

Baylor University Business Outlook and University Research Partnership Report

November 2019

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Research Purpose & Method

Purpose

The purpose of this research was two-fold:

1. To understand the business outlook for 2020 across Texas
2. To understand attitudes and perceptions around businesses who partner with universities on research

Methodology

The survey was sent to those who had opted in to receive emails from the following:

- Austin Business Journal
- Dallas Business Journal
- Houston Business Journal
- San Antonio Business Journal
- Fieldwork: October 9 – November 3, 2019
- Participation Incentive: Three \$50 gift cards

Number of Respondents

Overall Total: 591 respondents

- Austin: 151
- Dallas: 154
- Houston: 198
- San Antonio: 88

Key Takeaways

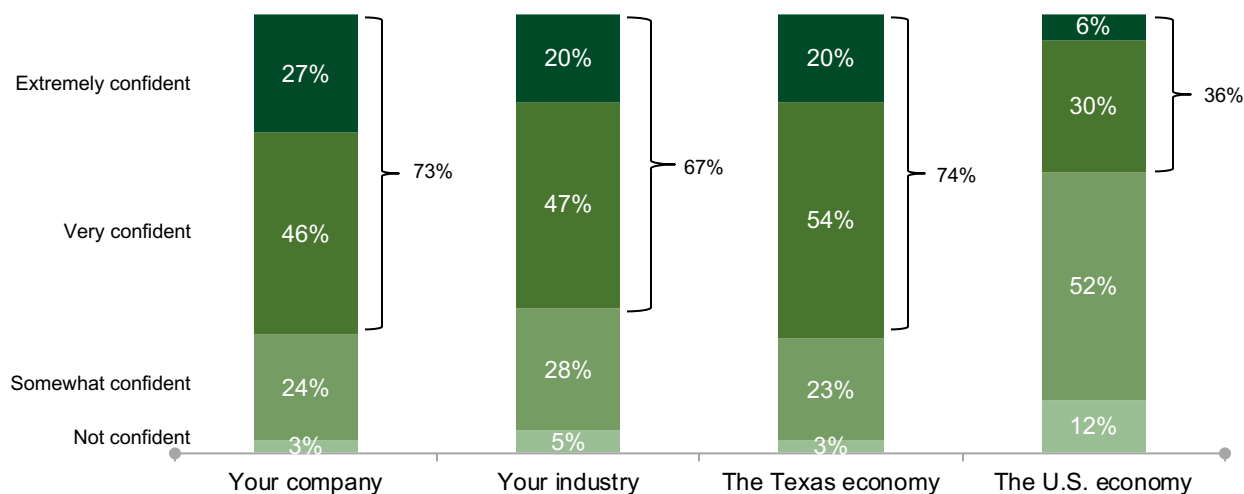
- 1 Confidence locally (in their business, industry and Texas economy) is significantly stronger than in the national economy. Over half plan on hiring more full-time employees
- 2 Obtaining capital/funding and finding talent are the biggest obstacles for start-ups in Texas. The biggest challenges regarding talent are retaining high performing employees and the shortage of skilled labor.
- 3 The concept of businesses partnering with a university on research is familiar to two-thirds and the majority of these people have a favorable impression of businesses who do.
- 4 Of businesses who have not partnered with a university on research, four of ten don't know why they haven't. One-quarter say red tape has stopped them.
- 5 Two-thirds are interested in this type of partnership in the future. Being a cost effective approach to research, a way to evaluate students as potential employees and good PR are some benefits seen by businesses in the partnership.

2020 Outlook

Confidence is high for company, industry and the Texas economy for 2020 but is significantly lower for the U.S. economy

BUSINESS OUTLOOK FOR 2020

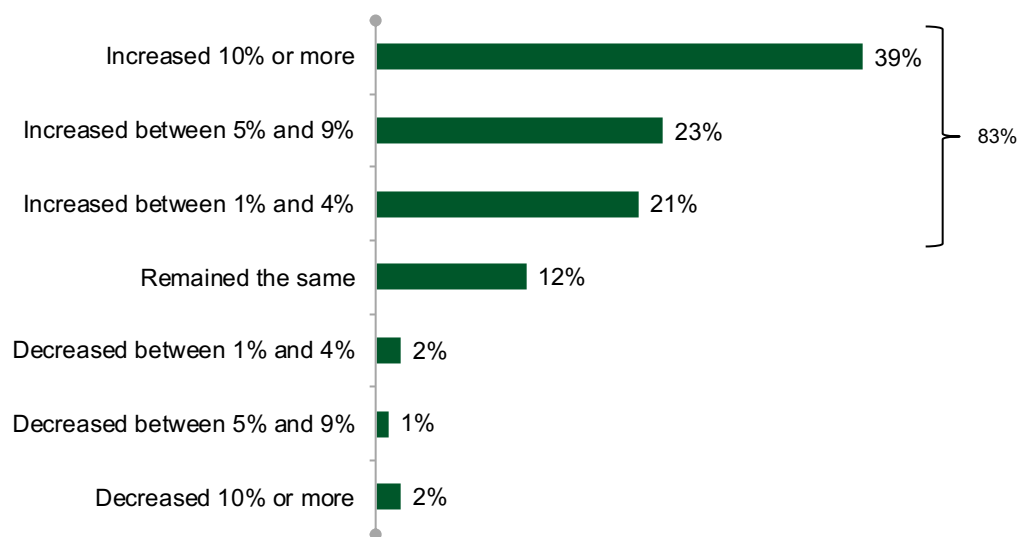
“How would you characterize the business outlook for the next 12 months for each of the following?”



