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Assessing the impact of COVID-19 to tourism and adaptation strategies: a case study in Thua Thien Hue, Vietnam

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1. Introduction

The COVID-19 pandemic is an ongoing global health crisis of the world caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). The first identified case was in Wuhan, China, in December 2019. The World Health Organization (WHO) declared it as a pandemic in March 2020. Because COVID-19 pandemic can spread rapidly, social distancing and lockdown are effective interventions to slow it down. However, it is creating unprecedented stresses to other aspects of socioeconomy. Fernandes (2020) suggests that each additional month of COVID-19 costs 2.5%—3% of global GDP approximately and service is being impacted the most. One of the industries that has been affected massively is tourism because of travel restriction.

In the past, there were a lot of time that health crisis impacted to tourism industry. In 2003, the outbreak of severe acute respiratory syndrome (SARS) had major impacts on politic and economy (Wilder-Smith, 2005). International tourism visitors fell 1.2% in 2003 with a drop of 9%, about 12 million visitors in Asia and the Pacific in the months of outbreak compared to 2002. In 2006, due to the impacts of Avian Flu, Brahmbhatt (2005) estimated that 5% of tourism visitors were decreased, equivalent with 0.4% GDP decline in Vietnam. However, in the COVID-19 pandemic crisis, the impacts are bigger in all aspects. According to World Travel & Tourism Council (2020), 112.1 million to 197.5 million jobs related to travel and tourism are projected to lose depending on different scenarios. Same as that travel and tourism GPD losses are estimated from 3.4 trillion to 5.4 trillion USD.
Being no exception, the COVID-19 has impacted severely to Vietnam since the first case was identified on January 23, 2020. Until the end of October 2020, 1180 infected persons with 35 deaths were reported. It can be divided into two waves: the first wave from January 23 to July 24, 2020, with no death loss, and the second wave from July 25 after 99 days without new community case transmission. All the deaths until now are from second wave. Due to the impacts of the COVID-19, Vietnam economy has a huge drop. According to General Statistics Office of Vietnam (GSO), Vietnam’s GDP growth target was set at 6.8% in 2020 compared to 2019 but it has only increased 2.91% in 2020 (General Statistics Office of Vietnam, 2020).

According to Vietnam National Administration of Tourism (VNAT), tourism directly contributed 9.2% of Vietnam GDP in 2019 with 18 million of international visitors and 85 million of domestic visitors. However, as of the end of September 2020, international and domestic reached about 3.8 million and 35.7 million, down 67.4 and 53.76% over the same period in 2019, respectively. Vietnam tourism GDP losses are estimated 23 million USD.

Thua Thien Hue is a famous tourism province in the North Central Vietnam. It has diversified and rich tourism resources. According to Thua Thien Hue Tourism Promotion Center (TTHDOT), the average growth rate of visitors is about 12% per year, of which the structure of international tourists accounts for 40%–45% of total visitors. Tourism revenue increases 14% per year on average. In 2020, the fast and complicated developments of pandemic in the world and Vietnam in the negative direction have greatly affected the tourism industry of Thua Thien Hue. Therefore, there is a need in assessing the current situation correctly and appropriate adaptation strategies to support and recover the tourism industry. This study will give an assessment about impacts of the COVID-19 pandemic in two sides. The first one is to understand general impacts of current situation of Thua Thien Hue tourism industry by comparing tourism indicators of 2020 and 2019. The second one is to find out deeply the impact of COVID-19 to tourism enterprises of accommodation, travel trade, and travel service by surveying relevant enterprises and government authorities. Finally, adaptation strategies are proposed based on the data from two sides and the potential COVID-19 scenario in the future.

The outcomes of this study can be helpful in proposing strategies to adapt with the COVID-19 for decision-makers of tourism, especially in Thua Thien Hue province. It is the base for implementing specific tourism plans and assigning tasks to related authorities to ensure the fastest and most effective recovery of the tourism industry while ensuring safety for tourists and community in the coming time.

2. Methodology

Fig. 24.1 shows the methodology flowchart of this research that is including two main processes: comparative approach and tourism enterprise approach.

