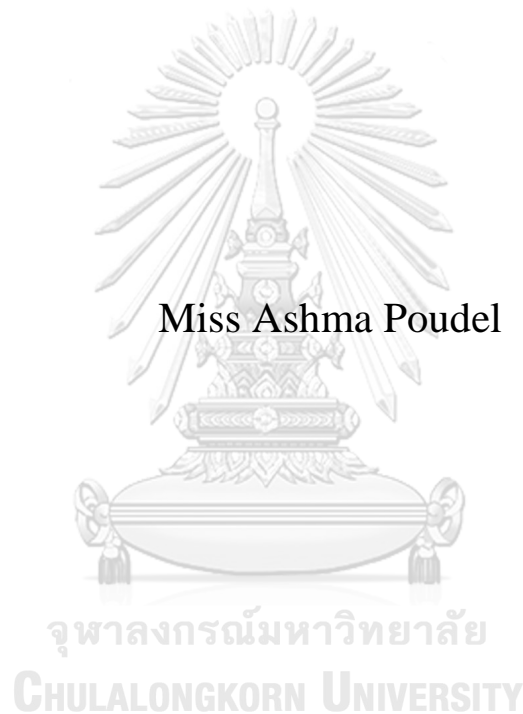


How does Synergistic Advertising Strategies created by
Advertisers have an impact on their Media Revenue. Company
Specific: BTSG Holdings PLC



Miss Ashma Poudel

An Independent Study Submitted in Partial Fulfillment of the
Requirements
for the Degree of Master of Arts in Business and Managerial Economics
Field of Study of Business and Managerial Economics
FACULTY OF ECONOMICS
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Ashma Poudel : How does Synergistic Advertising Strategies created by Advertisers have an impact on their Media Revenue. Company Specific: BTSG Holdings PLC. Advisor: Asst. Prof. SAN SAMPATTAVANIJA, Ph.D.

The objective of this paper is to prioritize importance of synergistic advertising attempts which is shown by the increased media revenue of a business house. For the past few years, there has been drastic shift on how the companies advertise, and each competing company are trying to draw the user's attention towards their product. Thus, this research paper portrays how the modern Marketing Intelligence works, why using both the online & offline advertising in one platform together is crucial in today's advertising world. This has been shown by collecting, compiling, analyzing real time data from an existing entity. The result has been reflected when the Media Revenue of the entity has increased significantly, after embedding both offline & online advertising in a single platform.



Field of Study:	Business and Managerial Economics	Student's Signature
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Introduction

Offline-to-Online (O2O) Model/Synergistic Marketing Communication, is a new marketing concept. O2O model integrates the offline advertising (billboards, television etc.) with the online advertising (i.e. World Wide Web/ Smart Card embedded with microchips where every little information is stored). With the O2O model, organizations uses extensively powerful data to provide attractive promotion and marketing campaigns to its targeted customers. Thus, synergies created by O2O in organizations affect its outcomes, in terms of creating and leveraging market-based asset- which ultimately leads to corporate's media revenue.

With surreal transformation taking place in marketing model, offline marketing and online marketing strategies are used as complement than as the substitute. The combination of online and offline marketing strategies is referred to as online-to-offline (O2O)/synergistic marketing. What is different with O2O is its ability to customize & deliver advertising to each individual customer. This is all possible with the use of Data Analytics & Market Intelligence. Once the company is able to extract data about its individual customer that is stored in any kind of microchips embedded in the smart card; the powerful algorithms that the company has access to, operates as commanded by the advertisers in order to personalize & customize advertisement to individual customers (Leung, et al., 2016).

Synergistic effect of both Traditional & Information Technology based Advertising creates loop in the marketing: attracting, engaging, retaining, learning, and relating to audiences. Traditional advertising has its own space in Thai Market, as the elderly population still are not very open to using IT and reap maximum benefit of Web Based Advertisement relative to Gen X & Gen Y. With only traditional marketing, no one can be sure when this loop loses its grip and advertising effect doesn't itself retain its total effect. Such synergistic marketing & its organization ensures that customer & the brand are always intact, even though there is no monetary transaction taking place. The core of today's marketing is not just to push customer towards one-time transaction, but continuously interact & engage with them in order to reap lifetime value from the customers. Customer Lifetime Value opens when customer of advertisement recommends a brand to their friends or get back to the company anytime in the future or respond to future promotional events of the company, etc. The more a company can attract, engage, retain, learn, and relate to its audiences, customers then remain intact with the company. Continuously engaging audiences with the brand is how an advertiser can increase its media revenue, even though there is just some passive interaction of the customers with

the company. In this age of technological advances and the continual use of online marketing strategies combined with powerful & witty offline marketing strategies by big corporate houses has contributed towards increased media revenue (Ulrike Gretzel & Fesenmaier, 2012).

Literature Review

Studies suggest that advertising in Thailand is influenced by American advertising strategies on how advertising is catered. However, advertisers did not just agree with every process typically used by agencies outside of Thailand. They combined those advertising strategies with their own appropriate approach. Which means that, advertising agencies fully accepted Thai business culture, allowing varied creative advertising strategy (Punyapiroje, Morrison, & Grubbs, 2012). Advertisers regularly review data on individual customers, product and market analysis so as to develop creative advertising strategies. Synergies have been created by the Advertising Agencies to reap extra customer benefits and thereby increase their Revenue.

Synergies in Advertiser's creative Advertisement gets everything together to reach out their targeted audiences. From Offline, Ad Agencies use: Billboards, Train Station Advertisement, advertisement in delivery package of logistic companies, etc. On the other side, agencies also make immense use of online advertisement platform with the help of Information Technology like World Wide Web, Social Media Platform Apps etc. Going beyond this, they have been integrating Data Analytics & Market Intelligence by embedding microchips in smartcard that customers use for ticketing purposes. Ticks & Tricks to get tinniest of information from the targeted customer and penetrating individuals with targeted advertisement has been the very heart of today's boundless advertisement strategies.

One form of newest Offline advertisement has been in the Train Station. Study done in the Train Station of Australia has shown how effective the advertising has been to reposition the brand image & change customer behavior towards Healthy eating. Field experiment was conducted in the prominent location of Train Station by putting advertisement of Healthy food in the cash counter, while placing actual not so healthy food elsewhere in the Train Station itself. Every time while passing on through this prominent location, it changed the way consumer choose their foods and that was where one of the Healthy food brands could reposition itself in the mind of consumers (Kroese, Marchiori, & Ridder, 2015).