Eight of ten expect to see an increase in their company revenue in the coming 12 months

EXPECTATIONS FOR COMPANY REVENUE FOR 2020

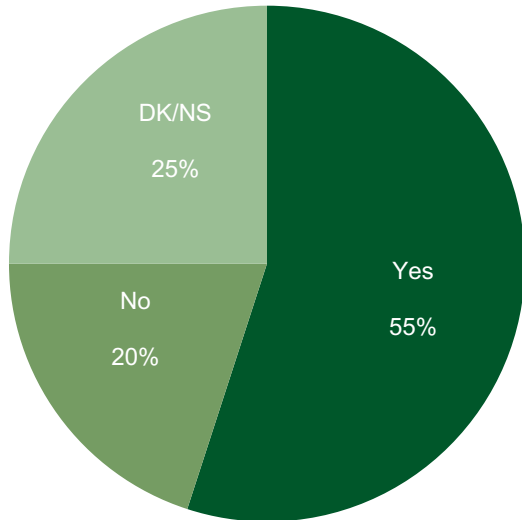
“In the next 12 months, what do you expect from your company revenue? Will it have ...”



Just over half plan to hire new full-time employees in 2020

PLAN TO HIRE NEW FULL-TIME EMPLOYEES

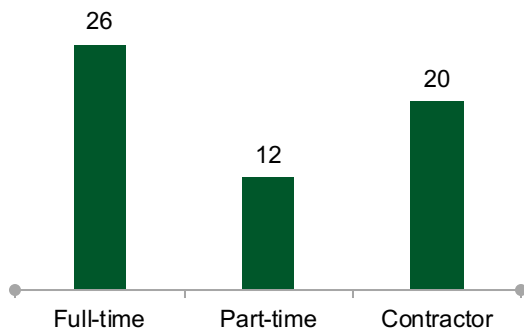
“Does your company plan on hiring new full-time employees in the next 12 months?”



On average, companies plan to hire 26 full-time employees; hiring will be across all education levels though most are looking for four year degrees

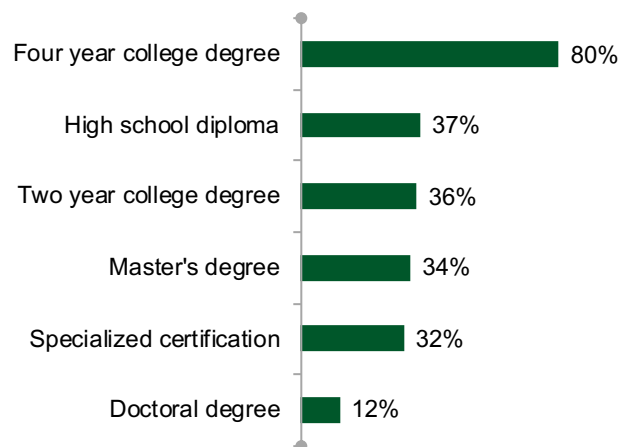
PLANNED HIRING FOR 2020

“Approximately how many new employees do you plan on hiring in the coming 12 months?”



EDUCATION LEVEL OF NEW HIRES

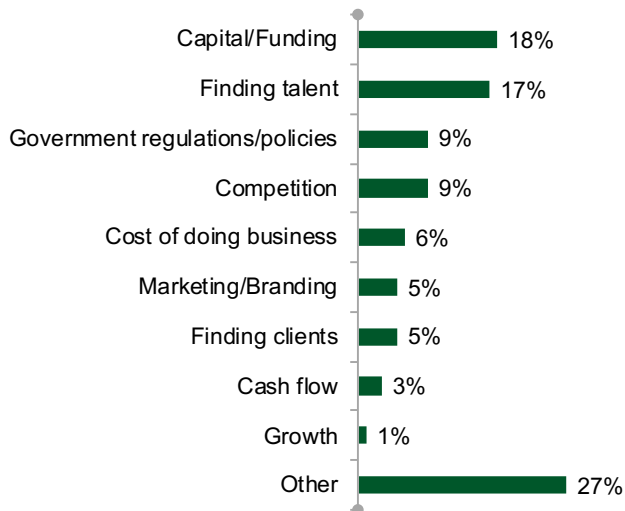
“What type of employees is your company hiring?”



Obtaining capital and finding good talent are the two biggest obstacles for start-ups

OBSTACLES FOR START-UPS OR BUSINESSES IN EARLY PHASES OF DEVELOPMENT

“In a few words, what do you think are the two biggest obstacles to success for a start-up in an early phase of development in your market?”

