

Rapid Assessment of national planning documents using machine-based text analysis

-United Nation & Fordham



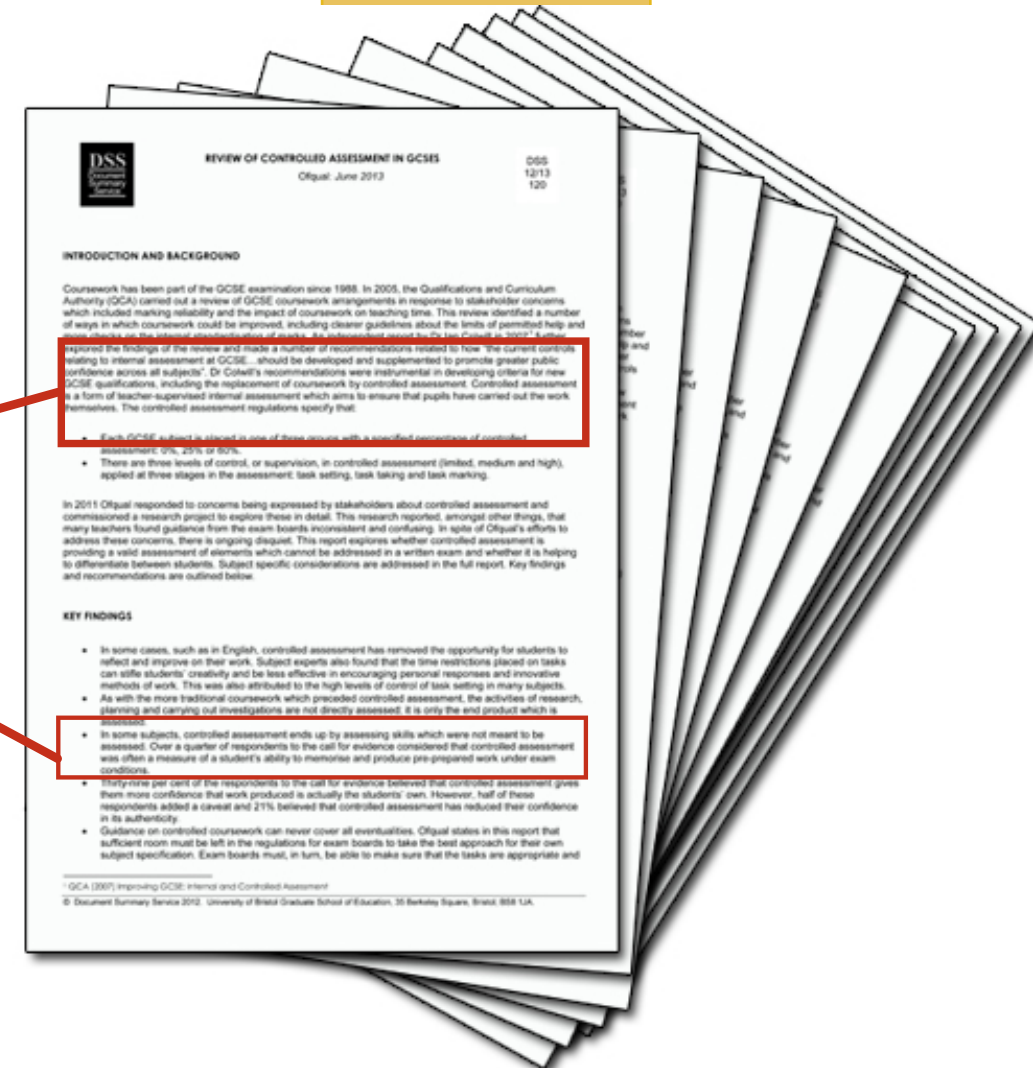
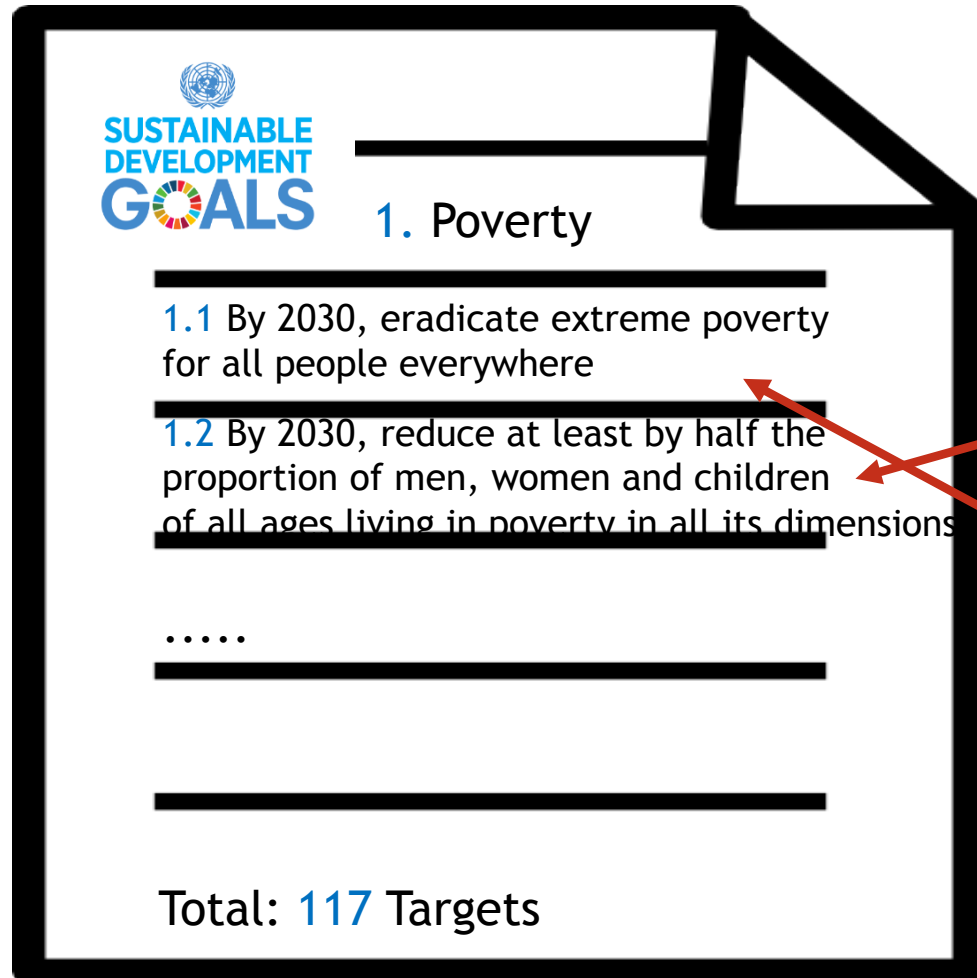
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Problem Statement