Wireless communication, may it be in any form such as SMS, social media communication, smart card ticketing, etc. possesses significant opportunity in marketing communication. Wireless communication has several usages such as simple text messaging, mobile Customer Relationship Management (CRM), Branding, Information Services (weather forecast, market rates, etc.), Location Based Services by the means of GPS, supporting product launches by pre-informing the ad audiences, and many more. All these opportunities is also highly dependent on the content of the message, personalization of message, respecting people's privacy & receiving their permission. All in all, in this era of digitization, wireless communication has so far been successful in driving consumer attention & consumer behavior in a very cost-efficient way (Dickinger, Haghirian, Murphy, & Scharl, 2004).

Data collected from the microchips that is embedded within data card; and these data when stored in marketing company's database, has led to yet another immensely powerful marketing strategy. With this, advertisers can create targeted advertising to each individual customer. This is possible because of the microsecond algorithms performed by Data Analytics that advertisers have access to. This form of advertising can also be signified as 'Neuromarketing'. Strategically targeted personalized & customized advertising will help retain company's product in the mind of the consumers and lead to immediate sales when brought to the market (Ariely & Berns, 2010). One of the very simplest yet creative ways of doing Neuroimaging marketing is to advertise a product in the parcel that is delivered to the customers. All this is possible after tracking historical data of consumers and placing right advertisement in right parcel package while it is being delivered to the customer.

This synergistic impact can be demonstrated by the higher-order interaction that takes place when both offline & online marketing are integrated to bring out larger impact. Across media synergies has/had been creating larger impact in form of higher-order interaction 'than' that which is created by within-media synergies. Within media synergies indicate either online advertising strategies or offline advertising strategies taken alone. While, across media synergies indicate when both online & offline marketing is fused together to bring larger impact. Research study conducted with a German Car company indicate that budget allocation in within media synergies was higher because of the plausible impact it created through higher-order interaction from the customers (Prasad A. & Kay, 2009).

Thai Advertising Agencies have also been in pressing upheaval in the sector of advertising. The synergistic effect of both Online & Offline Marketing has also given profound impact on all the aspects of Integrated Marketing Communication (IMC) which includes advertising,

public relations, direct marketing, sales promotion, and personnel selling. The synergies has been indicated by profitability, sales income, channels, brand awareness and several other measurable attributes that is created by creative advertising strategies as reported by the Ad agencies themselves. Offline-to-Online Marketing has made valuable contribution to the Media Revenue for corporations in Thailand (Vantamay, 2011).

Line Application lies at the heart of any Thai people; whether it be talking with friends, communicating with colleagues or even sometimes using it for business purposes. Not only has Line Application been a major hub for communication, various companies have now started to make targeted advertising to its customers through this powerful social networking app of Thailand. Hopping through mobile phone in the leisure hour, Line Application remains one of the most used Social Networking platform for any Thai. One of the simplest & easiest way that the company's interact with audience is through their Official Account Stickers in Line App. Users can download & use those stickers for free. By continuously using the sticker, users seem to be deliberately recognizing themselves with that Brand and soon will start engaging with the brand (Simasatitkul & Hsieh, 2015). When company target their advertising to audiences through Line Application, it is likely that the advertisement is well received by the audience and are most prone to react to it because it is the application that users use in their leisure time (i.e. either by visiting website, talking to friends, or even buying the product) (Boonitikorn, 2015) .

Amongst the factors leading to synergistic impact, the adoption of cashless payment system in Thailand has also been fostering customer's engagement with the advertisement. Age, education level, and knowledge- influences the rate of adoption of technological advances in Thailand. Young population and adults are more subject to using cashless payment system. This has given yet another opportunity for advertisers to target their ads to these demographic groups- who would not just interact with advertisement but also respond & engage in it by immediately buying goods/services. However, with the elderly population, this trend rarely seems to exist as they don't actively engage with the advertisement themselves (Kraiwanit, Panpon, & Thimthong). This indicates higher-order interaction of advertisement in Thailand with the advances in cashless payment system. Adopting cashless system (QR code scan, Mobile banking, and including smartcard tickets such as Rabbit Card, Rabbit LinePay, and Spiderman) has been increasing in Thai society. Factors contributing to this phenomenon has been motivation to advance in the use of technology, trust & reliability in transaction, operators dispersed widely across the nation, cost advantage of using the payment instead of

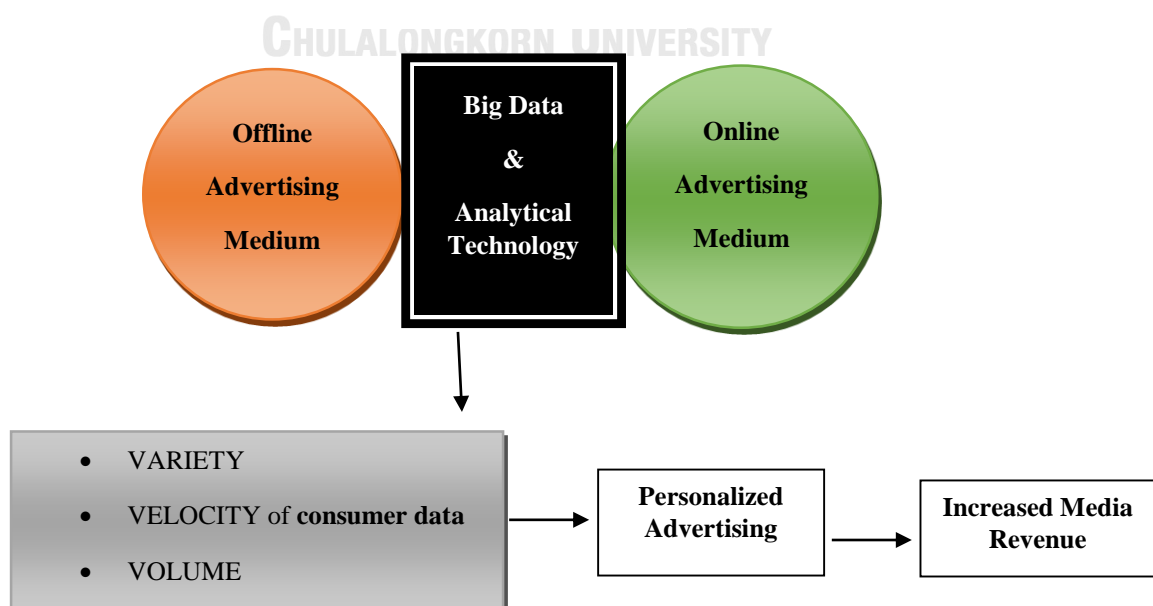
cash, and less burden of using cash (Factors Influencing the Intention to Use, 2019). Resulting from this factor has given huge opportunity for advertisers as they can easily track information from the chips and advertisements can be catered powerfully by the algorithms that the advertisers has access. This domain has increased the media revenue for the advertisers as to customer enthusiastically engage & interact themselves with the company.

