

Section 0507 Team 3: Aniela Skibniewska, Shu-Ping Chen, Yishang Huang, Anshika Kapoor, Hsinkai Liao

Read Me:

Why we chose this topic:

Our goal of the project is to help potential students select the best business graduate school to attend, based on a variety of factors. In addition, we would like to improve the ranking of the Smith School and help it to be considered as a high-ranked business school in the future as well. Thus, we design a conceptual model of the agencies which rank Business Graduate Programs in the United States using the entity-relationship model.

How our team worked together:

Our team met once weekly to discuss each week's upcoming deliverables. We discussed ideas for initial proposal, mission statement, mission objectives, database design, and visualization display. Meanwhile, we kept confirming our direction with the Professor and corrected our content with his comment. Eventually, we presented our slides and expressed our findings and recommendations to the class.

Data Sources:

For Business Schools: we looked at each school's website, which usually has most of the demographic information that we needed. Each school has the most reporting on MBA class profiles, so we mostly used this information for comparison purposes.

Stanford University: <https://www.gsb.stanford.edu/programs/mba/admission/class-profile>

University of Pennsylvania (Wharton School): <https://mba.wharton.upenn.edu/class-profile/>

Northwestern University (Kellogg School of Management):

<https://www.kellogg.northwestern.edu/programs/full-time-mba/class-profile.aspx>

University of Chicago (Booth School of Business): <https://www.chicagobooth.edu/mba/full-time/admissions/class-profile>

Massachusetts Institute of Technology (Sloan School of Management):

<https://mitsloan.mit.edu/mba/admissions/class-2023-profile>

Harvard University: <https://www.hbs.edu/mba/admissions/class-profile/Pages/default.aspx>

University of California, Berkeley (Haas School of Business):

<https://mba.haas.berkeley.edu/admissions/class-profile>

Columbia University: <https://academics.gsb.columbia.edu/mba/admissions/class-profile>

Yale University: <https://som.yale.edu/programs/mba/admissions/class-profile>

University of Maryland: <https://www.rhsmith.umd.edu/news/quick-look-full-time-mba-class-profile>

For the information that we could not find on each graduate business school's website directly, and for additional information, we used a combination of the following websites:

<https://www.usnews.com/best-graduate-schools/top-business-schools/university-of-maryland-college-park-01104>

https://en.wikipedia.org/wiki/List_of_Wharton_School_alumni

<https://www.topmba.com/mba-programs/mba-programs-highest-graduate-salaries>

<https://mba.haas.berkeley.edu/careers/employment-report>

<https://www.univstats.com/comparison/master-of-business-administration-mba/graduation-rate/>

For Faculty & Publication: we chose two symbolized faculties for each business school, each faculty with distinguished characteristics like director of a department or nobel prize winner. Then, for each faculty, we picked the most cited publication sorted in Google Scholar (https://scholar.google.com/schhp?hl=en&as_sdt=20000007). So there would be two faculties for each business school and one publication for each faculty.

Stanford University: <https://www.gsb.stanford.edu/faculty-research/faculty>

University of Pennsylvania (Wharton School): <https://www.wharton.upenn.edu/faculty-directory/>

Northwestern University (Kellogg School of Management):

https://www.kellogg.northwestern.edu/faculty/faculty_directory.aspx

University of Chicago (Booth School of Business):

<https://www.chicagobooth.edu/faculty/directory>

Massachusetts Institute of Technology: <https://mitsloan.mit.edu/faculty/faculty-directory>

Harvard University: <https://www.hbs.edu/faculty/Pages/browse.aspx>

University of California, Berkeley (Haas School of Business): <https://haas.berkeley.edu/faculty/>

Columbia University: <https://www8.gsb.columbia.edu/cbs-directory/faculty-expertise>

Yale University: <https://som.yale.edu/faculty-research/faculty-directory>

University of Maryland: <https://www.rhsmith.umd.edu/directory>

For Donation:

We collected the donation information from the website of each business school or from business news agencies like Bloomberg. For most schools, we listed donations of multiple years, up to recent 10 years. But for some schools, such as Stanford, Columbia, Yale, and University of Maryland, we could find only 1 calendar year's donation. In addition, for MIT, we listed it as null because its website did not show specific donations for business school.

Stanford University: <https://www.gsb.stanford.edu/alumni/giving/business-school-fund/2020-21-report>

University of Pennsylvania (Wharton School): <https://alumni.wharton.upenn.edu/wharton-fund-home/thank-you-general/>

https://alumni.wharton.upenn.edu/wp-content/uploads/2021/06/Donor-Honor-Roll-2020_Flipbook_v2.pdf

https://alumni.wharton.upenn.edu/wp-content/uploads/2021/06/FY18_Comms_5691_WF_Donor-Honor-Roll_v8_FINAL-1.pdf

Northwestern University (Kellogg School of Management):

https://www.kellogg.northwestern.edu/~media/files/alumni/kellogg_impact-report_2017-18.ashx

University of Chicago (Booth School of Business): <https://voices.uchicago.edu/booth-annual/>
Harvard University: <https://www.hbs.edu/about/annualreport/Documents/2020/HBS-Annual-2020.pdf>

<https://www.bloomberg.com/news/articles/2014-02-12/alums-donate-a-record-22-million-to-harvard-business-school>

<https://www.alumni.hbs.edu/stories/Pages/story-bulletin.aspx?num=1009>

University of California, Berkeley (Haas School of Business):

<https://annualreport.haas.berkeley.edu>

<https://annualreport.haas.berkeley.edu/2019-2020/>

<https://annualreport.haas.berkeley.edu/2018-2019/>

<https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/Haas-Annual-Report-2017-2018.pdf>

<https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/Haas-Annual-Report-16-17.pdf>

<https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/Haas-Annual-Report-15-16.pdf>

https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/FINAL_Haas_Annual_Report_13-14.pdf

https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/FINAL_Haas_Annual_Report_12-13.pdf

Columbia University: <https://www8.gsb.columbia.edu/alumni/support-school/annual-giving>

Yale University: <https://som.yale.edu/community/support-yale-som/yale-som-alumni-fund>

University of Maryland: <https://drive.google.com/file/d/1txGpLtySm1-xl-UQxHqVernw2Hxx8S4X/view>

For Rating Agency:

To compare, we chose one main ranking agency for our main ranking standard, which we chose the US News. And for the other two ranking agencies, we chose Bloomberg and QS. As for the school list, we chose the top 9 schools based on the US News ranking, as well as the University of Maryland Smith School. Therefore, we had the top 9 ranked schools and our university to be our experimental object.

For US News:

<https://www.usnews.com/best-graduate-schools/top-business-schools/mba-rankings>

<http://www.qianmu.org/2021USNEWS%E7%BE%8E%E5%9B%BD%E5%95%86%E5%AD%A6%E9%99%A2%E6%8E%92%E5%90%8D>

For Bloomberg:

<https://www.forwardpathway.com/64664>

For QS:

<http://www.qianmu.org/2020QS%E5%95%86%E7%A7%91%E4%B8%8E%E7%AE%A1%E7%90%86%E6%8E%92%E5%90%8D>

<https://www.forwardpathway.com/78675>

University of maryland (QS):

https://www.compassedu.hk/ad_28591

Compiling the data:

We created a shared Google Sheets, which had a separate sheet for each entity in our entity-relationship model. We then split up the information that each person in our group would be responsible for finding, which we then added to our shared file. In this way we were able to organize our information and have an easy place to store it before inputting it into our SQL tables that we later created.

