Tanzania Tourism

Predict tourist expenditure when visiting Tanzania

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TANZANIA
TRAVEL

America

Europe

Asia

~ 300 Employees

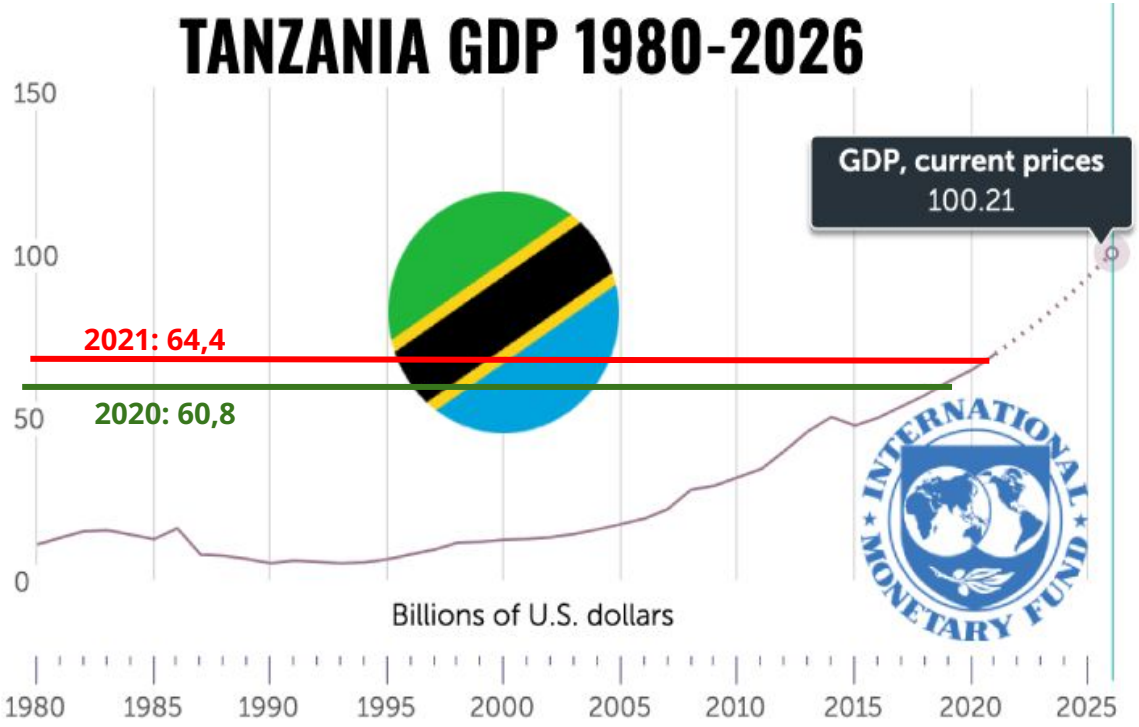
Tanzania

Population:	61 Million (2021 estimate)
Official languages:	Swahili and English
Capital:	Dodoma
Largest city:	Dar es Salaam
UNESCO World Heritage :	7
Currency:	Tanzanian shilling (TZS)
	1 Euro=2630 TZS

