

Content Sharing in Global Brand from Geographic Perspective

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Abstract—Though websites offer a direct channel for global brands to communicate in the international market, the presence of outdated and inconsistent content can potentially create poor impressions. This study foresees the occurrence of inter- and intra-regional discrepancies in information shared via country-specific websites, for example, inconsistent content in product specifications shared with customer in the Asia-Pacific and North American regions. To deal with regional discrepancies, this study examined managerial preferences for content sharing within and beyond geographic regions in global brands and identified traits such as coupling and scales in sharing. High coupling in websites within Europe suggest that intra-regional discrepancies are more likely to occur in content shared inside the European region and high coupling in websites among Asia-Pacific, Europe, and Middle-East-Africa suggest vulnerability to inter-regional discrepancies. Preferences in sharing revealed in this study have implications in the design of consistency policy customized for specific regions.

Keywords-content sharing; regional discrepancies; country-specific websites; geographic perspective; web globalization.

I. INTRODUCTION

The growing potential for websites to establish brand image and enhance relationships with customers globally has stimulated the publication of massive amounts of content targeting specific countries. Though customer expectations are met with country-specific websites, the managerial challenge is in projecting a lasting impression. Empirical evidence stresses that websites providing outdated or inaccurate information create poor perceptions about the company, leading to dissatisfaction and website abandonment [1]. Statistics also show an increasing trend in the publication of country-specific websites from global brands (100 websites in more than 20 languages) [2] raising the possibility for inconsistencies in content shared among the websites. A critical and daunting task for managers is to ensure consistency while sharing content with their customers.

Inconsistencies from the lack of updated content or the presence of conflicting content in country-specific websites potentially risk brand image. More severe are inter-regional and intra-regional discrepancies caused by conflicting content shared with customers in the same or different geographic region, for example a mismatch in information related to product use, specifications for customer in Asia Pacific and North America. It is crucial to expand our

understanding of global brands' managerial preferences in sharing content for specific categories such as product- or company-related information with customers within and beyond the geographic region to deal with regional discrepancies. This study contributes by examining content shared among country-specific websites from global brands for possible traits in sharing restricted to specific geographic regions.

Though extensive studies on content and design features in corporate websites among cultural groups, industry, or product types have returned mixed results for standardization or customization in multinationals [3][4][5]; a geographic perspective in web localization is relatively less explored. Previous research noted cultural differences among geographic regions, such as the individualistic low-context culture of western societies in North America and collectivistic high-context cultures in Asia influencing their preferences for the use of messaging services [6]. The perception of website effectiveness in corporate B2B websites also varies for customers in North America and Europe, and the underlying differences between how customers in North America perceive marketing stimuli as compared to customers in other parts of the world [7][8] all motivate an exploration of the traits in shared content for specific geographic regions as depicted in country-specific websites.

This study qualitatively compares webpages offered in the country-specific websites of global brands to examine propagation among websites within and beyond a geographic region. The results indicate interesting outcomes on coupling and scales in sharing that vary for specific regions. First, examining propagation among websites within geographic regions revealed high coupling in websites among countries in Europe and low coupling in websites among countries in North America, suggesting that websites in North America tend to be autonomous. Second, examining propagation among geographic regions also revealed low coupling in websites for countries in North America, which further suggest less interaction with websites from North America. Examining content categories also revealed scales in sharing depicting the suitability of content for specific or entire regions. Providing information on the current state of managerial preferences in global brands for sharing content, this study potentially helps avoid regional discrepancies with

