

# The Impact of Colours on Online Marketing Communications

Chai-Lee Goi

**Abstract**—Colour choice has become a common strategy and correlates highly with marketing. Three broad functions can be identified for colour in a building context especially applied in marketing communications, which are its role as an important parameter in illumination designs, its capacity to influence the visual appearance of a building in a predictable manner and as an aesthetic function. The review of literatures shows that colour has an impact on online marketing communications, and relations between colour, web and marketing communications.

**Keywords**—Colour, website, marketing communications

## I. INTRODUCTION

THE use of colors can contribute to differentiating products from competitors, influencing moods and feelings, either positively or negatively to attitude towards certain products [1]. Website colour appeal is a significant determinant for website trust, satisfaction with differences noted across cultures [2], and colour information such as hue, brightness, and saturation have affects on perceptions, physiological reactions, emotional reactions and behavioral intentions [3][2].

Modularity in colour choice has become a common strategy in the struggle to meet individual and correlates highly with consumer impressions of a product [4][5]. A study by Cyr et al [2] shows that colour applied in the commercial realm has influenced attitude and expectations toward brands. An application of colour can affect consumers' cognitive and affective responses during the service encounter [6]. Kaltcheva and Weitz [7] found that stores appealing atmospherics such as saturated color will increase the pleasure of recreational shoppers.

## II. OBJECTIVES

The main objective of this study is to review the impact of colour on online marketing communications, as well as relations between colour, web and marketing communications.

## III. COLOURS

Cyr et al's [2] literatures commented that colour information such as hue, brightness, and saturation have affects on perceptions, physiological reactions, emotional reactions and behavioral intentions.

- Emotional reactions to colours influenced by physiological and environmental.
- Culture is thought to influence emotional and behavioral reactions to colour.

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- Website design which may include elements such as colour, shapes, images or streaming video contributes to a user's perception of the website [8].
- Visual design of the website, which includes colour resulted in trust, satisfaction and loyalty [2].
- Colour for a cyber banking interface and discovered that colour affects the trust worthiness of the interface [9].
- Users' reactions towards to colour in an online context, and arouses reactions of trust or satisfaction, and to return to the website or to purchase from it in the future [10].

Singh [1] reviewed four aspects of an application of colour in marketing.

- Colours and restaurants: Red is a popular colour choice among fast-food restaurants and yellow color is also employed by fast-food moguls to hijack customers' interests and to gain customers' attention, increase their appetite, and encourage them to eat.
- Colours and waiting time: Time seems to pass slowly and objects seem larger and heavier under a red light. Time seems to pass quite quickly and objects seem smaller and lighter under blue light.
- Colours and brands: Colour has been strong emotional loading and able to prompt a swifter response to packaging. Red is the colour symbolising Coca Cola, and blue is associated with IBM [11][2].
- Colours and trend: With the passage of time, people change preferences for colours. Marketers will develop and forecast for short and long-term color, so they could match the trend and adjust colour of their products' packaging, maximising the likelihood that their products will be preferred based on the colour of the product.

Marketers need to be wise to consider the psychology of colour when designing their marketing materials. Colour has been used as a catalyst for affecting human mood and behaviour in marketing. The principals of colour psychology are being utilised across the web to insight interaction and emotion from onlookers and consumers alike [12]. The model of colour psychology in marketing is shown in Figure 1 [13] and the overall the science of colours in marketing and web design is highlighted in Table I [12].

