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PERCEPTION ON HALAL TRACEABILITY ON CHICKEN MEAT SUPPLY CHAIN

Persepsi Ketelusuran Halal pada Rantai Pasok Daging Ayam

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ABSTRAK

Halal merupakan kebutuhan utama konsumen muslim dalam mengkonsumsi produk makanan. Tren halal sangat penting karena berguna dalam merespon potensi risiko kontaminasi zat haram yang bisa timbul pada makanan. Penelitian ini dilakukan di wilayah Ponorogo, Indonesia. Dengan banyaknya sekolah yang fokus pada pendidikan islam, masyarakat memiliki tingkat kesadaran dan pengetahuan yang tinggi tentang makanan halal, sehingga ketertelusuran halal dibutuhkan untuk makanan yang dikonsumsi masyarakat di wilayah Ponorogo. Tujuan dari penelitian ini adalah: (1) mendeskripsikan rantai pasokan daging ayam, (2) menganalisis persepsi produsen dan konsumen dalam menerapkan ketelusuran halal di Wilayah Ponorogo. Metode penelitian yang digunakan adalah survey lapangan untuk mengetahui kondisi rantai pasok. Teknik wawancara juga diterapkan pada pelaku rantai pasokan di delapan kecamatan di Kabupaten Ponorogo untuk mengetahui seberapa jauh penerapan dan persepsi pelaku rantai pasokan terhadap ketertelusuran halal. Hasilnya menunjukkan bahwa rantai pasokan ayam di Ponorogo terdiri dari peternak ayam sebagai pemasok. Ayam hidup dibeli oleh distributor untuk dijual kepada penjual daging ayam. Kemudian penjual menyembelih ayam hidup dan menjualnya ke pasar. Konsumen daging ayam adalah rumah tangga, distributor daging ayam atau restoran. Tidak ada rumah pemotongan ayam yang sudah bersertifikat halal. Intensi pedagang daging ayam untuk mencatat dan mendokumentasikan informasi tentang produk yang dijual rendah. Pengetahuan pelaku rantai pasokan terhadap status 'Aman, Sehat, Sehat dan Halal' daging ayam masih rendah. Selain itu, tidak ada informasi yang jelas tentang status 'Aman, Sehat, Sehat dan Halal' yang ditunjukkan penjual kepada konsumen. Dapat disimpulkan bahwa persepsi pelaku rantai pasok terhadap ketelusuran halal di Kabupaten Ponorogo masih rendah.

ABSTRACT

Halal is a major requirement for Muslim consumers in consuming food products. Halal traceability is very important because it is useful in responding the potential risk of haram substances contamination that can arise in food. This research was conducted in Region of Ponorogo, Indonesia. With the large number of schools focusing on Islamic Education, the community has a high level of awareness and knowledge about halal food, so that halal traceability is needed for food that consumed by people in region of Ponorogo. The purpose of this research are : (1) describe chicken meat supply chain, (2) analyse the perception of producers and consumers in applying halal traceability in Region of Ponorogo. The research method is field survey to know the condition of supply chain. Interview technique is also applied for supply chains' actors in eight districts to find out how far the application and perception of supply chain actors toward halal traceability. The results show that chicken supply chain in Ponorogo consists of chicken farmers as a supplier. Chickens live bought by distributors to be sold to chicken meat seller. Then the seller slaughters chicken live and sell them to the market as carcass. Consumer of chicken carcass is household, chicken meat distributor or a restaurant.

There is no chicken slaughterhouse that has been halal certified. Merchant's intention to record and document information about the materials is low. The knowledge of supply chain actors on the 'Safe, Health, Wholesome and Halal' status of chicken meat is still low. In addition, there is no clear information about the status of 'Safe, Health, Wholesome and Halal' that sellers show to consumers. It can be concluded that the application of traceability in the chicken meat supply chain and the perception of supply chain actors toward it in Ponorogo is still low.

Keywords : *Halal, Perception, Traceability, Chicken Meat*

INTRODUCTION

Halal is a major requirement for Muslim consumers in consuming food products. The existence of halal assurance becomes an added value in today's food industry competition. Ponorogo regency is one of the regencies in East Java province which Islam is Major Religion. The percentage of the Muslim population in Ponorogo Regency in 2013 is 99% of the total population (BPS Ponorogo, 2016). In addition, there are more Islamic schools than general schools. The Background of religion and education make halal as a main factor that can affect consumers to consume their food in Ponorogo Regency.