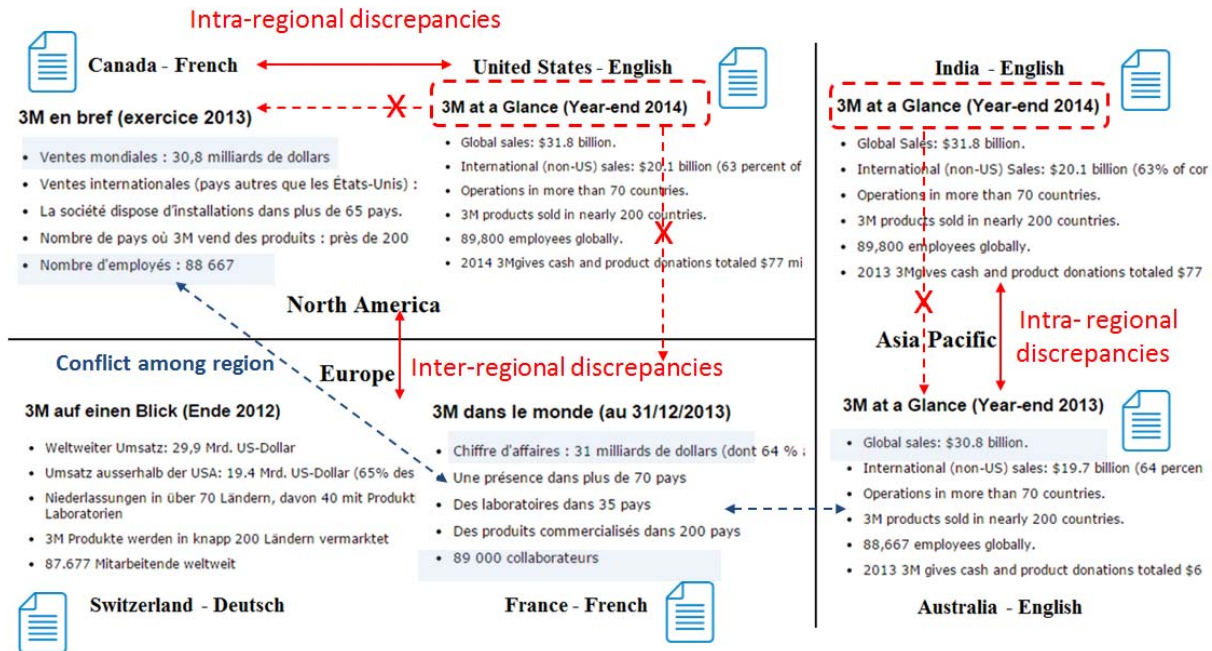


Figure 1: Intra- and Inter-regional Discrepancies in Shared Content

content consistency policies customized for a specific region.

This paper is organized as follows. Section 2 presents an example depicting inter- and intra-regional discrepancies in content shared with the customer. Section 3 reviews theoretical insights from past research and states the study's hypotheses. This is followed by a description of the methodology and findings in Sections 4 and 5, respectively. Section 6 discusses the managerial implications and limitations, and the conclusion is offered in Section 7.

II. MOTIVATING EXAMPLE

Fig. 1 illustrates discrepancies in information shared with customers residing in several geographic regions that possibly occur on websites belonging to global brands. To illustrate, the content "3M at a glance" from country-specific websites managed by the global brand 3M for the US, Canada, France, Switzerland, India, and Australia representing North America, Europe, and Asia-Pacific are examined. A number of problems occur in country-specific websites intended to share information in several languages within and beyond geographic regions.

a. Latest information inaccessible: As illustrated, only country-specific websites for the US and India offer the latest information for the year 2014, while those for the remaining countries offer information for the previous year. Intra-regional discrepancies are highlighted by the lack of recent information for countries in the same geographic region, such as Asia-Pacific (India and Australia) and North America (US and Canada). Though the latest information is

partly accessible to customers in countries in Asia-Pacific and North America, it is not available at all to customer accessing websites in Europe, highlighting inter-regional discrepancies.

b. Conflicting information: In addition to missing updated information on the European websites, there is conflicting information shared for the year 2013 among country-specific websites for France, Australia, and Canada. The statistics for "global sales" and "number of employees" offered on the website for France conflicts with content offered both in Canada and Australia. Inter-regional discrepancies from conflicting content in countries among regions such as Asia-Pacific, North America, and Europe provides customers with contradictory information shared among these regions.