TABLE I  
 THE SCIENCE OF COLOURS IN MARKETING AND WEB DESIGN

Colour	Description
	Often portrayed as being a cheerful attention getter, and is often associated with liveliness and being energetic. Yellow is also difficult for the eye to take in heavy doses, so it can easily overpower a palette if overused.
	Associated with energetic warmth and ambition. Orange is a vibrant color which often denotes new beginnings, enthusiasm and creativity. Pairing hints of orange with cooler blues often creates an exciting pop.
	The most emotionally intense color of all! Red is an extreme color often associated with boldness, love, and life (blood). Red also can denote a warning (think traffic/sign/alarm) so be careful of overuse.
	Symbolic of nature and organic materials. Green is one of the easiest colors on the eye and is often further associated with safety, optimism, growth, harmony, wealth, luck, and stress relief.
	One of the most commonly used colors. Blue is the color of the sky and is often associated with tranquility, depth, honor, trust, and productivity. Blue is also said to decrease one's appetite.
	Historically connected to royalty, nobility, power and wealth. Purple can also be associated with spirituality but do to its rarity in nature, purple can often appear artificial.
	Often Attributed to femininity, love, romance and tenderness. Pink has also been known to produce a calming effect.
	Solid, dependable, and confident are often Traits attributed to brown. It can be thought of as being both conventional and sophisticated depending on its intended use.
	Usually associated with being conservative, traditional and serious. Shades of grey also act as good base to provide more visibility to bolder colors such as red and orange.
	A symbol of power and authority. Black is also used as a color of sophistication and elegance, often provoking emotions of mystery. Black is also associated with evil, taboo, depth and gloom.
	Signifying purity, cleanliness, sterility, and youth. White is also known to project the absence of color, lending itself nicely to providing negative space in design.

Source: [12]



Fig. 1 Colour psychology in marketing [13]

Humar et al [14] examined legibility of different colour combinations of text and background through a repeated measures design. Their study shows that the best results were achieved with yellow on black, cyan on black, white on blue, black on yellow, white on black, and green on black color combinations. The colour pairs of black and blue, red and magenta, green and cyan, and yellow and white were relatively low. Another study found that the most legible of all color combinations are black on yellow and green on white followed by red on white [15].

#### IV. WEBSITE CLASSIFICATION

Websites can be classified into four categories by their use purposes, which are entertainment, information, communication and commerce (Figure 2) [16][17][18]. The design of website becomes a critical success factor especially for E-Commerce purposes. The literatures done by Goi [19] on website attributes focuses on five attributes, functionality, design, content, originality, and professionalism and effectiveness.

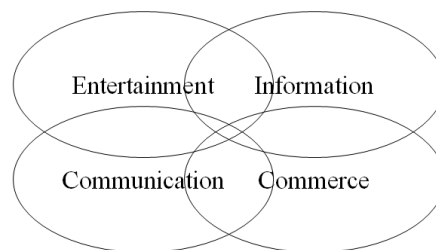


Fig. 2 Classification of websites by use purposes [16][17][18]

Application of website attribute has an impact on website's uses and purposes, in terms of Internet marketing activities. Internet marketing promptly began evolving into different types of activities between economic agents. Table II depicting the interaction between the economic agents of business, consumer and government [20].

TABLE II  
 THE E-COMMERCE MATRIX WITH SAMPLE ECONOMIC ACTIVITIES

	Business	Consumer	Government
Business	B2B Supply chain, Wholesalers	B2C Retailers (goods or services)	B2G Contract bidding, Privatisation
Consumer	C2B Public bidding marketplaces, Auctioneers	C2C Public flea markets	C2G Public government Auctions
Government	G2B Tax and fees collection	G2C Tax and fees collection	G2G Budget allocation

Source: [20]

Burgess and Cooper's [21] Model of Internet Commerce Adoption (MICA) was developed to explain how business's Web sites develop to incorporate aspects of Internet Commerce (Figure 3). MICA consists of three layered stages and incorporates the three levels of the business process of

Ho's [22] model that covers promotion, provision and processing. MICA provides a roadmap that indicates where a business or industry sector is in its development of Internet Commerce application (Figure 4).

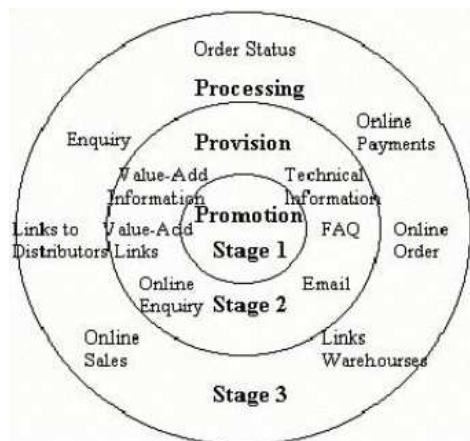


Fig. 3 Model of Internet Commerce Adoption (MICA) [21]