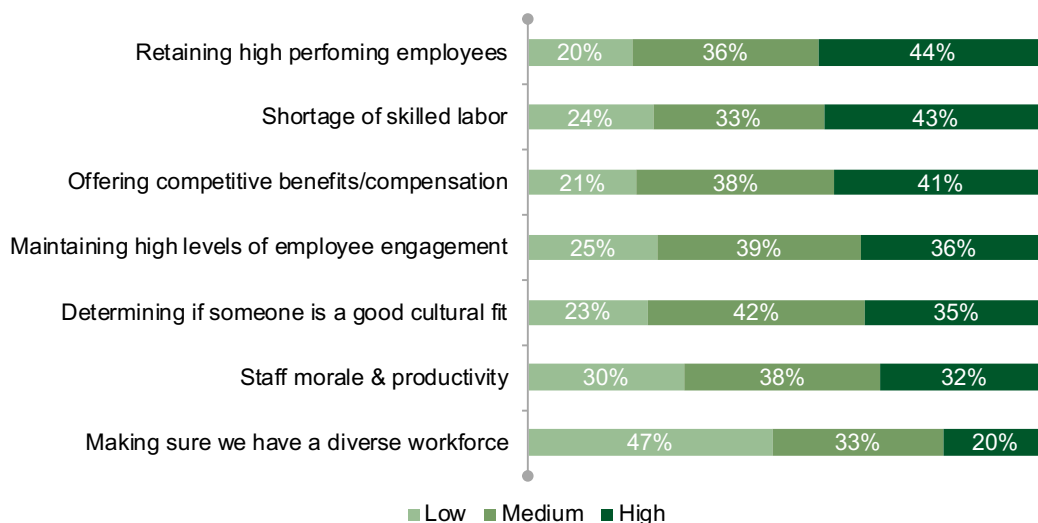


(only those with 10 or more mentions are shown)

Retention, the skilled labor shortage and offering competitive benefits are the biggest challenges to attracting/retaining employees

CHALLENGES FOR ATTRACTING/RETAINING QUALIFIED EMPLOYEES

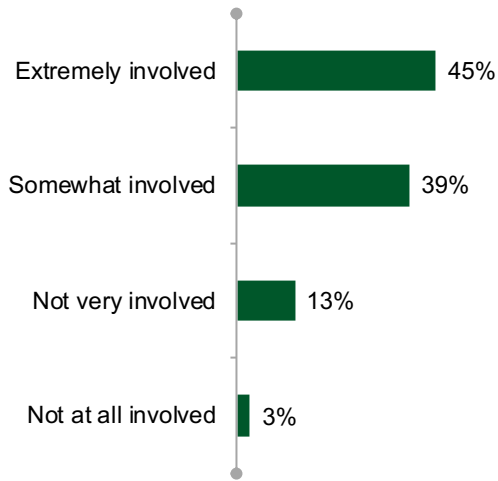
“Please rate as low, medium or high how big a challenge each of the following are for your company when it comes to attracting or retaining qualified employees.”



Eight of ten say their company is at least somewhat involved in solving industry problems and believe universities should be as well

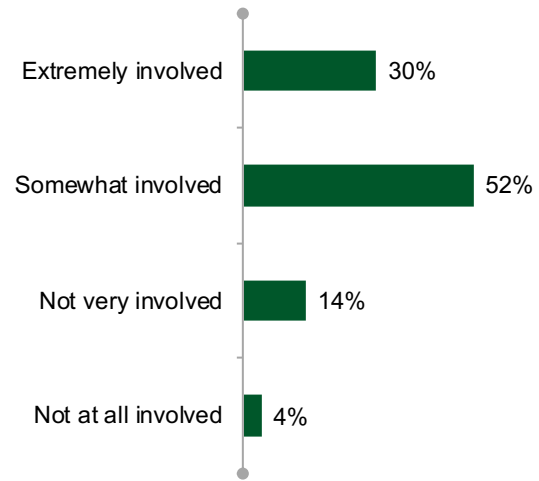
COMPANY INVOLVEMENT IN SOLVING INDUSTRY CHALLENGES

“How involved is your company in trying to find viable solutions for challenges within your industry?”



UNIVERSITY INVOLVEMENT IN SOLVING INDUSTRY CHALLENGES

“How involved do you think universities in Texas should be in trying to find viable solutions for problems in your industry?”

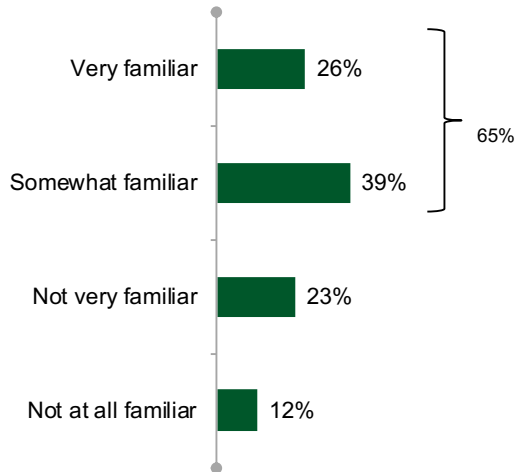


Thoughts on Business and University Research Partnerships

Two-thirds are familiar with the idea of partnering with a university on research; three-quarters have a positive impression of businesses who do

