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Hi everyone, good morning. We are from group 5, Manu and Bhuvan here to present on the article, The Dark Side of Custom Analytics, by Thomas Davenport and Jeanne Harries. This article, to give you an overview discuss about the privacy matter of how supermarket deals with their customer data which is collected to a loyalty program in a business, in a business perspective while they are trying to share this data or trying to deal with a business, with an insurance company. And we will just give, we will see over the expert opinion on how this discussion, how this business between the supermarket and an insurance company data sharing is available. Yes, so to the 2 companies here we are considered in HRB case studies. One is a ShopSense, which is a Dallas based supermarket retail chain in USA which has a more number of customers who just avail their loyalty program where they collect certain personal information and in certain cases also related medical information where they can suggest a products for them and provide discounts for the customers based on their preferences.

HBR Case Study

ShopSense

- Dallas-based superMarket retail store chain in the US
- In-house analytics, employed pattern-based approach to issue coupons
- Collected customer data through loyalty programs

IFA Insurance Company

- Founded in year 1972
- One of the largest life and health insurance company in the US
- Among the best in the industry at evaluating external sources of data

and able to issue coupons specifically for that to attract more, to attract them more to purchase.s

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And they, they also have a in house analytics through which they collect the data and with the data they are collected through the loyalty program, they also have a pattern based approach to issue coupons. For example, if a customer is specifically buying some milk based products or any health related products, they were able to create a pattern through their data analysis or the purchases they made and able to issue coupons specifically for that to attract more, to attract them more to purchase. And as I mentioned, it is they basically collect this data through the loyalty program. The second company is a IFA insurance company which is founded in 1972 and it is one of the largest life and health insurance company in USA.

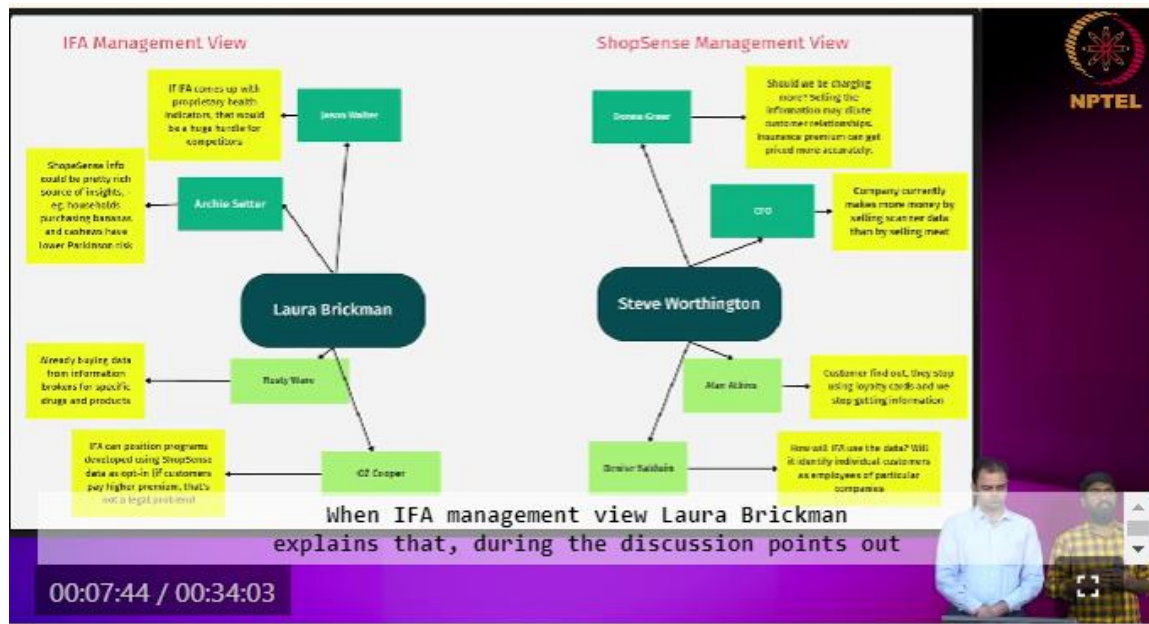
They are based among the industry where they also collect data's related to customers from multiple agencies or multiple points and they able to have an analysis to set the premium level for the customers. If for a, they specifically collect an data space with respect to health related issues. For example, if a customer is purchasing meat or relate a more of an alcohol, they were able to come to an conclusion and have an analysis that the chances of him having the health issues related to cholesterol or BP is higher. So, they wanted to charge more premium for it. So, this is where the purpose of collecting the data was helpful to the insurance company.