University Ratings Data

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A1 busName

	A	B	C	D	E	F	G	H	I		
1	busName	Faculty	facName	facNumAwards	facNumProjects	facDomExpert		facYearsTeach	facNumberNote	Publication	pubId
2	Leo:		Ritu Agarwal	25	94	Information Systems		24	0	10.230	
3	University of Maryland		Rajshree Agarwal	13	62	Management and Organization		29	0	10.546	
4	University of Maryland		Paul R. Milgrom	7	17	Economics		42	1	10.125	
5	Stanford University		William F. Sharpe	2	146	Finance		60	1	10.246	
6	Stanford University		Gad Allon	3	361	Operations, Information and Decisions		26	0	10.128	
7	University of Pennsylvania		Peter Cappelli	14	76	Human Resources		43	0	10.546	
8	University of Pennsylvania		Nicola Persico	2	43	Managerial Economics & Decision Sciences		20	0	10.105	
9	Northwestern University		Gregory Carpenter	12	81	Marketing		44	0	10.150	
10	Northwestern University		Richard H. Thaler	2	100	Behavioral Science and Economics		50	1	10.125	
11	University of Chicago		Lars Peter Hansen	10	126	Economics		43	1	10.230	
12	University of Chicago		Sinan Aral	6	105	Management Science		8	0	10.128	
13	Anshika:		Jacquelyn R. Gillette	0	6	Economics, Finance and Accounting		5	0	10.111	
14	Massachusetts Institute of Technology		Lauren H. Cohen	28	29	Finance		14	0	10.112	
15	Massachusetts Institute of Technology		Jill J. Avery	13	17	Marketing		8	0	10.108	
16	Harvard University		Vinod K. Aggarwal	12	26	Business & Public Policy		41	0	10.114	
17	Harvard University		David A. Aaker	8	15	Marketing		51	0	10.152	
18	University of California, Berkeley		Ann P. Bartel	5	20	Economics		45	0	10.151	
19	University of California, Berkeley		Medini R. Singh	9	10	Decision, Risk and Operations		11	0	10.128	
20	Columbia University		Barbara Biasi	5	6	Economics		4	0	10.125	
21	Yale University		Alexander Burnap	0	4	Marketing		1	0	10.101	
22	Yale University										
23											
24											
25											
26											
27											
28											

+ BusinessSchool Faculty&Publication Rating Agency Donation Explore

University Ratings Data

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	A	B	C	D	E	F	G	H	I	J	K	L
1	name	ranking 1	ranking 2	ranking 3								
2	usNews	QS	Bloomberg									
3												
4	standford university	1	3	1								
5	university of pennsylvan	1	4	6								
6	northwestern university	3	6	10								
7	university of chicago	3	9	4								
8	MIT	5	2	7								
9	harvard university	6	1	3								
10	university of california,b	7	5	8								
11	columbia university	8	7	9								
12	yale university	9	8	14								
13	university of maryland,co	44	41	26								
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+ BusinessSchool Faculty&Publication Rating Agency Donation

School	donId	donAmount	period	reference
Stanford University	1	\$16+ million	09.01.2020 – 08.31.2021 (12 months)	https://www.gsb.stanford.edu/alumni/giving/business-school-fund/2020-21-report
University of Pennsylvania	2	\$18.3 million	07.01.2020 – 06.30.2021 (12 months)	https://alumni.wharton.upenn.edu/wharton-fund-home/thank-you-general/
	3	\$16.1+ million	07.01.2019 – 06.30.2020 (12 months)	https://alumni.wharton.upenn.edu/wp-content/uploads/2021/06/Donor-Honor-Roll-2020_Flipbook_v2.pdf
	4	\$16+ million	07.01.2017 – 06.30.2018 (12 months)	https://alumni.wharton.upenn.edu/wp-content/uploads/2021/06/FY18_Comms_5691_WF_Donor-Honor-Roll-2018_Flipbook_v2.pdf
Northwestern University	5	\$12 million	09.01.2017 – 08.31.2018 (12 months)	https://www.kellogg.northwestern.edu/-/media/files/alumni/kellogg_impact-report_2017-18.aspx
	6	\$10.1 million	09.01.2016 – 08.31.2017 (12 months)	https://www.kellogg.northwestern.edu/-/media/files/alumni/kellogg_impact-report_2017-18.aspx
	7	\$7.8 million	09.01.2015 – 08.31.2016 (12 months)	https://www.kellogg.northwestern.edu/-/media/files/alumni/kellogg_impact-report_2017-18.aspx
	8	\$6.0 million	09.01.2014 – 08.31.2015 (12 months)	https://www.kellogg.northwestern.edu/-/media/files/alumni/kellogg_impact-report_2017-18.aspx
	9	\$5.4 million	09.01.2013 – 08.31.2014 (12 months)	https://www.kellogg.northwestern.edu/-/media/files/alumni/kellogg_impact-report_2017-18.aspx
	10	\$4.3 million	09.01.2012 – 08.31.2013 (12 months)	https://www.kellogg.northwestern.edu/-/media/files/alumni/kellogg_impact-report_2017-18.aspx
University of Chicago	11	\$12.94 million	07.01.2020 – 06.30.2021 (12 months)	https://voices.uchicago.edu/booth-annual/
	12	\$11.07 million	07.01.2019 – 06.30.2020 (12 months)	https://voices.uchicago.edu/booth-annual/
	13	\$10.74 million	07.01.2018 – 06.30.2019 (12 months)	https://voices.uchicago.edu/booth-annual/
	14	\$11.10 million	07.01.2017 – 06.30.2018 (12 months)	https://voices.uchicago.edu/booth-annual/
	15	\$8.98 million	07.01.2016 – 06.30.2017 (12 months)	https://voices.uchicago.edu/booth-annual/
Massachusetts Institute of Technology	16	NULL	NULL	
Harvard University	17	\$56 million	07.01.2019 – 06.30.2020 (12 months)	https://www.hbs.edu/about/annualreport/Documents/2020/HBS-Annual-2020.pdf
	18	\$76 million	07.01.2018 – 06.30.2019 (12 months)	https://www.hbs.edu/about/annualreport/Documents/2020/HBS-Annual-2020.pdf
	19	\$22 million	07.01.2012 – 06.30.2013 (12 months)	https://www.bloomberg.com/news/articles/2014-02-12/alums-donate-a-record-22-million-to-harvard-business-school
	20	\$16.7 million	07.01.2010 – 06.30.2011 (12 months)	https://www.alumni.hbs.edu/stories/Pages/story-bulletin.aspx?num=1009
University of California, Berkeley	21	\$45.4 million	07.01.2020 – 06.30.2021 (12 months)	https://annualreport.haas.berkeley.edu/
	22	\$27 million	07.01.2019 – 06.30.2020 (12 months)	https://annualreport.haas.berkeley.edu/2019-2020/
	23	\$28.7 million	07.01.2018 – 06.30.2019 (12 months)	https://annualreport.haas.berkeley.edu/2018-2019/
	24	\$40 million	07.01.2017 – 06.30.2018 (12 months)	https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/Haas-Annual-Report-2017-2018.pdf
	25	\$21.5 million	07.01.2016 – 06.30.2017 (12 months)	https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/Haas-Annual-Report-16-17.pdf
	26	\$35.9 million	07.01.2015 – 06.30.2016 (12 months)	https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/Haas-Annual-Report-15-16.pdf
	27	\$35.5 million	07.01.2014 – 06.30.2015 (12 months)	https://annualreport.haas.berkeley.edu/wp-content/uploads/2020/02/Haas-Annual-Report-15-16.pdf

Creating DDL and DML:

To establish the database in SQL, firstly we should create tables including primary keys and foreign keys for each entity and the necessary relationships (relationships with many to many cardinality). To avoid missing foreign keys during inserting values, we created tables with the order of strong entities, corresponding relationships, and then weak entities.

So, we implemented following steps using BUDT703_Project_0507_03:

1. Implemented corresponding DROP TABLE statements for tables we will create

```
USE BUDT703_Project_0507_03;
```

```
DROP TABLE IF EXISTS [TA03.Rate];
DROP TABLE IF EXISTS [TA03.AgencyRanking];
DROP TABLE IF EXISTS [TA03.Donation];
DROP TABLE IF EXISTS [TA03.Work];
DROP TABLE IF EXISTS [TA03.Publish];
DROP TABLE IF EXISTS [TA03.Publication];
DROP TABLE IF EXISTS [TA03.Faculty];
DROP TABLE IF EXISTS [TA03.BusinessSchool];
```

2. Implemented CREATE TABLE statements and INSERT INTO statements with the corresponding data and definitions we compiled previously:

For Business School:

```

CREATE TABLE [TA03.BusinessSchool] (
busName VARCHAR(40) NOT NULL,
busLocation VARCHAR(40),
    busNumStudents INTEGER,
    busProInstStudents DECIMAL(3,3),
    busProFemStudents DECIMAL(3,3),
    busGrdRate DECIMAL(3,3),
    busEmpRate DECIMAL(3,3),
    busNotableAlum VARCHAR(40),
    busAvgSalary DECIMAL(9,2),
    CONSTRAINT pk_BusinessSchool_busName PRIMARY KEY (busName)
)

INSERT INTO [TA03.BusinessSchool] VALUES
('Stanford University', 'Stanford, CA', 848, .430, .440, .950, .910, 'Phil Knight', 156000.00),
('University of Pennsylvania', 'Philadelphia, PA', 1740, .230, .520, .960, .920, 'Sundar Pichai', 150000.00),
('Northwestern University', 'Evanston, IL', 1289, .080, .490, .950, .919, 'James L. Allen', 142857.00),
('University of Chicago', 'Chicago, IL', 1193, .30, .42, .960, .928, 'James McKinsey', 147977.00),
('Massachusetts Institute of Technology', 'Cambridge, MA', 825, .097, .440, .956, .959, 'Kofi Annan', 180223.00),
('Harvard University', 'Cambridge, MA', 1868, .330, .460, .976, .900, 'Mike Bloomberg', 148750.00),
('University of California, Berkeley', 'Berkeley, CA', 591, .390, .370, .923, .895, 'Constance Moore', 139423.00),
('Columbia University', 'New York, NY', 1284, .470, .410, .962, .900, 'Warren Buffett', 150000.00),
('Yale University', 'New Haven, CT', 722, .400, .430, NULL, .902, 'Oladiwura Oladepo', 170000.00),
('University of Maryland', 'College Park, MD', 119, .970, .350, .963, .735, 'Jeff Knabe', 159772.00);