Besides this, there are also inconsistencies or discrepancies in information shared for cases where the official language is the same among countries. Though English is a common language offered for the websites for the US, India, and Australia, up-to-date information is not available for Australia. Similarly conflicting information is also accessed in French, a shared language for websites for France and Canada. Additionally, for countries with multiple official languages, there are discrepancies in between the sites offered in the official languages within a specific website.

The problems in content shared among country-specific websites illustrated in this example foresee the occurrence of regional discrepancies in the information shared. This is critical, as information is accessed from the preferred

country-specific website and language. Conveying contradictory or incorrect information to customers with distinct linguistic and geographic backgrounds can be detrimental to the brand's reputation. To avoid such discrepancies, this study aims to determine the traits in sharing that exist in country-specific websites. The next section presents this study's hypotheses.

III. THEORY AND HYPOTHESIS

Though at first glance, the internet seems to be a culturally and physically neutral medium, cultural theorists have diverging opinions about localizing websites. Proponents of standardization view cultural homogeneity across countries from the spread of western culture dominating the national culture favoring standardization in products and services worldwide, or a website with a "one size fits all" approach [9][10]. Contrary to this, the Hofstede typology of culture elucidates differences in cultural values among countries, implying the importance of localizing products and services to ensure cultural relevance with the local market [11][12]. Such opposing views on globalization also influence the management, design, and content on websites with the option to either decentralize localization responsibilities to the offices in host countries or centralize in the home country [13]. Managers must target individual markets with country-specific websites and offer content in the official language, and determine the extent of cultural adaptation.

Robbins conducted a content analysis of corporate websites and found that website content features differ significantly across cultural groups [5], while others found differences in both content and design features according to the local culture of the target audience and market [14]. Also, such differences exist among industry sectors and B2B products in a target market [3][4][15]. In a broader context, the cultural difference among geographic regions in previous research has also raised concerns about website localization targeted for a specific region. Others depict cultural influences in preferences for the use of instant messaging among North America and Asia [6], differences in consumer perceptions in marketing stimuli and website effectiveness from specific regions, such as North America and Europe [7] [8] also support geographic considerations in website localization.

Several website categories, from standardized to highly localized, also suggest that managers should offer consistent design across country-specific websites or adapt them to meet the locale-specific needs of the target market [16]. Similarly, website categories [17] also indicate levels of cultural adaptation by global, local, and glocal, balancing global appeal and local flexibility in the design. Bringing this notion into country-specific websites representing global brands, content sharing among the websites is presumably either standardized with same content offered for both domestic and international users in all regions, or

localized with content for international users within specific regions and not shared among country-specific websites. However, the presence of content in varying proportions among websites indicates content sharing restricted to specific websites. As earlier research demonstrates cultural differences in geographic regions and location specificity in knowledge sharing, the suitability of content for specific regions and their restricted reach to country-specific websites is also presumed to differ with geographic regions. To shed light on restrictions in sharing across geographic regions, we set the following hypothesis:

H1. Propagation among country-specific websites is constrained by geographic region: Asia Pacific, Europe, North America and so on.

As several categories such as corporate- or product-related information and so on are published on websites, the restriction in content sharing for specific categories is also presumed to vary with geographic region. Previous research shows the differences in content and design features among cultural groups, industry, product types, and so on. The sharing of specific content categories in geographic regions will also shed light on propagation restricted among country-specific websites. We thus set the following hypothesis.

H2. Propagation of content categories such as corporate- or product-related information among country-specific websites is constrained by geographic region.

The goal from the stated hypotheses is to uncover traits in sharing by global brands, demonstrated by the content shared in their country-specific websites targeting a specific geographic region. The contribution will have implications for policy for consistent content sharing on websites managed by global brands. The methodology for this study is presented next.