Comparative method is a method of investigation based on comparison. In this research, comparative approach aims to make comparison to find out the differences of tourism results before and during COVID-19 by comparing same tourism indicators in different time scale of 2019 and 2020; thence, understanding the impacts of COVID-19 to tourism in different aspects of indicators. The data are collected from Thua Thien Hue Department of Tourism.
The chosen indicators are shown in Table 24.1 which are number of domestic and international visitors, number of days serviced by accommodation establishments, and total revenue. Each indicator reflects each aspect of tourism results. Number of domestic and international visitors shows the difference in traveling behavior to Thua Thien Hue province before and after worldwide outbreaks of the COVID-19. Comparing the total number of visitors and total revenue in 2019 with 2020 helps to have an overall impact of COVID-19 to tourism. Comparing number of domestic visitors with international visitors shows how country lockdown impacts to tourism. Number of days serviced by accommodation establishments points out the average duration of a trip for one person.

Tourism enterprise approach will help to understand the difficulties and preparation of tourism enterprises during COVID-19. In this study, 563 questionnaires were sent directly to 563 tourism enterprises to get information about impacts of the COVID-19 that focus in

### TABLE 24.1 List of indicators.

| No. | Indicator                                           | Unit     | Time period          | Source                                                      |
|-----|-----------------------------------------------------|----------|----------------------|-------------------------------------------------------------|
| 1   | Domestic visitor                                   | Person   | January 2019 to      | Thua Thien Hue department of tourism (TTHDOT)              |
|     |                                                     |          | December 2020        |                                                             |
| 2   | International visitor                              | Person   |                      |                                                             |
| 3   | Number of days serviced by accommodation establishments | Day      |                      |                                                             |
| 4   | Revenue                                             | Mil. VND |                      |                                                             |

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revenue, workforce, and activities to do during COVID-19. The travel service enterprises include 15 transportation agencies, 17 restaurants and catering services, 7 specialty and gift business units, 3 art and entertainment services, and 1 health-care service.

The survey was proceeded and completed in June of 2020, which is during the last period of the first wave of the COVID-19 in Vietnam. Thua Thien Hue Tourism Promotion Center was supported in doing in person survey for this research. The respondents were owners of the enterprises, or senior staffs who were in charge of human resources and finance in the enterprises.

From the results of two processes, an overview about impacts of COVID-19 to tourism industry in Thua Thien Hue province will be given out. From the overview, adaptation strategies will be prosed based on different scenarios of COVID-19. Scenarios are established by using expert opinion method and group discussion. Experts are nine persons from Thua Thien Hue Department of Tourism and Tourism Department of Hue University.

### 3. Study area

Thua Thien Hue is a province located in the North Central of Vietnam with 9 districts and city. Administrative boundaries are defined as follows: The East borders with East Sea; the West borders with Laos; the North borders with Quang Tri, a province in the North Central of Vietnam; and the South borders with the South Central Coast of Viet Nam. This is one of the provinces with strong tourism development in Vietnam because it has diversified and rich tourism resources. On the side of cultural and historical tourism, this province was the capital of the last feudal dynasty of Vietnam. It is a multicultural province, still preserving many cultural heritages, national ranked monuments, unique architectural works, and intangible cultural values. The most prominent is the Complex of Hue monuments which were listed as a World Cultural Heritage by UNESCO. On the side of recreational tourism, Thua Thien Hue is the transitional boundary of the climate in the North and the South of Vietnam. It has a lot of beautiful sights with high mountains, long sandy beaches, beautiful rivers, and springs; especially, this province has the largest lagoon system in South East Asia – Tam Giang – Cau Hai lagoon in the East (Fig. 24.2).

In the period from 2016 to 2019, with tourism resources and favorable geographical location and the efforts of developing tourism of the whole province, the tourism industry of Thua Thien Hue has had strong development steps, achieving positive results. The average growth rate of visitors to this period is about 12% per year, of which the structure of international visitors accounts for 40% to 45%. Tourism revenue increases 14% per year on average.

In 2019, the total number of visitors to Thua Thien Hue reached 4817 million (up 11.18% over the same period in 2018), in which, international visitors reached 2186 million (up 12.06% over the same period); guests staying at 2247 million arrivals (up 7.30%). Revenue from accommodation establishments in 2019 reached 4945 billion VND, an increase of 10.54% compared to 2018; total revenue from tourism reached 11,300 billion. Compared to other provinces in the region as well as the whole country, Thua Thien Hue tourism growth is not too fast but sustainable, synchronizing with tourism development strategy of the province.