```

For Faculty:

```

CREATE TABLE [TA03.Faculty](
    facName VARCHAR(30) NOT NULL,
    facNumAwards INTEGER,
    facNumProjects INTEGER,
    facDomExpert VARCHAR(50),
    facYearsTeach INTEGER,
    facNumberNobel INTEGER,
    CONSTRAINT pk_Faculty_facName PRIMARY KEY (facName))

INSERT INTO [TA03.Faculty] VALUES
('Ritu Agarwal', 25, 94, 'Information Systems', 24, 0),
('Rajshree Agarwal', 13, 62, 'Management and Organization', 29, 0),
('Paul R. Milgrom', 7, 17, 'Economics', 42, 1),
('William F. Sharpe', 2, 146, 'Finance', 60, 1),
('Gad Allon', 3, 361, 'Operations, Information and Decisions', 26, 0),
('Peter Cappelli', 14, 76, 'Human Resources', 43, 0),
('Nicola Persico', 2, 43, 'Managerial Economics & Decision Sciences', 20, 0),
('Gregory Carpenter', 12, 81, 'Marketing', 44, 0),
('Richard H. Thaler', 2, 100, 'Behavioral Science and Economics', 50, 1),
('Lars Peter Hansen', 10, 126, 'Economics', 43, 1),
('Sinan Aral', 6, 105, 'Management Science', 8, 0),
('Jacquelyn R. Gillette', 0, 6, 'Economics, Finance and Accounting', 5, 0),
('Lauren H. Cohen', 28, 29, 'Finance', 14, 0),
('Jill J. Avery', 13, 17, 'Marketing', 8, 0),
('Vinod K. Aggarwal', 12, 26, 'Business & Public Policy', 41, 0),
('David A. Aaker', 8, 15, 'Marketing', 51, 0),
('Ann P. Bartel', 5, 20, 'Economics', 45, 0),
('Medini R. Singh', 9, 10, 'Decision, Risk and Operations', 11, 0),
('Barbara Biasi', 5, 6, 'Economics', 4, 0),
('Alexander Burnap', 0, 4, 'Marketing', 1, 0)

```

For Publication:

```

CREATE TABLE [TA03.Publication](
    pubId VARCHAR(50) NOT NULL,
    pubYear DATE,
    CONSTRAINT pk_Publication_pubId PRIMARY KEY (pubId))

INSERT INTO [TA03.Publication] VALUES
    ('10.2307/3250951', '2000'),
    ('10.5465/20159599', '2017'),
    ('10.1257/aer.111.5.1383', '2021'),
    ('10.2469/faj.v31.n2.60', '2018'),
    ('10.1287/opre.1060.0337', '2007'),
    ('10.5465/amr.2011.0302', '2012'),
    ('10.1056/NEJMoa1704559', '2017'),
    ('10.1509/jmkg.68.4.76.42721', '2004'),
    ('10.1257/jep.5.1.193', '1991'),
    ('10.2307/1912775', '1982'),
    ('10.1287/mnsc.2020.3650', '2020'),
    ('10.1111/1475-679X.12307', '2020'),
    ('10.1126/science.aad2686', '2016'),
    ('10.1080/17544750.2012.660766', '2012'),
    ('10.1142/S1013251120400068', '2020'),
    ('10.1525/cmr.2012.54.2.43', '2012'),
    ('10.15185/izawol.362', '2017'),
    ('10.1287/opre.47.4.601', '1999'),
    ('10.1257/mic.20190113&&from=f', '2021'),
    ('10.1017/dsj.2016.9', '2016')

```

For Publish:

```

CREATE TABLE [TA03.Publish](
    facName VARCHAR(30) NOT NULL,
    pubId VARCHAR(50) NOT NULL,
    CONSTRAINT pk_Publish_facName_pubId PRIMARY KEY (facName, pubId),
    CONSTRAINT fk_Publish_facName FOREIGN KEY (facName)
        REFERENCES [TA03.Faculty] (facName)
        ON DELETE NO ACTION ON UPDATE NO ACTION,
    CONSTRAINT fk_Publish_pubId FOREIGN KEY (pubId)
        REFERENCES [TA03.Publication] (pubId)
        ON DELETE NO ACTION ON UPDATE NO ACTION)

INSERT INTO [TA03.Publish] VALUES
    ('Ritu Agarwal', '10.2307/3250951'),
    ('Rajshree Agarwal', '10.5465/20159599'),
    ('Paul R. Milgrom', '10.1257/aer.111.5.1383'),
    ('William F. Sharpe', '10.2469/faj.v31.n2.60'),
    ('Gad Allon', '10.1287/opre.1060.0337'),
    ('Peter Cappelli', '10.5465/amr.2011.0302'),
    ('Nicola Persico', '10.1056/NEJMoa1704559'),
    ('Gregory Carpenter', '10.1509/jmkg.68.4.76.42721'),
    ('Richard H. Thaler', '10.1257/jep.5.1.193'),
    ('Lars Peter Hansen', '10.2307/1912775'),
    ('Sinan Aral', '10.1287/mnsc.2020.3650'),
    ('Jacquelyn R. Gillette', '10.1111/1475-679X.12307'),
    ('Lauren H. Cohen', '10.1126/science.aad2686'),
    ('Jill J. Avery', '10.1080/17544750.2012.660766'),
    ('Vinod K. Aggarwal', '10.1142/S1013251120400068'),
    ('David A. Aaker', '10.1525/cmr.2012.54.2.43'),
    ('Ann P. Bartel', '10.15185/izawol.362'),
    ('Medini R. Singh', '10.1287/opre.47.4.601'),
    ('Barbara Biasi', '10.1257/mic.20190113&&from=f'),
    ('Alexander Burnap', '10.1017/dsj.2016.9')

```

For Work:

```
CREATE TABLE [TA03.Work](
    facName VARCHAR(30) NOT NULL,
    busName VARCHAR(40) NOT NULL,
    CONSTRAINT pk_Work_facName_busName PRIMARY KEY (facName, busName),
    CONSTRAINT fk_Work_facName FOREIGN KEY (facName)
        REFERENCES [TA03.Faculty] (facName)
        ON DELETE CASCADE ON UPDATE CASCADE ,
    CONSTRAINT fk_Work_busName FOREIGN KEY (busName)
        REFERENCES [TA03.BusinessSchool] (busName)
        ON DELETE CASCADE ON UPDATE CASCADE )  
  
INSERT INTO [TA03.Work] VALUES
    ('Ritu Agarwal', 'University of Maryland'),
    ('Rajshree Agarwal', 'University of Maryland'),
    ('Paul R. Milgrom', 'Stanford University'),
    ('William F. Sharpe', 'Stanford University'),
    ('Gad Allon', 'University of Pennsylvania'),
    ('Peter Cappelli', 'University of Pennsylvania'),
    ('Nicola Persico', 'Northwestern University'),
    ('Gregory Carpenter', 'Northwestern University'),
    ('Richard H. Thaler', 'University of Chicago'),
    ('Lars Peter Hansen', 'University of Chicago'),
    ('Sinan Aral', 'Massachusetts Institute of Technology'),
    ('Jacquelyn R. Gillette', 'Massachusetts Institute of Technology'),
    ('Lauren H. Cohen', 'Harvard University'),
    ('Jill J. Avery', 'Harvard University'),
    ('Vinod K. Aggarwal', 'University of California, Berkeley'),
    ('David A. Aaker', 'University of California, Berkeley'),
    ('Ann P. Bartel', 'Columbia University'),
    ('Medini R. Singh', 'Columbia University'),
    ('Barbara Biasi', 'Yale University'),
    ('Alexander Burnap', 'Yale University')
```