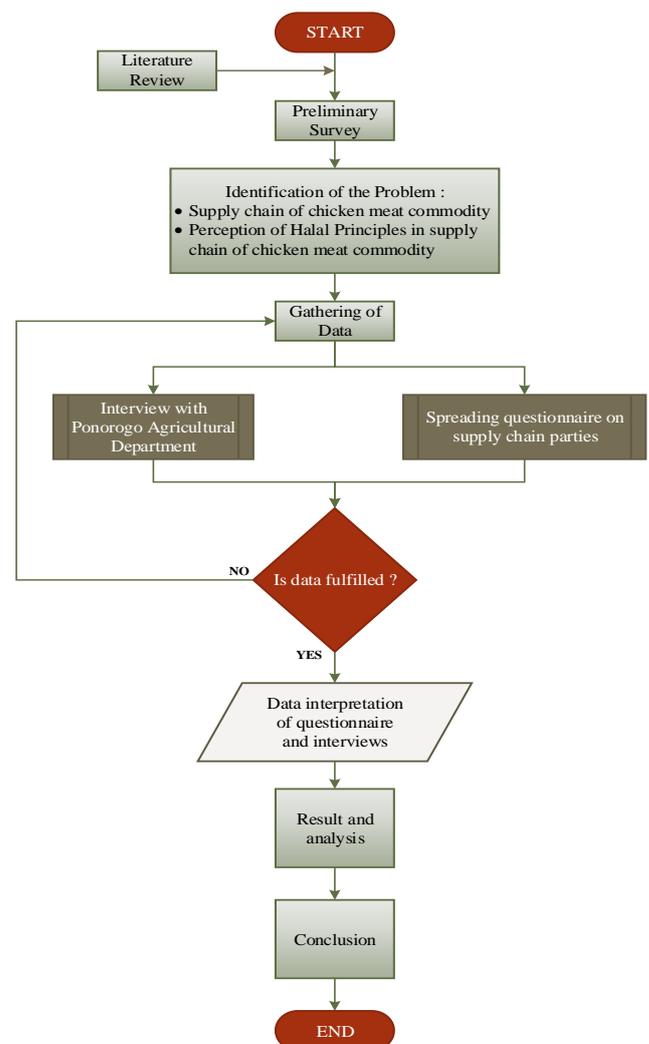
Halal assurance is not only required for the end product but also at every stage of the supply chain. This can be assessed by consumers through a halal traceability of a product or commodity. Halal traceability on the supply chain of a commodity makes consumers aware of the halal status of the products they consume. Halal traceability is a part of halal supply chain management which is an important discipline in the development of halal food industry today. By the existence of halal supply chain management, the related process linking with the halal criteria from raw materials to consumers hands can be analyzed.

Chicken meat through several stages starting from slaughter house to be a derivative product must be halal-maintained in all aspect, including production, distribution and material handling. Researcher chose chicken meat as a material studied in this research because this commodity is one of animal protein that have been the most popular food by people. The level of chicken meat

consumption in Indonesia has become the largest above the level of beef consumption (BPS, 2015).

The purpose of this research are : (1) describe chicken meat supply chain, (1) describe chicken meat supply chain, (2) analyse the perception of producers and consumers in applying halal traceability in Region of Ponorogo.

RESEARCH METHODS



The study was conducted from June to August 2017, located in eight districts in

Ponorogo Regency. To describe chicken meat supply chain in Ponorogo, the method of taking data is interview to respondents. The respondents of this research are Agriculture Department of Ponorogo local government and also chicken meat supply chain actors from upstream to downstream. Descriptive analysis is used to process the data into the main conclusion. Figure 1. shows the research flow diagram. There are three main stages: preliminary survey, problem identification and data retrieval.

RESEARCH RESULTS AND FINDINGS

Chicken Meat Supply Chain in Ponorogo

Supply chain is a network between parties that together alter the basic commodities (upstream activity) into finished good product (downstream activity) by adding value to customers (Harrison *et.al*, 2015). Upstream activities are defined as buy-side activity that performed by a producer in obtaining materials to be processed in the manufacturing, while downstream is integrated activities taken by a company to distribute their finished product. In upstream activities, each supplier has a level or classified as tier as similar with downstream activities.