IV. RESEARCH METHODOLOGY

Fig. 2 summarizes the steps taken to examine sharing among countries in specific geographic regions by sampling webpages and comparing them in their country-specific websites. The elements comprising the step are detailed in the next subsections.

A. Country-Specific Website

Websites from 10 global brands (Nivea, 3M, Starbucks, Acer, Samsung, KPMG, HP, Nestle, Avon, and John Deere) that are listed in the web globalization report card [2] are selected for this study. Each of the chosen global brands offers worldwide products and services targeting an international market with more than 40 country-specific websites in more than 20 languages. From each global brand we select

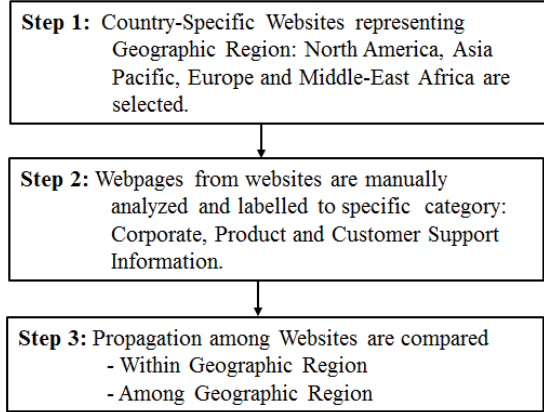


Figure 2: Outline on Steps to examine Content Sharing

a sample of 8 country-specific websites targeting: India, Australia, the UK, Ireland, the US, Canada, the Middle East, and South Africa representing the geographic regions of Asia Pacific, North America, Europe, and Middle East-Africa. A total of 80 country-specific websites are the source for webpage samples used for comparison.

B. Content Category

Previous research [5][15] analyzed content features such as general company information, financial information, and so on among cultural groups. Such features indicate general design and cultural adaptations in websites among global brands rather than websites managed by each brand. This study also uses content categories in sampling webpages from the country-specific websites of each global brand. The content categories are: corporate information, or the pages that provide background information about a company, such as mission statements, history, and employees; product information, or pages that describe the products, their use, and specifications; and customer support information, or pages that provide contact information or methods to have any questions answered.

C. Geographic Region

Four regions, Asia-Pacific, North America, Europe, and Middle East-Africa are chosen as global brands categorize their country-specific websites into these regions. Cultural differences among the regions are also highlighted in earlier research, and these regions are further explored in analyzing the websites.

D. Webpage Samples

From country-specific websites in each geographic region, webpages that offer content in English is manually analyzed to label them according to specific content categories: “Corporate Information”, “Product Information”, and “Customer Support Information”. From websites in each global brand,

48 webpage samples are collected, making a total of 480 webpage samples used in this study.

E. Comparison of Webpage

The content in the sampled webpages are qualitatively compared to determine whether propagation occurs among the websites within and beyond geographic regions. Propagation among websites is determined by checking the presence of a paragraph of text in the webpage of a source website with the remaining websites. Propagation is determined to occur among the websites if the exact same paragraph or a comparable paragraph is present in their webpage. Comparable paragraphs are paraphrased text that provides the same information on the websites. Similarly, no propagation is assigned when content is not the same between the webpages of the corresponding website or the webpage does not exist. In this study, webpages are compared to examine propagation among country-specific websites within and among geographic regions, as explained below.

