriminant was established between latent variables [55]

Table 5. Discriminant validity HTMT ratio [55]

	ENG	INF	SBC	STI
ENG				
INF	0.630			
SBC	0.589	0.503		
STI	0.760	0.804	0.657	

INF=Informativeness; SBC= self-brand connection;  
STI= Advertising Stimulation; ENG= Social Media Engagement.

## Structural Model

In the second step in the PLS-SEM we examined the structural model and the causal relationships between variables. To analyze the model fit we obtained the SRMR = 0.076, which is below than the threshold value [56]. Next, we divided our sample in two groups of consumers: female and male. Next, we analyzed the adjusted R<sup>2</sup> of the endogenous variables in our model (Table 6).

Table 6. Adjusted R<sup>2</sup> of the endogenous variables

Group	STI	ENG
Female	0.530	0.384
Male	0.604	0.632

STI= Advertising Stimulation; ENG= Social Media Engagement.

The structural model aimed to test the results of the hypothesis test and we examined the results obtained in the male (Table 7) and female (Table 8) consumer groups.

Table 7. Hypotheses testing (group: female)

Path	$\beta$	t values	p values	95% confidence interval	Hypothesis
INF à STI	0,531	8,410	0,000	[0,390 .. 0,640]	H1: Supported
SBC à STI	0,347	5,742	0,000	[0,234 .. 0,476]	H2: Supported
SBC à ENG	0,215	2,549	0,011	[0,051 .. 0,382]	H3: Supported
STI à ENG	0,478	7,308	0,000	[0,336 .. 0,591]	H4: Supported

$\beta$  =Standardized path coefficients; INF=Informativeness; SBC= self-brand connection; STI= Advertising Stimulation; ENG= Social Media Engagement

Table 8. Hypotheses testing (group: male)

Path	$\beta$	t values	p values	95% confidence interval	Hypothesis
INF à STI	0,508	6,918	0,000	[0,355 .. 0,641]	H1: Supported
SBC à STI	0,370	4,511	0,000	[0,200 .. 0,525]	H2: Supported
SBC à ENG	0,199	2,014	0,044	[0,008 .. 0,394]	H3: Supported
STI à ENG	0,651	7,621	0,000	[0,474 .. 0,804]	H4: Supported

$\beta$  =Standardized path coefficients; INF=Informativeness; SBC= self-brand connection; STI= Advertising Stimulation; ENG= Social Media Engagement

The hypotheses were examined by assessing the significance of path coefficients, and we used a bootstrapping procedure with 5000 subsamples.

Hypothesis H1 examines causality between informativity and advertising stimulation. In both male and female groups, we confirm that the relationship exists and the results indicate that, for  $p < 0.001$  informativeness positively influences advertising stimulation.

Therefore, we concluded that informativeness has substantial positive effects on advertising stimulation.

The investigation also examined the influence of the self-brand connection on advertising stimulation. In both groups of Staples brand consumers analyzed, we confirmed this research hypothesis and found that high levels of self-brand connection influence advertising stimulation. Thus, we corroborate hypothesis H2 in our study. Hypothesis H3 is also confirmed in our study, since the results obtained for the female group ( $\beta_{SBC \rightarrow ENG} = 0.215$ ;  $p < 0.05$ ) and for the male group ( $\beta_{SBC \rightarrow ENG} = 0.199$ ;  $p < 0.05$ ) verify the existence of causality between the variables.

Finally, H4 proposes that advertising stimulation positively influences social media engagement. Our results show that this path is significant in both groups. female ( $\beta_{STI \rightarrow ENG} = 0.478$ ;  $p < 0.01$ ) and male ( $\beta_{STI \rightarrow ENG} = 0.651$ ;  $p < 0.01$ ).

## 5. Conclusions

Nowadays, brand communication goes through actions on social networks. The capture of new audiences and the improved segmentation allow communication through social networks to be more effective than in other media. However, the challenges that arise for brands are new and academic research seeks to identify how consumers move in the digital channel.

The investigation we carried out sought to identify engagement in social networks through the presentation of an advertising video, since this form of communication optimizes the interaction between consumers and brands through creativity, informativeness and self-connection with brands.

### Theoretical Implications

This investigation tested the proposed conceptual model and found relevant effects among the variables studied. The results demonstrate that the conceptual model presented better fits the male group compared to the female group. Following Hilde, Noort, Muntinga and Bronner [12], we found significant effects to propose that informativeness influences enthusiasm and emotional stimulation of an advertising video in male and female consumers.

This study additionally observed that the self-brand connection has a decisive position in advertising stimulation. This conclusion is reflected in the literature since higher values of self-brand connection translate into emotional responses to brand advertisements [22].

In this study on advertising, Hilde et al. [12] found that social media engagement depends on previous experiences. This study also found that self-brand connection and advertising stimulation influence social media engagement.

### Implications for management

Evidence from this study demonstrates that the informativeness of advertisements is an important ingredient for consumers to engage with video advertisements. Furthermore, our study reports that the self-brand connection is a predictor of advertising engagement.

Therefore, brands must recognize that the information presented in their ads has consequences, and one of those consequences is social media engagement.

Our study also considers that congruence with consumers in order to promote the self-brand connection is a dimension that companies should take into account.

This study also suggests that advertising videos on social media must be original and unique in order to create something new in consumers that generates advertising stimulus and higher values of engagement on social media.

### Limitations and future research

This investigation has demonstrated that social media engagement is predicted by informativeness, self-brand-connection and advertising stimulation in different audiences (female and male). In general, the variables identified in conceptual model explain the social media engagement, although the explanation is better in the male group. Therefore, brands must understand the determinants identified in this investigation as causes for social media engagement [58, 59].

It is crucial to point out the constraints of our investigation. First, the composition of the sample in terms of age and education may have influenced the results obtained and the groups dimension must be higher. Second, the presentation of a particular message video ad could have affected our results. Third, our inferences must be considered from a transversal point of view.

In this way, it will be appropriate to expand future research on social media engagement [60]. Consequently, we suggest that additional studies should be carried out, with samples different and higher. Additionally, it will be appropriate to carry out researches that explore advertising videos from other brands. In addition, we suggest that longitudinal investigations can be carried out to recognize the advancement of social media engagement over time.

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## Aims and Objectives

Published online by ICS two times a year, Journal of Digital Science (JDS) is an international peer-reviewed journal which aims at the latest ideas, innovations, trends, experiences and concerns in the field of digital science covering all areas of the scholarly literature of the sciences, social sciences. The main topics currently covered include: Digital Media; Digital Economics, Education, Engineering, Finance, Health Care.

The main goal of the journal is the effective dissemination of original incites/results generated by the human brain and presented/reflected in articles using modern information/digital technology.

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## Contact information

**Website:** <https://ics.events>

**Email:** [conf@ics.events](mailto:conf@ics.events)