In Thua Thien Hue, there are currently 667 accommodation establishments, with a total of 11,508 rooms; 18,801 beds; 78 companies, branches, representative offices, travel agents; 38
tourism transport enterprises; and many tourist service enterprises. By the end of 2019, there are about 16,000 direct employees in the tourism business, including accommodation, travel trade, tour guides, and restaurants specializing in tourism and other services. In addition, there are a number of employees who are indirectly involved in tourism such as sales units, community-based tourism, ecotourism, and a number of other related departments.

4. Results and discussion

4.1 Impacts of the COVID-19 pandemic on growth indicators of Thua Thien Hue tourism

4.1.1 Number of visitors

Before the widespread outbreak of the COVID-19, tourism activities in Thua Thien Hue still achieved positive results. However, the fast and complicated developments of pandemic in the world and in the country in the negative direction have greatly affected the tourism industry of Vietnam in general and Thua Thien Hue in particular. Because of the impacts of COVID-19, the number of visitors in 2020 has been drastically low in comparison to 2019. In Fig. 24.3, it can be seen that in January 2020, the number of visitors coming to Thua Thien Hue reached 479,101 arrivals, an increase of 22.07% over 2019. This is the period right before COVID-19 outbreak in Vietnam. From February to December 2020, the
The number of visitors is lower over the same period in 2019. Especially, April has the lowest number of visitors which is only 5327 arrivals, down 98.81% over the same period. The reason is from April 1 to 15, 2020, Vietnam implemented social isolation all over the country. After April 2020, Vietnam controlled the COVID-19 pandemic; there was no cases in community for 99 days. In addition, summer is domestic tourism season in Vietnam. Therefore, from May to July 2019, there is an increasing trend in the number of visitors; however, the second wave of the COVID-19 that came from July 25 breaks that trend. After controlling the second wave of the COVID-19, Thua Thien Hue province has experienced a series of disasters including typhoons, floods, and landslides, plus low domestic tourism season; the number of visitors by month from August to December is steady by lower than the period of May to July. In comparing over the same period in 2019, it is only about one-fourth to one-fifth.

Fig. 24.4 shows proportion of domestic and international visitors by month in 2019 and 2020. It can be clearly identified that international visitors have a big proportion in 2019.
from a half to two-fifths in the total number of visitors, but in 2020, international visitors have a small proportion because of travel restriction and country lockdown during the COVID-19 period. In January 2020, the number of international visitors is 264,075 arrivals, increasing 33.6% compared to January 2019. However, it has gone down since February 2020. Specifically, the number of visitors has never got over 7000 arrivals by month from April to December 2020. Thus, in case of the COVID-19 pandemic continues in 2021 and further, Thua Thien Hue province should pay more attention in developing domestic tourism market to attract more domestic visitors.

### 4.1.2 Overnight accommodation and total revenue

Overnight accommodation and total revenue from tourism in Thua Thien Hue have the same decreasing trend as the number of visitors (Figs. 24.5 and 24.6). In January of 2020, overnight accommodation was 204,323 days, and total revenue was 1,018,000 million VND, increasing around 12% for both indicators compared to January of 2019. However, the trends are decreasing after that with the lowest in April. In April of 2020, overnight accommodation and total revenue were 6675 days and 26,525 million VND, only achieved 3.1% and 2.4%, respectively, compared to same month of 2019. The increasing trends could be observed from May to July then dropped again in August and stayed steady to December. In the period after national lockdown in April, there is only 1 month the number of overnight accommodation got over 50% compared to same month of 2019 which was July with 59%. The other months are from 30% to 48%. The number of total revenue by month is worse; the highest month is July with about 47% compared to July of 2019. The other months are from 12% to 35% compared to the same month of 2019. This is proved that Thua Thien Hue tourism depends more on international visitors than domestic visitors in term of total revenue.