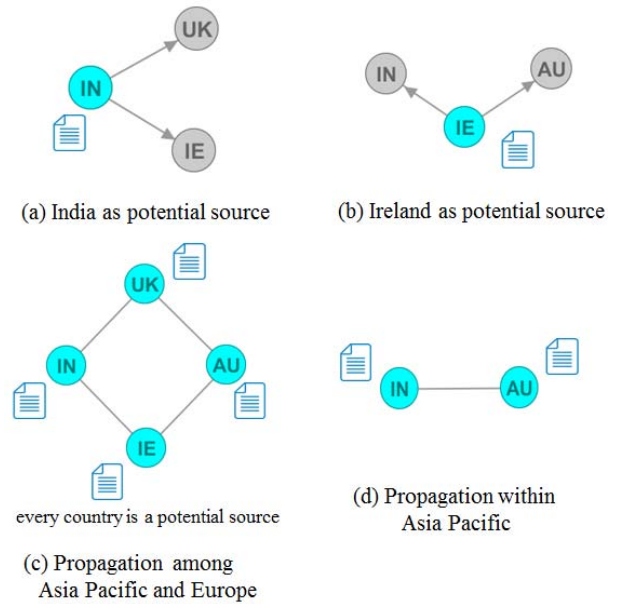


Figure 3: Propagation in Geographic Regions

1) *Among Geographic Regions:* From the four geographic regions, there are 6 possible inter-regional comparisons for propagation among regions such as Asia-Pacific-Europe, Asia-Pacific-North America, and so on. As the information on the source website where the content first originates is not publicly accessible, each country-specific website is considered a potential content publishing target to share with the remaining websites (the cyan colored node represents the source website). Fig. 3.a depicts India as the potential source website with content propagated to countries in Europe (United Kingdom and

Ireland). From choosing each country as a potential source and comparing webpages, the graph in Fig 3.c represents propagation that occurs among countries in Asia-Pacific and Europe. For each inter-regional pair, 240 comparisons of webpages are performed and repeated to check for propagation in the remaining inter-regional pairs. A total of 1440 comparisons are performed to check for propagation in a geographic region.

2) *Within Geographic Regions*: Webpages are also compared to check for propagation among country-specific websites from the same geographic region. Fig. 3.d illustrates an example of propagation occurring within Asia-Pacific with propagation of content in websites between India and Australia. A total of 240 comparisons of webpages are performed to check for propagation occurring within all four geographic regions.

The next section describes the findings from these examinations.

V. RESEARCH FINDINGS

The results from webpage comparisons within and among geographic regions are compiled in this section, as well as the results from examining specific content categories and their propagation for specific geographic regions.

A. Propagation Within Geographic Regions

Table 1 presents the qualitative results from comparing webpages for propagation among country-specific websites within each region. The occurrence of propagation and no propagation among websites is used as a measure for coupling in shared content among countries within a region. A greater number of occurrences of propagation within a region indicates high coupling in country-specific websites within that region. This comparison reveals differences in coupling in the websites.

As illustrated in Fig. 4.a. the number of occurrences of propagation and no propagation among websites are comparable within Asia-Pacific and Middle East-Africa. However, for websites in North America, there tends to be less propagation (33%) while the majority of cases (67%) show no propagation occurring among websites. In contrast, the number of occurrences of propagation tends to be higher (58%) among websites in Europe, with some cases (42%)

Table I: Summary: Within Geographic Regions

Within Geographic Regions	Occurrences of Propagation			
	Yes	%	No	%
Asia Pacific	29	48	31	52
Europe	35	58	25	42
North America	20	33	40	67
Middle East - Africa	32	53	28	47

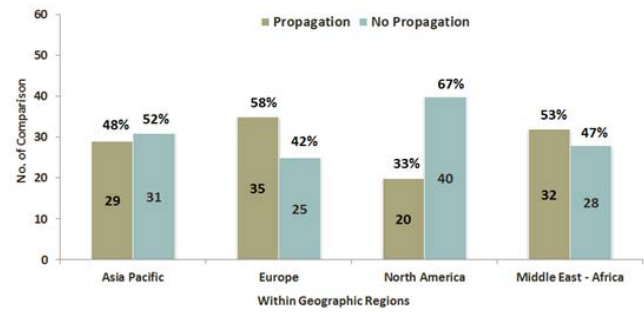
Table II: Summary: Among Geographic Regions

