

An Analysis of B Corp Impact Data Trends

What are B Corps?

- “B Corporations are businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose.”
- Must be certified and re-certified in 5 impact areas, creating a lot of impact data...



Impact Assessment

- 5 broad impact areas, each contributes to overall “Impact score”
- Companies must be re-certified every 3 years
- Re-assessment creates opportunity to assess trends in assessment and assessment data overall, leading to interesting questions...



Guiding Questions

1. What is the relative influence of each impact area on the overall impact score?
2. Does a company's impact score improve or worsen over the course of their tenure of certification?
3. What industries tend to improve their impact score over multiple certification cycles?
4. What industries tend to have higher impact scores?
5. Is there a correlation between impact score and profit made for certified companies?

What is the relative influence of each impact area on the overall impact score?

```
| #Filter out NaNs from impact area customers series, run regression with it as np array
customers_array = bcorp_US_cleaned['impact_area_customers'].to_numpy(dtype = int)
customers_array
overallscore_array = bcorp_US_cleaned['overall_score'].to_numpy(dtype = int)
overallscore_array
nan_array_cust = np.isnan(customers_array)
not_nan_array_cust = ~ nan_array_cust
customers_nonan = customers_array[not_nan_array_cust]
customers_nonan
#attempt regression
(slope, intercept, rvalue, pvalue, stderr) = sts.linregress(customers_nonan, overallscore_array)
rvalue
regress_values_customers = customers_nonan * slope + intercept
line_eq_customers = "y = " + str(slope) + "x + " + str(round(intercept,2))
line_eq_customers
```

'y = 2.450811931862826e-09x + 97.61'



data.world

What is the relative influence of each impact area on the overall impact score?

```
bcorp_US_cleaned = bcorp_US.drop(['website', 'b_corp_profile', 'description',  
                                  'industry', 'industry_category', 'products_and_services',  
                                  'country', 'state', 'city', 'sector', 'size', 'impact_area_community',  
                                  'impact_area_customers_na_score', 'impact_area_environment_na_score',  
                                  'impact_area_workers_na_score'], axis = 1)  
  
bcorp_US_cleaned.head()
```

|:

	company_name	date_first_certified	date_certified	current_status	assessment_year	overall_score	impact_area_community
1	Heather Paulsen Consulting	12/30/2015	12/19/2017	certified	2017	115.0	
2	Heather Paulsen Consulting	12/30/2015	12/30/2015	certified	2015	90.5	
9	Bark Media	7/25/2018	7/25/2018	certified	2018	90.5	
10	Kosmenko & Co.	8/30/2016	11/7/2019	certified	2019	120.3	
11	Kosmenko & Co.	8/30/2016	8/30/2016	certified	2016	116.7	

5 rows × 99 columns

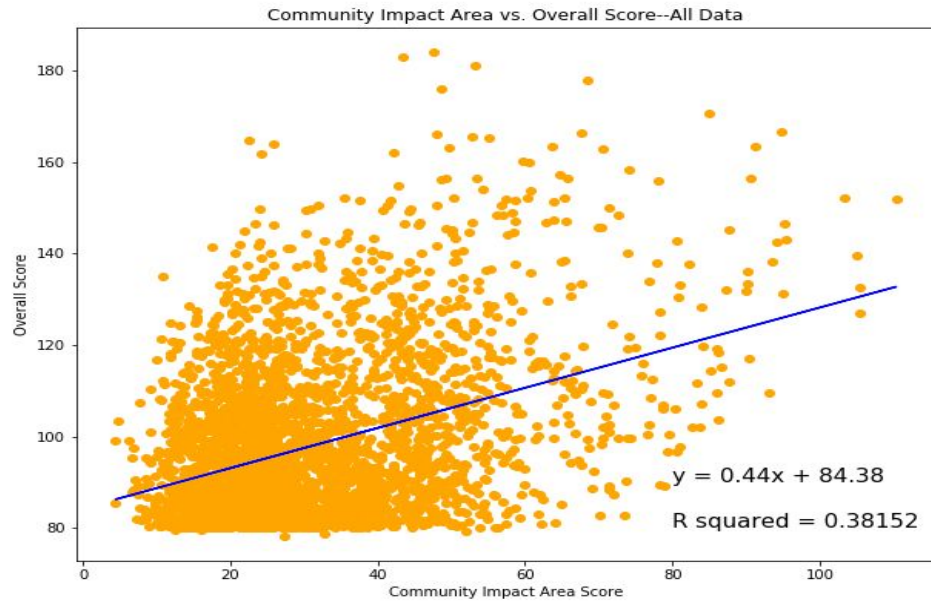
```
ned = bcorp_US_cleaned.drop([col for col in bcorp_US_cleaned.columns if 'ia_community_it' in col], axis = 1)  
ned.head()
```