Research Methodology

i. Marketing Intelligence Theory with O2O Solutions adopted by BTSG Holdings PLC.

Unprecedented changes in the Advertising & Marketing Strategies adopted in the world today has been capable because of Big Data & Analytical Technology, which connects both the Online & Offline strategies in one single platform. This technology collects millions of data & information of the consumer stored in the microchip; and within Nanoseconds caters personalized advertising to consumers using algorithms that is exclusively available to the Organization. The role of Marketing Intelligence is to collect data, change them into information, and with intelligence cater personalized advertising to its targeted consumers. However, there should be some investment in Fixed Assets like hardware & infrastructure. With this few dollars of investment will then lead to escalated business in the Company (in terms of the sales revenue) that have never been observed before (Gaurda, Santos, Pinto, & Silva, 2012).

Figure 1. Marketing Intelligence Theory



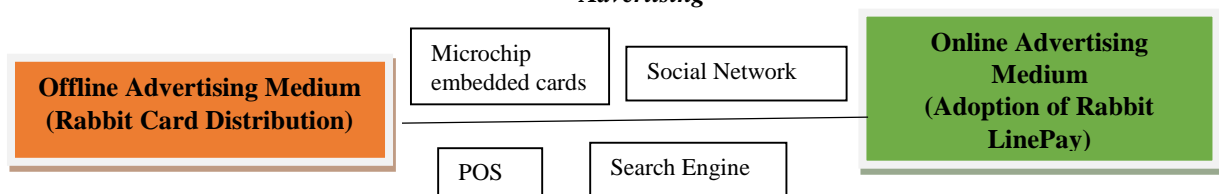
Does it mean that with just the Big Data & Analytical Technology, great power of today's Marketing & Advertising is possible? No, as there should be the medium (Offline & Online) from where the tiniest of details of the consumer is collected. These collected data are then processed, with the Big Data Analytical Technology. The algorithms present in this Analytical Technology, within the loop of the Company, arranges the Data in such a way that it caters personalized Advertising to each individual consumer and urge them to respond immediately to the Advertising.

Marketing Intelligence Theory adheres to the fact that the data must have **3 characteristics**:

1. **Volume:** Volume denotes amount of data that the Big Data can collect and store in its system about one & all the individual consumer who happens to that Company's targeted market.
2. **Velocity:** Rate at which the data is rapidly created, processed, and arranged to personalized Advertising.
3. **Variety:** Structured & unstructured data that is collected from several mediums like: POS machine, social media, clickstream, internet searches, etc.

This real time data equipped with large variety of information provides Advertisers with unique insights; this knowledge will then be used by the advertisers to build the algorithm in order to cater personalized advertising to its target segment. The effectiveness of advertising strategies are then determined when it has direct impact on the sales revenue of the Businesses (Erevelles, Fukawa, & Swayne, 2015)

Figure 2: Synergies in the Advertising



The **Offline Advertisement** represents all the advertisements that is placed in the Train Station, Transits, Hotels, Shops, and everything under the loop of BTSG Holdings PLC.

The **Online Advertisement** represents all the advertisements that BTSG Holdings implements on behalf of its client companies in the online mediums like: Line, other Social Media's, YouTube, Voice Search, and Websites.

For the Marketing Intelligence to work, it is important to have synergies between Online Advertising & Offline Advertising. Without the previous one, the latter cannot perform well. If the latter one cannibalizes the previous one, the multiplier effect that we get through the Marketing Intelligence & Data Analytics is not achievable (Wedel & Kannan, Marketing Intelligence for Data Rich Environment, 2016).

Offline Advertising Medium in terms of BTSG Holdings PLC denotes the e-ticketing/ digital Rabbit Card that the consumers use while commuting in the Train Station. Without this being in hand, no one can get into the Train Station. There are 2 types e-ticketing: membership Rabbit Card, and one-time use Rabbit Card. Both the cards have microchip embedded in it. From the one-time use Rabbit Card, when the GPS/Location is turned on in the user's mobile devices it tracks the information, it identifies & monitors the unstructured data of the consumer & reverts with personalized advertising whenever & however possible. What is most prominent is the membership Rabbit Card, each individual gives their ID Card number, Phone Number, and other details while taking the card; this give the Advertisers more opportunity to collect variety of data from the consumers. Adding on to this, consumer uses the same card when he travels everywhere from the Train Station. He can also use the same Rabbit Card in different cash counters to make the payment. This gives an Advertiser, an unprecedented opportunity to collect vast array of data from one individual customer so that the Advertisers can draw out the patterns and devise wide variety of Advertising strategies to be placed in the Train Stations, Transits, and check-out counters within the loop of BTSG Holdings etc. Which in turn supports in bigger advertising impact, increased sales on the client company's business, ultimately increased Media Revenue for BTSG Holdings PLC.

The Online Marketing Medium for BTSG Holdings PLC is the Rabbit LinePay that the company has adopted since 2016 Q1. With Rabbit Line Pay, a customer does not have to queue up in the cash counter of BTS Stations to pay for the service. Linking up the Membership Rabbit Card Number with Line Pay, he is eligible to make smooth payment and travel in BTS trains. While the LinePay Account is directly linked up with the Bank Account of the customer, Advertisers then get detailed data on the consumer behavior and pattern. With LinePay, not only can the person pay for travelling through Train Station, but also pay for several other services. Due to this, Advertisers have an opportunity to track smallest & tiniest of information from the customers. Line Account being one of the most used Social Networking site in Thailand, whether it be for chatting with Friends, Colleagues, Shopkeepers, or even buying any product; there are wide arrays of Data & the possibility to

extract relevant information about each individual consumer from the Line Account. Thus, it gives an opportunity to throw personalized Advertisement to each individual consumer when Online Advertising Strategy is complemented with Offline Advertising Strategies. Wherever, however, and whenever possible; BTSG Holdings can throw personalized Advertisement to customers whether if they are using Facebook, YouTube, Line Account, or any other Social Media or Websites.