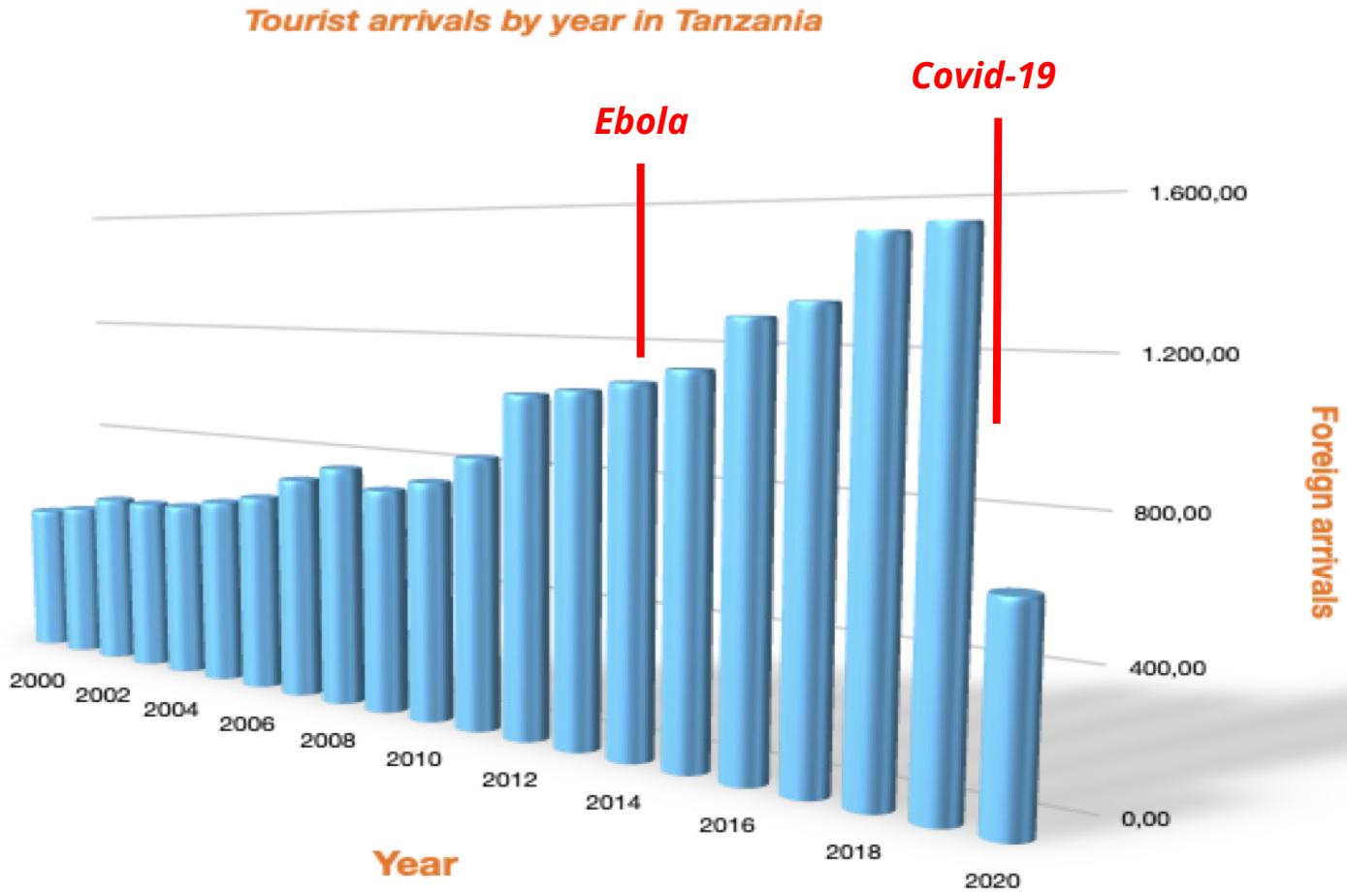
Ressource [2]

Tanzania Economic Indicator

- ***Lower-Middle Income Economic group***. (Per capita $1,046 to $4,095)
- Tourism contributing about ***17%*** of the country's GDP (Gross Domestic Product) and ***25%*** of all foreign exchange revenues.
- The tourism of Tanzania dependent tourism economy of Zanzibar.