For Donation:

```

CREATE TABLE [TAB3.Donation](
    busName VARCHAR(40) NOT NULL,
    donId CHAR(10) NOT NULL,
    donAmount DECIMAL(10, 2),
    donStartDate DATE,
    donEndDate DATE,
    CONSTRAINT pk_Donation_busName_donId PRIMARY KEY (busName, donId),
    CONSTRAINT fk_Donation_busName FOREIGN KEY (busName)
        REFERENCES [TAB3.BusinessSchool] (busName)
        ON DELETE CASCADE ON UPDATE CASCADE)

INSERT INTO [TAB3.Donation] VALUES
    ('Stanford University', '1', 16000000, '09/01/2020', '08/31/2021'),
    ('University of Pennsylvania', '2', 18300000, '07/01/2020', '06/30/2021'),
    ('University of Pennsylvania', '3', 16100000, '07/01/2019', '06/30/2020'),
    ('University of Pennsylvania', '4', 16000000, '07/01/2017', '06/30/2018'),
    ('Northwestern University', '5', 12000000, '09/01/2017', '08/31/2018'),
    ('Northwestern University', '6', 10100000, '09/01/2016', '08/31/2017'),
    ('Northwestern University', '7', 7000000, '09/01/2015', '08/31/2016'),
    ('Northwestern University', '8', 6000000, '09/01/2014', '08/31/2015'),
    ('Northwestern University', '9', 5400000, '09/01/2013', '08/31/2014'),
    ('Northwestern University', '10', 4300000, '09/01/2012', '08/31/2013'),
    ('University of Chicago', '11', 12940000, '07/01/2020', '06/30/2021'),
    ('University of Chicago', '12', 11070000, '07/01/2019', '06/30/2020'),
    ('University of Chicago', '13', 10740000, '07/01/2018', '06/30/2019'),
    ('University of Chicago', '14', 11180000, '07/01/2017', '06/30/2018'),
    ('University of Chicago', '15', 8980000, '07/01/2016', '06/30/2017'),
    ('Massachusetts Institute of Technology', '16', NULL, NULL, NULL),
    ('Harvard University', '17', 56000000, '07/01/2019', '06/30/2020'),
    ('Harvard University', '18', 76000000, '07/01/2018', '06/30/2019'),
    ('Harvard University', '19', 22000000, '07/01/2012', '06/30/2013'),
    ('Harvard University', '20', 16700000, '07/01/2010', '06/30/2011'),
    ('University of California, Berkeley', '21', 45400000, '07/01/2020', '06/30/2021'),
    ('University of California, Berkeley', '22', 27000000, '07/01/2019', '06/30/2020'),
    ('University of California, Berkeley', '23', 28700000, '07/01/2018', '06/30/2019'),
    ('University of California, Berkeley', '24', 40000000, '07/01/2017', '06/30/2018'),
    ('University of California, Berkeley', '25', 21500000, '07/01/2016', '06/30/2017'),
    ('University of California, Berkeley', '26', 35900000, '07/01/2015', '06/30/2016'),
    ('University of California, Berkeley', '27', 35500000, '07/01/2014', '06/30/2015'),
    ('University of California, Berkeley', '28', 29900000, '07/01/2013', '06/30/2014'),
    ('University of California, Berkeley', '29', 42500000, '07/01/2012', '06/30/2013'),
    ('Columbia University', '30', 29870000, '07/01/2019', '06/30/2020'),
    ('Yale University', '31', 5200000, '07/01/2020', '06/30/2021'),
    ('University of Maryland', '32', 8451971, '07/01/2019', '06/30/2020');

```

For Rating Agency:

```

CREATE TABLE [TA03.AgencyRanking](
    othAgnId VARCHAR(10) NOT NULL,
    othAgnName VARCHAR(20),
    othAgnRate INTEGER,
    CONSTRAINT pk_AgencyRanking_othAgnId PRIMARY KEY (othAgnId))

INSERT INTO [TA03.AgencyRanking] VALUES
    ('1','USNews', 1),
    ('2','USNews', 2),
    ('3','USNews', 3),
    ('4','USNews', 4),
    ('5','USNews', 5),
    ('6','USNews', 6),
    ('7','USNews', 7),
    ('8','USNews', 8),
    ('9','USNews', 9),
    ('10','USNews', 44),
    ('11','QS', 3),
    ('12','QS', 4),
    ('13','QS', 6),
    ('14','QS', 9),
    ('15','QS', 2),
    ('16','QS', 1),
    ('17','QS', 5),
    ('18','QS', 7),
    ('19','QS', 8),
    ('20','QS', 41),
    ('21','Bloomberg', 1),
    ('22','Bloomberg', 6),
    ('23','Bloomberg', 10),
    ('24','Bloomberg', 4),
    ('25','Bloomberg', 7),
    ('26','Bloomberg', 3),
    ('27','Bloomberg', 8),
    ('28','Bloomberg', 9),
    ('29','Bloomberg', 14),
    ('30','Bloomberg', 26)

```

For Rate:

```

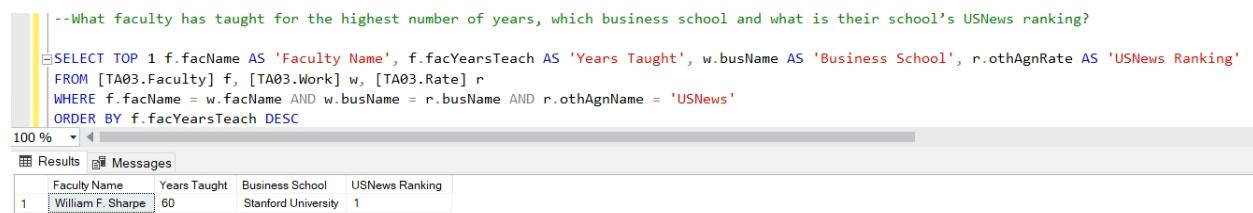
CREATE TABLE [TA03.Rate](
    othAgnId VARCHAR(10) NOT NULL,
    busName VARCHAR(40) NOT NULL,
    othAgnName VARCHAR(20),
    othAgnRate INTEGER,
    CONSTRAINT pk_Rate_othAgnId_busName PRIMARY KEY (othAgnId,busName),
    CONSTRAINT fk_Rate_othAgnId FOREIGN KEY (othAgnId)
    REFERENCES[TAB3.AgencyRanking](othAgnId)
        ON DELETE CASCADE ON UPDATE CASCADE ,
    CONSTRAINT fk_Rate_busName FOREIGN KEY (busName)
    REFERENCES[TAB3.BusinessSchool](busName)
        ON DELETE CASCADE ON UPDATE CASCADE )

INSERT INTO [TA03.Rate] VALUES
    ('1','Stanford University', 'USNews', 1),
    ('2','University of Pennsylvania', 'USNews', 2),
    ('3','Northwestern University', 'USNews', 3),
    ('4','University of Chicago', 'USNews', 4),
    ('5','Massachusetts Institute of Technology', 'USNews', 5),
    ('6','Harvard University', 'USNews', 6),
    ('7','University of California, Berkeley', 'USNews', 7),
    ('8','Columbia University', 'USNews', 8),
    ('9','Yale University', 'USNews', 9),
    ('10','University of Maryland', 'USNews', 44),
    ('11','Stanford University', 'QS', 3),
    ('12','University of Pennsylvania', 'QS', 4),
    ('13','Northwestern University', 'QS', 6),
    ('14','University of Chicago', 'QS', 9),
    ('15','Massachusetts Institute of Technology', 'QS', 2),
    ('16','Harvard University', 'QS', 1),
    ('17','University of California, Berkeley', 'QS', 5),
    ('18','Columbia University', 'QS', 7),
    ('19','Yale University', 'QS', 8),
    ('20','University of Maryland', 'QS', 41),
    ('21','Stanford University', 'Bloomberg', 1),
    ('22','University of Pennsylvania', 'Bloomberg', 6),
    ('23','Northwestern University', 'Bloomberg', 10),
    ('24','University of Chicago', 'Bloomberg', 4),
    ('25','Massachusetts Institute of Technology', 'Bloomberg', 7),
    ('26','Harvard University', 'Bloomberg', 3),
    ('27','University of California, Berkeley', 'Bloomberg', 8),
    ('28','Columbia University', 'Bloomberg', 9),
    ('29','Yale University', 'Bloomberg', 14),
    ('30','University of Maryland', 'Bloomberg', 26)

```

Next, we converted our mission objections as eight WH-style-questions, then we implemented SQL SELECT statements to answer each business transaction question:

1. What faculty has taught for the highest number of years, which business school and what is their school's USNews ranking?



```
--What faculty has taught for the highest number of years, which business school and what is their school's USNews ranking?
SELECT TOP 1 f.facName AS 'Faculty Name', f.facYearsTeach AS 'Years Taught', w.busName AS 'Business School', r.othAgnRate AS 'USNews Ranking'
FROM [TA03.Faculty] f, [TA03.Work] w, [TA03.Rate] r
WHERE f.facName = w.facName AND w.busName = r.busName AND r.othAgnName = 'USNews'
ORDER BY f.facYearsTeach DESC
```