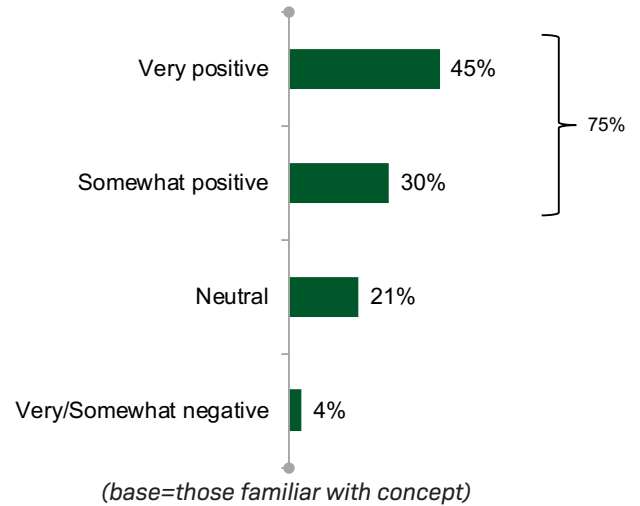
FAMILIARITY WITH CONCEPT OF PARTNERING WITH UNIVERSITIES ON RESEARCH

“How familiar are you with the concept of businesses partnering with universities on research?”



IMPRESSION OF BUSINESSES WHO PARTNER WITH UNIVERSITIES ON RESEARCH

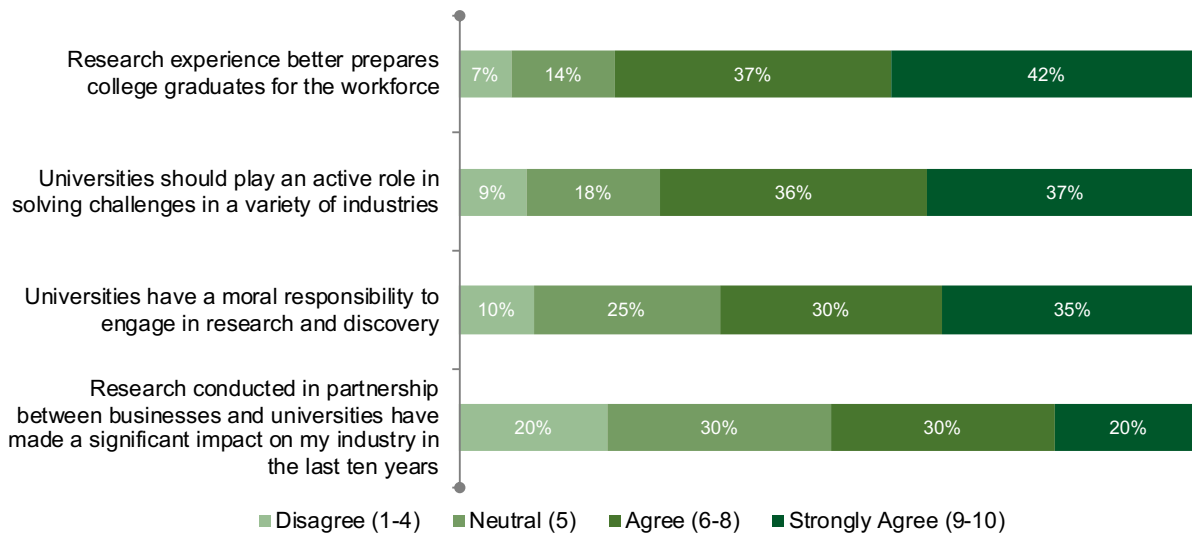
“What is your impression of businesses who partner with universities on research?”



Two-thirds believe universities have a moral responsibility to engage in research & discovery

STATEMENT AGREEMENT

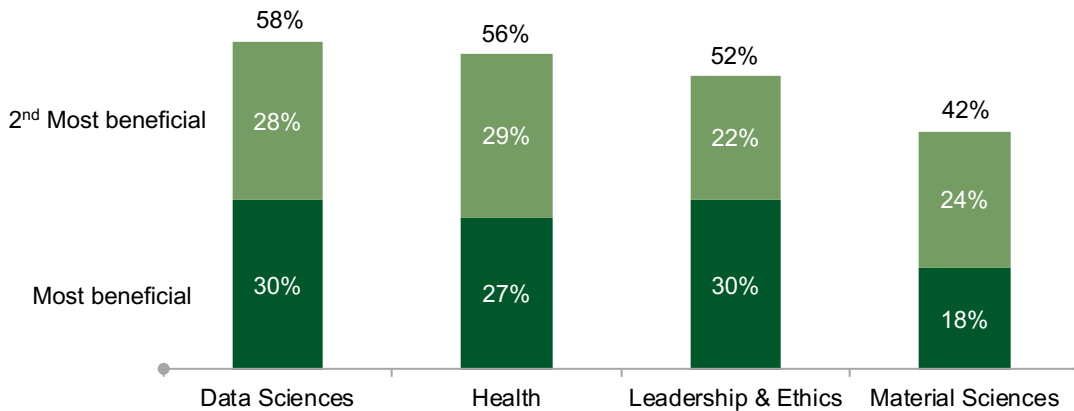
“On a scale of 1 to 10, where 1=strongly disagree and 10=strongly agree, how much do you agree or disagree with the following statements?”