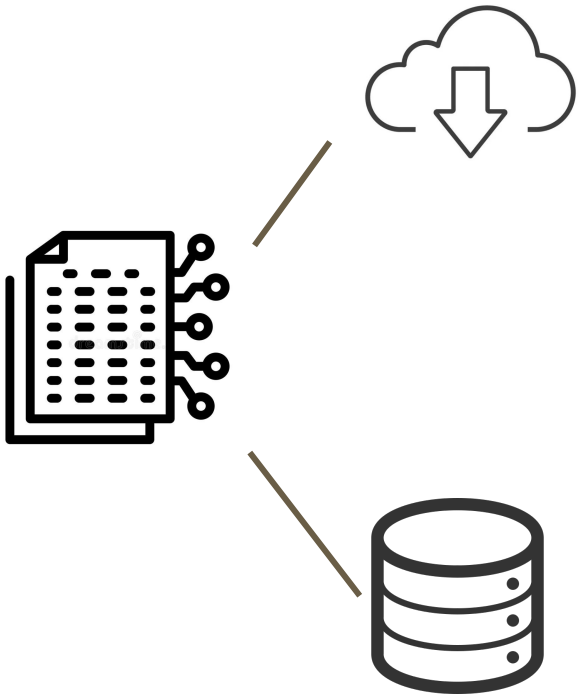


Ressource [1, 3, 4]



from ressource [5] and [6] was combined.

Datasets



- from Zindi official website as test data and training data. [2]

- collected by the National Bureau of Statistics (NBS) in Tanzania.
- The survey includes information from seven departure points of information on tourist expenditure.
- ~6400 rows (~ 1600 Test and ~4800 Train data)

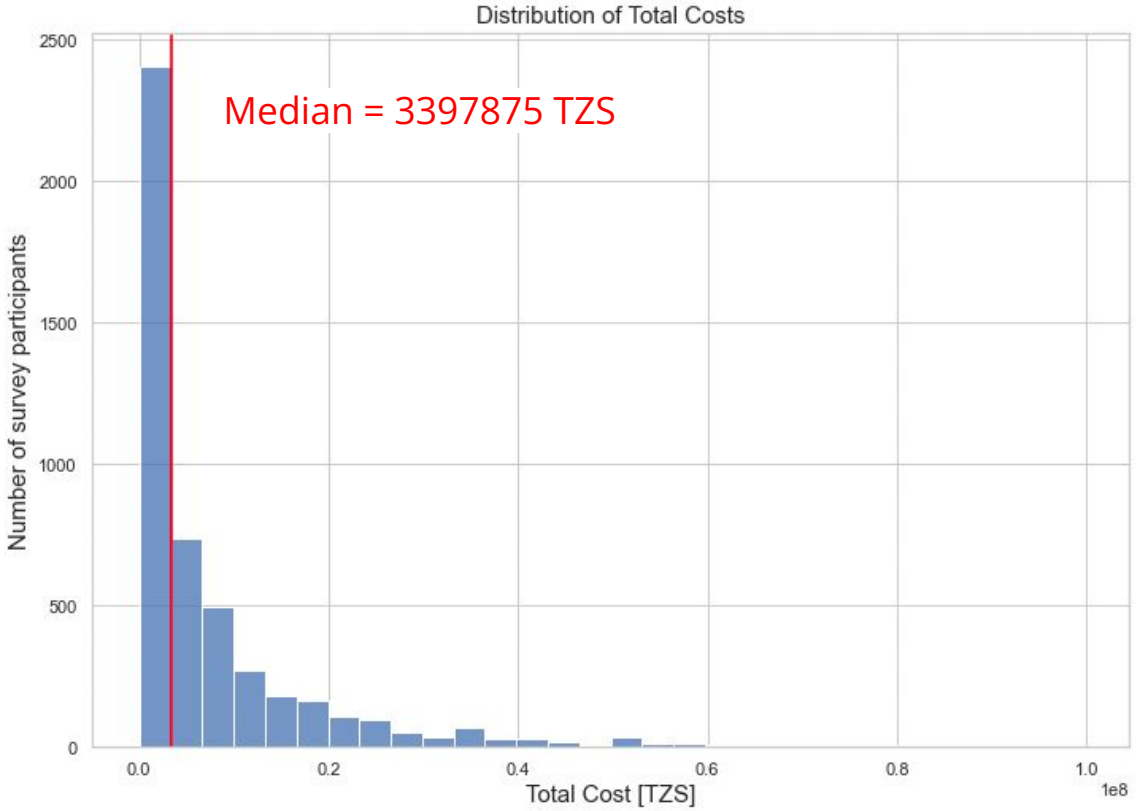
Goals and hypotheses

- does a tourist belong to the group that spends a lot, or not

- tourist spending depends
  - on country of origin
  - age group and type of trip