Faculty Name	Years Taught	Business School	USNews Ranking
William F. Sharpe	60	Stanford University	1

2. What is the faculty and their number of publications, in order of publication amount, for the faculty that have Nobel prizes, and what is their corresponding business school?

```
--What are the faculty and their number of publications, in order of publication amount, for the faculty that have Nobel prizes,
--and what are their corresponding business schools?

SELECT f.facName AS 'Faculty Name', f.facNumProjects AS 'Number of Publications', w.busName AS 'Business School'
FROM [TA03.Faculty] f, [TA03.Work] w
WHERE f.facNumberNobel > 0 AND f.facName = w.facName
ORDER BY f.facNumProjects DESC
```

	Faculty Name	Number of Publications	Business School
1	William F. Sharpe	146	Stanford University
2	Lars Peter Hansen	126	University of Chicago
3	Richard H. Thaler	100	University of Chicago
4	Paul R. Milgrom	17	Stanford University

3. What is the relationship between the USNews ranking and the financial support in terms of donations to the school, in order of donations?

```
--What is the relationship between the USNews ranking and the financial support in terms of donations to the school, in order of donations?

SELECT d.busName AS 'Business School', SUM(d.donAmount) AS 'Donation Received', r.othAgnRate AS 'USNews Ranking'
FROM [TA03.Donation] d, [TA03.Rate] r
WHERE r.othAgnName = 'USNews' AND r.busName=d.busName AND d.donAmount IS NOT NULL
GROUP BY d.busName, r.othAgnRate
ORDER BY SUM(d.donAmount) DESC
```

	Business School	Donation Received	USNews Ranking
1	University of California, Berkeley	306400000.00	7
2	Harvard University	170700000.00	6
3	University of Chicago	54830000.00	4
4	University of Pennsylvania	50400000.00	2
5	Northwestern University	44800000.00	3
6	Columbia University	29870000.00	8
7	Stanford University	16000000.00	1
8	University of Maryland	8451971.00	44
9	Yale University	5200000.00	9

4. What is the comparison between the USNews Ranking and the average of the agency rankings, in order of USNews Ranking for each business school?

```
--What is the comparison between the USNews Ranking and the average of the agency rankings, in order of USNews Ranking for each business school?

SELECT USNews.othAgnRate AS USNewsRating, avg.averageRating, avg.busName
FROM (
    SELECT AVG(r.othAgnRate) AS averageRating, r.busName
    FROM [TA03.Rate] r
    GROUP BY r.busName) AS avg, (
    SELECT r.othAgnRate, r.busName
    FROM [TA03.Rate] r
    WHERE r.othAgnName = 'USNews') AS USNews
WHERE avg.busName = usNews.busName
ORDER BY USNews.othAgnRate, avg.averageRating,
```

	USNewsRating	averageRating	busName
1	1	1	Stanford University
2	2	4	University of Pennsylvania
3	3	6	Northwestern University
4	4	5	University of Chicago
5	5	4	Massachusetts Institute of Technology
6	6	3	Harvard University
7	7	6	University of California, Berkeley
8	8	8	Columbia University
9	9	10	Yale University
10	44	37	University of Maryland

5. What 5 faculty had the highest number of awards, and what is their corresponding business school's USNews ranking?

```
--What 5 faculty had the highest number of awards, and what is their corresponding business school's USNews ranking?

SELECT TOP 5 f.facName AS 'Faculty Name', f.facNumAwards AS 'Number of Awards', w.busName AS 'Business School', r.othAgnRate AS 'USNews Ranking'
FROM [TA03.Faculty] f, [TA03.Work] w, [TA03.Rate] r
WHERE f.facName = w.facName AND w.busName = r.busName AND r.othAgnName = 'USNews'
ORDER BY f.facNumAwards DESC
```

100 %

	Faculty Name	Number of Awards	Business School	USNews Ranking
1	Lauren H. Cohen	28	Harvard University	6
2	Ritu Agarwal	25	University of Maryland	44
3	Peter Cappelli	14	University of Pennsylvania	2
4	Jill J. Avery	13	Harvard University	6
5	Rajshree Agarwal	13	University of Maryland	44

6. What is the relationship between the proportion of female students and the USNews ranking?

```
--What is the relationship between the proportion of female students and the USNews ranking?

SELECT b.busName, r.othAgnName, r.othAgnRate, b.busProFemStudents
FROM [TA03.Rate] r, [TA03.BusinessSchool] b
WHERE r.othAgnName='USNews'
AND r.busName=b.busName
ORDER BY busProFemStudents DESC;
```

100 %

	busName	othAgnName	othAgnRate	busProFemStudents
1	University of Pennsylvania	USNews	2	0.520
2	Northwestern University	USNews	3	0.490
3	Harvard University	USNews	6	0.460
4	Massachusetts Institute of Technology	USNews	5	0.440
5	Stanford University	USNews	1	0.440
6	Yale University	USNews	9	0.430
7	University of Chicago	USNews	4	0.420
8	Columbia University	USNews	8	0.410
9	University of California, Berkeley	USNews	7	0.370
10	University of Maryland	USNews	44	0.350

7. What is the relationship between the proportion of the international students and the USNews ranking?

```
--What is the relationship between the proportion of the international students and the USNews ranking?

SELECT b.busName, r.othAgnName, r.othAgnRate, b.busProIntStudents
FROM [TA03.Rate] r, [TA03.BusinessSchool] b
WHERE r.othAgnName='USNews'
AND r.busName=b.busName
ORDER BY busProIntStudents DESC;
```

100 %

	busName	othAgnName	othAgnRate	busProIntStudents
1	University of Maryland	USNews	44	0.970
2	Columbia University	USNews	8	0.470
3	Stanford University	USNews	1	0.430
4	Yale University	USNews	9	0.400
5	University of California, Berkeley	USNews	7	0.390
6	Harvard University	USNews	6	0.330
7	University of Chicago	USNews	4	0.300
8	University of Pennsylvania	USNews	2	0.230
9	Massachusetts Institute of Technology	USNews	5	0.097
10	Northwestern University	USNews	3	0.080

8. What is the relationship between employment rate, salary, and USNews Ranking, in order of employment rate and highest salary?

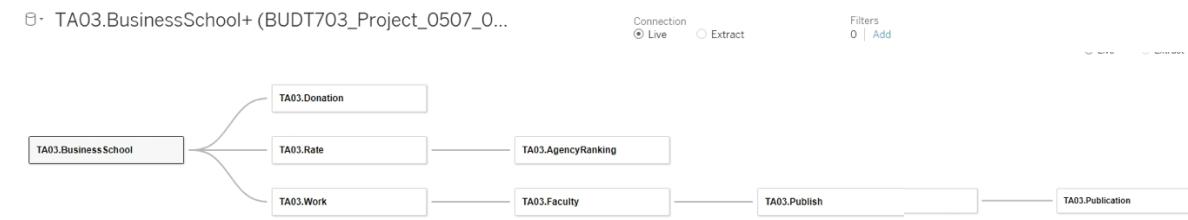
```
--What is the relationship between employment rate, salary, and USNews Ranking, in order of employment rate and highest salary?

SELECT b.busName, r.othAgnName, r.othAgnRate, b.busEmpRate, b.busAvgSalary
FROM [TA03.Rate] r, [TA03.BusinessSchool] b
WHERE r.othAgnName='USNews' and r.busName=b.busName
ORDER BY b.busEmpRate DESC
```

	busName	othAgnName	othAgnRate	busEmpRate	busAvgSalary
1	Massachusetts Institute of Technology	USNews	5	0.959	180223.00
2	University of Chicago	USNews	4	0.928	147977.00
3	University of Pennsylvania	USNews	2	0.920	150000.00
4	Northwestern University	USNews	3	0.919	142857.00
5	Stanford University	USNews	1	0.910	156000.00
6	Yale University	USNews	9	0.902	170000.00
7	Columbia University	USNews	8	0.900	150000.00
8	Harvard University	USNews	6	0.900	148750.00
9	University of California, Berkeley	USNews	7	0.895	139423.00
10	University of Maryland	USNews	44	0.735	159772.00

Creating and interacting with our Tableau:

Data Source:



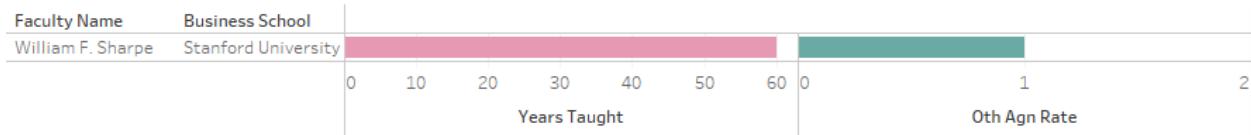
1. What faculty has taught for the highest number of years, which business school and what is their school's USNews ranking?