So, the four experts opinion who were given on the topic of how this companies leverage the customer data responsibly was to start with, George Ljones who is the president and CEO of Borders Groups, Michigan. The second person is Katherine Lemon who is associate professor at Boston College of Management and David Norton who is the vice president of Relationship Marketing from Harrah's Entertaining, Las Vegas and the last person is Michael McCallister is a president and CEO of Humana which is a benefit based company from Louisville. To introduce with this article, this is a discussion and also between two companies where they were a primary point of contact from IFA personnel is Laura Brickman who projects, showcase a scenario of how the customer data while you are performing a shopping. We will just come to it during the second slide. So, the persons involved or the characters involved in this article for, from the IFA perspective is Laura Brickman who is a Regional Manager for West Coast operations, Archie Stetter which is a senior analyst, Geneva Hendrickson who is a senior vice president of ethics and corporate responsibilities, O.

Z.Cooper who is a general counsel and the CEO who is Jason Walter. From shop clues management personnel's involved in this discussion are Steve Worthington which is a chief analyst and Alan Atkins who is a Chief Operating Officer, Denise Baldwin who is a head of human resource and Donna Greer who is a Chief Executive Officer. The scenario happens where, when Laura Brickman who is a regional manager of IFA performs a shopping and thinks about the accusation happened 14 months earlier where IFA and

Shop Clues come to, comes into an agreement for sharing the data. He thinks about how the customer data's are collected while making an shopping and she also goes to the receipts and coupons. For example, when he goes to a, once he comes to the checkout he was, he was thinking about whether we need to have, buy sunscreen or not and it was also a sunny time.

So, when she goes for a checkout, when she gets a receipt, at the back of a receipt, there was a benefit mentioned about the you, sunscreen diseases and also just given an discount, also coupon code. So, she thinks about that due to the scenarios or depends on the climate or the current scenario, they were able to analyze, the supermarket were able to analyze and bring out a receipt, bring a receipt coupon where they bring a print at the end of the, back of the receipt and give it to the customer. So, that they will come to know, this is the product and this is required right now and they meant used to the coupon also. And they and Laura thinks that so, with this customer data he were able to identify which customers are buying how many products for their household related to food materials and also related to the health issues. So, that she thinks if this data would be useful for a insurance company to assign the premium for the customers.



So, she thinks to, she flies away to discuss with Steve and tries to collect the data and also they get the data, where 10 years worth of data from Shop Clues from, it is specific to the people of Michigan. The discussion happens in such way, when with IFA management view and then ShopSense management view. When IFA management view Laura Brickman explains that, during the discussion points out that it is worth that we get

a health related or customer related data from the loyalty program of ShopSense. So, the Archie Stetter who is also on senior analytics posted, give a additional support that ShopSense information could be rich source of insight where we can collect the data's, household information whoever is purchasing more house product and other details which is useful for them to identify which will be the upcoming diseases or to reduce the impact of a premium. With this also the senior analyst, Rusty Ware explains that apart from ShopSense, IFA is also collecting multiple credits informations, financial information also from other multiple sources which also deals with drugs and products.

Where the O.Z.Cooper positions that if IFA can get more information developed using ShopSense, he asked whether if customers pay higher premium, that is may lead to a legal problem with perspective of a ShopSense. He also asked a question whereas, the Jason Walter who is a CEO disclosed that if IFA comes up with a proprietary health indicators, that will be a huge hurdle for competing with, the competing with the other insurance companies. And moving on with the ShopSense management view, Steve Worthington who is an analyst and who had a discussion with Laura, tells our management that if we can share the data with IFA and we can gain more in economical output or economic output for which there was some discussion between them and this is how it goes, where the Alan Atkins he spells out that who is a senior analyst, spells out that if customer finds out we are just selling the data to the insurance company, they may start using the loyalty card program which will stop the ShopSense from collecting the information.

And also who is a CFO states that company is currently making more money out of selling the data, instead of selling more meat. Where he makes an statement that this is what the current scenario is also and the Denise Baldwin who is an HR, he said that if IFA use the data will it identify individual customers as employees for particular companies also. He from a human resource and privacy standpoint, he also requested how IFA will use the data. And finally, with the shop management Donna Greer states that should we be charging more for the data which is they are sharing with the IFA because selling the information may dilute the customer relationship, what ShopSense has and also insurance premium can get priced more accurately depends on the data what they have with, what these ShopSense are collected with. And this is the discussion which has been going on and also ShopSense has however, shared 10 years worth of data to IFA for the specific state of Michigan and this is about the article and as I mentioned that there were 4 expert opinion on it.