![Bar chart showing overnight accommodation by month in 2019 and 2020.](https://sdl.thuathienhue.gov.vn/) (Accessed on 31 December 2020).
4.2 Impacts of the COVID-19 pandemic on tourism enterprises in Thua Thien Hue

4.2.1 Accommodation enterprises

The main types of tourist accommodation are guest houses and hostel (Fig. 24.7). However, the number of rooms in hotels and resorts accounts for the majority: 8531 rooms out of a total of 11,508 rooms. The number of rooms in other types is not large, only 2977 rooms. The main form of ownership is private enterprise, accounting for 81.4%; 3.7% of joint stock companies; 2.2% of state-owned enterprises; 1.1% of foreign direct investment (Fig. 24.8).

Survey data from 472 accommodation enterprises showed that 89% of total employees were affected by the COVID-19 pandemic (6228 people, including the board of directors, heads of departments, and staffs) in which staffs are most impacted, 5376 people (accounting
for 86% of affected employees), followed by department heads with 538 people (Fig. 24.9).
Notably, in order to minimize the damage caused by the COVID-19 pandemic, the majority of accommodation enterprises implement personnel policies. Specifically, there are 2469 labors with pay cut and job cut; 669 labors on unpaid leave with support; 936 people with job quit (accounting for 16%); unpaid leave without support is 1298 people (12.6%).

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FIGURE 24.8 Ownership information of accommodation enterprises in survey.

FIGURE 24.9 Situation of impacted labors of accommodation enterprises.
About activities during the COVID-19 pandemic, 32.5% of accommodation enterprises renovated and upgraded their facility and trained their key staffs to be ready to welcome visitors when COVID-19 pandemic is controlled.

4.2.2 Travel trade enterprises

Of the 48 surveyed enterprises, the ownership forms of travel companies are mainly joint stock and limited liability companies (72.9%). Fig. 24.10 shows that there are 647 impacted labors (including board of directors, department heads, staffs, and tour guides) in which staffs are affected the most (accounting for 63.6% of impacted labors). In travel trade enterprises, only 4% of the total impacted labors quit job, and 23.6% of the labors leave with support. However, the number of labors who quit their jobs without any support accounts for 41%.

Although travel trade enterprises are closed during the pandemic, there are still many activities to prepare for the postpandemic. From the survey, 66.7% of enterprises conduct research on new products and services; 56% do research new markets; 50% develop promotion plans for the next period. The rest are some activities such as training human resources (45.8%), restructuring (31.25%), and upgrading facilities (16.7%).

4.2.3 Tourism service enterprises

The main ownership form of tourism service enterprises is joint stock and limited liability companies, accounting for 39.5%, followed by private enterprises (23.3%) and individual
enterprises (20.9%). Fig. 24.11 shows situation of impacted labors of tourism service enterprises. The total number of employees in this category is 1003 people, of which 879 are impacted by COVID-19 pandemic. Thus, the number of impacted labors accounts for 87.6%. Staffs are still the most affected, accounting for 84%; 37.3% of labors on unpaid leave with support; unpaid leave labors without support still account for a high proportion, 33.7%.

The survey results also show that during the pandemic, 34.9% of enterprises conducted a number of activities such as training human resources, developing promotion plans (27.9%), researching new markets (27.9%), upgrading facilities (25%), and restructuring (14%).

4.2.4 General situation of tourism enterprises

In general, the survey results of tourism enterprises show that the revenue situation has decreased sharply, not enough costs to operate the business. Most companies are forced to adopt policies to reduce staffs, adjust salaries for their employees, or take unpaid leave until the end of COVID-19. Survey results show that there are nearly 8000 workers directly affected, but if including indirect workforces such as tour guides, seasonal workers, short term contract, etc. This number is over 13,000 people.

Particularly, in February of 2020 the number of canceled rooms was about 16,000; the number of guests was about 29,000 visitors. For travel services, the number of canceled tours was 230 tours; the number of canceled guests was about 7 passengers. In the first half of March, tour and room cancellation increased sharply, more than 80% of the tourism businesses stopped operating. In April of 2020, nearly 100% of guests canceled rooms and tours, and the travel business stopped operating.