Select table statement:

```
SELECT TOP 1 f.facName AS 'Faculty Name', f.facYearsTeach AS 'Years Taught', w.busName AS 'Business School', r.othAgnRate AS 'USNews Ranking'
FROM [TA03.Faculty] f, [TA03.Work] w, [TA03.Rate] r
WHERE f.facName = w.facName AND w.busName = r.busName AND r.othAgnName =
'USNews'
ORDER BY f.facYearsTeach DESC
```

	Faculty Name	Years Taught	Business School	USNews Ranking
1	William F. Sharpe	60	Stanford University	1

What faculty has taught for the highest number of years, which business school and what is their school's USNews ranking?



Sum of Years Taught and sum of Oth Agn Rate for each Business School broken down by In / Out of Top 1 Faculty by Projects and Faculty Name. The data is filtered on Oth Agn Name and Top 1 Faculty by Projects. The Oth Agn Name filter keeps USNews. The Top 1 Faculty by Projects filter keeps 1 member.

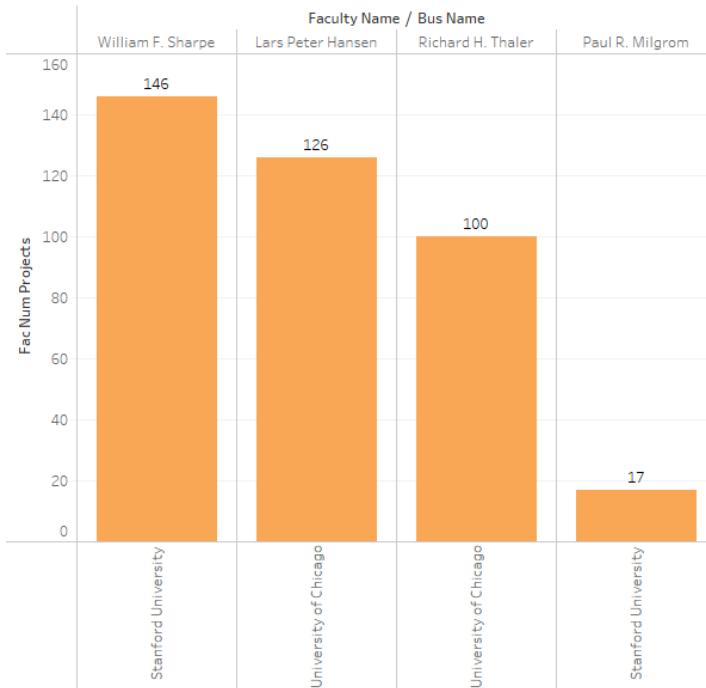
2. What is the faculty and their number of publications, in order of publication amount, for the faculty that have Nobel prizes, and what is their corresponding business school?

Select table statement:

```
SELECT f.facName AS 'Faculty Name', f.facNumProjects AS 'Number of Publications',
w.busName AS 'Business School'
FROM [TA03.Faculty] f, [TA03.Work] w
WHERE f.facNumberNobel > 0 AND f.facName = w.facName
ORDER BY f.facNumProjects DESC
```

	Faculty Name	Number of Publications	Business School
1	William F. Sharpe	146	Stanford University
2	Lars Peter Hansen	126	University of Chicago
3	Richard H. Thaler	100	University of Chicago
4	Paul R. Milgrom	17	Stanford University

What is the faculty and number of publications, in order of publication amount, for the faculty that have Nobel prizes, and what is their corresponding business school?



Sum of Fac Num Projects for each Bus Name broken down by Faculty Name. The marks are labeled by sum of Fac Num Projects. The view is filtered on Faculty Name, which has multiple members selected.

3. What is the relationship between the USNews ranking and the financial support in terms of donations to the school, in order of donations?

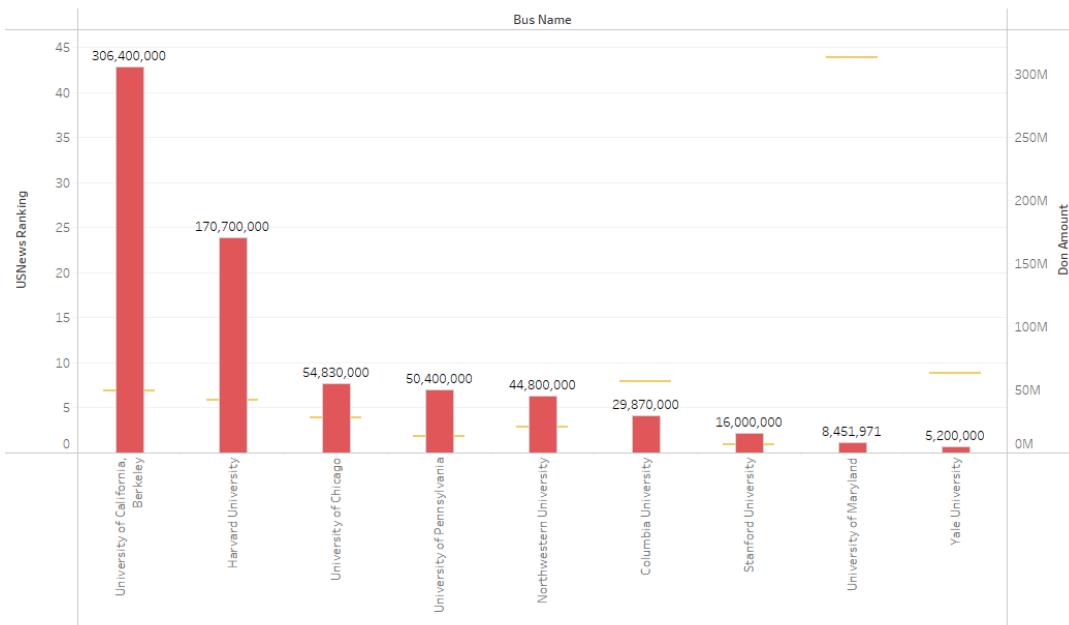
Select table statement:

```

SELECT d.busName AS 'Business School', SUM(d.donAmount) AS 'Donation Received',
r.othAgnRate AS 'USNews Ranking'
FROM [TA03.Donation] d, [TA03.Rate] r
WHERE r.othAgnName = 'USNews' AND r.busName=d.busName AND d.donAmount IS NOT
NULL
GROUP BY d.busName, r.othAgnRate
ORDER BY SUM(d.donAmount) DESC
    
```

	Business School	Donation Received	USNews Ranking
1	University of California, Berkeley	306400000.00	7
2	Harvard University	170700000.00	6
3	University of Chicago	54830000.00	4
4	University of Pennsylvania	50400000.00	2
5	Northwestern University	44800000.00	3
6	Columbia University	29870000.00	8
7	Stanford University	16000000.00	1
8	University of Maryland	8451971.00	44
9	Yale University	5200000.00	9

What is the relationship between the USNews ranking and donations to the school, in order of donations?



Oth Agn Rate and Don Amount for each Bus Name. Details are shown for Oth Agn Rate and Don Amount. For pane Sum of Don Amount: The marks are labeled by Don Amount. The data is filtered on Oth Agn Name, which keeps USNews. The view is filtered on sum of Don Amount, which keeps non-Null values only.

4. What is the comparison between the USNews Ranking and the average of the agency rankings, in order of USNews Ranking for each business school?