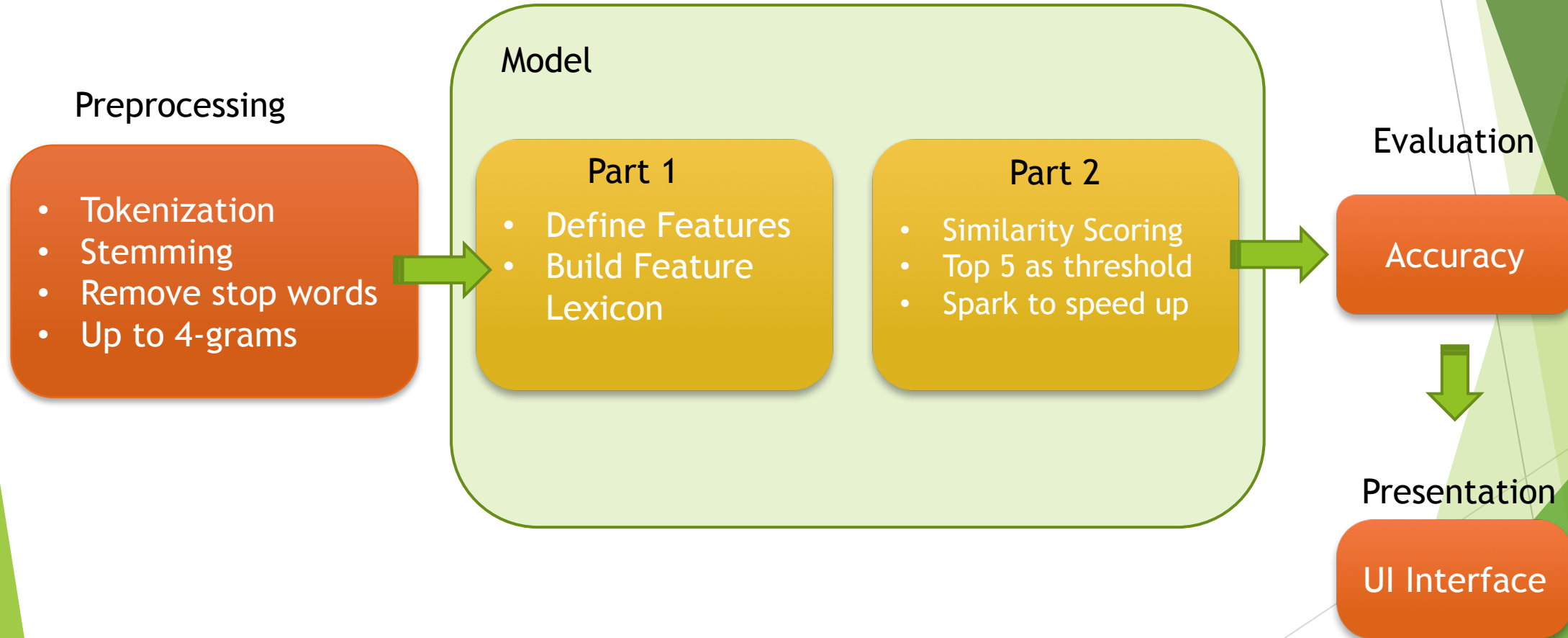
Very time consuming for human analyst to go through National Plan documents for each country, in order to find matches in 117 SDG Targets