What is the relative influence of each impact area on the overall impact score?

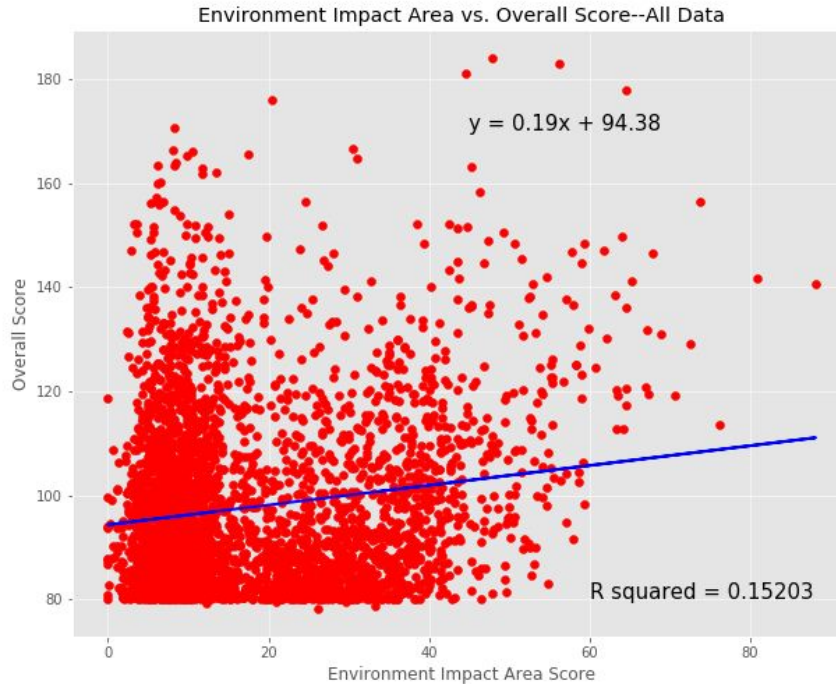
1

	overall_score
assessment_year	-0.154907
overall_score	1.000000
impact_area_community	0.381523
impact_area_customers	0.372143
impact_area_environment	0.152033
impact_area_governance	0.221790
impact_area_workers	0.221914

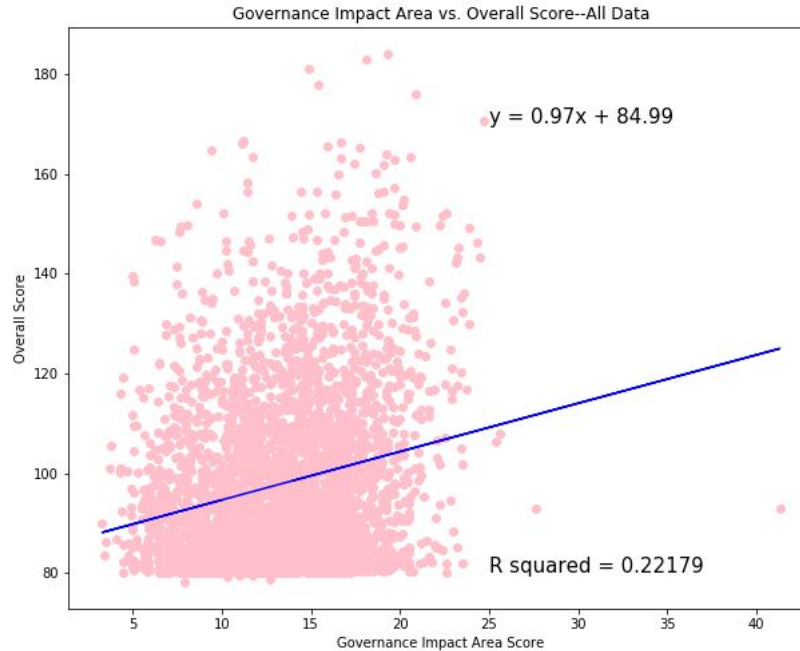
What is the relative influence of each impact area on the overall impact score?