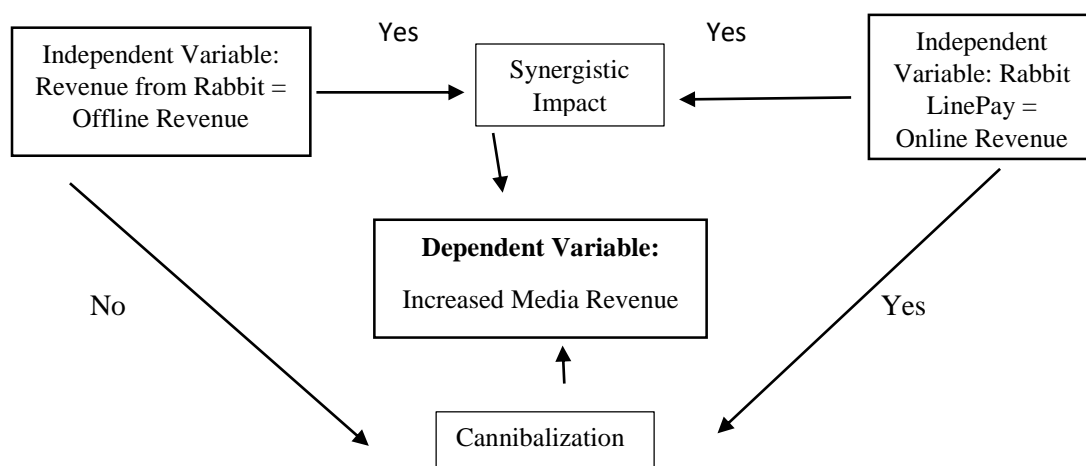
Catering right advertisement to right person at right time and at right place urges the customer to quickly respond to it. Consumers either refers a brand to his friend, plan for his own purchases shortly thereafter, or purchases rightly then and there.

The very core or Marketing Intelligence Theory is that Offline Advertising creates a path for Online Advertising and just when there are synergies between them, there is an increase in the sales revenue of the client companies and finally increased Media Revenue for BTSG Holdings PLC. While Offline Strategy has created path to collect varied information and given customers an opportunity to know about the client company that BTSG Holdings is servicing, Online Strategy has worked on to make profound impact by serving lead customers with personalized advertising & attention. This can be demonstrated when BTSG Holdings holds rich data & information of possible consumers and creates personalized advertising or even works relationship marketing on behalf of its client companies (Schafer & Kummer, 2013).

With just Offline Advertising, the possibility of personalized advertising is not possible. In today's era with the presence of thousands of competitors, competing to urge their customers to buy only their product; not giving personalized attention to the lead customers would be the biggest mistake and huge expense for the company (Fan, Lau, & Zhao, 2015).

Has BTSG Holdings has really benefitted from the synergies in the Advertisement with increased Media Revenue? The descriptive Analysis is done using Financial Data collected from the Company's Reports & Publications.

ii. Conceptual Framework



The Dependent Variable here is the quantifiable variable to measure the impact of synergistic advertising adopted by business in terms of their Media Revenue that is being collected. The synergistic advertising strategy is the combination of the distribution of Rabbit Card & the adoption of Rabbit Line Pay affecting the Media Revenue of the Company. Distribution of Rabbit Card alone without brought into contact with Rabbit Line Pay is simply traditional/offline advertising strategy. When it is brought into play with Online medium like Rabbit Line Pay, it multiplies its effect on the collection of Media Revenue. Thus, they are the Independent/Explanatory variable. They directly impact on the Media Revenue of the Company.

iii. Data Collection

Data has been collected from several documents from the company's website. Major focus was on the Quarterly Report and Annual Report of the Company since the year 2011: Q1 to 2018: Q4. However, the data collection also delved into information located in the Investor's Relation which is in the Company's own website. Data from Investors Relation includes: several publication & downloads, webcasts & presentation, yearly report, quarterly report, investor presentation. Link to company's website: www.btsgroup.co.th

Table 1. Data Availability

Variable Type	Variable	Variable in BTSG Holding PLC. & World Development Indicator	Measurement
Dependent	Media Revenue	Media Revenue (per million)	Baht/quarter
Independent (Explanatory)	Rabbit Line Pay (Online Revenue)	Rabbit Line Pay	Baht/quarter
Independent (Explanatory)	Revenue from Rabbit Card Sales (Offline Revenue)	Revenue from Rabbit Card (per million)	Baht/quarter
Independent (Control)	Fixed Assets	Fixed Assets (per million)	Baht/quarter
Independent (Control)	GDP per capita PPP	GDP per capita PPP (per million)	USD/quarter

Media Revenue: The data on Media Revenue is available for every year starting from 2011 Q1 to 2018 Q4.

Offline Revenue: For all the years are available 2011 Q1 - 2018 Q4. E-card payment along with Rabbit Card with embedded smart card chips was available since the middle of year 2010. Thus, the revenue generated from Offline media's data is available for all the years.

Online Revenue: Since the Rabbit Line (Rabbit Card linked with Social Media i.e. Line Pay) was only introduced since 2016 Q1, the data available for this independent variable is only available for 2016 Q1 – 2018 Q4.

Fixed Assets: The data on Fixed Assets is available for all the years i.e. 2011 Q1 to 2018 Q4. The Fixed Assets for the company encompass all the mass transit networks under BTSG Holdings PLC, where the advertisements are placed. It included the investments in Big Data like: Rabbit Card & Rabbit Rewards, hardware & infrastructure to work with the Data. Alongside, it combines the investment in Online Media like Line Pay.

GDP per capita PPP: The quarterly data is collected from World Development Indicator's website. The data is collected from 2011 Q1 to 2018 Q4

iv. Data Analysis

From the Literature Review it is understandable that previous Researches were based on Primary Data esp. in-depth Interview with the Advertisers. Thus, the data was collected based on Treatment Group & the Control Group and ANOVA/ MANOVA was used to conduct the Data Analysis and reach the conclusion. While this Research Data is solely based on the Secondary Data and basically financial data is collected from the Reports on the Company's website, the Research takes the very core variable needed to test the Research Question & the Hypothesis formed. For this, Descriptive Analysis (Extrapolation Method) is used. The Extrapolation here doesn't denote forecasting beyond the timeframe, but some form of extrapolation within the actual time frame (2011 Q1 – 2018 Q4).