![Figure 24.11 Situation of impacted labors of tourism service enterprises.](image)
5. Discussion

5.1 Adaptation strategies based on scenario of COVID-19

The adaptation strategies depend on scenario of controlling COVID-19 pandemic in Vietnam. They are consulted from experts’ opinions and Central Government decisions. To adapt with the COVID-19 pandemic in Vietnam, the Central Government has been promulgated a number of guiding documents. Here are the most important guidelines:

- Directive No.15: Directive No.15/CT-TTg was promulgated about drastically implementing the prevention and control in the peak period of COVID-19 pandemic by the Prime Minister on March 27, 2020
- Directive No.16: Directive No.16/CT-TTg was promulgated about taking urgent measures to prevent and control the COVID-19 pandemic by the Prime Minister on March 31, 2020
- Directive No.19: Directive No.19/CT-TTg was promulgated about continuing to implement measures to prevent and control the COVID-19 epidemic in the new situation by the Prime Minister on April 24, 2020
- Ministry of Health’s handbook: Handbook “Guidelines for COVID-19 prevention and control in the community in the new normal

Table 24.2 describes the differences between Directive No.15, No.16, and No.19. Directive No.16 is the strictest, which is applied in severe situation. Otherwise, Directive No.19 is applied in the new normal, from the guiding documents of the Central Government. The scenarios of controlling COVID-19 pandemic in Vietnam and adaptation measures for Thua Thien Hue tourism are shown in Table 24.3.

In general, all four scenarios are focusing on domestic tourism than international tourism based on the difference situation between Vietnam and the world. While Vietnam is controlling the pandemic quite well, the situation outside Vietnam border is a different story when the speed of transmission is still very high, and the rehab ability of international tourism is low. Thus, prioritizing to develop domestic tourism is reasonable in the case of Thua Thien Hue province and Vietnam. In all four scenarios, pandemic prevention measures must always be ensured as directed by the Central Government.

Scenario 1 is perfect scenario. There is no transmission case in community and government can put all their efforts in economic development. There is no fluctuation, and everything goes straight as a line; so that, it is called ‘line scenario.’ This is the best scenario under the COVID-19 situation. In this scenario, tourism has great advantages to rehab in domestic tourism. However, to stand out in competition with other provinces which also focuses in domestic tourism, Thua Thien Hue province has to build strong brand, develop new tourism products, and improve the quality of the current ones. In this scenario, tourism activities have to follow Ministry of Health’s handbook for COVID-19 prevention and control.

In scenario 2, there are some transmission cases in other provinces and the government can control them. The impacts of transmission cases are not too much to Thua Thien Hue province. It is defined as ‘V scenario’ with more fluctuation than ‘line scenario.’ This scenario is close to current reality of Vietnam and Thua Thien Hue province because even Vietnam did a great job in controlling the COVID-19; there are still some cases in community because
| Directive No.15 | Directive No.16 | Directive No.19 |
|----------------|----------------|----------------|
| **Gatherings** | - Total social lockdown: All people have to stay at home, only go out if really necessary  
- Social gatherings must not exceed 2 persons | - Stop all the events more than 20 people in a room  
- Stop all cultural, sports, and entertainment activities  
- Social gatherings must not exceed 10 persons | - Stop all the events gathering a lot of people  
- Social gatherings:  
  + High risk provinces: not exceed 20 persons  
  + Low risk provinces: not exceed 30 persons |
| **Safe distance** | - 2 m | - 2 m | - 1 m |
| **Business establishments** | - Temporarily suspending operation of business and service establishments  
- Business establishments of essential goods and services may operate but must strictly implement anti-pandemic measures | - Temporarily suspending operation of business and service establishments  
- Business establishments of essential goods and services may operate | - Temporarily suspending nonessential businesses: Karaoke, bar, massage, beauty salon, club, etc.  
- Can be operated:  
  + Restaurants, hotels, wholesale, retails  
  + Sport practice areas, tourist destinations |
| **Transportation activities** | - Stopping public transportation, unless necessary  
- Limiting personal vehicles as much as possible | - Limiting movement from pandemic areas to other localities  
- Limiting flights from Hanoi and Ho Chi Minh City to other places | - Public, interprovincial and intraprovincial transportation services are operational  
- Flight transportation services must apply specific appropriate measures to ensure the safety of passengers |
of migration and bad management in quarantine area. Luckily, all of those cases are controlled promptly. Same as line scenario, tourism in this scenario pays more attention in domestic tourism development. However, there should be a mechanism to manage big events with crowded people to limit the possibility of transmission in society. Therefore, Directive No.19 should be applied for tourism activities.