Data Sciences and Health are the two research areas believed to be most beneficial to the economic landscape in Texas

MOST BENEFICIAL AREAS OF RESEARCH FOR TEXAS ECONOMY

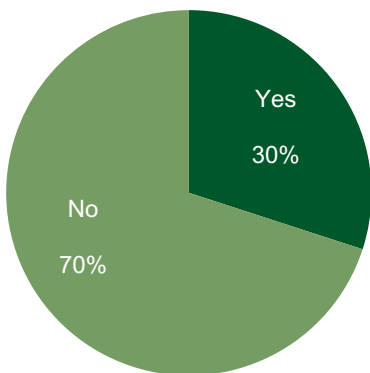
“Please rank each of the following areas of research in the order you believe would most benefit the overall economic landscape in Texas.”



Only 30% have partnered with a university on research and of those, half had done so once or twice in the last five years

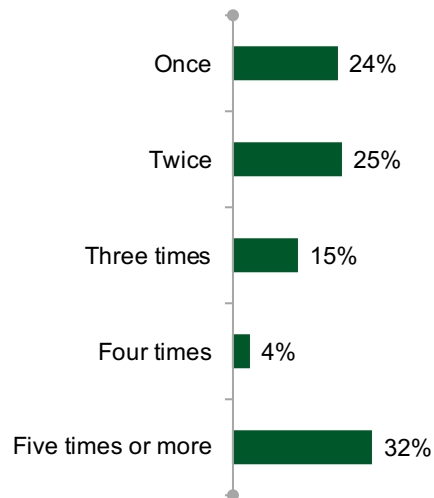
COMPANY HAS PARTNERED WITH UNIVERSITY ON RESEARCH

“Has your company ever partnered with a university on research?”



NUMBER OF TIMES COMPANY PARTNERED WITH UNIVERSITY IN LAST FIVE YEARS

“How often have you collaborated with universities in your community in the past five years for on-going research?”

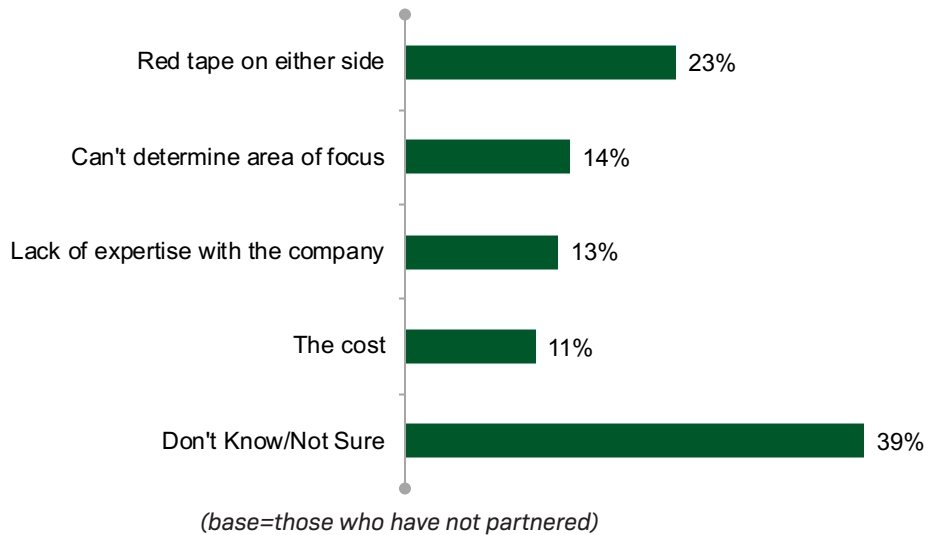


(base=those who have partnered)

Four of ten state they don't know what might be holding their company back from partnering with a university on research

CHALLENGES HOLDING BACK BUSINESSES FROM PARTNERING

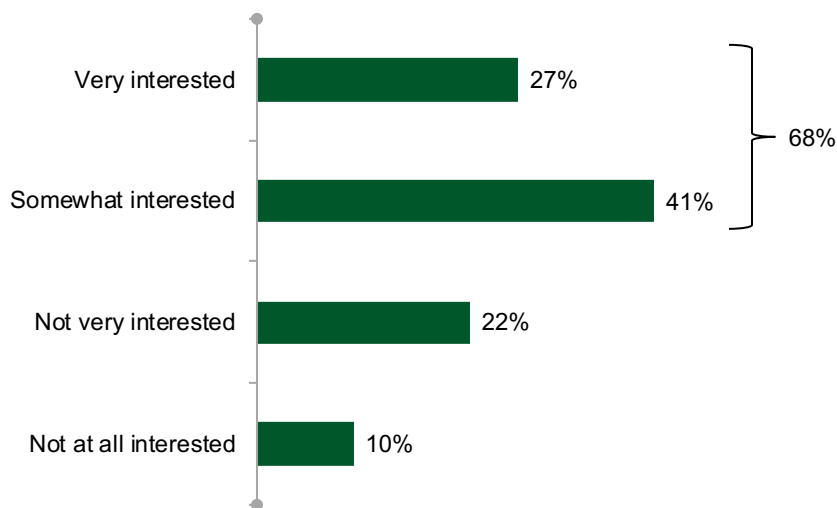
“What is the single biggest challenge facing your business that holds you back from engaging with a university on research in the future?”



