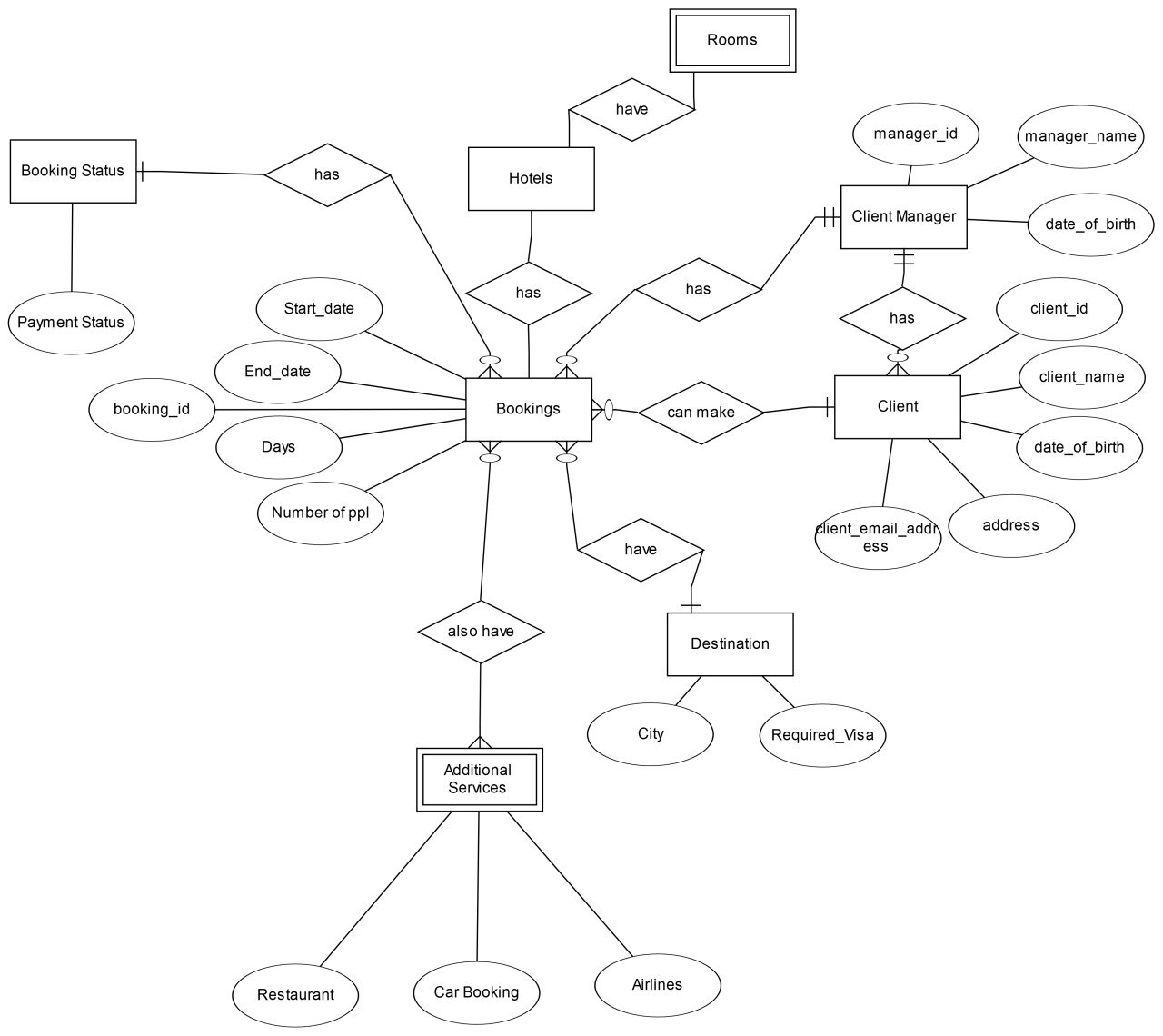