HYPOTHESIS

General overview target variable



currency conversion:

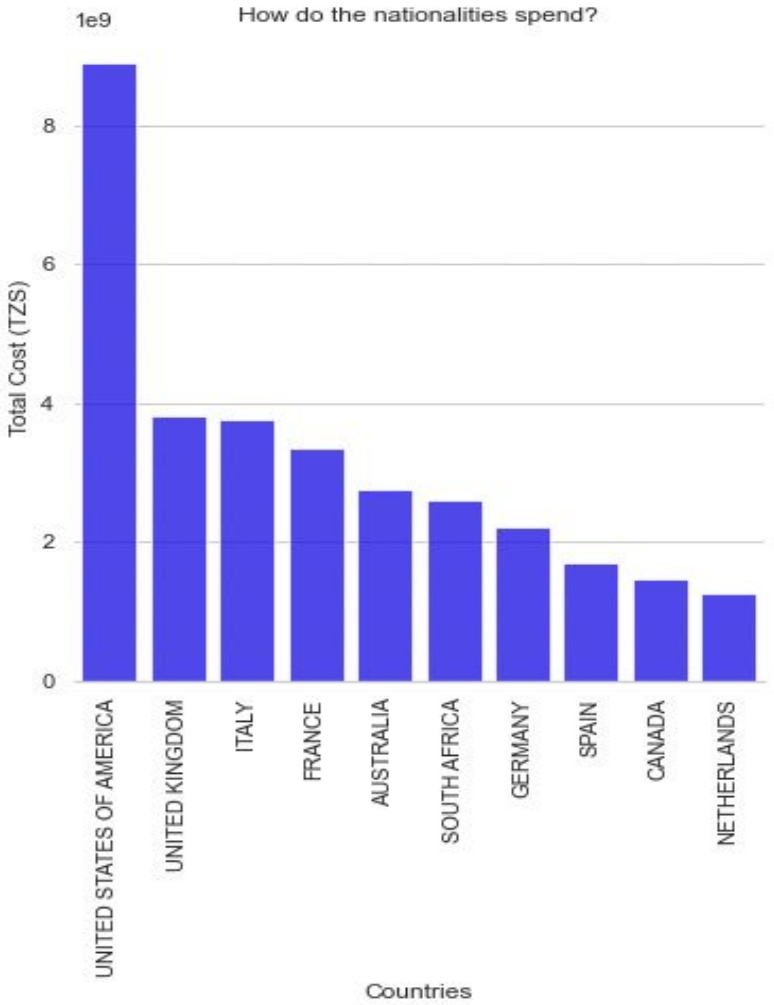
1 € → 2629,26 TZS