SDG Targets

National Plan



System Design



Model - Part 1- Feature Lexicon

SDG Targets

3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

Features & Lexicon

Strong Feature (must include)

1. epidemics: epidemics, communicable, infectious
2. disease: disease, illness

Weak Feature (could include)

1. AIDS
2. tuberculosis
3. malaria

National Plan

Vision 2030 outlines a vision for a healthy, food-secure and breastfeeding nation, in which all preventable, infectious and parasitic diseases are under secure control and in which people enjoy a high standard of living, with access to quality health services.

Model - Part 2- Similarity Ranking

Similarity Score

sentence	3.3
A reduction in morbidity and mortality	
Key diseases, particularly the most damaging communicable and non-communicable diseases, such as lifestyle diseases will be focused on.	0.42837408
Both communicable and non-communicable diseases are at unacceptably high levels.	0.29050932
HIV/AIDS and TB	
Certain diseases remain a key barrier for progress on morbidity and mortality in Namibia.	0.23613283
Vision 2030 outlines a vision for a healthy, food-secure and breastfeeding nation, in which all preventable, infectious and parasitic diseases are under secure control and in which people enjoy a high standard of living, with access to quality health services.	0.14851361
Furthermore, the prevalence of tuberculosis has been increasing over recent years, and the prevalence of HIV and AIDS in general remains unacceptably high.	0.13997046
Ensure water security for human consumption and industrial development through recharging strategic aquifers, recycling and reusing water and by other means, as well as addressing the demand side through water-saving technologies	
Ensure that we have access to affordable modern and reliable ICT infrastructure to promote business efficiency, and that there is deeper penetration of broad-band Internet in rural communities in order to minimise the digital divide and contribute toward unleashing the potential of rural development through enhanced market intelligence, and	
Put in place a funding mechanism, including a PPP framework, to ensure delivery of infrastructure while maintaining macroeconomic stability.	0.09841668

- Rank sentence using similarity
- Similarity Algorithm:
 - Tf-idf matrix
 - + CWSS (concept weighted sentence similarity)
- Use Spark to speed up: 0.1s/target

Result & Evaluation

Template 1

	sector	title	1.1	1.2	1.3	1.4
1		1 Institutional Environment				
2		2 Education & Skills		X		
3		3 Health				X
4		4 Reducing extreme poverty	X	X	X	X
5		5 Public infrastructure				X
6		6 Logistics				
7		7 Tourism				
8		8 Manufacturing				
9		9 Agriculture				

Evaluation

- Target 3.1-3.9
- Testing set: Namibia National Plan
- Threshold: Top5 sentence

Accuracy Rate: 26/45 58%

UI Interface

Sustainable Development Goal Matching

Check the box if sentence addressed goal 1.2 :

By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

☐

Health Human Resource: The Bhutanese Health System suffers from acute shortage of all categories of health personnel

☐

As a result, many Bhutanese in Phuentsholing are forced to live across the border and in places like Gasa and Lhuentse civil servants are living in temporary makeshift houses due to lack of proper housing.

☐

Education virtually impacts all dimensions of development and is critical for ensuring sustainable poverty alleviation which can only come through the empowerment of our people, particularly the remote and most vulnerable sections of our population

☐

Reductions in the number of products under this list by member states are still being negotiated by the Working Group on Reduction in the Sensitive Lists

☐

Tertiary education in Bhutan comprises of three years of undergraduate studies provided by the Royal University of Bhutan (RUB) through its 10 constituent colleges located in various parts of the country and one private college, the Royal Thimphu College

☐

Cultural industries have the potential to contribute to poverty alleviation by enhancing rural incomes

☐

In the absence of rain, farmers are forced to leave their land fallow and this has direct impact on poverty and national food and nutrition security goals

☐

The major challenge faced by the sector in implementation of the legislation pertains to lack of human resources and capacity.

☐

This 1.5 percent are assumed to be children in remote and hard to reach areas, children of nomadic communities, children with learning disabilities whose special learning needs are yet to be catered for and children of the urban poor.

☐

Overall, a plan or framework which brings together in one place all aspects of culture and traditions as well as the gaps and challenges is lacking

Confirm

Thank you