In the following section, the commodity of chicken meat in Ponorogo has been implemented supply chain network. Theoretically, a network can be considered as supply chain network if its consist of supplier, manufacturer and costumer. This research has identified all of those parties. Figure 2 shows chicken meat supply chain network in Ponorogo Regency. Firstly, focal point of this network is chicken meat trader as the center of many possible connections with supplier and customer or it can be defined as manufacturer which produce fresh chicken meat. This focal point play main

roles as trader for selling fresh chicken meat and they open their store in most traditional market in Ponorogo. Secondly, supplier network classified as two tiers which are first tier and second tier. The closest network with focal point in buy side (upstream) is first tier supplier. Living chicken collector is defined as first tier supplier because they will directly supply living chicken to the chicken trader. Similarly, the party that responsible to supply to the first tier and play roles as second tier supplier is broiler chicken farmer. From independent broiler chicken farms, chicken is channeled to living-chicken distributors or chicken collectors. This second tier party will responsible to produce healthy broiler chicken and sell them to many living-chicken collectors. Thirdly, broiler chicken meat is then sold by a meat trader in a traditional market for its own slaughter. In downstream activities, there are two stages of the customer, among others: first tier customer is a shop and restaurant and second tier customer is a household customer. Downstream activities are carried out by chicken traders to be further distributed to restaurants and / or chicken meat distributors for resale to household consumers. In other hand, focal point also can sell directly fresh chicken meat to the household as end customer.

The Respondents of Supply Chain Actors

The respondents used to figure producer perception toward halal traceability were chicken meat trader. In the case in Ponorogo Regency, Agriculture Department of Ponorogo Regency stated that in 2017, there are 83 merchants selling chicken meat in traditional market. Beside selling chicken meat, they also processed chicken live by slaughtering and handling into chicken carcass.

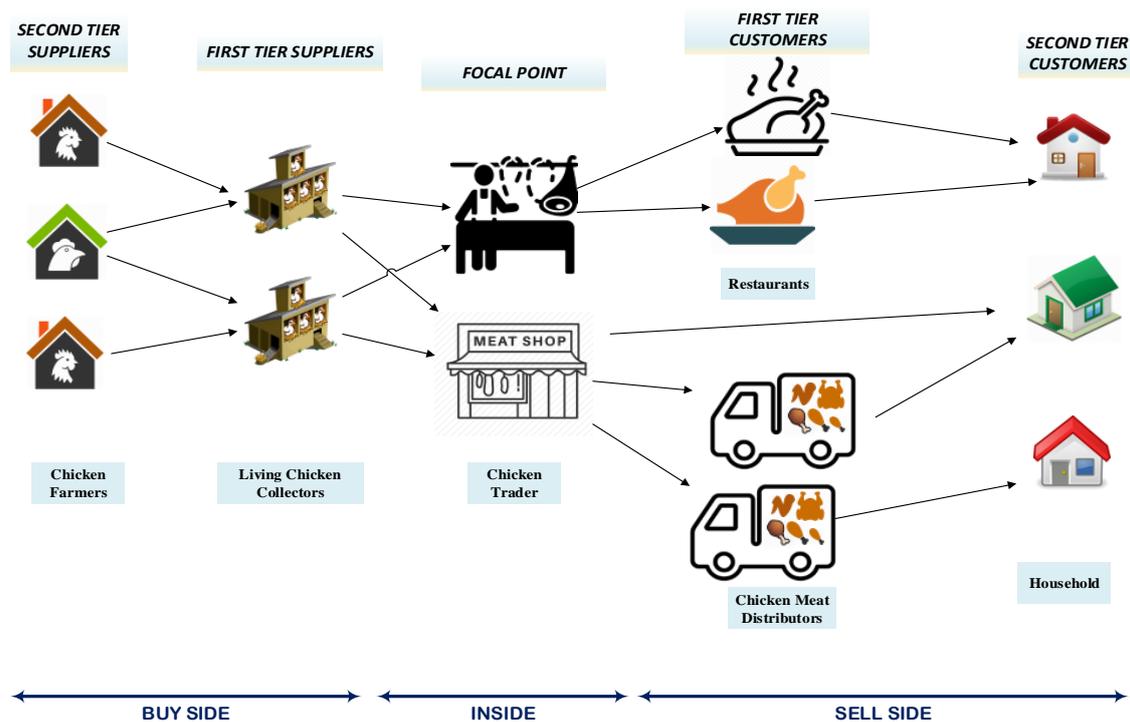


Figure 2. Supply Chain Network of Chicken Meat in Ponorogo

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Producer Perception toward Halal Food