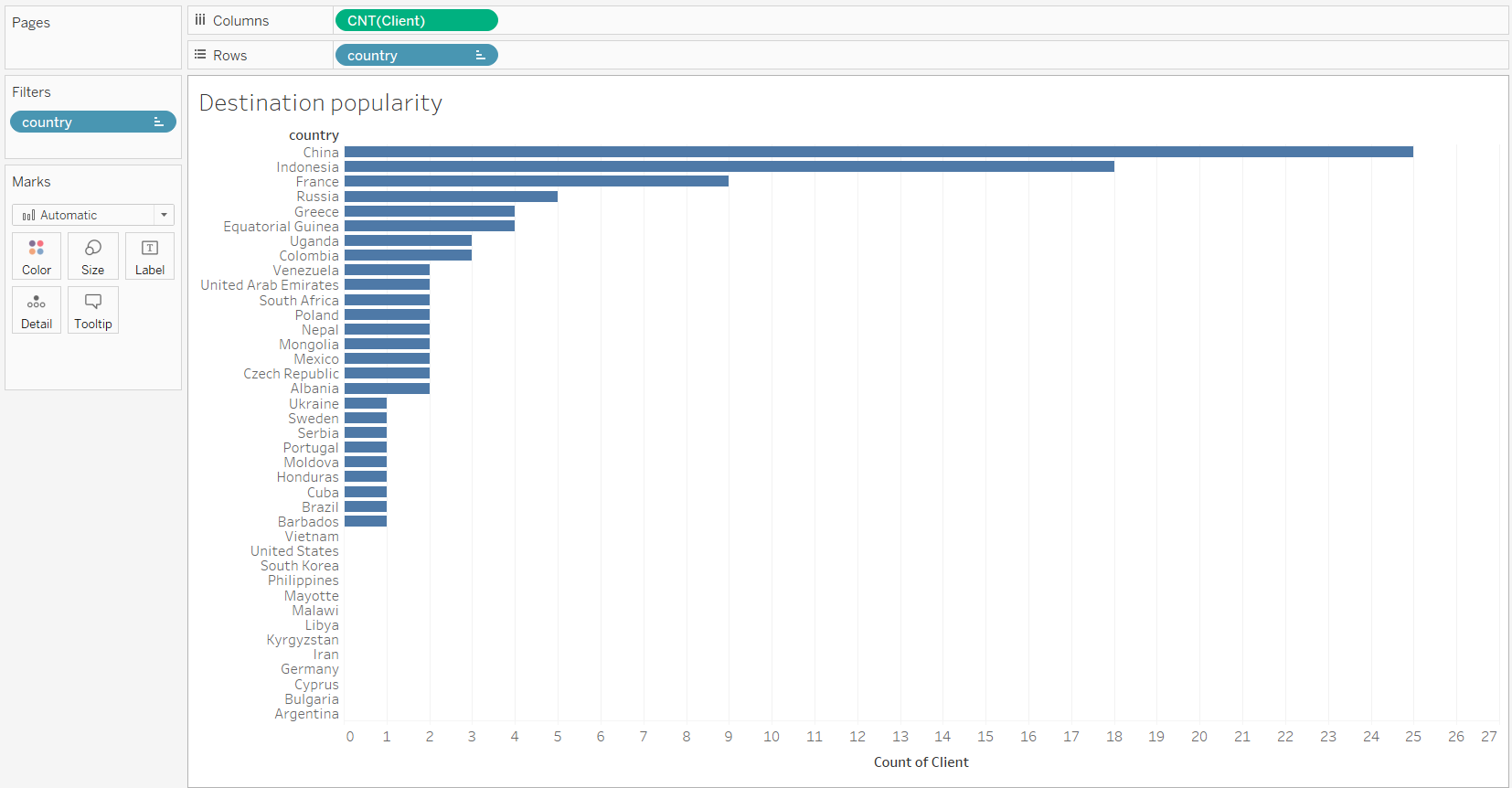
HW 4 group, report for May 7th.  
  