It is clear from *Table 1: Data Availability* and its description that the data for all the years for Online Media Revenue is not available. Online Revenue Data is available only from 2016 Q1 – 2018 Q4, thus the extrapolation of Offline Strategy is done for within this timeframe. This kind of extrapolation is conducted to find out the differences between actual & forecasted value of Offline Advertising Strategy within 2016 Q1 – 2018 Q4. The actual curve for Offline Media Revenue rising (above the forecast line) denotes that when offline advertising strategy is integrated with online marketing strategy- the synergies is demonstrated. While, the the actual line which is below the forecasted line, shows that Online Media Strategy cannibalizes Offline Media Strategy.

Step-by-step procedure of the Research Methodology:

Step 1: Time series plot of Offline Strategy, sees a jump/drop in Offline Media Revenue after 2016 (when Online Strategy was introduced).

Step 2: The data is used from Offline Revenue, beginning 2016 and trend (*forecast*) is made for the same. Alongside, based on the *actual* data of Offline Revenue beginning 2016 Q1; the data is plotted in Time Series until 2018 Q4.

Step 3: The difference between actual and forecasted value of Offline strategy is measured, starting on 2016 Q1 and ending on 2018 Q4. 2016 Q1 is the time period when Online Strategy was adopted by BTSG Holdings PLC which augmented the Offline Strategy.

Forecast value (2016 Q1-2018 Q4) lying above the actual value in the same time period indicates that the increase in the offline revenue is because of the synergistic effect. In other words, when the Offline Strategy is integrated into the Online Strategy, Advertising has higher impact and the companies will be pay more for the Advertiser (BTSG Holdings PLC). On the other hand, the actual value lying below the forecasted value for the same time period indicates that even though the media revenue is rising, Online Advertising Strategy cannibalizes Offline Advertising Strategy.

Step 4: Plot the Online Advertising Strategy's (Online Revenue) data from the year 2016 Q1 as given in Company's Report.

Is the Online Revenue plot also reflecting rising trend from 2016 Q1 – 2018 Q4?

Step 5: Collinearity Test is conducted:

- i. Actual-Forecast of Offline Strategy
- ii. Online Strategy: This is to identify whether synergies is being created or cannibalization is taking place while impacting total media revenue.

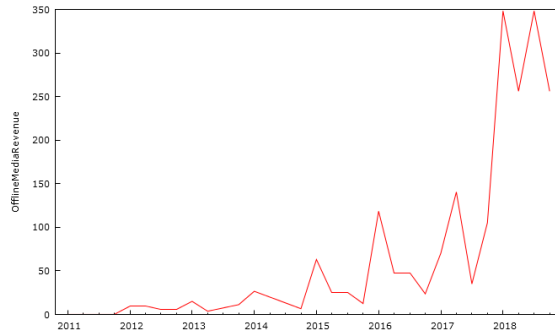
Step 6: In this Final Stage, time series Graph for Fixed Assets is plotted to see how the investment is in comparison to the Media Revenue; Investment has been really high shows that the company hasn't been able to fully reap the benefits of increased Media Revenue. In this stage, time series graph for GDP per capita PPP is also plotted to see how the trend of GDP per capita PPP is?, and does it impact the media revenue?

Data is collected from several different sources in the entirety of creating Advertisement; which mean when there is the transition from using only Offline Strategy TO integrating both strategies in one single platform (Wedel & Kannan, 2016). Marketing Intelligence Theory explains how the collection of Data when transitioning from Offline to Online Strategy adds up to the core Business Activity. With some extra investment in Technology, has the company been able to reap exclusive benefits in terms of their Media Revenue while still creating synergistic impact?

Data Analysis

Step 1: Time series plot of Offline Strategy

Figure 3. Time Series Plot



The above figure shows the Offline Media Revenue starting from the year 2011 and ending on year 2018. The Revenue has started rising from 2011 Q3. From the plot, it is also evident that after 2017: Q2 there is tremendous increase in the Media Revenue. This increase has been followed after the integration of Offline Strategy with Online, which has been since 2016 Q1.

Table 2. OLS, using observations 2011:1-2018:4 (T = 32)

	Coefficient	Std. Error	t-ratio	p-value	
const	-90.6298	34.4363	-2.632	0.0139	**
time	7.96738	1.34043	5.944	<0.0001	***
dq1	52.6234	34.9799	1.504	0.1441	
dq2	26.0559	34.8512	0.7476	0.4611	
dq3	15.6014	34.7738	0.4487	0.6573	

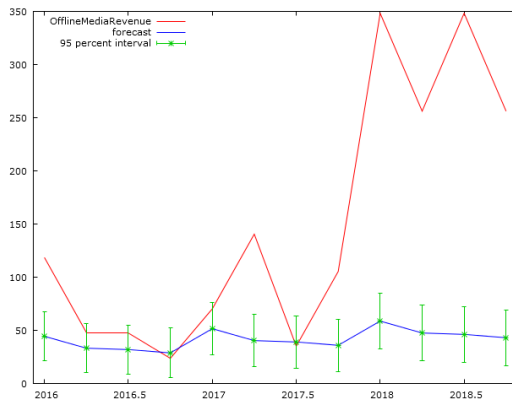
Table 3. OLS, using observations 2011:1-2018:4 (T = 32)

Mean dependent var	64.40222	S.D. dependent var	99.12495
Sum squared resid	130401.4	S.E. of regression	69.49592
R-squared	0.571891	Adjusted R-squared	0.508467
F(4, 27)	9.016998	P-value(F)	0.000093
Log-likelihood	-178.4082	Akaike criterion	366.8165
Schwarz criterion	374.1451	Hannan-Quinn	369.2457
rho	0.647772	Durbin-Watson	0.716580

In the OLS Regression given above, the dependent variable is Offline Media Revenue. The independent variables are time trend and the periodic Dummies. It reflects that time trend is significant variable to the Offline Revenue. As from the Figure 1: Time Series Plot of Offline Media Revenue, it is confirmed that- with time the offline media revenue is in rising trend.

Step 2 & 3: Aforementioned, Online Advertising Strategy was adopted from 2016 Q1, thus the data for this is available only from just this period. Therefore, to proceed with, Forecast for Offline Advertising Strategy is made beyond 2016 Q1 – 2018 Q4. Alongside, Actual values for the same is also plotted in the same graph.