The definition of perception is the process of selection, organisation and interpretation of person's stimuli into a meaningful and coherent description (Sciffman *et.al*, 2010). Perception has closely meaning with how people react to the stimuli that they gather from what they see and they hear. To explore about perception towards halal traceability for producer, their perception about halal definition have to be known because the definition oh halal could indicate their knowledge and belief about the substance and technical requirement of halal. Al-

Qaradhawi (1999) explains literally, halal is something that is not, apart from the bond of prohibition, and by the makers of shari'ah (law) to do, while the opposite of halal is haram. It can be considered as lawful as stated in the Quran or hadits. Furthermore, Al-Qaradhawi (1999) mentioned food prohibited based on Al Qur'an and Hadits, such as are : flesh of dead animals, flowing blood, flesh of swine, animals which are dedicated to anyone other than Allah.

From this research, respondents confirmed that 65 % of them perceive halal as following shariah law and especially for chicken meat they talked about slaughtering process by reading the name of Allah. The rest of respondents could not explained about the spesific definition about halal based on Qur'an and Hadist. Based on the reference stated by Al-Qaradhawi (1999), the respondents have lack on comprehension about the definition of halal.

Producer Perception toward Halal Traceability

Traceability is the ability to track food through all stages of production, processing and distribution (Food Standard Australia New Zealand, 2016). The need for halal product has raised, and it influenced how important halal traceability implemented into food industry today. In Halal food industry perspective, traceability can be used to trace the Halal status of a particular food product at every stage of the supply chain (Zulfakar, 2014). It includes all the information regarding the activities that the Halal food products have went through including activities involved before the production of that particular food product such as origin of the ingredients/animals. In line with those statements, in this research, producers perception toward halal traceability could be measured from some factors : (1) information exposure and (2) record information.

There are some terms used for Indonesian government to provoke people consuming good quality of chicken meat, including : Safe, health, wholesome, and halal (Public Health Directorate, 2017). Those policy mentioned that chicken meat consumed by citizens have these requirements :

- Safe : does not contain biological, chemical and phisical harmful material that causes food-borne illness.
- Health : contain materials needed for health
- Wholesome : does not mixed with other compound from the same animal or compound from oyerher animal
- Halal : cut and handled based on shariah (islamic) laws.

As Ratanamaneichat *et.al* (2013) stated that Halal issues also have required safety and quality assurance. It means the product must be up to the standards, which include hygiene, safety and served in a proper manner, and of quality for everybody.

Therefore, In order to provide good and competitive quality management in food industry, this research also used four standard about good quality chicken meat that Indonesian Government fixed. This research resulted that information exposure about safe, health, wholesome, and halal to the producers is low because most of them (88 %) did not know about quality requirement to produce good quality chicken meat as Safe, health, wholesome, and halal.

Furthermore, this research resulted that 94% of respondents did not record information about product needed for consumer to assure product quality. It could be caused by the lack of public awareness about how to provide chicken meat with good quality and also low of socialisation from local government about the policy.

Producers Intention toward Halal Traceability

The posibility to implement halal traceability on chicken meat supply chain, that is important to know producers intntion toward halal traceability. The intention was measured by :

- (1) Willingness to implement the terms “Safe, health, wholesome, and halal”
- (2) Willingness to assure chicken meat fullfil “Safe, health, wholesome, and halal”
- (3) Willingness to give information about product and process to customer
- (4) Willingness to record information about product and process

Measurement for intention used five scales 1 to 5 with the lowest score described unwillingness and the highest score shown willingness. Respondents give assesment about how much they will implement the aplication of traceability into their activities. The result shown in Figure 3.