  
The subject area chosen by our group is tourism agency – while this area is not particularly prosperous in the current pandemic period, this downtime can be used to optimize future business processes.   
  
Currently the tourism industry is very diverse, as while many take to organizing trips on their own, vacations organized by a professional specifically catering for a consumer’s needs are increasingly popular, especially among high-class, luxury travel or travel to unorthodox destinations where assistance and guidance is required – for example, trips to South America and Antarctica is becoming more relevant and popular among travelers, however, beside larger cities in large developing countries (such as Brazil, Argentina and Mexico), exploration of the countries will require special knowledge of paths, equipment for hiking mountains or glaciers and specially equipped vehicles for traversing undeveloped roads. For such needs, tourists often come to an agency to leave the search for the needed guide or equipment up to the workers.  
  
The database we are creating is aimed to aid tourism agencies with one source for all the information an employee may require to organize a tour – or booking, as we will call it further. Due to the nature of the job as a middleman between hotels (or other vacation services) and users, the information needed can be stored in different places – for example, lost in an employee’s or the company’s email inbox or, at times, found deep within an outdated website of a hotel or suite, oftentimes in another language. This project aims to reduce the time required to find the needed information and make sure it is securely stored in one place, with potential for later use, for example, for a returning customer.   
  
This database is developed for business use – it is not intended for consumers to use it, and its functions and the needs it satisfies are not aimed at individual travelers who plan the trip for themselves. Smaller companies focusing on individually catered trips will find greater use in this database, however, it could be used by larger companies as well for data organization and communication between different employees or departments.  
  
The software developed using it would take form of an application with options to create a new booking, add new data relating to an existing booking (defined by its individual number, or ID), edit or delete existing data related to a booking, and, finally, search for all data related to a specific user query, for example, the contact data, room types and prices of a hotel.   
  
The main entities used for this database are Booking, Client, Client manager, Destination, Hotel and Booking status. Additional services is a weaker entity of Booking, and Rooms is a weaker entity of Hotel. The structure of the database with entities and attributes can be seen below.