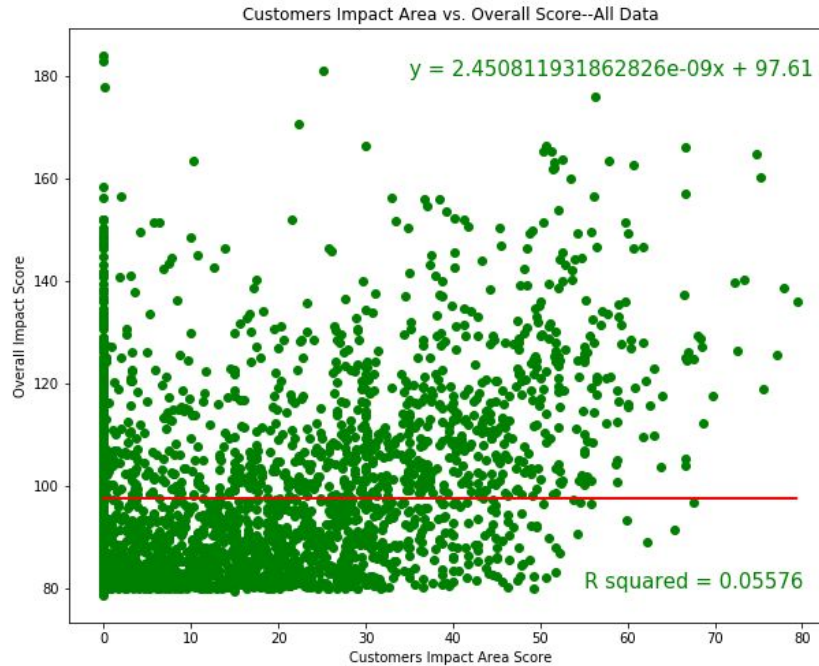
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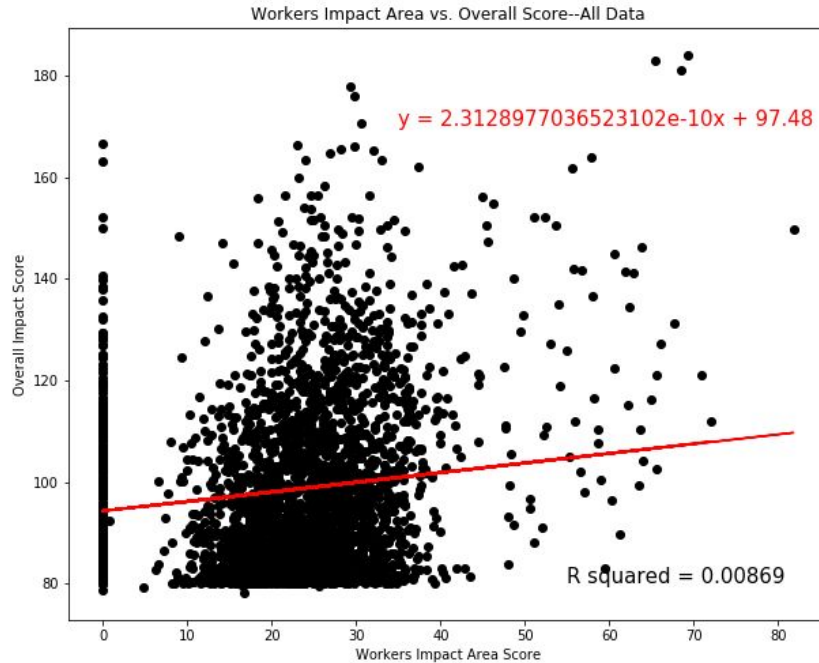
What is the relative influence of each impact area on the overall impact score?