- Tourist divided into two groups (0, 1)
- separated on median

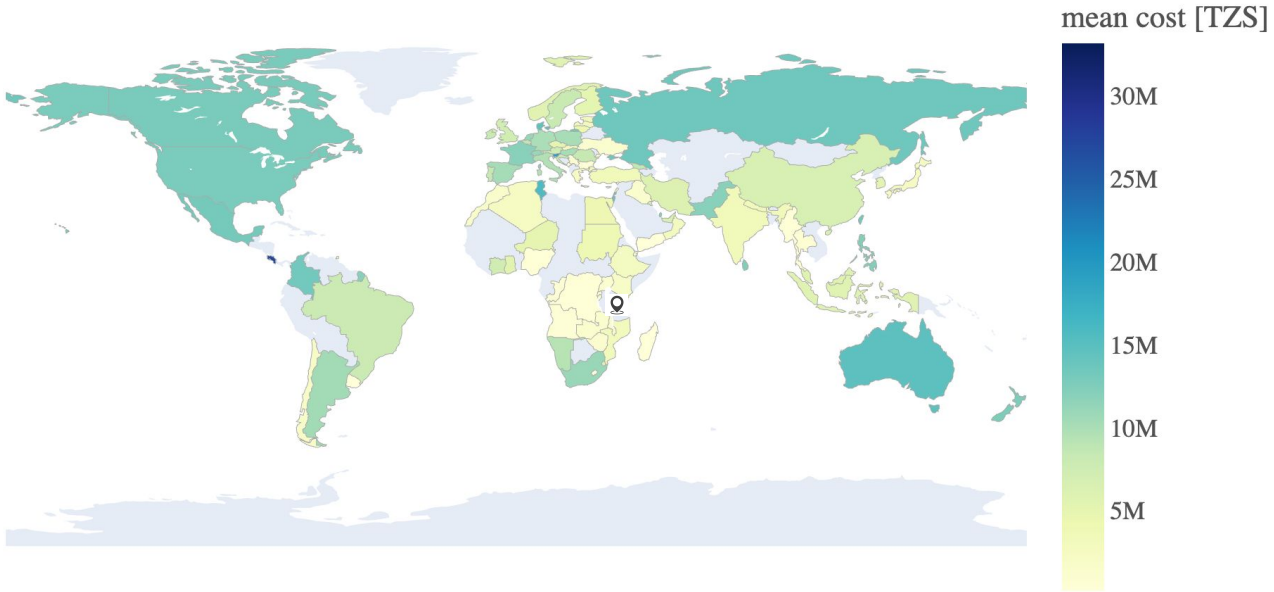
importance of the country of origin

probably:

- europeans and americans spend the most



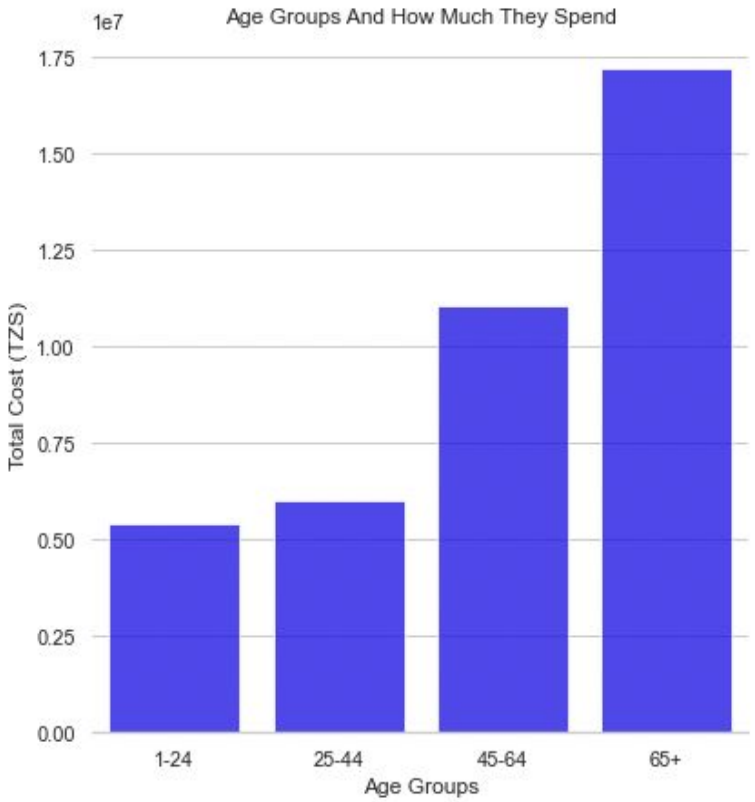
Countries by mean cost of Tanzania trip

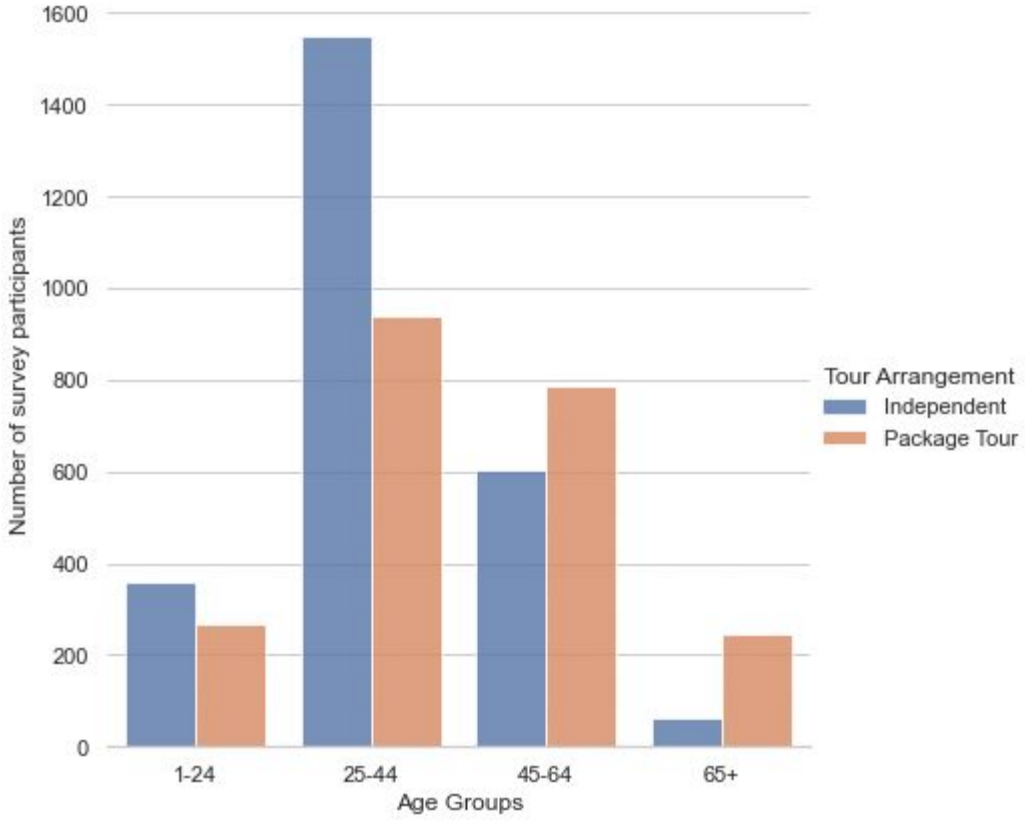


Mean cost per country positively correlates with GDP per capita.