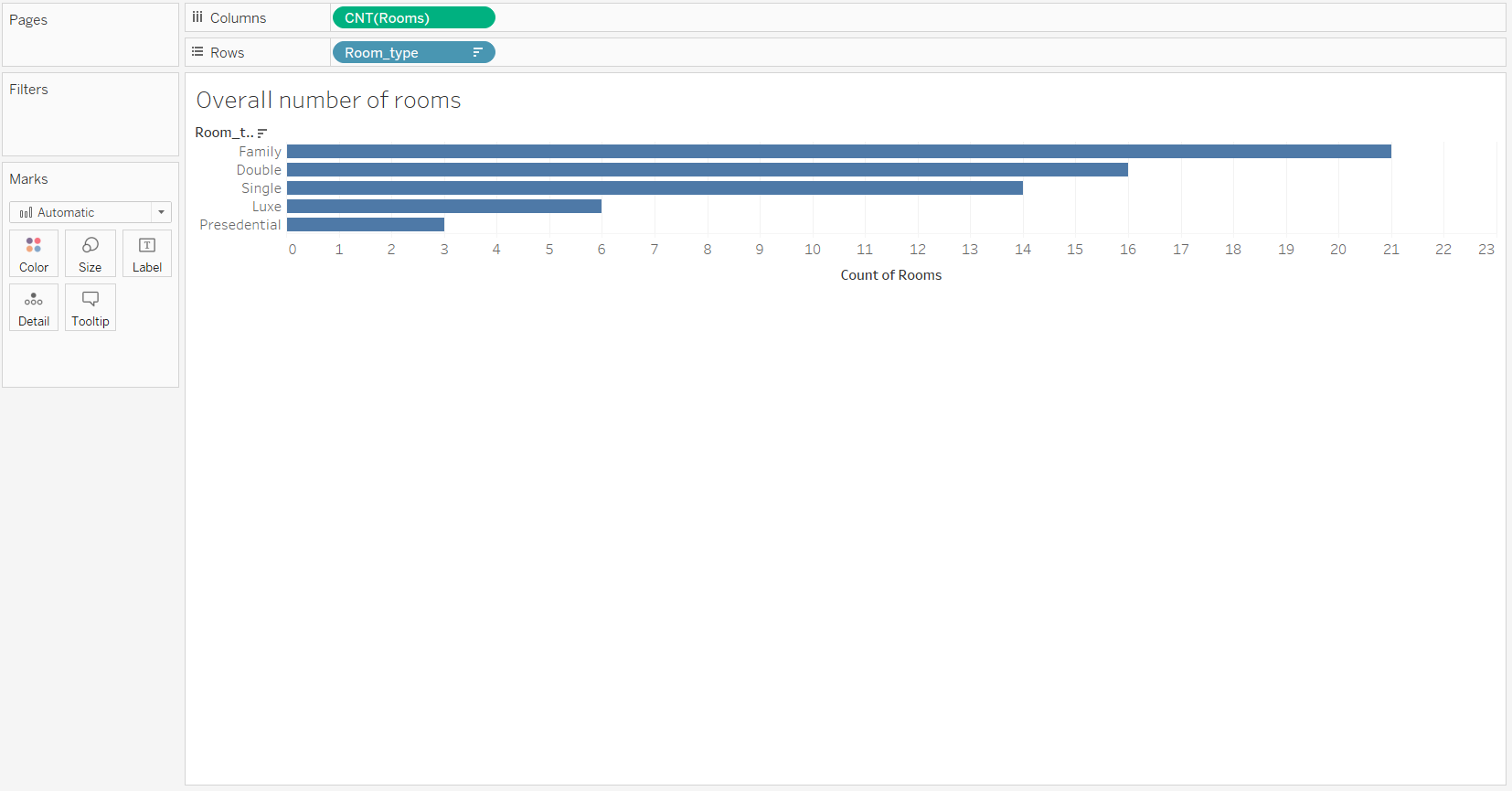


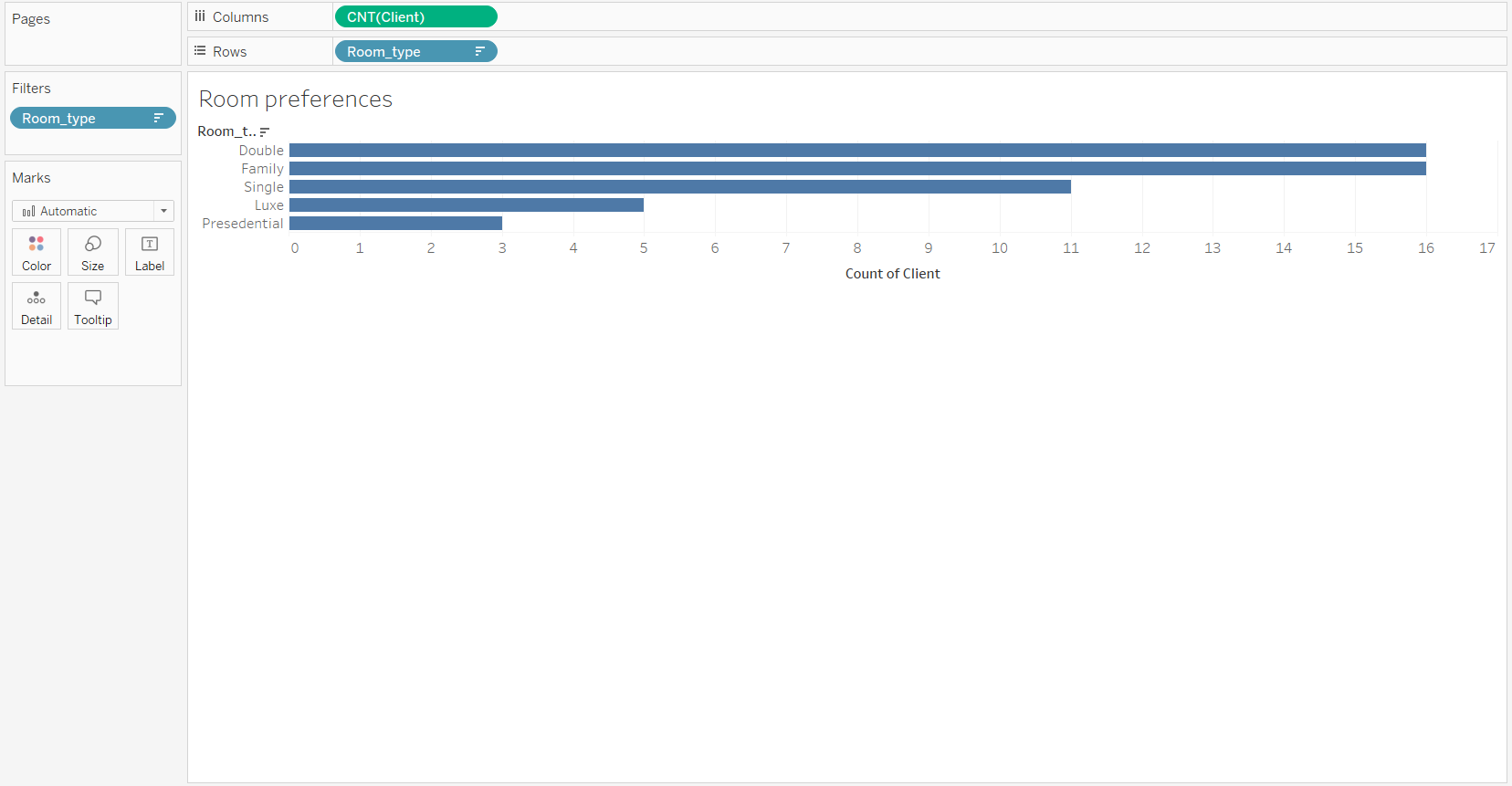
**Reports**

As for the reports, that are presented in our project, the main goal for the reports was to perform a critical analysis of the data contained within the database with the further optimization of the Travel Agency’s database.

Overall, 6 reports were created. All those reports concerned the most important topic that a travel agency can encounter. To start off with the first report, the focus of it is aimed at providing information regarding the most popular destinations within the client base. As it can be seen in the report, the most popular destinations are China, Indonesia and France which indicates that the Agency has to put an accent on providing more attention to those destinations in a form of more destinations within the country :