	Asia Pacific		Europe		North America		Middle East - Africa							
	Yes	%	No	%	Yes	%	No	%						
Asia Pacific			107	45	133	55	78	33	162	68	105	44	135	56
Europe	107	45	133	55			83	35	157	65	110	46	130	54
North America	78	33	162	68	83	35	157	65			87	36	153	64
Middle East - Africa	105	44	135	56	110	46	130	54	87	36	153	64		

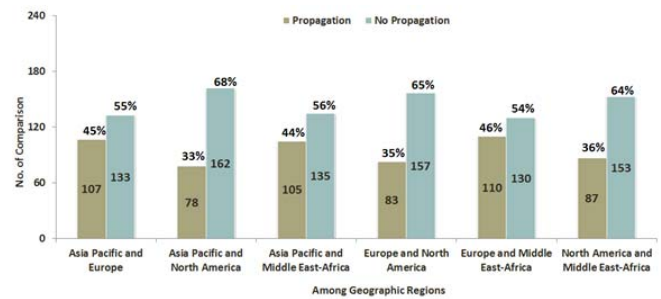
of no propagation. The difference in propagation suggest coupling in websites that vary with each region.

1) *Coupling within Geographic Regions*: Most cases of propagation occur among country-specific websites in Europe, suggesting high coupling in websites among countries in Europe. Similarly, a tendency toward no propagation among country-specific websites in North America suggest low coupling among countries in North America. As previous research accounted for cultural differences in geographic regions these findings further support existing differences in sharing content for specific regions.

Another interesting finding from the differences in coupling is that country-specific websites in North America tend to be more autonomous compared to those in Europe.



(a) Within Geographic region



(b) Among Geographic region

Figure 4: Summary of Propagation for Specific Regions

English is a dominant official language in North America, while several official languages are used in Europe, so the low coupling in websites in North America seems reasonable, as the customer will probably access English content if it is not available in their preferred language. On the other hand, higher coupling in websites within Europe also seems reasonable, as content is available in multiple official languages in several countries, and more interaction is required to ensure that content is shared with customers from most of countries in Europe. The next subsection examines propagation among geographic regions.

B. Propagation Among Geographic Regions

Table 2 compiles the qualitative results from comparing webpages for propagation among geographic regions. Fig. 4.b illustrates that the number of occurrences of propagation and no propagation is comparable among Asia-Pacific, Europe, and Middle East-Africa. However, there are noticeable differences in the number of occurrences of propagation and no propagation in content shared with countries in North America. Similar to coupling within geographic region, there are also differences in coupling in content shared with other region.

1) *Coupling among Geographic Regions*: Less than 40% of the propagation occurs from countries in Asia-Pacific, Europe, and Middle East-Africa with countries in North America and more than 60% cases have no propagation, which suggests low coupling in websites for sharing content from Asia-Pacific, Europe, and Middle East- Africa with customers in North America. The differences in coupling also suggest that global brands tend to prefer sharing content mostly among markets in Asia-Pacific, Europe, and Middle-East Africa, and prefer to offer specialized content for markets in North America not shared with other region.

The low coupling with websites in North America also suggest that country-specific websites in North America tend to have less interaction with websites from other region. Though English is used globally, languages other than English are used outside of North America, which potentially reduces interactions among websites from North America and the other regions. Several content categories are also examined for propagation in specific regions and are presented next.

C. Content Category Propagation

Comparing webpages for specific content categories “Corporate Information”, “Product Information” and “Customer Support Information” on websites in different geographic regions provided further insights into coupling that varies by geographic region for specific content categories. In addition, the findings also suggest scales in sharing, depicting suitability for sharing specific categories within or outside a specific region.