Figure 4. Actual & Forecast beyond 2015 Q1



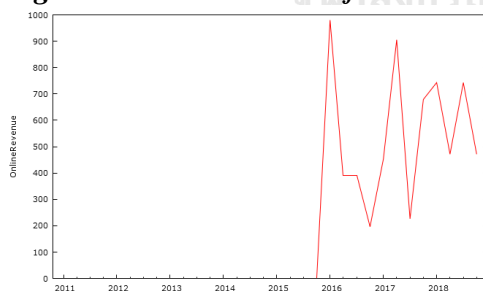
The blue line in the graph indicates trend while the red line indicates the actual revenue. The difference between the actual and the trend (forecast) indicates that beyond 2016 Q1, there is significant increase in the offline media revenue.

Is there synergistic effect between offline & online advertising while increasing the media revenue of the company?

This Question is answered in the steps shown below.

Step 4: Time Series Plot of the Online Advertising Revenue

Figure 5. Time Series Plot for Online Revenue



The figure considers just the Online Revenue and shows that the trend shows increasing pattern.

Table 4. OLS, using observations 2011:1-2018:4 (T = 32)

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	-50.2714	35.9846	-1.397	0.1742	
OnlineRevenue	0.139315	0.0582964	2.390	0.0244	**
time	4.42279	1.93127	2.290	0.0304	**
dq1	27.5481	33.9398	0.8117	0.4243	
dq2	11.6127	32.7214	0.3549	0.7255	
dq3	11.7961	32.1265	0.3672	0.7165	

Table 5. OLS, using observations 2011:1-2018:4 (T = 32)

Mean dependent var	64.40222	S.D. dependent var	99.12495
Sum squared resid	106916.7	S.E. of regression	64.12630
R-squared	0.648991	Adjusted R-squared	0.581489
F(5, 26)	9.614442	P-value(F)	0.000027
Log-likelihood	-175.2311	Akaike criterion	362.4623
Schwarz criterion	371.2567	Hannan-Quinn	365.3774
rho	0.758112	Durbin-Watson	0.528139

Table 4 and 5 are another OLS Regression where the Dependent Variable is Offline Media Revenue and the independents are online revenue, time trend and periodic dummies. Model shows that both the time trend & online revenue is significant to the Dependent Variable. It is alike what is shown in the steps above. Offline revenue has been increasing with time but what is most significant is that it has increased drastically as the Online Strategy has been adopted by BTSG Holdings PLC.

Additionally, after adding Online Advertising Strategy to the model, the value of Adjusted R² has also increased from 51% to 58%, meaning that it has an impact on the media revenue of the business by the synergistic effect.

The Figure below incorporates i. Actual-Forecast of Offline Strategy ii. Online Strategy

Figure 6. Forecasts of Offline Revenue incorporating Online Revenue from 2016 Q1

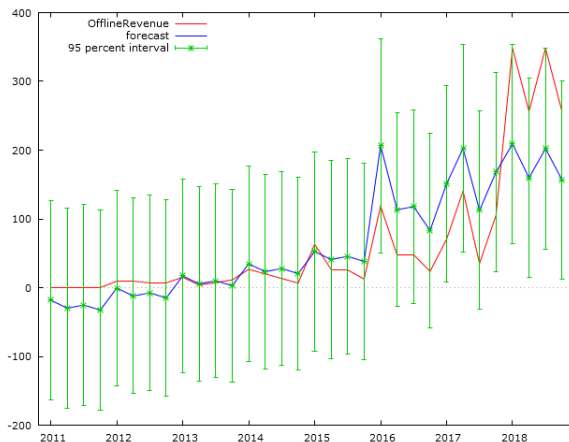


Table 6. Collinearity test between Offline Revenue and Online Revenue

Variance Inflation Factors
 Minimum possible value = 1.0
 Values > 10.0 may indicate a Collinearity problem

time	2.474
dq1	1.681
dq2	1.562
dq3	1.506
Online Revenue	2.486

$VIF(j) = 1/(1 - R(j)^2)$, where $R(j)$ is the multiple correlation coefficient between variable j and the other independent variables

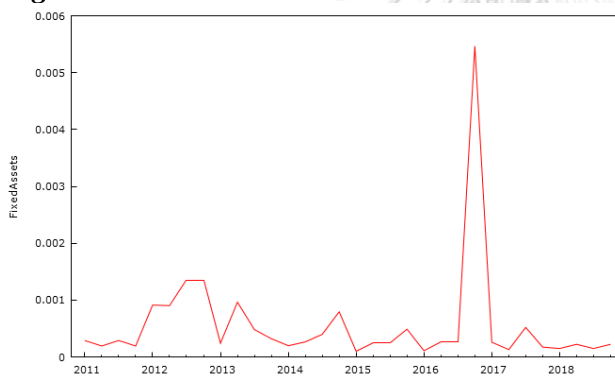
Synergistic impact has been reflected in Figure 4. Additionally, Collinearity Test also indicates that two strategies are correlated with each other. Offline Advertising medium when integrated and augmented with the Online Advertising medium, shows its bountiful effect on the media revenue of the company.

Figure 7. Actual & Forecast plot of Total Media Revenue (Offline + Online)



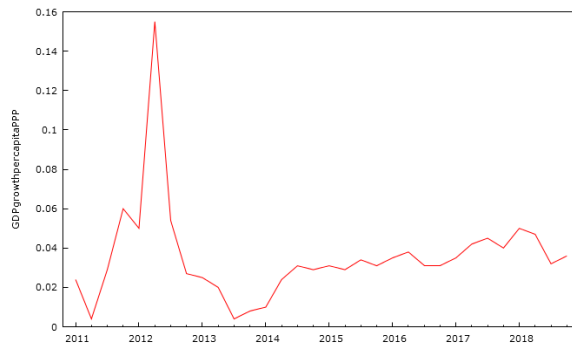
As indicated above, beyond 2017 Q2, after the Offline Revenue could actually reap the benefits derived from the Online Revenue, there is surreal increase in the Actual Total Media Revenue (which surpasses the forecasts).

Figure 8. Fixed Assets



In the above figure, it is evidential that in the year 2016, huge investment has been made in the Fixed Assets. This is the year when BTSG Holdings PLC adopted Online Advertising Strategy. But, as it has reached 2017, investments have been very low. Despite this, the Total Media Revenue has surged dramatically from 2017 Q2. It means that with just one time investment in required hardware & infrastructure, BTSG Holdings PLC has done exceptionally well in serving its client with synergistic advertising and collected increased Media Revenue. Therefore, it indicates that Marketing Intelligence Analytics (termed as O2O Solutions), has have tremendous advantage to BTSG Holdings PLC.