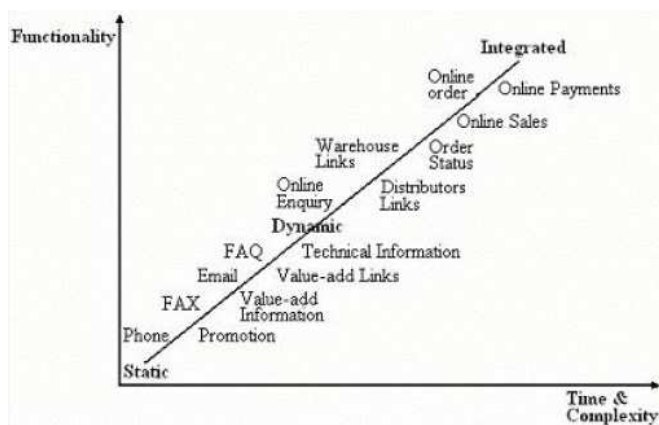


Fig. 4 Internet Commerce roadmap [21]

In Wen, Chen and Hwang's [23] E-Commerce Website Design Models, they proposed a total of 12 website design models for E-Commerce. The first four models that related to the informational/communicational design are brand awareness and image building model, cost saving model, promotion model and info-mediary model. Another eight models that are based on the on-line/transactional design strategy include brokerage model, retail model, mall model, advertising model, subscription model, community model, manufacturer model and customisation model.

#### V. MARKETING COMMUNICATIONS

"During the 1980s, many companies came to see the need for more of a strategic integration of their promotion tools. These firms began moving toward the process of integrated marketing communication (IMC), which involves coordinating the various promotional elements and other marketing activities that communicate with a firm's customers" [24][25].

Marketing activities involve communication (exchange information between sellers and buyers), transaction (generate sales activities), and distribution (physicals exchange of products and services) channels [26]. The basic tools used to accomplish a firm's communication objectives are involving advertising, direct marketing, interactive/ internet marketing, sales promotion, publicity/ public relations and personal selling [25].

Advertising which is a nonpersonal communication of information usually persuasive in nature, about products, services or ideas [27] and turned into specific measurable goals, which are awareness, comprehension, conviction and action [28]. Advertising can be seen as a defensive strategy used to build brand loyalty, which helps in retaining the loyal consumers, and price promotions as an offensive strategy used to attract the loyal consumers away from the rival brand [29][30].

Harridge-March [31] found that direct marketing and relationship marketing have something of value to the other. The combination of the two strategies can only be of value and benefit to both customers and organisations. Direct marketing faces challenges and opportunities associated with the emergence of social network media, which are combines the seller, the buyer and the community. "It is argued that the experience of using a social network site is an integrative framework for reconciling the needs and expectations of buyers, so that the community and firms' involvement in communities can mutually reinforce buyers' experience" [32] (Figure 5).

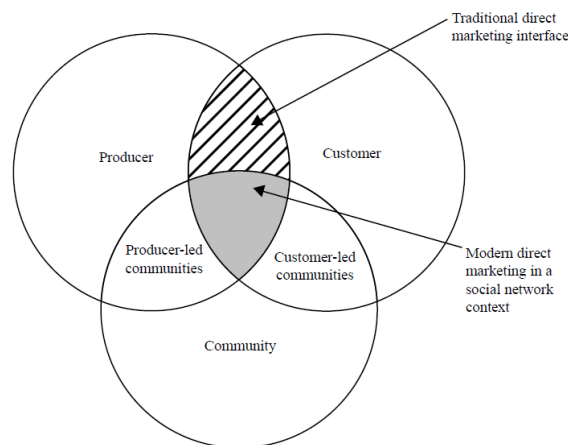


Fig. 5 Direct marketing in a social network context

The Internet network is part of a marketing channel that is being used as an avenue for advertisers, marketers and society by and large to find the right combination of marketing mix utilities that best suit the customer's need [33]. The trend towards an engagement with issues around consumer satisfaction is the key to gaining attention of online consumers and transforming them into repeat customers [34].