Two-thirds believe their company would be interested in partnering with a university on research in the future

FUTURE INTEREST IN PARTNERING WITH UNIVERSITY

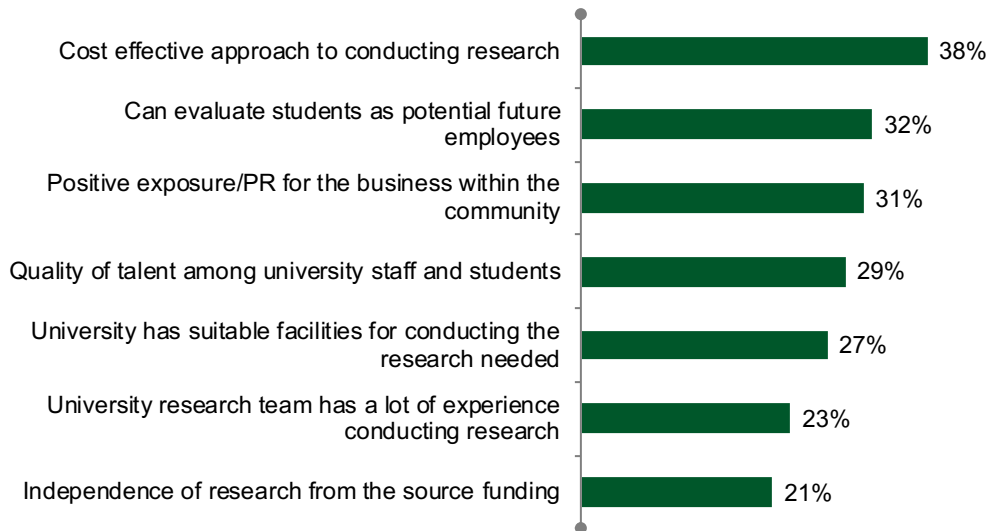
“What is the level of interest your business would have in partnering with a university on research in the future?”



No single benefit of this partnership stands out with businesses, but being a cost effective approach to research tops the list

BENEFITS OF PARTNERING WITH UNIVERSITY ON RESEARCH

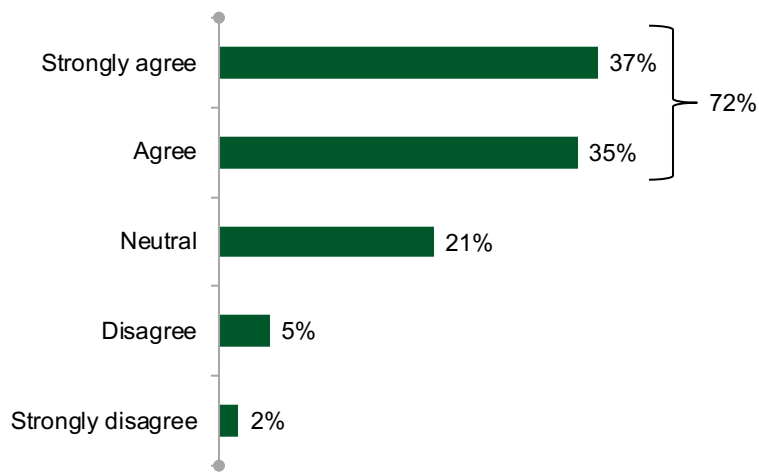
“What do you believe would be the top two perceived benefits for a company to partner with a university on research?”



Nearly three-quarters agree it is important for Texas to have more research universities in the state to be competitive

IMPORTANCE OF HAVING MORE RESEARCH UNIVERSITIES IN TEXAS

“How much do you agree or disagree with the following statement? It is important for Texas to have more research universities in the state to be competitive”



Market Comparison

How To Read Data Comparing Multiple Segments

Here is an example of data where we compare results across the four markets sampled. Results that reflect a statistically significant difference between segments will be highlighted.

The table below shows data from the question asking about familiarity of businesses partnering with universities on research.

FAMILIARITY OF PARTNERING WITH UNIVERSITIES ON RESEARCH

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Very familiar	20%	24%	30% AD	19%
Somewhat familiar	40	40	39	43
Not very familiar	24	23	22	27
Not at all familiar	16 C	13	9	11

How to read this table:

- Those in Houston are significantly more likely be very familiar with this concept than those in Austin or San Antonio.
- Those in Austin are significantly more likely to not be at all familiar with this concept than those in Houston.

Those in Houston have the least confidence in the 2020 outlook for their company, industry and the Texas economy

BUSINESS OUTLOOK FOR 2020

EXTREMELY/VERY CONFIDENT

“How would you characterize the business outlook for the next 12 months for each of the following?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Your company	71%	79% C	66%	84% AC
Your industry	71 C	69 C	59	82 ABC
The Texas economy	79 C	80 C	65	78 C
The U.S. economy	25	32 D	40 A	53 ABC

Those in Austin are significantly more likely than those in Houston to expect a revenue increase of 10% or more in 2020

EXPECTATIONS FOR COMPANY REVENUE FOR 2020

“In the next 12 months, what do you expect from your company revenue? Will it have ...”