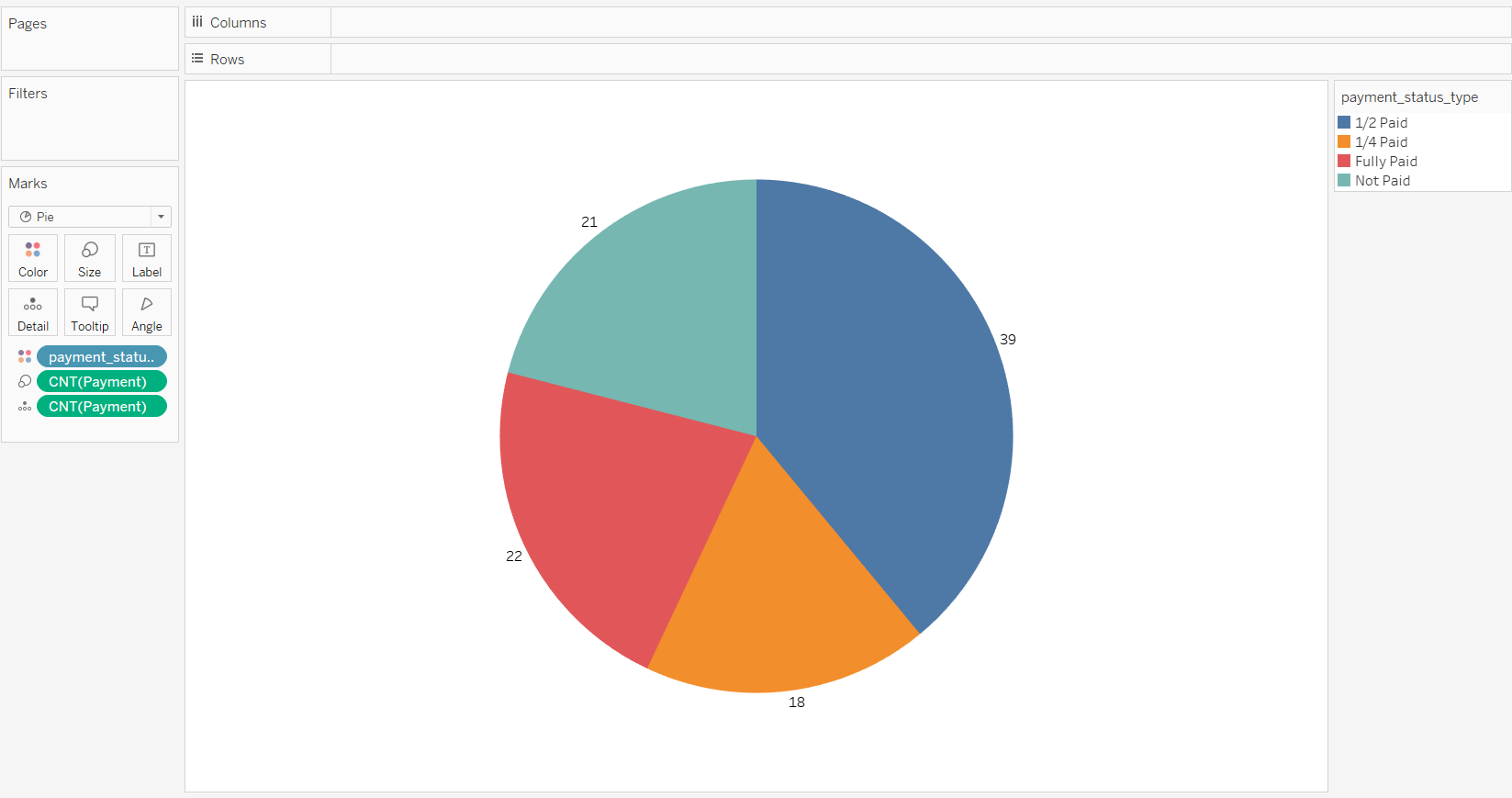


Next two reports that were provided for projects were aimed at the overall amount of rooms that the agency provides as well as the detailed preference within the client base. As it can be seen in the report regarding the overall amount of room the most prominent type of room is the Family type. As for the room preferences within the rooms, it can be noted that the most chosen rooms are the Family type and Double type. The results of those reports are represented below: 