Figure 9. GDP per capita PPP



GDP per capita PPP has shown slower growth on all the quarters after 2013 Q2. Despite this slower growth rate, after 2017 Q2 (i.e. after the adoption of online advertising strategy) there has been tremendous increase in media revenue. It indicates that despite the state of GDP per capita PPP, the personalized advertising does urge individual to act upon increasing total media revenue of the media houses.

Limitation(s):

1. Small sample size: As we can already see that the sample size for the Data Analysis is very small, only covering 32 observations (2011 Q1 – 2018 Q4). Regardless of the previous similar Researches delving into Primary data (in-depth interview with Advertisers), this paper just have data from the Company’s website.
2. Methodology: As the Research prioritizes the impact of SYNERGISTIC advertising on a Company’s Media Revenue, here it has been impossible to use ANOVA/MANOVA method for Data analysis. Alongside, this Research also does not employ any confounding variables in the process of Data Analysis.

v. Conclusion from Data Analysis

The core variables that has been taken and the result analyzed indicates that synergistic advertising is created which has ultimately increased the Total Media Revenue of the Company. Furthermore, this effect has also been shown when Time Trend and periodic Dummies, the two variables has been incorporated in each stage in order to see if these variables play significant role in creating synergies and impacting the media revenue of the Company. But the Analysis shows that none of these plays’ significant role. This makes the analysis strong despite limitations pointed above. Additionally, it has also been shown that GDP per capita PPP, no matter how it is, it doesn’t impact the total media revenue of the company. With the powerful Marketing Intelligence Analytics (O2O Solutions), once the

personalized advertisement reaches out to the lead customers, they act upon it with ultimately increasing the Media Revenue of BTSG Holdings PLC.

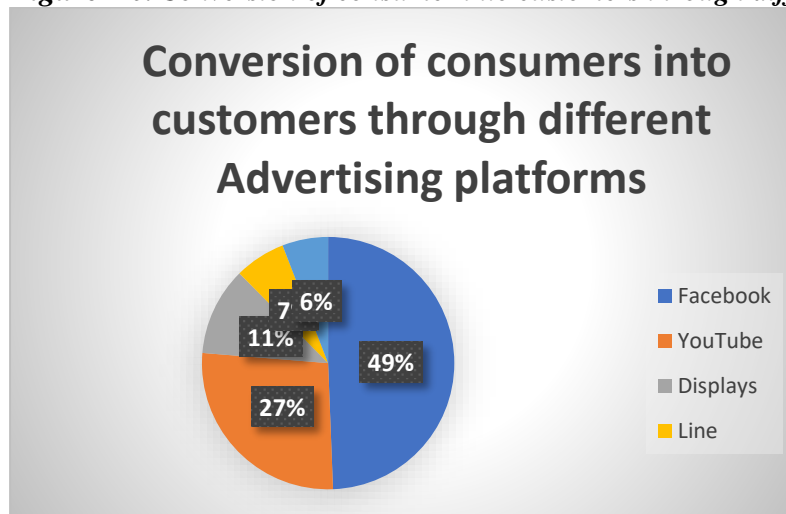
Qualitative Analysis

Market Analysis

Advertising Scenario in Thailand:

Effectiveness of Advertising strategies in Thailand were categorized as follows:

Figure 10. Conversion of consumer into customers through different advertising platform



Source: Digital Advertising Association (Thailand) DAAT

In the figure above, offline strategy denotes displays ads which are placed everywhere: on the BTS sky train stations and inside the train. It has been significant that digital advertising as such do play an important role in the conversion rate. i.e. converting the probable consumers into customers of the Business. It has been identified that 47% of the company has used offline strategies to awaken interest of the audiences and strengthen online traffic; while 68% of the companies uses the given online platform to promote customer relationship management & capturing brand loyalty from customers. Thus, both **should not only work independently but together to create bigger impact from the advertising strategy.** (Licio, n.d.)

Offline Advertising media's like out of the home (digital billboards & displays) still captures attention of the users and are examples of significant offline advertising. Even in the presence of different social media's like Instagram, Twitter, online searches, etc- display ads on several

location heads on to bang the 4th place in their advertising impact (i.e. 11%) compared to other online platform like Line. ¹

Data is regarded as the connector between the offline & the online advertising strategies. Offline strategies in today's digital world, plays a significant role as a Data Connector.

Data based on the advertising agencies of Thailand portrays that with the Data Connector, offline and online advertising has been brought together to create tremendous impact from the advertising strategies in terms of conversion rate.

Data connector, is used as the data analytics, when data connector is connected to the offline advertising platform like e-ticketing and POS machine, it collects tiniest of data about the each individuals. While when it merges with the online platform like mobile banking, e-commerce platform, and social media; information on each individual customers is detailed out. This way, media houses can draw out the patterns on customer's attitudes, behaviors, decision making process, and more importantly perception about individual product. This paves the way for the marketing and advertising strategy, to best derive value from each individual customers, building relationship with them, and creating long term relationship to reap their lifetime value. Therefore, it has given profound benefits to media houses to earn bountiful revenue from customers. Along with them, business houses has also got immense benefit to know and build long term relationship with customers. This is through understanding them well and serving them appropriately, so that they are delighted with the product/service.