	Austin (A) 139	Dallas (B) 139	Houston (C) 185	San Antonio (D) 81
Increased 10% or more	45% C	40%	34%	39%
Increased 5% to 9%	23	23	23	19
Increased 1% to 4%	15	24 A	22	26 A
Remained the same	14	8	15 B	14
Decreased 1% to 4%	1	4	3	1
Decreased 5% to 9%	1	0	2 B	0
Decreased 10% or more	1	1	1	1

There are no significant differences in the plan to hire more full-time employees across the four markets

PLAN TO HIRE NEW FULL-TIME EMPLOYEES

“Does your company plan on hiring new full-time employees in the next 12 months?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Yes	58%	56%	54%	51%
No	20	20	20	21
Don't know/Not sure	22	24	26	28

There is also no significant difference in the number of full-time employees they plan on hiring

AVERAGE NUMBER OF NEW FULL-TIME EMPLOYEES PLAN TO HIRE IN NEXT 12 MONTHS

“Approximately how many new employees do you plan on hiring in the coming 12 months?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Full-time	12%	31%	37%	8%
Part-time	2	23	14	8
Contractor	3	27	33	3

Employers in Dallas are significantly more likely than those in San Antonio to hire people with Master's degrees

EDUCATION LEVEL OF NEW HIRES

“What type of employees is your company hiring?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
High School Diploma or GED	38%	33% D	35% D	51%
Two year college degree	37	36	33	44
Four year college degree	82	79	82	72
Master's degree	36	37 D	35	21
Doctoral degree	11	11	15	8
Specialized certification	33	27	27	33

Austin and San Antonio have bigger challenges finding skilled labor

CHALLENGE IS HIGH WHEN ATTRACTING/RETAINING QUALIFIED EMPLOYEES

“Please rate as low, medium or high how big a challenge each of the following are for your company when it comes to attracting or retaining qualified employees.”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Shortage of skilled labor	55% BC	40%	35%	53% BC
Retaining high performing employees	45	45	44	34
Competitive benefits/compensation	41	40	46 D	33
Maintaining high level of employee engagement	36	35	39	29
Staff morale and productivity	28	34	34	35
Determining good cultural fit	28	34	38 A	38
Having diverse workforce	20	20	22	18

Companies in all four markets have similar levels of involvement when it comes to solving industry challenges

COMPANY INVOLVEMENT IN SOLVING INDUSTRY CHALLENGES

“How involved is your company in trying to find viable solutions for challenges within your industry?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Extremely involved	45%	44%	47%	40%
Somewhat involved	36	42	36	47
Not very involved	15	9	16	12
Not at all involved	4	5	1	1

Those in Houston are significantly more likely to believe Texas universities should be extremely involved in solving industry challenges

IMPORTANCE OF TEXAS UNIVERSITY INVOLVEMENT IN SOLVING INDUSTRY CHALLENGES

“How involved do you think universities in Texas should be in trying to find viable solutions for problems in your industry?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Extremely involved	24%	23%	38% AB	32%
Somewhat involved	51	53	50	57
Not very involved	22 CD	19 C	10	8
Not at all involved	3	5	2	3

Houston companies are significantly more likely to be familiar with businesses working with universities than those in Austin or San Antonio

FAMILIARITY OF PARTNERING WITH UNIVERSITIES ON RESEARCH

“How familiar are you with the concept of businesses partnering with universities on research?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Very familiar	20%	24%	30% AD	19%
Somewhat familiar	40	40	39	43
Not very familiar	24	23	22	27
Not at all familiar	16 C	13	9	11

Those in Dallas & Houston are significantly more likely to have a very positive impression of businesses who work with universities

IMPRESSION OF BUSINESSES WHO PARTNER WITH UNIVERSITIES ON RESEARCH

“What is your impression of businesses who partner with universities on research?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Very positive	32%	45% A	55% A	44%
Somewhat positive	36 C	29	22	33
Neutral	27	22	20	16
Somewhat negative	5	3	2	7 C
Very negative	0	0	1	0

Those in San Antonio are more likely than those in Austin and Houston to believe research better prepares college grads for the workforce

STATEMENT AGREEMENT

“On a scale of 1 to 10, where 1=strongly disagree and 10=strongly agree, how much do you agree or disagree with the following statements?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Universities should play an active role in solving challenges in a variety of industries	35%	33%	36%	39%
Research experience better prepares college graduates for the workforce	32	42	41	54 AC
Universities have a moral responsibility to engage in research and discovery	29	35	40 A	40
Research conducted in partnership between business and universities have made a significant impact on my industry in the last ten years	11	19	24 A	24 A

(rate 9,10 on a 10 point scale)

Different cities have different ideas of the type of research that would be most beneficial for the economic landscape in Texas

AREAS OF RESEARCH THAT WOULD BE MOST BENEFICIAL FOR ECONOMIC LANDSCAPE IN TEXAS

“Please rank each of the following areas of research in the order you believe would most benefit the overall economic landscape in Texas.”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Health	66% AD	44%	63% B	47%
Data Sciences	55	68 AC	49	61
Leadership & Ethics	51	51	50	56
Material Sciences	34	40	50 A	48

(Ranked 1st or 2nd)

Companies in Houston were more likely than those in Austin or Dallas to have partnered with a university on research

COMPANY HAS PARTNERED WITH UNIVERSITY ON RESEARCH

“Has your company ever partnered with a university on research?”