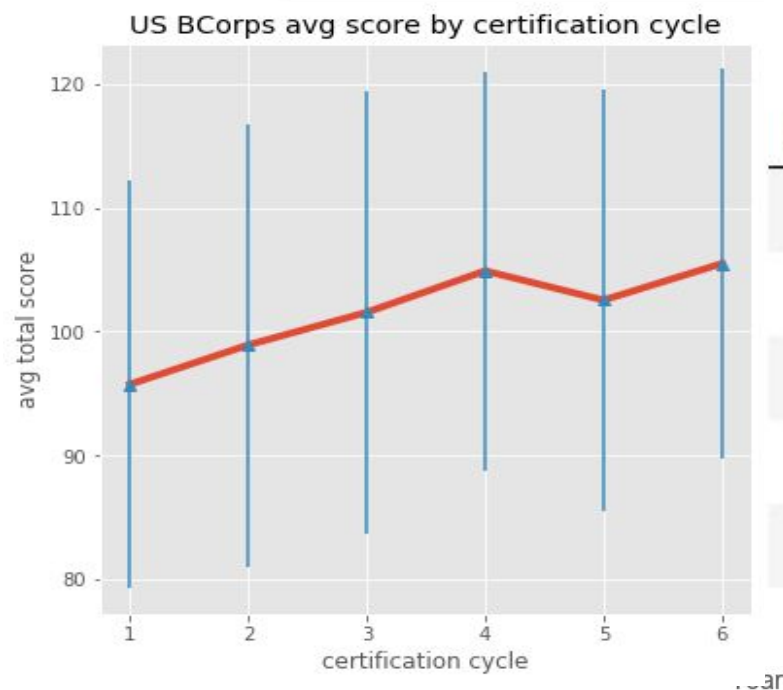
What is the relative influence of each impact area on the overall impact score?



What is the relative influence of each impact area on the overall impact score?



Q2 - Does a company's impact score improve or worsen over the course of their tenure of certification?