So, let us go on to move in. Thank you Manu. So, sorry let us go back. So, we have seen that this is a proposed deal. The ShopSense is a, is a supermarket retail chain which has been collecting a lot of data, has made a lot of investments into developing its analytical ability and in the past it has been using it to, to personalize the marketing campaign or the

coupons or the discounts that they offer.

And they have also been sharing some of the scanner information without the knowledge of the customers and that is what the CFO refers to, that they have been getting more revenue from it. And similarly on the IFA side, it is an insurance company which is looking for more data to try and do the risk analysis of the customers or potential customers who take the insurance products. So that they are able to price and arrive at a premium more accurately. So, now let us look at the situation, look at this deal from both companies perspective. From ShopSense perspective which, which as I mentioned is a supermarket retail chain.

It has this excellent database of customers. It has made a lot of investments. It can monetize it by selling it to different companies. Should it go ahead with this deal? What is the, what is your opinion? It is the revenue generating model for them, but without customer knowledge they should not, otherwise you know, they can land in obviously legal and obviously ethical problems. Ethical issues and legal issues will be there.

Ok, any other point to add to that? So, if we look at look at it from the ShopSense perspective, of course you know the pros, some of which also have been mentioned. It is, it is an absolutely legal deal in all the states where the company is operating. It can lead to 1 billion dollar of additional annual profit because there is no cost involved in getting this. They basically share the data and they get 1 billion dollar additional revenue and profit. And the data which they share could also be used by the insurance company to develop some of the wellness programs by personalizing the offerings that the insurance may have.

So, that is also approved. It is the company management is considering as well, but on the con side as you mentioned that there could be customer relationships which are harmed. All of this is being done without the knowledge of the customers and they may even opt out of the loyalty program. So that basically stops the inflow of data and inhibits its own ability to customize the products. So, the expert opinion also has been that it is a high risk, probably a short sighted approach which the company seems to be taking.

It is not keeping customers at the core of the decision making, customer may lose trust. So, transparency is very important and also that the company in this case would lose control of how the data is being used. So, one suggestion also is that they can have a combined program along with transparency and then this may be taken forward. Yeah, so this is difficult to understand. You say there is no legal problem, right in sharing the data, but then you are saying there is a customer trust problem or customer relationship problem.

So how is that possible? If legally they are safe or it is legal to share customer data in the United States by law and if they are complying, you know legally they are safe. Then why should there be a problem with the customers because they are not doing anything illegal. The deal would be legal. There is no law which would stop them from doing this, but they are thinking of doing this without informing the customers or from a customer standpoint, once they share the data, there is an inherent trust that the data would be used only for the purposes of how the company is providing various discounts or different schemes. Now if it is being shared with an external customer, especially with an insurance company where the customer may be buying the product from and that is being done without the knowledge of the customer.

So it becomes more of an ethical issue though it is legal, but it is more of a breaking trust which may lead to bad publicity for the company and the customer, the trust which is the basis of in this industry would get lost. Again legally your data, I doubt because you are just looking at the two parties. The first party and the second party, but obviously the third party itself that is, you know customers, they are the third party and how can they be neglected because data actually belongs to them. Yes. So legally also it can be challenged always.

ShopSense Perspective

Pros

- Deal legal in all the US states ShopSense operates in
- Data monetization - \$1bn additional annual profit
- Data could be used to develop wellness programmes by the insurer

Cons

- Customer relationships may be harmed - concerns around data sharing
- Customers may opt out of loyalty programmes preventing the company from getting further data
- Risk to company reputation; no control over any customer programme

Expert Opinion:

- Customers may lose trust; transparency and value proposition should be disclosed
- Look at whether some data should be excluded, programmes may be marketed jointly

with IFA where the specific datas related to the financials, what IFA required is alone shared.

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Yes. So from a legal perspective why we say that they stand good in the sense, even though it is a ShopSense supermarket before, while the customers enrolled to a loyalty program, there is always an acknowledgement which is given by the customer. So, whether they, where the privacy point is started, where they were given, a consent is that, every

loyalty program collects the data and they give a consent that this is used for an analytic purposes. So, they do understand and they give an acknowledgement there while enrolling to an loyalty program, for which they get an additional discount. This gives a ShopSense an legal perspective of sharing the data with the legal entities whom, it is not ShopSense is sharing the data with everyone. They have a contractual agreement with IFA where the specific datas related to the financials, what IFA required is alone shared.