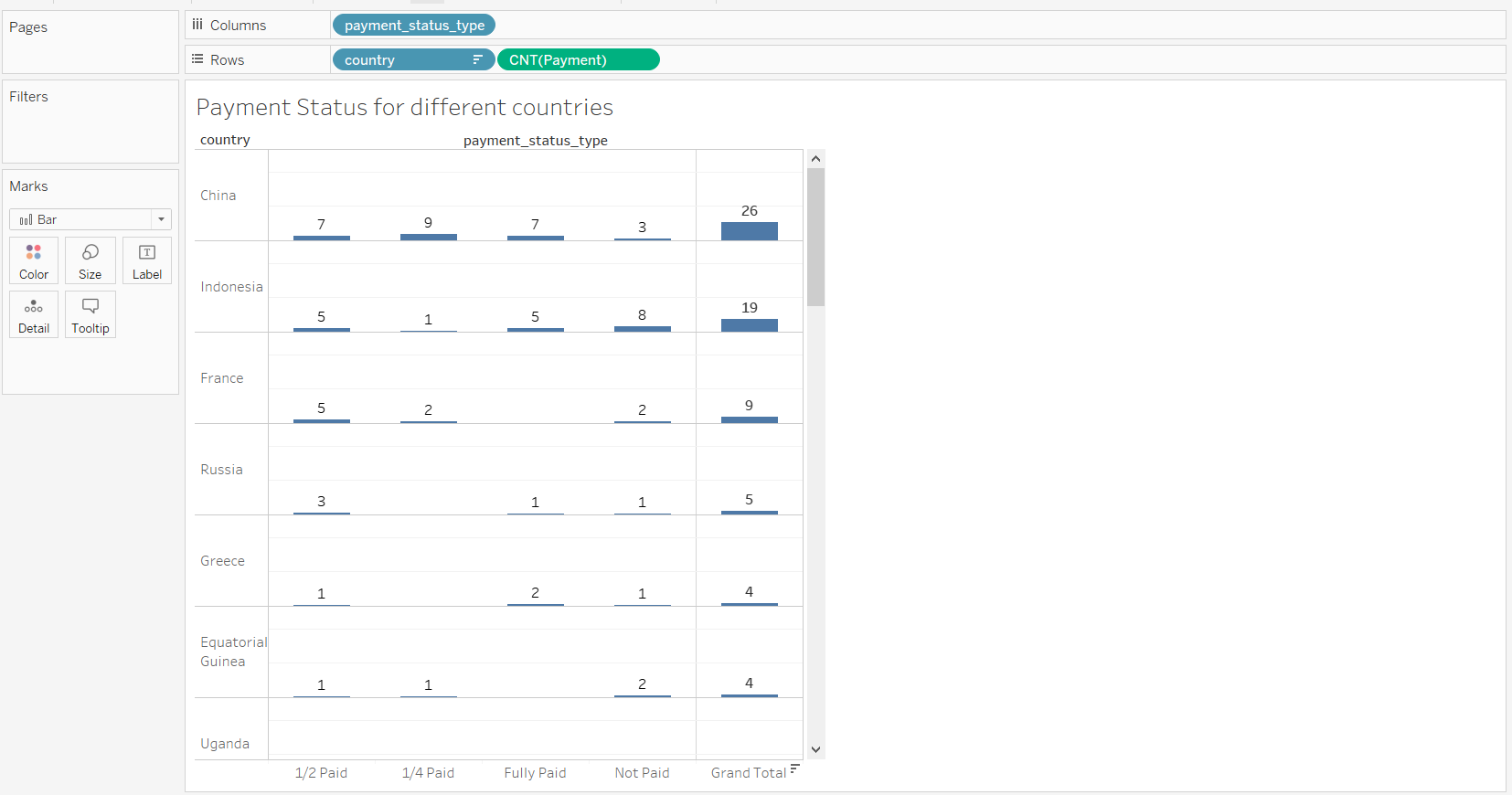


Both reports are done in order to provide the necessary information for the agency when establishing contracts with the hotels in order to get the maximum amount of those types of rooms.

Next 2 reports concern the topic of the payment for the booking. First report mostly focuses on the overall types of payments which are the 1/2 paid, 1/4 paid, fully paid and not paid at all. As it can be seen, a large portion of bookings are 50% paid and it can be seen in the report below:

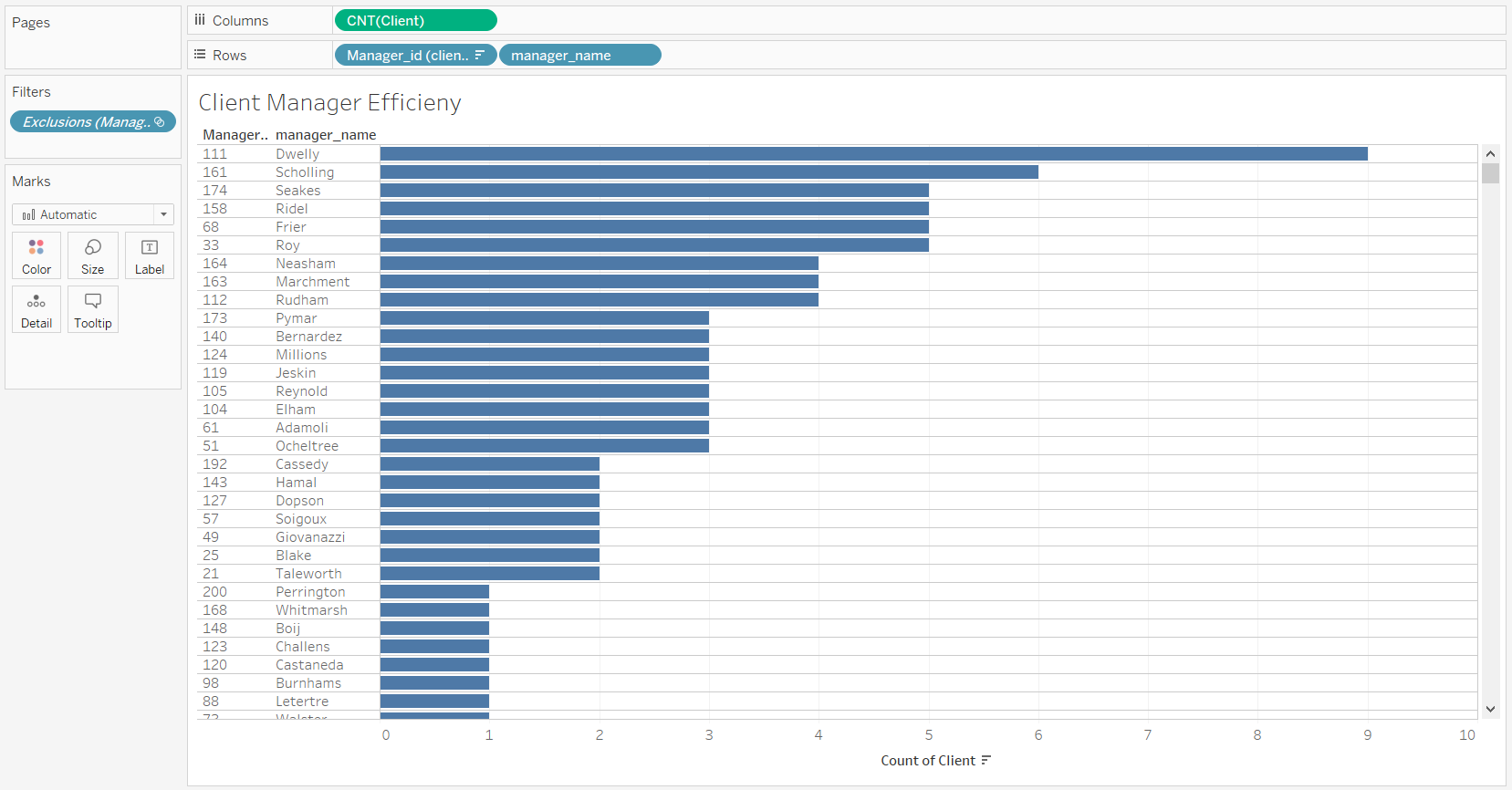


However, in order for the proper analysis of the payment another report was created and it was focused on the countries which were presented previously and the most preferable types of payment for those countries:



After performing necessary analysis on those reports the agency can consider providing benefits to those who either pay for bookings in 50% or more percent.

And the last report that should be pointed out is the report which focuses on the client manager efficiency. It shows the amount of client per client manager which shows the client manager’s effectiveness rating and it is shown below:



This report is required to perform analysis on the efficiency of the firm and its subsequent optimization within the number of managers within the firm.