Figure 11. Advertising strategy overview

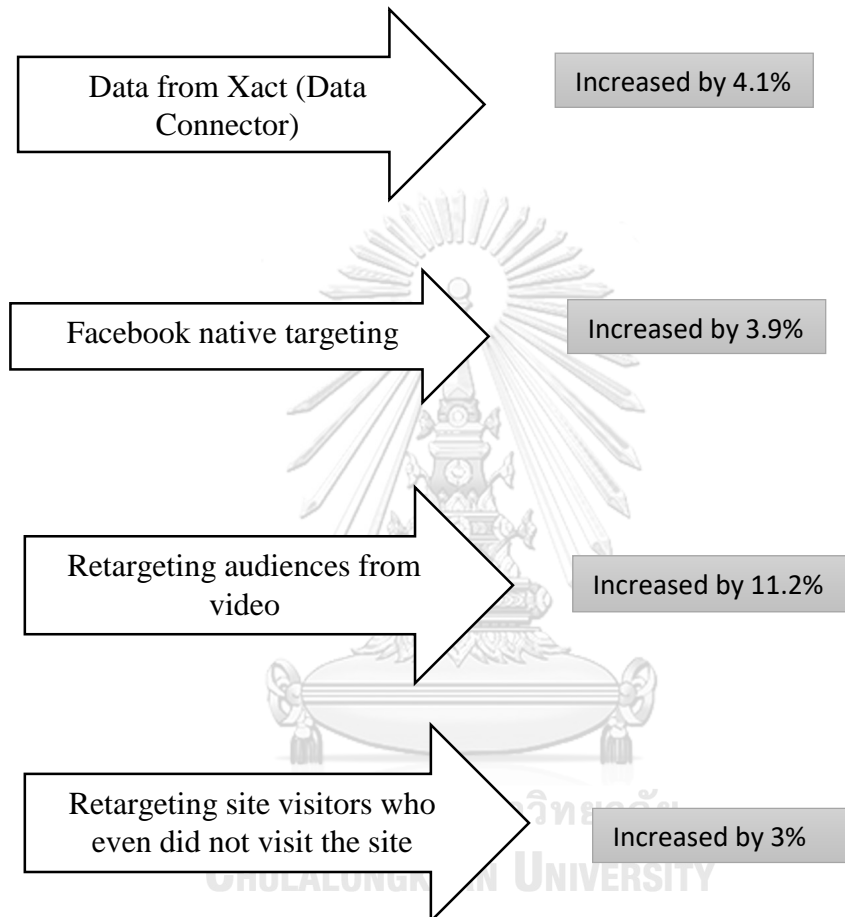


The data from one of the ad agencies in Thailand exemplified how the conversion rate increased from several different channels after the company adopted its own Data Connector i.e. *Xact*. With just 4.1% increase in data collected, the company could deliberate advertising strategies to consumer who did not seem interested in advertising. With their successful attempt, they could elicit desired response from 3% of the uninterested customer. Not only did this powerful data connector converted the interested consumers to a customer but

¹ The percentages: 47 %, 68% and 11% for the consumer conversion to customers through advertising platform has been sourced from the data of DAAT as indicated in (Licio, n.d.)

performed exceptionally by converting the uninterested audiences into someone who visits the website and engages with the advertising done by the company. Paving the way to elicit sales from that customer.

Figure 12. Synergy impact measured by Customer Conversion



Thai customer market: Thai's are regarded as the most "online people" of the world-gives any company the competitive edge to grip hold of sales in their hand. The research on Thai Consumer market portrays that: Thailand holds 1st position in using mobile banking services, globally; 3rd in mobile commerce with approximately 71% of the population engaging in online purchases while global average results in only 55%. Online purchases have been done most prominently from LINE Application (84%),² while having direct contact with the salesperson (Hedin, 2020). Advertising companies must have an endurance to be visible and create customized content to each of its users. Thus, major media houses like BTSG Holdings PLC Media Group, have wittingly applied both the offline & online strategy

² The data on Thai as well as global consumers (71%, 55%, and 84%) using online platform has been sourced from the journal article (Hedin, 2020)

into one platform to: capture awareness, awaken interest, develop the desire, and elicit action.

Global Advertising Scenario:

Human interaction with the data though it seems to be very negligible to us, we are fueling every little data of ours to big media houses. Thus, these media houses are equipped with immense opportunity to target personalized advertisement to each individual customer; who in turn revert with the desired response of the advertiser.

The figure below demonstrates, average big data market size (based on the revenue) that the media houses have been able to seize (in billion USD) from the year 2011-2019.

The figure incorporates data analytical advertising from the very beginning i.e. 2011. With each year increase, the effect of the advertising in terms of market size and thus the revenue has been rapidly increasing. Therefore, it is evidential that the synergies brought by offline & online marketing i.e. Data Analytical marketing has have greater advertising impact not just in Thai market but the global market as well (Global Analytics Market in 2019: Opportunities, Challenges, and Forecasts, 2019)

Figure 13. Average global market size, based on revenue (billion USD)



Source: Statista 2019

Conclusion

The objective of the research paper was to dig into the marketing revolution that has been taking place globally. The research worked thoroughly to identify if businesses have really benefit from the synergistic advertising strategies that taken over in the global market. From the data of one of the biggest Thai media houses, it is evidential that after the synergies has been created i.e. Offline Advertisement has been merged together with the Online Advertising, significant financial improvement has been taken place. This boost in the Media business has been identified with surge in the

Media Revenue. Despite large investments in hardware, software, and infrastructure, company has been able to easily cope up with the expenses incurred in the first few quarters of investment. Alongside, data from GDP per capita PPP have also shown that: despite any changes in the income level of the consumers, they are readily engaging with the advertisement of the companies. This has led to the increased media revenue of Media houses.

Furthermore, 'Thai consumers are the biggest global online consumers', qualitative research has shown how synergies in advertising has created profound effect. This has been exemplified when it is shown that synergies have not just been able to engage existing customers but to drive in uninterested consumers to engage with your business. The market size has been drastically increasing, giving enormous opportunity for media houses to gain revenue. The synergies not just target customer from one or two offline & online platform, but they look at each existing corner to pull in more and more customers to the business; and drive in the media revenue. The same has been seen with global trend, where we can see how market size has increased drastically after the synergistic effort driving up the media revenue.

Furthermore, it has been clear that, other factors such as GDP per capita PPP doesn't play an important role in influencing decision-making process of consumers. Once the advertising is catered to everyone at right time and right place and with right message, they are likely to react to it. The reaction doesn't always mean buying the product right away. It is either recommending the products/services to someone else, or keeping long term relationship with customer. It also means engaging in their advertising, going to check the company's website, following their subscription letters, following them on their social media page, taking part in giveaway's etc. It comes in several different forms. Therefore, media houses have immense opportunity to bring customers to engage with the company and generate higher revenue by serving their client companies.

Recommendation

Marketing Intelligence and Data Analytics giving way to synergistic advertising hasn't much given importance to issues relating to customer privacy. With all the drastic improvements taking place and media houses having enormous ability to draw in every tiny information of the customer; sometime later there might be big issue of

seizing consumer privacy. With these things taking place in the businesses, at any point of time customer may revert back to the business houses and asking them to be transparent about how the businesses use customers tiny piece of information. Media houses while working on with the data connector and analytics must devise solution where they must be transparent about the type of information that they draw in about customers. They must ensure that the privacy of customers is not used inappropriately, and the business of media houses is not destroyed.

Just to take a simple example: many online shopping now has the tag security guarantee in the checkout process. Some of them also have an option for customer to contact them to know about the security of their credit card information. All these small attempts by the company will have powerful influence on the customers' perception about them. This is also an opportunity for the business and media houses to build long term sustaining relationship with customers.

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