So this from a legal perspective. Where we point out the con, that customer relationship may be harmed is that, when we share this with an insurance company, when for example, if the customer is specifically buying health related issue. For example, if he is buying products, if he have cholesterol and if you buy more meat products, this receipts data may affect the premium of it. When the customer comes to know that there is a high in premium, he may enquire IFA and he may try comes to know that the purchase if, what I have made with the supermarket may affect the premium. So this may give him, even though he will is to pay the life insurance premium, but it may gives a harm to perspective that the purchase if what he has made may affect the premium, with even though you are given a consent for analytics which has been done, but the increase in premium economically affect him which gives a hard relationship, so that he may choose not to go for this company or go for another shop.

So that is a con we come up. So is there like the deal is legal in United States or something when we walk into any kind of supermarket or store like that, there is no agreement or anything we sign, the mode of payment is our own choice, whether we pay in cash or card or loyalty card or whichever way that is. So firstly is there something, some legally binding thing existing and how does it come into effect because nobody knows what is your mode of payment, Google pay or online payment. That is the first question. The second question would be as I make out ShopSense would be some kind of a super mart or a supermarket kind of a store. So what is the customer segment they would be targeting? And how far would they be and how much would they be concerned about the privacy aspects because all these shops and supermarkets, they are running on the cost leadership kind of concept, daily low prices, discounts, coupons.

As in US the coupon system is quite prevalent. So would that have a more overbearing effect on this overall privacy thing? Or would privacy assume a more superior position vis-a-vis those discounts and the cost leadership aspect. As to your first question on how they are getting the data, right from. The question is, is it legally binding, are we, as a customer when we go into any retail shop for that matter here also, you sign some agreement. When we take up a loyalty program, that signing up for the loyalty program comes with certain terms and conditions which clearly states that everything is ok.

Which would state that is what my point is, there is no legally binding thing with, I am asking is there over and above, other than loyalty program, as you go into any kind of mart or anywhere, in this case also, is there anything like, top from the government side or something, is there anything that is legally binding? So the terms and conditions will be legally binding themselves. So before I share from the company side, so there is nothing overall. US has state wise regulations. So the states in which, for example California has stricter privacy law where it would restrict from sharing with anyone. But some of the other states, like where it is operating, it's data space, there the, laws governing supermarket, stores, retail stores, all organisations whoever is collecting personal data has to abide by certain laws.

So that is governed by the state laws. Also at the time of writing the case you can read that none of the states that IFA did business in, had laws prohibiting the sort of data exchange ShopSense and the insurer were proposing. So if you read the case carefully it says there is no legal issue in the sharing of data or data trade in the United States. It is very specific. It is very clear they will not face, should not be facing any issue but, so what you are highlighting is what is legal need not be ethical.

That is what you are saying. Yes, you could be legal but you may not be ethical, okay. So the consequence of data sharing is what you are highlighting. So data sharing is legal but when data is shared with an insurance company because my individual data is with the insurance company, not with ShopSense and insurance company can charge me more premium, if I consume certain food items which they are actually monitoring, what you are eating. So your insurance premium depends on what you are eating and drinking which is monitored by a insurance company through a grocery retail.

That is a ethical problem. This is a new model they are trying. The case also refers to another insurance company in the automobile sector, The Progressive. Progressive already has it. So when i was in the US long back, Progressive used to advertise, if you drive safe, you get money back.

That is the advertisement. The model is different. You drive safe and get money back. So everyone pays the same premium and what Progressive does is, in your car they will put a data logger, a sensor which constantly monitors how well you drive, in terms of how much you accelerate and what is your speed over a period of time and from that data they can make out whether you are a safe driver or a rash driver. If you are a safe driver, your premium is low because your risk is less. So basically money back means they charge less premium for safe driving and they charge higher for rash driving.

So it is about differentiated premium or what you call personalised insurance. This is

personalised insurance. With individual data you are able to actually offer a product for everyone individually. That is the idea that Laura is pursuing here, create personalised insurance products. It came to my mind that this Googlepay and phonepay and paytm which we are doing Sir, they do not charge us anything.

So how are they basically making the, what about the data what we are buying, are they sharing this? See if you do not pay, data is what they actually use. Absolutely, so what this case highlights is how they make money through data which we do not know as customers. We do not know. This case brings or throws light on this particular issue of data trade and how it can affect customers. There can be so many different contexts where our data is shared and we may be paying for it or we may be adversely affected sometimes which we do not know.


So from a Shop Sense perspective, we are seeing that because it is in a retail segment, the business runs on customer relationships. So, if that gets harmed, there may be a big risk to the company. But what about from insurance perspective, from IFA perspective? Insurance companies are known to try and collect data from various sources to do the risk assessment. Do you think from their perspective it is a good deal? What is your view? From their perspective, it is a very good deal actually.