Gopal et. al's [35] literatures found that the purposes of sales promotions are for various reasons including shifting inventory cost from retailers to consumers, dealing with

demand uncertainty, price discriminating among different segments of consumers, and shifting the promotion strategies.

Marketers have to take a broader perspective than exchange in developing marketing programmes and it does also imply that PR people may need to apply marketing-type reasoning to public issues and communications. Table III illustrates progressive developments that have taken place in marketing and public relations [36].

TABLE III  
 TOWARDS THE INTEGRATION OF PR AND MARKETING

Factors affecting	Marketing evolution	PR evolution	Factors affecting
Emergence of mass markets and mass communication media	Production	Press agency	Emergence of mass communication and mass media
Persuasive tactics to make consumer attributes match product attributes	Selling/ Advertising	Press agency/ Research	Emergence of audience research
Greater competition, saturated markets, search for competitive advantage	Selling/ Advertising/ Market research	Publicity/ Research/ Public opinion	Fragmented attempts to co-ordinate PR functions
Emergence of marketing brand management organisational structures, initially subservient to other management tasks	Marketing department	Public relations department/ Interaction with publics	Separation of PR into specialised parts addressing differentiated publics
Marketing concept integrated marketing, increased competition, environmental turbulence, start of audience clutter and demassification	Marketing orientation	Public company orientation	Realisation of import of corporate image, variety of publics and issues to address, use of marketing skills in corporate PR, closer liaison with marketing needful
Creation and maintenance of image, societal responsibilities beyond marketing recognized, use of PR as complement to marketing undertaken, greater liaison with corporate PR	Societal orientation	Public orientation	

→Towards integration←

Source: [36]

Marketers are using personal selling especially for person-to-person communication and involve more immediate and precise feedbacks [25]. The Internet affects the personal selling process in many ways and in several contexts. Grewal

et al [35] delineated the personal selling contexts and type of relationship using a 2-by-2 matrix portrayed (Figure 6). Horizontally, type of exchange – transactional versus relational, and vertically, personal selling context – retail (B-to-C) and B-to-B.

		Type of Relationship	
		Transactional	Relational
Personal Selling Context	Retail (B-to-C)	Cell 1	Cell 2
	B-to-B	Cell 3	Cell 4

Fig. 6 Personal selling contexts and relationships

Early study by Whitfield and Slatter [38] found that three broad functions can be identified for colour in a building context especially applied in marketing communications. Firstly, its role as an important parameter in illumination designs, the control of visibility conditions for specific tasks and object identification. Secondly, its capacity to influence the visual appearance of a building in a predictable manner. Finally, as an aesthetic function.

Andrews [39] believed that colour actually improves the business from boosting the effectiveness of promotions to polishing the halo over the brand and even generating new revenue. Gorn et. al's [40] study showed that ads containing colours with a higher level of value lead to greater liking for the ad, and this effect is mediated by the greater feelings of relaxation elicited by the higher value colour. Funk and Ndubisi's (2006) study showed that attitude towards colour, colour attractiveness, normative colour and colour preferences are significantly associated with product choice.

## VI. CONCLUSION AND FUTURE RESEARCH

The analysis of literatures found that colour has an impact on online marketing communications, as well as direct and indirect relations between colour, web and marketing communications. Most of studies found that red and blue are two popular colours to be applied in marketing communications activities. A further investigation will focus on the impact of colour on marketing communications based on specific marketing communications' activities. Further study could also focus on relation between colour appear in web design and marketing communications as well as associate with emotions and behavior (Figure 7).

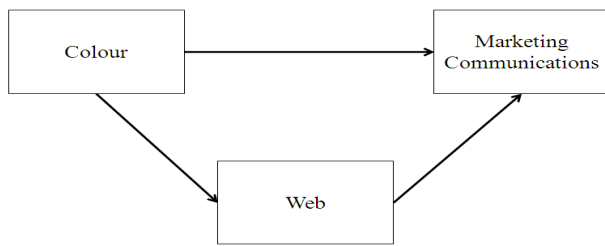


Fig. 7 Future research model

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