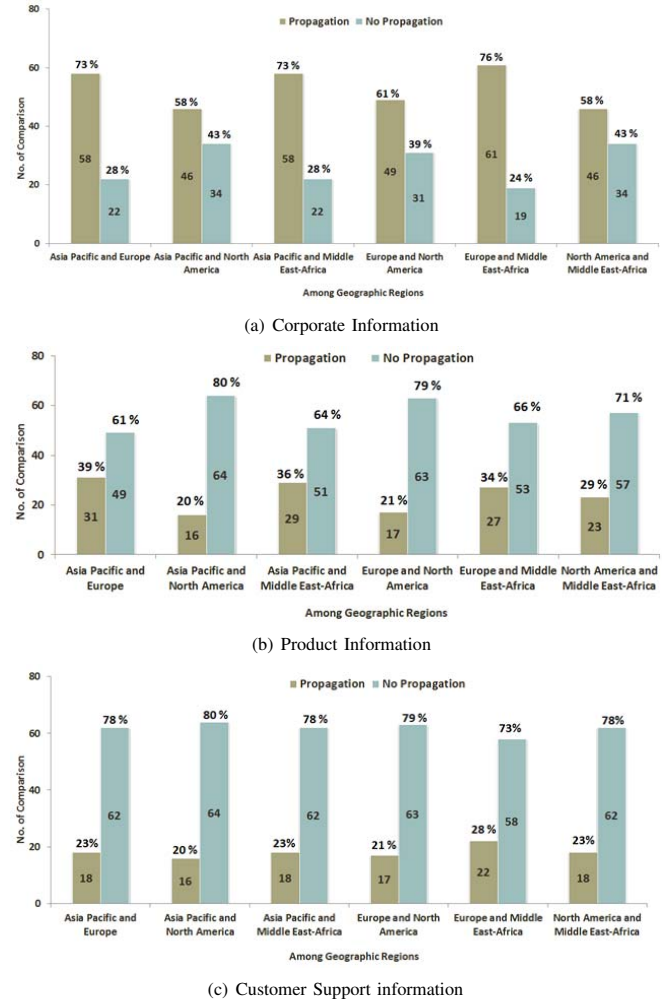


Figure 5: Summary on Propagation for specific Content Category

1) *Scale in Content Category*: Fig. 5.a shows that propagation tends to be higher in websites among all regions while sharing content for “Corporate Information” outside its specific region. This suggests that coupling in websites tends to be higher for sharing corporate-related information from one region to another. In particular, propagation occurs more (more than 70%) for corporate-related information among Asia-Pacific, Europe, and Middle East-Africa, suggesting that this is a globally suitable category for customers in all regions. In contrast, the lower propagation among regions for “Product Information” and “Customer Support Information” in Fig. 5.b and Fig. 5.c, respectively, suggest that this content

tends to be region-specific and either locally or regionally suitable. This also suggests low coupling in country-specific websites while sharing content describing products or contact information.

Referring to Fig. 5.b, there are noticeable differences, with less than 30% of propagation and more than 80% of cases with no propagation in the “Product Information” category when sharing with North America suggesting that websites in this region are more likely to prefer region-specific content when describing product use or specifications. However, differences in propagation and no propagation for “Customer Support Information” in Fig. 5.c seem to be consistent among all regions, suggesting that websites in all regions are more likely to prefer region-specific content when describing customer support. From identifying traits such as scales and coupling in websites that vary for specific geographic regions and content categories, these findings provide enough information to verify the hypotheses.

Tables 1 and 2 report the occurrences of propagation that vary among websites within and beyond geographic regions, for example, higher occurrences of propagation inside the European region or among Asia-Pacific, Europe, and Middle East-Africa, and so on. The results convincingly support hypothesis H1 in depicting constraints in propagation due to differences in geographic regions. Hypothesis H2 is also supported, as propagation of specific content categories also vary with geographic regions, for example, corporate-related information is propagated mostly among Asia-Pacific, Europe, and Middle East-Africa while customer support-related information is confined within each region. The managerial implications from the finding are discussed next.