That kind of data is so valuable. Sir also brought out that just by virtue of your habits or what are you buying and that data itself can be used to determine your premium and what kind of insurance policy or risk factor the company can determine very quickly and they can also determine what is required in the market, what should be trending, what are the new products. Lot of things will depend on it. Definitely it is beneficial for them. Obviously they will be too happy to get this data because actually it is very very valuable to them and they can customize the products also whatever they are offering, products and services.

Okay. Any other view? So the points that you mentioned are absolutely valid that these data points could provide very valuable insights for each customer and they would be able to personalize the premium calculations. As we discussed, the deal is legal and the public also understands that an insurance company has to do some kind of analysis to arrive at the premium and it could, some management personnel also mentioned that there could be a positive spin to it that further wellness programs or discounts or like Sir mentioned based on the driving data how certain discounts are given, that can be done by the insurance company. But at the same time there are some cons also to consider, that accuracy of data may not be very high. Especially when a person goes to a supermarket, person may be buying for other people also or for example a father in the family would be buying for children as well, may not be consuming himself but does that mean that if the person is

buying a lot of let's say sweet or carbohydrates based products should the premium for the person go up? That Is a question to ask. The other factor could be that there could be a battered customer syndrome.

That is once you are able to profile different customers there would be top 10-15% where the company would focus and automatically that means that the remaining 85 or 90%, they are not being given the same kind of service and then it becomes a question how long they would stick with the company. In that also, you know we can have a model like bundleization of services for a family like insurance for the family. Yeah, obviously insurance for the individuals can be there but for a family also in case, you know you said that errors might be there. Yeah, that's a good point. So the expert opinion on the point is also that it could be a good deal for the customer but there are certain points to take into consideration.



IFA Perspective

Pros

- Data could provide insights into drivers of disease and thereby ability to price products better
- Deal is legal and public understands that insurers perform risk analyses
- Data could be used to develop wellness programmes/offer discounts

Cons


- Accuracy of data and correlation with health unproven - people may buy for others
- Battered customer syndrome
- Uncertainty on insights that may be gained - find something that it is better of not knowing

Expert Opinion:

- Integrity of customer data should be protected; needs to be 'win-win'
- Risk of public backlash; customers may reconsider the relationship with IFA
- Ethical behaviour needs to be inculcated

because even for an insurance company, the customer might think that if this insurance company

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One is, of course if as much as possible the transparency with the customer should be there. It should be drafted as a win-win product for the customer whose data is being taken because even for an insurance company, the customer might think that if this insurance company is trying to get my data from different sources and I am not even aware of it. I would be a little inhibited in going and taking more products from them. So there could be risk of their public backlash and one point that has been highlighted by the experts of both of these companies is that management is trying to think of what will be disclosed to the, to the customer and this take decisions based on that. So that is also a point which needs to be changed, more ethical behaviour needs to be inculcated across the organization and irrespective of the industry, that could have a major bearing on how decisions are

made going forward as well.

I have a point here, from justifying this deal, you know of course, IFA is going to pay ShopSense to get data. So this has to be justified, economically justified. So one homework that Laura and, Laura has done along with the analytics team in ShopSense is that they ran a pilot program. So they, before formalizing the deal they tested whether this is something that is going to work and the pilot program was successful. Isn't it? For example, they found a correlation between consumption or purchase.

We do not know consumption. Purchase of certain products like the trans fat products, food products with trans fats and insurance claims, there is a correlation. So that is already established from data. So there may be, as you said, there may be issues in terms of not buying for myself but somebody else. So there will be outliers in the data or data can have noise but these patterns nevertheless exist in the data, despite the noise.

So there is evidence. This proposal is evidence based. It is not just hypothetical. So that is one strong argument they can have. We have already demonstrated that this is useful. That is one argument in favor of the deal. The other, I think from IFA's perspective is the potential for building a competitive strategy.

I think that is a very important point in the case that we are also discussing data for business strategy. See this is something that can differentiate their business. They are offering products which competitors are not able to because of data. Personalized insurance is a new product, personalized health insurance is a new product in the market, which they are, they will be able to roll out in the market first time.

So it gives them a competitive advantage. I think it is coming up subtle, in a subtle way in the case discussion. But it is a, it is a, it is also a competitive strategy with a data partner. Here is a new product which competitors do not have. So data is also for strategy, that is a point I wanted to add.

ShopSense is ready to sell the data which is available. If IFA did not buy it, if it may be anyone competitors can buy it. Because ShopSense is ready to make a economical profit out of the data which they readily have. So if IFA is not able to purchase, any competitors would have. In fact the CEO of IFA mentions that point also, that if they get an exclusive right to this data set, it will be a hurdle which will be difficult for all the competitors to get over.

So that is an important consideration from the IFA perspective as well. Thank you.