STD

certification_cycle

1 16.459424

2 17.874030

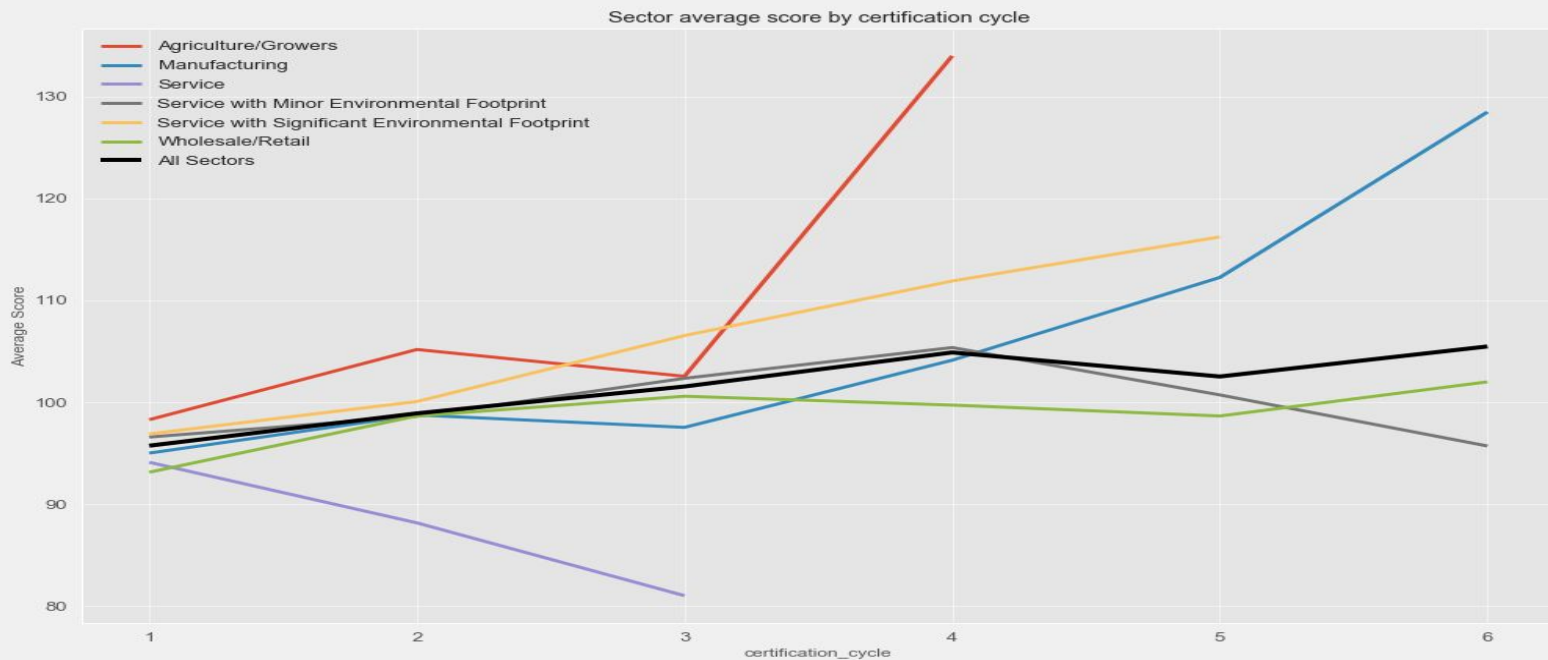
3 17.903692

4 16.082735

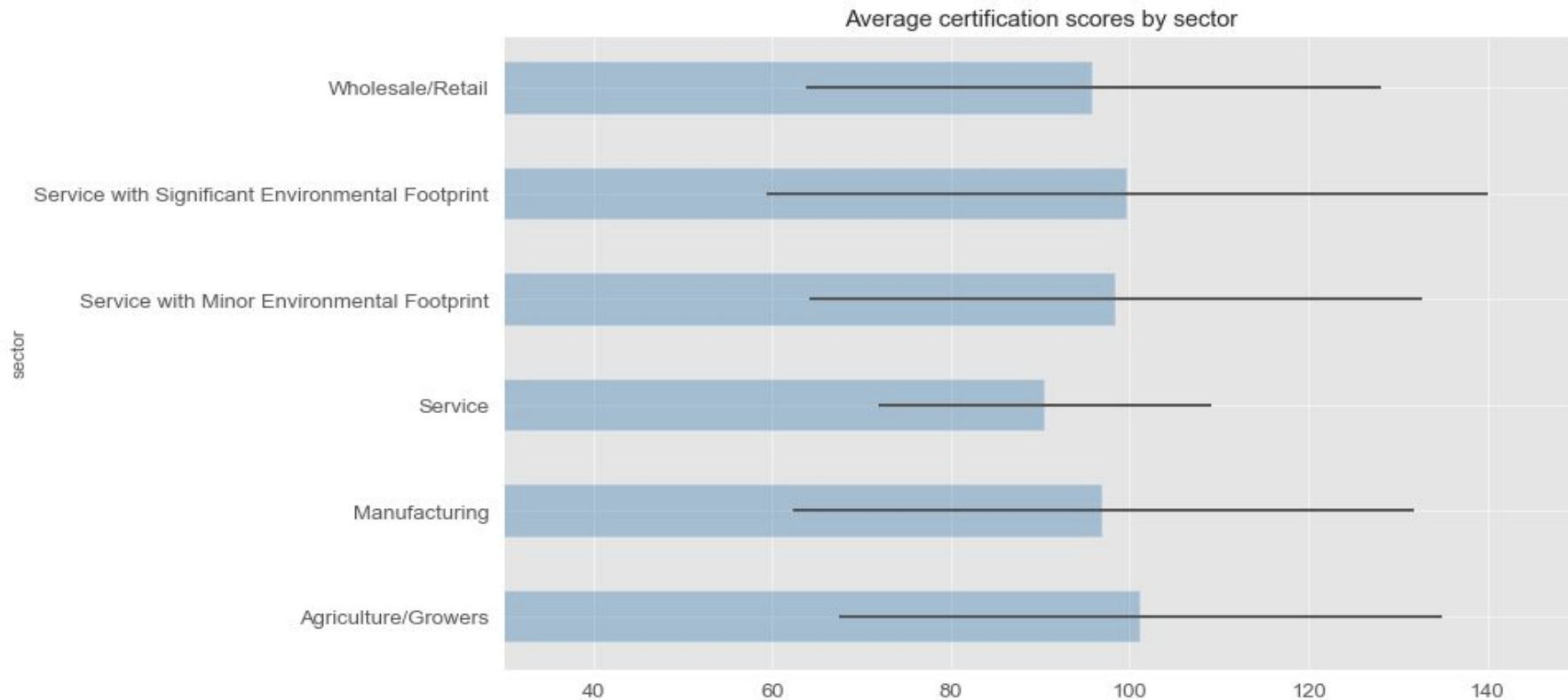
5 17.015354

6 15.696151

Q3 - What industries tend to improve their impact score over multiple certification cycles?

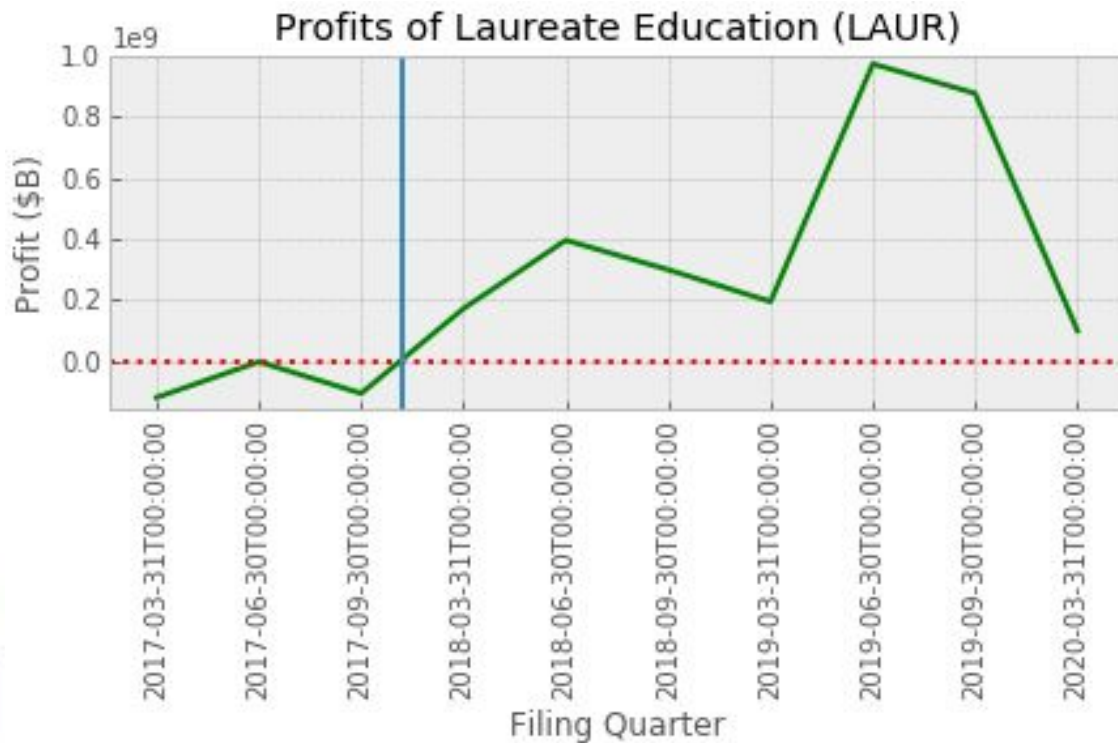


Q3- What industries tend to have higher impact scores?



Profits of Laureate Education Case Study

- B-Certified since 2015
- IPO Jan. 2017
- Re-certified in Dec. 2017



Assessment Year	Overall Score
2017	104.2
2015	95.8

Key takeaways

- Companies seeking to improve their overall impact score may want to focus on the community and customers impact areas as they are most highly correlated with overall impact score.
- Significant positive improvement is seen in the majority of companies impact scores over time.
- Possible connection between impact scores and profits.