Scenario 3 describes the disruption of the COVID-19 to society in general and tourism in particular. The situation changes continuously because transmission cases appear consecutively in other provinces and create indirect impacts to the efforts of the COVID-19 controlling of Thua Thien Hue province. In this scenario, the pandemic can be controlled but the government has to put a lot of efforts to respond with it. It is described as ‘W scenario’ because of its instability. Tourism in ‘W scenario’ can be implemented but depends on provincial resources. Stricter regulations in controlling the COVID-19 in tourism is needed to prevent community transmission such as Directive

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No.15. Big events with crowded people should be banned. Instead, tourism should be changed to focus on types with small groups.

Scenario 4 is the worst scenario out of all four. The pandemic outbreak is so severe with transmission within provincial community or nationwide, and travel restriction and provincial lockdown is applied. It drops from good spot to crisis spot and maintains there like an L shape; so it is called ‘L scenario.’ In this case, Directive No.16 must be applied, and tourism should put all its ability to help the government to fight against the COVID-19 to overcome the crisis. Tourism buildings can be used as quarantine areas. Tourism authorities should take actions as well as discuss with higher levels and other authorities to help tourism workforces by supporting packages or temporary job change. In the meantime, government and responsible authorities should prepare and conduct strategies for rehabilitation of tourism after the COVID-19 is controlled.

5.2 Adaptation activities and strategies for tourism of Thua Thien Hue province

Based on the current pandemic situation in Vietnam and the province, Thua Thien Hue government has already given strategies for in the short term and long term. In the short term, focusing on attracting domestic visitors, especially visitors from North and South, retail customers, and families. Tourism has to be always ready to welcome international visitors right after the pandemic is controlled. Improving the quality and diversity of tourism products and developing new products; and organizing high-quality festivals and attractive events such as Hue Festival, traditional events, and sport events.

Thua Thien Hue province has already taken a lot of activities to adapt with the COVID-19 reflecting given strategies. These activities can be categorized into five main groups. The first group is to implement mechanisms and packages to support tourism with specific activities of reducing taxes, fees, and prices of state-owned products, supporting in bank loans, unemployment insurance, communication, and promotion. The second one is to stimulate tourism demand to encourage domestic visitors to use services and come to destinations within Thua Thien Hue province such as ticket free, ticket discounts, etc. The third one is to develop new products prioritizing to develop products of meetings, incentives, conferencing, exhibitions (MICE) tourism, ecotourism, and community-based tourism. The fourth is to deploy promotion activities via different platforms and channels from traditional channels such as newspapers, television, magazines, etc., to others such as social media, influencers, etc., to enhance provincial tourism brand within domestic tourism market. The last one is to ensure safety for visitors to Hue and the community, and a green, clean, and friendly environment.

6. Conclusion

This study attempts to find out the impacts of COVID-19 to tourism in Vietnam with a case study in Thua Thien Hue province, and propose adaptation strategies under four scenarios of COVID-19 in the future. The results show that the COVID-19 pandemic impacts severely to
Thua Thien Hue tourism with decreasing trends in the number of visitors, the number of days in overnight accommodation, and total revenue. The trends are related to the development of the COVID-19 in Vietnam. The tourism of the province received good result in January before outbreak of the COVID-19. The lowest point was in April when the whole country locks down. The second lowest point was in August right after the second wave. In the survey of tourism enterprises, the results showed that 89% of labors are impacted and general staffs are impacted the most. The adaptation strategies of tourism are developed based on the expert opinions and group discussion about the potential development of the COVID-19 in Vietnam in the future. The results show that the government should put all their efforts in controlling the pandemic to create safe environment to develop tourism and putting most of their efforts in stimulating domestic tourism. This research has a limitation. The research only focuses on assessing negative impacts of the COVID-19 but has not assessed the positive impacts to Thua Thien Hue tourism such as improving in natural environment. However, Thua Thien Hue is not a high density spot of tourists; the negative impacts are more dominant to the positive ones.

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