VI. MANAGERIAL IMPLICATIONS

Findings from this study also reveal managerial preferences rooted in global brands for sharing content with customers inside and outside geographic regions.

First, the higher propagation in the European region showed that managers prefer to share most content among countries inside Europe as compared to other regions. Second, there is less propagation to countries in North America, suggesting that global brands tend to prefer to share most content among markets in Asia-Pacific, Europe, and Middle-East Africa, but offer specialized content for its customers in North America not shared with other regions. Further, global brands also prefer to share corporate-related information, mostly among Asia-Pacific, Europe, and Middle East-Africa. Product-related information is specialized in Northern America but shared among other regions, and customer support information is confined within each region.

These findings of preferences in managerial practices of global brands in sharing content on country-specific websites among geographic regions has several implications for managerial policies aiming for consistency. Coupling in websites that vary by geographic region dictate the need to

separate policy enforcing consistency for specific regions. Among all regions, the European region is more vulnerable to content inconsistencies due to the high coupling in websites while sharing content. Rigid policies for content consistency is suited to content sharing for customers in the European market; whereas policies can be lenient in terms of sharing for customers in North America. Tendencies for sharing corporate-related information globally in all regions, especially among Asia-Pacific, Europe, and Middle East-Africa also suggest the severity of content consistencies in sharing such content among these regions. Though information related to products and customer support are region-specific with less coupling among regions, websites in North America tend to prefer producing specialized information describing product use and specifications irrelevant to other regions. In other words, content consistency in sharing product-related information should be strictly applied locally in North America compared to other regions. Severe content consistency, as revealed in this study, is useful in generating policies to avoid inter- and intra-regional discrepancies in information provided to customers along with a content consistency policy customized for specific geographic regions. This study contributed to existing web globalization literature by offering findings on the current state of multinational corporate website strategies to share content, and advances our knowledge about influences from a geographic perspective. However, there are some limitations to address in future research.

Propagation among websites in distinct language pairs, aside from English, as used in this study can provide further interesting results about content sharing that vary for specific languages when shared among geographic regions. Though the sample of websites and webpages chosen for this study is reasonable, the results can be further improved by increasing the number samples, for example, increasing the quantity of country-specific websites in each region can improve the generalizability for all countries. The same holds for content categories to cover more information, such as employment, finance, and so on. Future work should focus on integrating content consistency policies customized for specific geographic regions and specific content categories with an inconsistency detection mechanism [18][19] to design a multi-language content sharing system.

VII. CONCLUSION

This study expanded our understanding of managerial preferences among global brands in sharing content via their country-specific websites. By examining propagation within geographic regions, we find high coupling in websites among countries in Europe and low coupling in websites in North America, suggesting that websites in North America tend to be autonomous and participate less in sharing. Higher propagation inside Europe also revealed global brands preferences for sharing most of its content among these countries

compared to other regions. This raised an important concern that among all regions, customers in Europe are more vulnerable to intra-regional discrepancies from inconsistencies in shared content. Similarly, examining propagation among geographic regions also revealed low coupling in websites sharing content in North America, which further supported the autonomous nature of websites in this region. However, websites from Asia-Pacific, Europe, and Middle-East Africa mostly share among themselves, and are hence more vulnerable to inter-regional discrepancies. Investigating specific content categories revealed tendencies to share corporate-related information globally, while information related to products and customer support are confined within a specific region. Additionally, websites in North America prefer to have specialized product-related information not shared with other regions, while customer support-related information is specialized for each region and not shared.

The revelation of preferences in sharing content within and beyond geographic regions has implications on the design of consistency policies customized for specific regions. For example, a rigid content consistency policy is suited to sharing content with customers in Europe, whereas policies can be lenient for content targeting customers in North America. This study raises the prospect for avoiding regional discrepancies and contributed to the existing web globalization literature by showing the current state of corporate website strategies for content sharing from a geographic perspective.

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