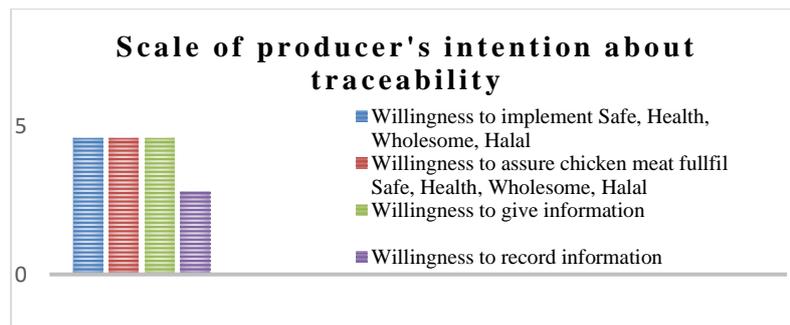


Figure 3. Results of Producer's Intention for Implementing Traceability

From this research, it was found that producers had a high willingness to implement and assure the requirement about "Safe, Health, Wholesome, and Halal" to the product but they resisted to record every information about the product they produced and sold. The respondents also intend to give information about process and product to consumer.

Consumer Perception towards Halal Traceability The Respondents of Consumers

The characteristics of the sample respondents in Ponorogo Region can be described from education background, gender, income and food expenditure. All of the respondents were Moslem. There was a relatively balance between male (52%) and female (48%) buyers. The buyers were well-educated that showed from the percentage of education background in high school and above were more than a half. Respondent who have islamic education background were also numerous. This factor can influence consumer's decision making while buying chicken meat and their perception about halal food. The intention to purchase halallabeled products of consumers with Islamic educational background is higher than consumers with general education background because their level of religious knowledge is higher (Aisyah, 2016). In other words, the higher the consumers' religious behavior, the higher the intention to purchase halal-labeled products. Mostly respondents were considerably low-income buyers according to the regional minimum wage rate, with spending on food taken about 50% of their income.

Consumer Perception towards Halal Food

Consumers will evaluate what they give and what they get in their subjective perception when they are buying a product/service (Zeithaml, 1988). Consumers' perceived quality of the product determines their behavior in buying the product. Halal is one of component of the product quality. Different perception towards halal can influence their behavior while buying halal products.

Research from Said *et.al* (2014) resulted that the factors that could influence consumers' perception towards Malaysia Halal food products were knowledge, trust and religiosity. It also showed that the consumers' perception and their level of knowledge and religiosity differed. In line with a research in Indonesia considerably Muslim majority, there were some different knowledge about halal concept (Ismoyowati, 2015). Respondents explained the concept as related with Islamic shariah, without haram content, and moreover they mentioned about halal ingredients and processes. In this research, it was found that consumer relatively have same knowledge about the difinition of halal. According to their opinion, halal is something allowed by Shari'a law. This corresponds with Quranic term used to indicate what is lawful or permitted. The factors that make consumers trust for halal status of the products, half of the respondents explained about the closeness and trusts with usual or subscribed seller. They believed that seller generally knew about how to slaughter according to shari'a law. Some 40% of the

respondents related it with quality and texture of carcass. Furthermore, some of them stated that halal label was an important factor. From their opinion, it can be concluded that most of respondents have sufficient knowledge about halal related with islamic law and defintion but lack of awareness how to assure and verify the validity of halal claim from seller.

Consumer Perception towards Halal Traceability in Chicken Meat Traceability

Lack of halal certified chicken meat products in Ponorogo District makes consumers have difficulties in validiting the status of halal products. This is not only a problem but also a chance to apply halal traceability in chicken meat supply chain. Reference [14] also stated that halal is a credence attribute of food similar to organic food, humanely treated animal products and environmentally sustainable products as it cannot be easily evaluated or ascertained by the consumer. Halal traceability is important to facilitate customers how to check the halal status of a product and at the same time to track the quality of chicken meat. In this research, halal traceability was perceived by respondents in four aspects : awareness for product information, perception on product information, perception on product quality, and awareness for product information search. Consumer awareness for product information was measured by some parameter, there were awareness about :

- (1) location of slaughtering
- (2) person who slaughtered
- (3) when the chicken to be slaughtered
- (4) how to slaughter the chicken, information on product
- (5) when transported, separated from non-halal foods
- (6) halal certificate of product

Most of the respondents were aware about product information that showed from the result. All parameters were assessed agree by more than 50% of respondents. In previous discussion, almost respondents have a right knowledge about

halal concept. This could be related with their awareness about availability and completeness of product information. This finding is inline with statement of Poniman *et.al* (2015) that food labels must include details for accuracy of labelling information, complete information regarding source ingredients and Halal.

