

**MICROSOFT DATACENTER GOES UNDERWATER**

Microsoft has placed its newest data center underwater, in the ocean off the coast of Scotland with the hopes that it will lead to similar sites in the future. The company ultimately sees the data center, which it calls Project Natick, as one of many "environmentally sustainable, prepackaged data center units" that could be sold in the near future.

For that to happen, the units would have to be ordered to size, quickly deployed and then left to operate lights out on the seafloor without maintenance for years. "That is kind of a crazy set of demands to make. Natick is trying to get there," said Peter Lee, corporate vice president of Microsoft AI and Research in a press statement.

The Project Natick data center has 12 racks containing a total of 864 servers and associated cooling system infrastructure. The submerging part of the project was handled by Naval Group, a 400-year old French company. Using a heat-exchange process mainly used for cooling submarines, Naval Group shipped data center to Scotland on a flatbed truck. In the water, the data center is partially submerged and held in place with 10 winches and cranes.

While being deployed, a remotely operated vehicle went down 117 feet to the seafloor and grabbed hold of a waiting cable containing fiber optic and power wiring. Once grabbed and plugged in, the data center came to life.

"The most joyful moment of the day was when the data-center finally slipped beneath the surface on its slow, carefully scripted journey," says Ben Cutler, who led the Project Natick team.

Environmental researchers have called data centers a "latent environmental threat," with improved efficiency being subsequently made irrelevant through yet another increase in user demand. A government study in 2016 showed data centers using 70 billion kWh of electricity in 2014, which is equal to 1.8 percent of the country's total energy consumption.

Microsoft has faced criticism for its handling of data centers in the past. In 2011, the company faced a stand-off with the town of Quincy, Washington, when it wasn't using the amount of energy it had projected. The new data centers could offer a way around dealing with burdensome local politics in the first place.

Source: [BBC](#)

**TEXAS DECEMBER ECONOMIC NUMBERS**

Industry	Dec 2018	Monthly Change	Annual Change	Annual % Change
<b>Total Nonagricultural</b>	<b>12,744,100</b>	<b>38,000</b>	<b>391,800</b>	<b>3.2</b>
Private	10,798,400	35,400	388,800	3.7
<b>Goods-Producing</b>	<b>1,946,400</b>	<b>10,900</b>	<b>126,700</b>	<b>7.0</b>
Mining & Logging	271,100	3,300	41,300	18.0
Construction	778,600	4,500	46,800	6.4
Manufacturing	896,700	3,100	38,600	4.5
<b>Service-Providing</b>	<b>10,797,700</b>	<b>27,100</b>	<b>265,100</b>	<b>2.5</b>
Trade, Transportation & Utilities	2,553,100	4,200	82,700	3.3
Information	195,900	-1,600	-4,200	-2.1
Financial Activities	784,400	400	19,900	2.6
Professional & Business Services	1,767,500	100	75,600	4.5
Education & Health Services	1,723,700	7,900	49,400	3.0
Leisure & Hospitality	1,385,200	10,200	25,500	1.9
Other Services	442,200	3,300	13,200	3.1
Government	1,945,700	2,600	3,000	0.2

Source: Texas Workforce Commission Texas Labor Market Review. Information is the latest available at printing time. Seasonally adjusted.

**DECEMBER 2018 EMPLOYMENT**

Not Seasonally Adjusted	Civilian Labor Force	Employed	Unemployed	Rate
US	163,240,000	156,945,000	6,294,000	4.0%
TX	13,902,500	13,387,400	515,100	3.7%
D/FW Region	4,020,344	2,536,915	129,772	3.9%

Source: Texas Workforce Commission Texas Labor Market Review

**U.S. ECONOMIC NUMBERS**

Long Term Unemployed (27+ wks.) % of unemployed 19.3%	Jan '19	1,252,000
Consumer Price Index	Dec '18	-0.1%
Payroll Employment	Jan '19	+304,000 (p)
Average Hourly Earnings	Jan '19	+\$0.03 (p)
Producer Price Index	Dec '18	-0.2% (f)
Employment Cost Index	4th Qtr '18	+0.7%
Productivity	3rd Qtr '18	+2.2% (r)
U.S. Import Price Index	Dec '18	-1.0%
U.S. Export Price Index	Dec '18	-0.6%

(p) preliminary; (c) corrected; (f) final demand; (r) revised - Source: U. S. Department of Labor. Information is the latest available at printing time.

INTERLINK  
P.O. Box 610246, DFW Airport, TX 75261-0246  
Email: [candy@interlink-ntx.org](mailto:candy@interlink-ntx.org)  
Website: [www.interlink-ntx.org](http://www.interlink-ntx.org)