Austin (A)	19%
Dallas (B)	21
Houston (C)	41 AB
San Antonio (D)	30

NUMBER OF TIMES COMPANY PARTNERED WITH UNIVERSITY IN LAST FIVE YEARS

“How often have you collaborated with universities in your community in the past five years for on-going research?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Once	27%	28%	19%	21%
Twice	27	28	24	29
Three times	13	11	10	14
Four times	7	6	2	0
Five or more times	26	27	35	36

(note: very small sample sizes)

Businesses in Dallas and Houston are more likely to not know why they haven't partnered with universities than those in San Antonio

CHALLENGES HOLDING BACK BUSINESSES FROM PARTNERING WITH UNIVERSITIES

“What is the single biggest challenge facing your business that holds you back from engaging with a university on research in the future?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Red tape on either side	20%	21%	28%	30%
The cost	15	3	13	13
Can't determine area of focus	15	15	11	15
Lack of expertise with the company	11	13	11	17
Don't know/Not sure	39	48 CD	37 D	25

Those in Houston are much more interested in this partnership than those in Austin or Dallas

FUTURE INTEREST IN PARTNERING WITH UNIVERSITY

“What is the level of interest your business would have in partnering with a university on research in the future?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Very interested	18%	22%	37% AB	26%
Somewhat interested	42	42	42	39
Not very interested	29 C	24	16	25
Not at all interested	11	12 C	5	10

The cities have different perceived benefits that would come from this type of partnership

TOP BENEFITS OF PARTNERING WITH UNIVERSITY ON RESEARCH

“What do you believe would be the top two perceived benefits for a company to partner with a university on research?”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Quality of talent among university staff and students	33%	30%	24%	32%
University has suitable facilities for conducting the research	30 B	19	31 BD	18
Cost effective approach to conducting research	30	39	44 A	42
Positive exposure/PR for the business within the community	29	33	26	35
Independence of research from the source of funding	27	20	20	16
Can evaluate students as potential future employees	27	42 AC	28	35
University research team has a lot of experience conducting research	24	17	27 B	23

The majority of all markets agree that having more research universities in Texas is important to be competitive

IMPORTANCE OF HAVING MORE RESEARCH UNIVERSITIES IN TEXAS

“How much do you agree or disagree with the following statement? It is important for Texas to have more research universities in the state to be competitive”

	Austin (A)	Dallas (B)	Houston (C)	San Antonio (D)
Strongly agree	29%	36%	42% A	37%
Agree	42 C	37	30	33
Neutral	24	20	22	19
Disagree	3	5	5	7
Strongly disagree	2	2	1	4

Respondent Profile

Job Title & Industry

JOB TITLE

“What is your job title?”

C-Suite	16%
Owner/Partner	14
President/Principal	10
Director	10
EVP/SVP/VP	9
Managing Director/Partner	6
Manager	6
Business Development	2
Legal	2
Other	26

INDUSTRY

“What industry do you work in?”

Real Estate (commercial or residential)	15%
Construction/Building/Architecture	13
Energy	7
Banking/Finance	7
Marketing/Advertising	7
Health Care/Medical	4
Non-Profit	4
Travel (airline, hotel, motel, car rental, etc.)	4
Legal	4
Engineering	3
Transportation	3
Other	29

Company Revenue

“What was your company’s total sales (revenue) in 2018?”

	Total	Austin	Dallas	Houston	San Antonio
Under \$1 Million	29%	33%	30%	22%	26%
\$1 Million to under \$10 Million	30	22	34	32	40
\$10 Million to under \$20 Million	8	11	5	13	6
\$20 Million to under \$50 Million	6	10	5	5	4
\$50 Million to under \$100 Million	4	5	1	3	9
\$100 Million to under \$250 Million	5	5	7	4	4
\$250 Million to under \$500 Million	4	3	3	3	4
\$500 Million or more	14	11	13	19	6

Number Full-Time Employees

“Including yourself, how many full-time employees does your company have in total?”

	Total	Austin	Dallas	Houston	San Antonio
I am a sole proprietor	10%	15%	7%	9%	13%
1 to 4 employees	20	16	32	12	16
5 to 24 employees	21	17	15	24	34
25 to 49 employees	9	11	8	11	4
50 to 99 employees	8	11	5	9	7
100 to 499 employees	10	14	12	7	13
500 to 999 employees	4	3	5	5	2
1,000 or more employees	18	13	15	23	12

Company Ownership

“Would you describe the ownership of your company as:”

	Total	Austin	Dallas	Houston	San Antonio
Women-owned	18%	21%	16%	15%	26%
Minority-owned	17	19	14	18	22

Education

“What is the highest level of education you have completed?”

	Total	Austin	Dallas	Houston	San Antonio
High School or less	2%	0%	0%	2%	9%
Attended college but did not graduate	9	9	6	9	16
Graduated from two year college	3	1	5	2	2
Graduated from four year college	42	48	47	40	36
Post-graduate study without a degree	10	7	11	13	4
Master’s degree	27	24	27	29	25
Doctorate	7	11	4	6	7

Gender and Age

“What is your gender?”

“What is your age?”

	Total	Austin	Dallas	Houston	San Antonio
Male	68%	59%	67%	70%	73%
Female	32	41	31	30	27
Under 25	1%	0%	2%	0%	0%
25 to 34	5	9	6	6	0
35 to 44	13	16	6	17	11
45 to 54	29	30	38	23	32
55 to 64	29	29	25	31	28
65 and older	23	16	23	23	28

Contact

Amy Innerfield
Research Director
212-500-0609
ainnerfield@bizjournals.com