Second aspect is consumer perception on product information that explained in five statement and then judged by respondents in agreement or disagreement. The statements were about :

- (1) availability of chicken meat products information could reduce consumer doubt about food safety
- (2) willingness of seller to show halal certificate of their product
- (3) ability to understand with product information on the market
- (4) willingness of consumer to consider with product information on the market
- (5) conformity of consumers' information needs with information on the market

This research found that some 73% of respondents perceived that chicken meat product information on the market could reduce their doubt about food safety. More than a half respondent agreed about few seller in the market will show product information to consumer. Chicken products information that available on the market was also difficut to understand for allmost respondents. Because of the limited product informations, most of the respondent would not consider about those informations. It could be concluded that awareness from consumer about food safety could be increased from display of product information that was clear and detailed. Lack of a transparency of product information could cause consumers confused and didn't consider about that.

Third aspect of halal traceability judgement is consumer perception on product quality. There were some parameter :

- (1) quality of chicken meat that sold in modern or tradisional retailer

- (2) convenient to buy chicken meat at a supermarket to the provision of halal status of products
- (3) consumer references related with merchants selling a legal halal chicken meat status
- (4) consumer references related with merchants selling chicken meat having good quality

Some 53% of respondents thought that there was different quality between chicken meat sold in modern retailer and traditional retailer. Some 93% of respondents felt more convenient to buy chicken meat at a supermarket to the provision of halal status of products. Most of the respondents didn't ask for references while considering who seller sold chicken meat with good quality. Some 43% of respondents need references related with merchants selling chicken meat having good quality. There were more respondents that had references to decide merchants who selling chicken meat with good quality than selling product with legal halal status. It could be related with lack of their awareness about how to assure halal claim from seller in previous discussion.

The last is consumer awareness for product information search. There were some parameter :

- (1) need for information about chicken meat products
- (2) news booming regarding the sale of "ayam tiren"(chicken that died without slaughtered), "ayam suntik" (injecting carcass for increasing mass), formalin added, etc could encourage consumer to seek halal information of the chicken meat.
- (3) willingness to use product information available on the market for making choice of purchase Information about chicken meat product were very needed by some 80% of respondents.

There were some issues related with food safety and halal status of chicken meat in Indonesia, among others were "ayam

tiren"(chicken that died without slaughtered), "ayam suntik" (injecting carcass for increasing mass) and formalin added. This research found that this news influence consumers to search for information about product. Most of respondents also had much willingness to use product information available on the market for making choice of purchase.

CONCLUSION AND RECOMMENDATION

The commodity of chicken meat in Ponorogo has been implemented supply chain network. Focal point of this network is chicken meat trader as the center with supplier and customer or it can be defined as manufacturer which produce fresh chicken meat by slaughtering and handling from chicken live in most traditional market in Ponorogo.

Perception of producers toward halal food that they had lack on comprehension about the definition of halal. The knowledge of chicken trader on the 'Safe, Health, Wholesome and Halal' status of chicken meat is also still low. respondents did not record information about product needed for consumer to assure product quality. It could be caused by the lack of public awareness about how to provide chicken meat with good quality and also low of socialisation from local government about the requirement of good chicken meat quality. In the other hand, producers had a high willingness to implement and assure the requirement about "Safe, Health, Wholesome, and Halal" to the product but they resisted to record every information about the product they produced and sold. The respondents also intend to give information about process and product to consumer.

With characteristics of respondents in Ponorogo which most of them have islamic education background, respondents have sufficient knowledge about halal concept, but lack of awareness how to assure and verify the validity of halal claim

from seller. Most of the respondents were aware about product information. Chicken products information that available on the market was also difficult to understand for almost respondents. There were more respondents that had references to decide merchants who selling chicken meat with good quality than selling product with legal halal status.

The government cooperated with MUI (Majelis Ulama Indonesia) as halal certification body and academics should hold consumer's and producer's education

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