Select table statement:

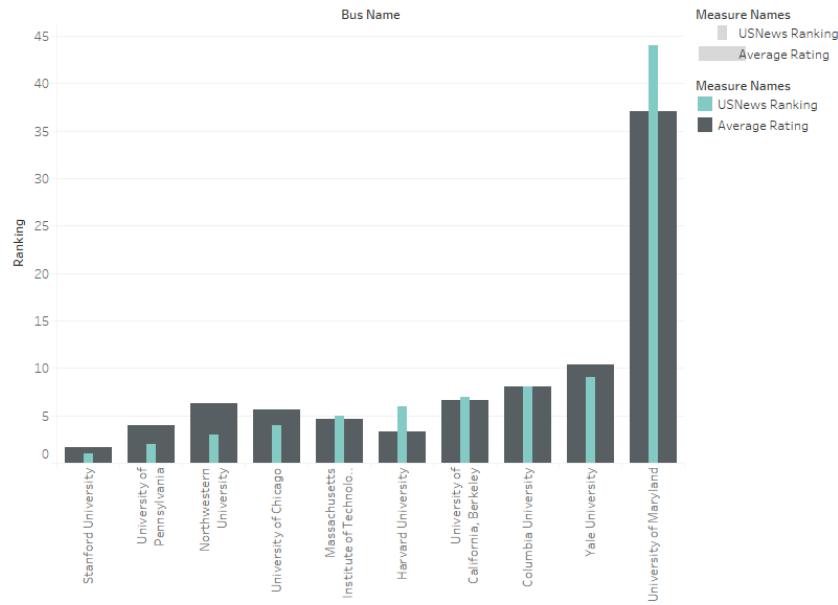
```

SELECT USNews.othAgnRate AS USNewsRating, avg.averageRating, avg.busName
FROM (
    SELECT AVG(r.othAgnRate) AS averageRating, r.busName
    FROM [TA03.Rate] r
    GROUP BY r.busName) AS avg, (
    SELECT r.othAgnRate, r.busName
    FROM [TA03.Rate] r
    WHERE r.othAgnName = 'USNews') AS USNews
WHERE avg.busName = usNews.busName
  
```

ORDER BY USNews.othAgnRate, avg.averageRating;

	USNewsRating	averageRating	busName
1	1	1	Stanford University
2	2	4	University of Pennsylvania
3	3	6	Northwestern University
4	4	5	University of Chicago
5	5	4	Massachusetts Institute of Technology
6	6	3	Harvard University
7	7	6	University of California, Berkeley
8	8	8	Columbia University
9	9	10	Yale University
10	44	37	University of Maryland

What is the comparison between the USNews Ranking and Average Ranking of each Business School?



USNews Ranking and Average Rating for each Bus Name. Color shows details about USNews Ranking and Average Rating. Size shows details about USNews Ranking and Average Rating.

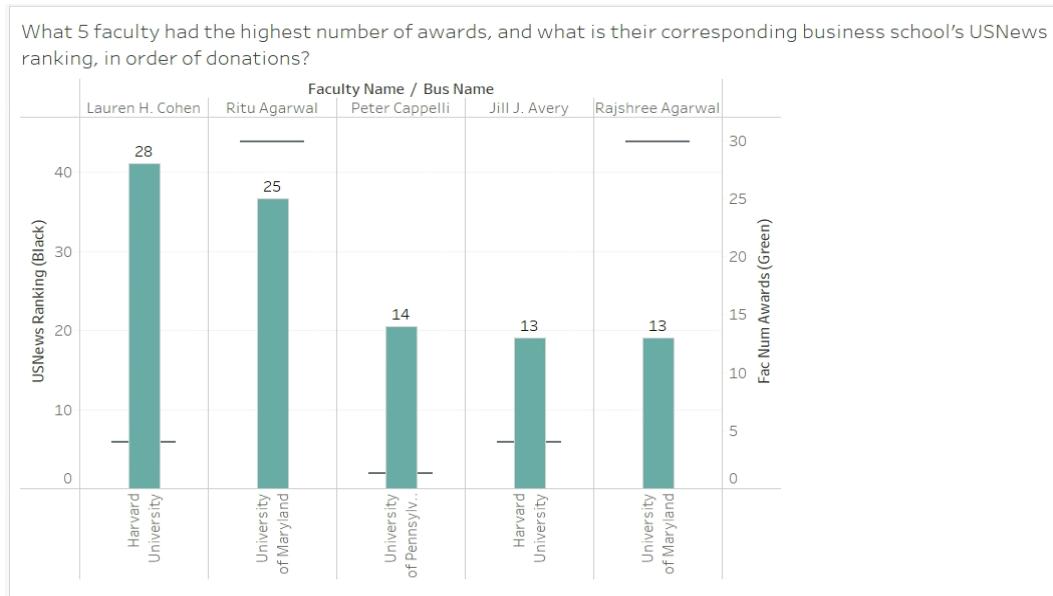
5. What 5 faculty had the highest number of awards, and what is their corresponding business school's USNews ranking?

Select table statement:

```
SELECT TOP 5 f.facName AS 'Faculty Name', f.facNumAwards AS 'Number of Awards',
w.busName AS 'Business School', r.othAgnRate AS 'USNews Ranking'
FROM [TA03.Faculty] f, [TA03.Work] w, [TA03.Rate] r
WHERE f.facName = w.facName AND w.busName = r.busName AND r.othAgnName =
'USNews'
ORDER BY f.facNumAwards DESC
```

	Faculty Name	Number of Awards	Business School	USNews Ranking
1	Lauren H. Cohen	28	Harvard University	6
2	Ritu Agarwal	25	University of Maryland	44
3	Peter Cappelli	14	University of Pennsylvania	2
4	Jill J. Avery	13	Harvard University	6
5	Rajshree Agarwal	13	University of Maryland	44

In this Tableau sheet, it is important to note the two different axes on both the left and right. On the left, we can see that the horizontal black bars indicate US News ranking for the schools, and on the right, the vertical green bars represent the Faculty number of awards. We included the color corresponding to the label in the axis titles for additional clarity.



6. What is the relationship between the proportion of female students and the USNews ranking?

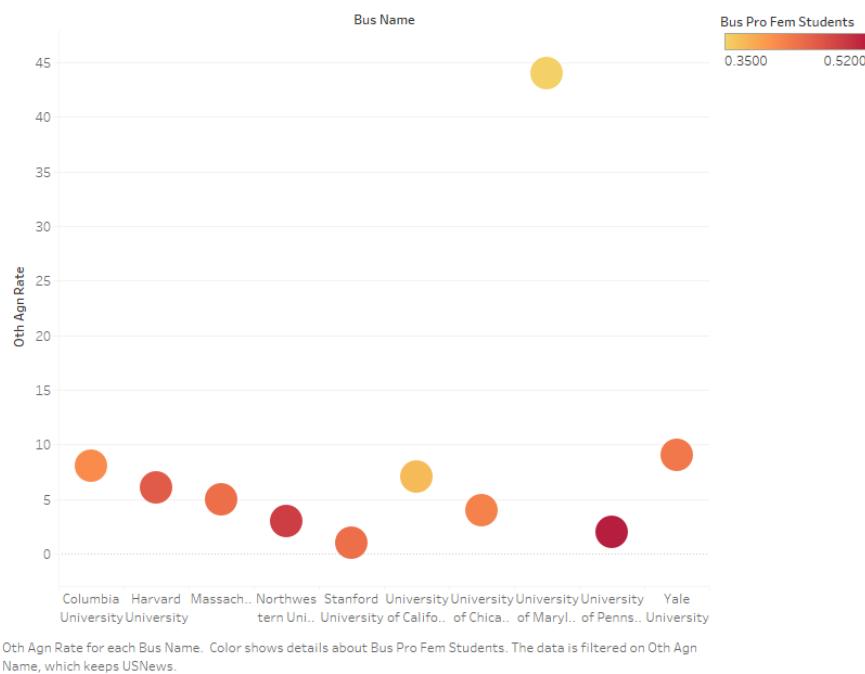
Select table statement:

```

SELECT b.busName,r.othAgnName,r.othAgnRate, b.busProFemStudents
FROM [TA03.Rate] r, [TA03.BusinessSchool] b
WHERE r.othAgnName='USNews'
      AND r.busName=b.busName
ORDER BY busProFemStudents DESC;
    
```

	busName	othAgnName	othAgnRate	busProFemStudents
1	University of Pennsylvania	USNews	2	0.520
2	Northwestern University	USNews	3	0.490
3	Harvard University	USNews	6	0.460
4	Massachusetts Institute of Technology	USNews	5	0.440
5	Stanford University	USNews	1	0.440
6	Yale University	USNews	9	0.430
7	University of Chicago	USNews	4	0.420
8	Columbia University	USNews	8	0.410
9	University of California, Berkeley	USNews	7	0.370
10	University of Maryland	USNews	44	0.350

What is the relationship between the proportion of female students and the USNews ranking?



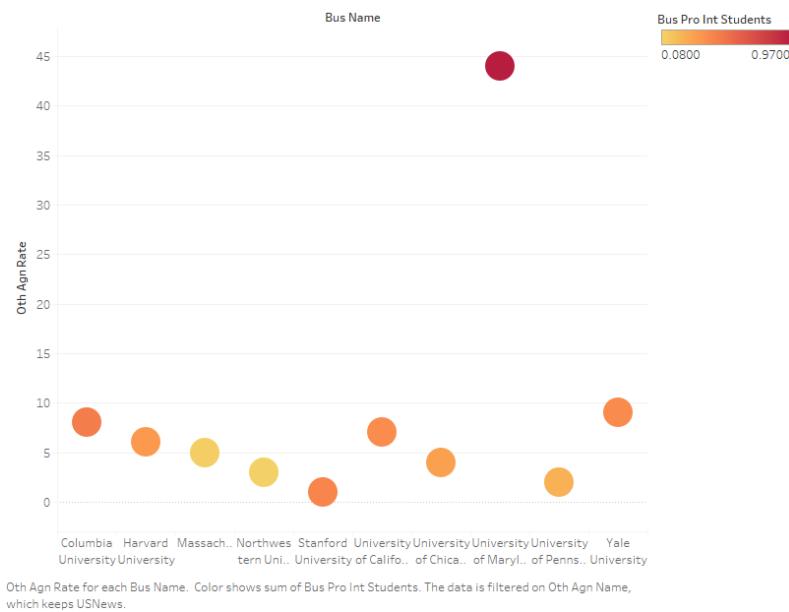
7. What is the relationship between the proportion of the international students and the USNews ranking?