Oldy but Goldie

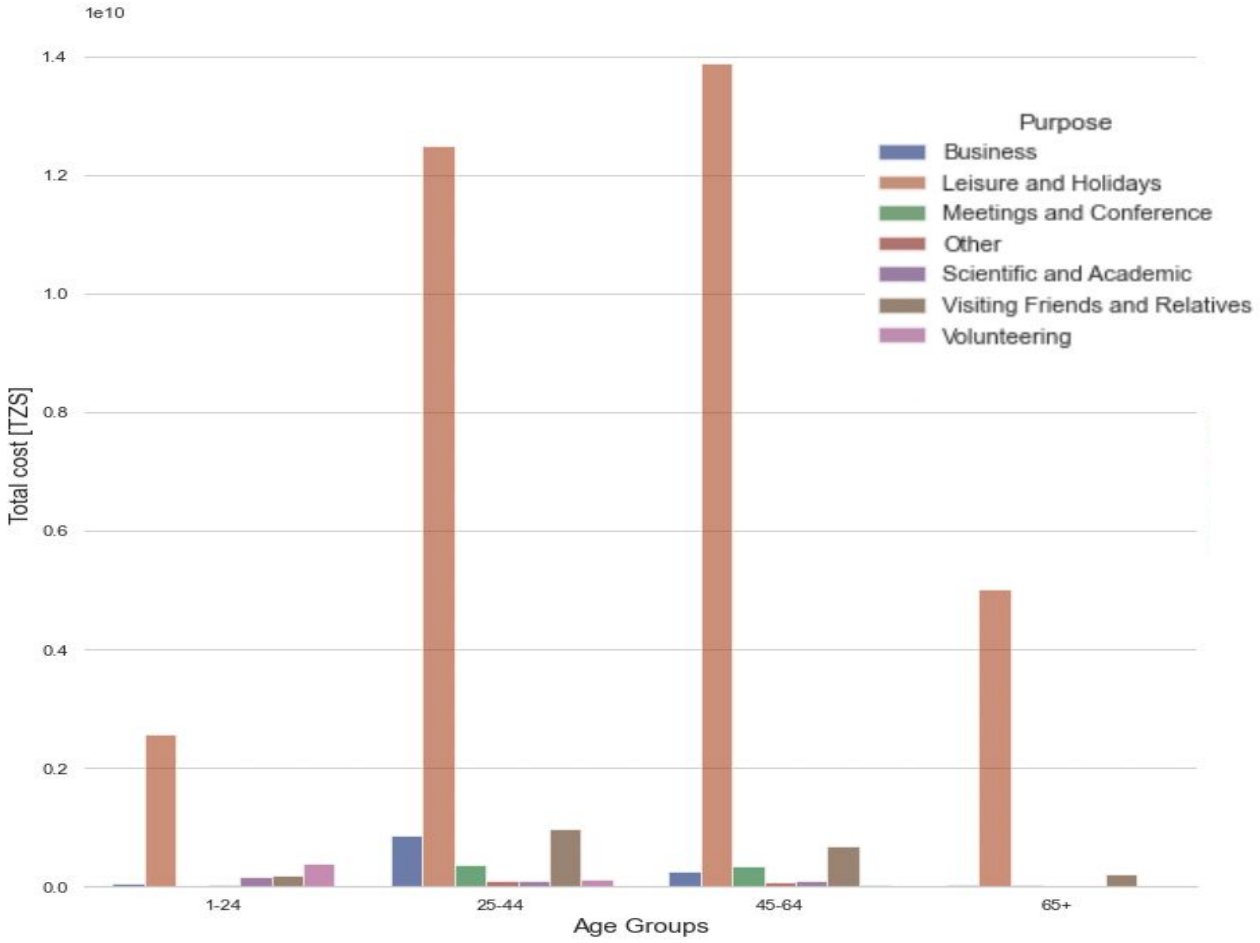
older visitors spend the most





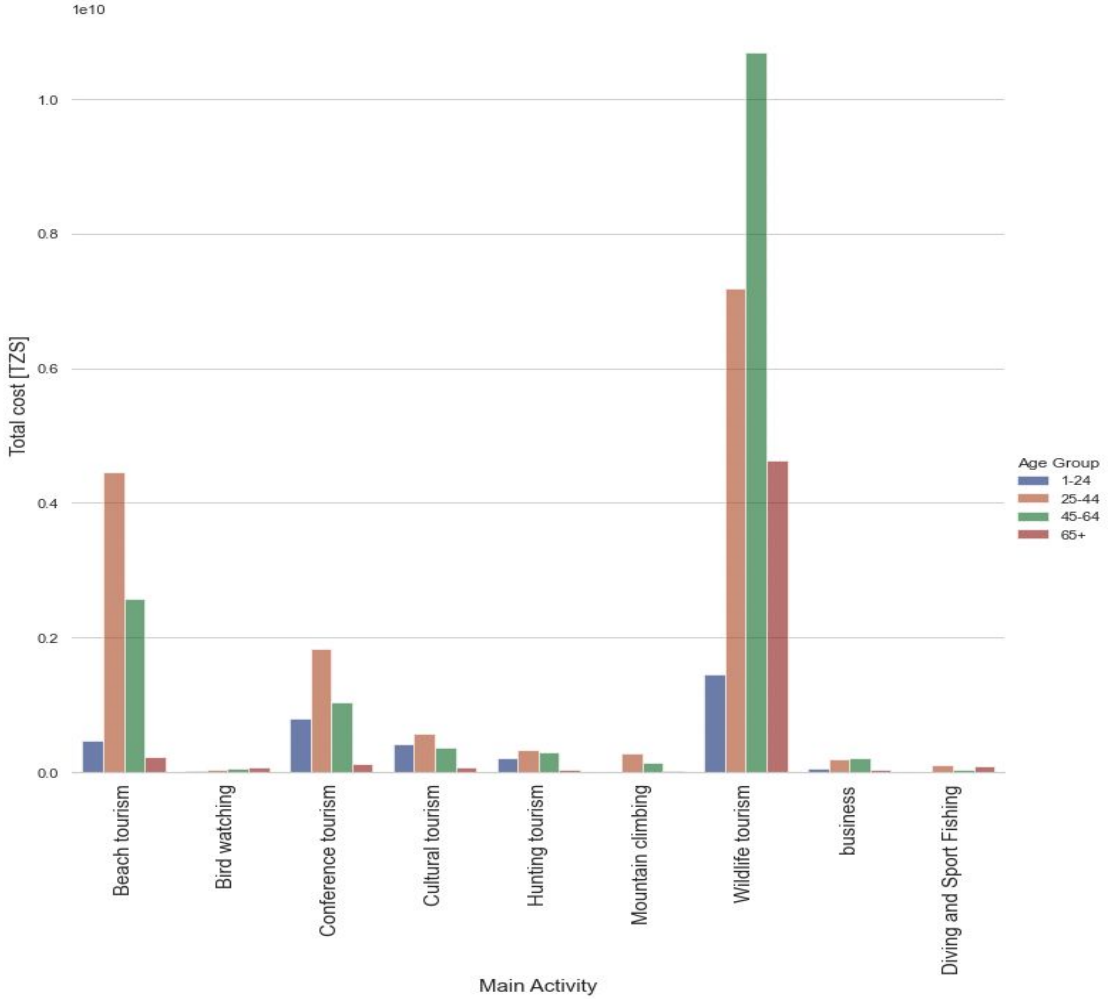
What do the visitors actually do mainly?

The most money was spent on **leisure and holidays** in all age groups.



How do they spend their holidays?

Tourists spend the most money on **wildlife tourism** and **beach tourism**.



Recommendations

Age group

- package tours for age groups above 45
- independent tours for age groups below 45

➡ corresponding offers in print media/ online

Country

- highest sale made by high-income countries

➡ advertising should focus on North America, Europe, Australia

Activities

- wildlife and beach tourism brings highest income

➡ marketing campaign for other activity fields

Predicting Price Class

	Baseline Model	Advanced Model
Number of features	2 (age group & country)	19
Pro	easy to interpret	predicts well
Contra	less accurate	higher calculating time
Recall	0,65	0,84

Recall is the number of instances which are relevant and which the model correctly identified as relevant. Values are between 0 and 1, with 1 being perfect.

Future work

Further data selection:

Time of the year	peak season increases cost
Hotel rating and location data	rating of hotel and hotel location could affect cost

Ressources

1. Wikipedia https://en.wikipedia.org/wiki/Tanzania
2. Zindi https://zindi.africa/competitions/tanzania-tourism-prediction/data
3. Tanzania Invest https://www.tanzaniainvest.com/economy
4. The World Bank https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups
5. Tanzania Tourism Wikipedia https://en.wikipedia.org/wiki/Tourism_in_Tanzania
6. Number of tourists arriving in Tanzania from 2015 to 2020 https://www.statista.com/statistics/1248890/tourist-arrivals-in-tanzania/

Thank you!