Select table statement:

```
SELECT b.busName,r.othAgnName,r.othAgnRate, b.busProIntStudents
FROM [TA03.Rate] r, [TA03.BusinessSchool] b
WHERE r.othAgnName='USNews'
      AND r.busName=b.busName
ORDER BY busProIntStudents DESC;
```

	busName	othAgnName	othAgnRate	busProIntStudents
1	University of Maryland	USNews	44	0.970
2	Columbia University	USNews	8	0.470
3	Stanford University	USNews	1	0.430
4	Yale University	USNews	9	0.400
5	University of California, Berkeley	USNews	7	0.390
6	Harvard University	USNews	6	0.330
7	University of Chicago	USNews	4	0.300
8	University of Pennsylvania	USNews	2	0.230
9	Massachusetts Institute of Technology	USNews	5	0.097
10	Northwestern University	USNews	3	0.080

What is the relationship between the proportion of international students and the USNews ranking?



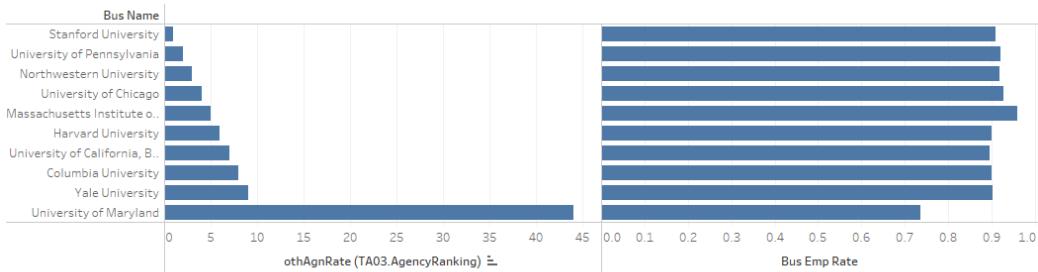
8. What is the relationship between employment rate, salary, and USNews Ranking, in order of employment rate and highest salary?

Select table statement:

```
SELECT b.busName, r.othAgnName, r.othAgnRate, b.busEmpRate, b.busAvgSalary
FROM [TA03.Rate] r, [TA03.BusinessSchool] b
WHERE r.othAgnName='USNews' and r.busName=b.busName
ORDER BY b.busEmpRate DESC
```

	busName	othAgnName	othAgnRate	busEmpRate	busAvgSalary
1	Massachusetts Institute of Technology	USNews	5	0.959	180223.00
2	University of Chicago	USNews	4	0.928	147977.00
3	University of Pennsylvania	USNews	2	0.920	150000.00
4	Northwestern University	USNews	3	0.919	142857.00
5	Stanford University	USNews	1	0.910	156000.00
6	Yale University	USNews	9	0.902	170000.00
7	Columbia University	USNews	8	0.900	150000.00
8	Harvard University	USNews	6	0.900	148750.00
9	University of California, Berkeley	USNews	7	0.895	139423.00
10	University of Maryland	USNews	44	0.735	159772.00

What is the relationship between the employee rate and the US news ranking?



Sum of othAgnRate (TA03_AgencyRanking) and sum of Bus Emp Rate for each Bus Name. The data is filtered on othAgnName (TA03_AgencyRanking), which keeps USNews. The view is filtered on sum of Bus Emp Rate, which ranges from 0.7350 to 0.9590.

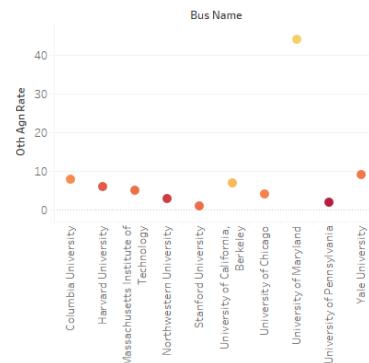
What is the relationship between the average salary and the ranking?



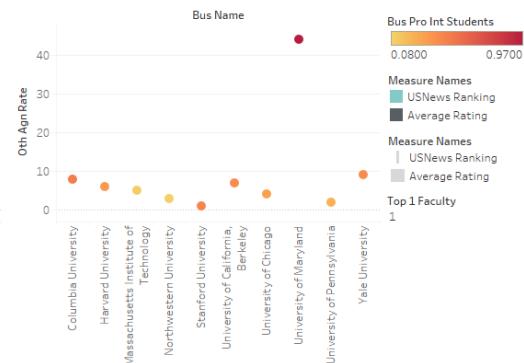
Sum of Bus Avg Salary and sum of othAgnRate (TA03_AgencyRanking) for each Bus Name. The data is filtered on othAgnName (TA03_AgencyRanking), which keeps USNews.

Tableau Dashboard:

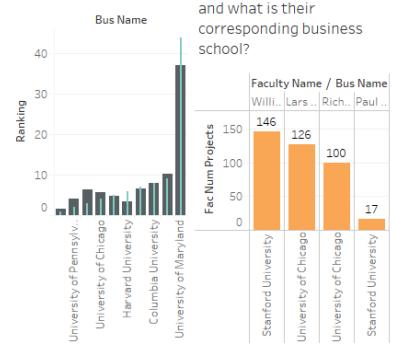
What is the relationship between the proportion of female students and the USNews ranking?



What is the relationship between the proportion of international students and the USNews ranking?

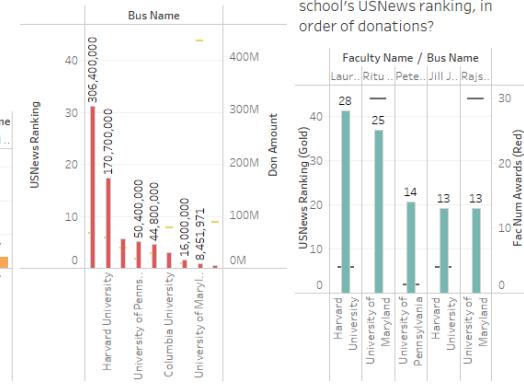


What is the comparison between the USNews Ranking and Average Ranking of each Business School?



What is the faculty and number of publications, in order of publication amount, for the faculty that have Nobel prizes, and what is their corresponding business school?

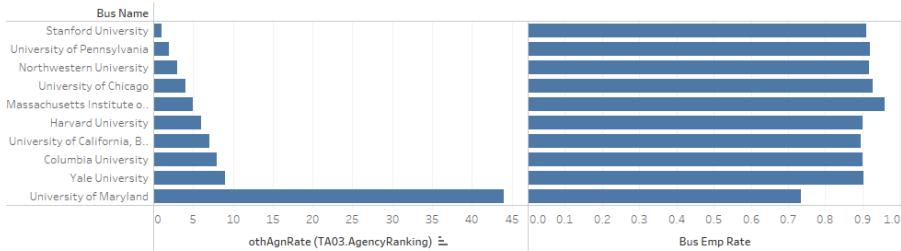
What is the relationship between the USNews ranking and donations to the school, in order of donations?



What 5 faculty had the highest number of awards, and what is their corresponding business school's USNews ranking, in order of donations?



What is the relationship between the employee rate and the US news ranking?



What is the relationship between the average salary and the ranking?



Applications:

Our data will be helpful to students that are considering which graduate business school to attend, as well as graduate business schools that would like to improve their rankings. For the students, they can compare various factors across schools, and see which schools align better with their career ambitions. Our database and case applications are helpful to schools, because they can see where they stand not only with overall rankings, but also with individual factors. They can see comparisons between things like faculty years of experience and rankings, or proportions of female students and rankings, and potentially target a few of these individual factors at a time to hopefully boost overall rankings. Our model introduces insights into new relationships between various factors and school rankings that each school may have never before considered.

Future Work:

Our model could be expanded to include more graduate business schools. With more data, we would be more likely to extract trends that we cannot see with a limited dataset. In addition, another version of our model could be adapted for various other types of schools, though some of the attributes may be different depending on the relevant factors for different types of schools. For example, a Residency attribute would be relevant if we adapted our model to medical schools.