

Market Briefing

2017 Issue 1 News from the month of December 2016



BOSCH
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Bosch

Dremel

RotoZip

Vermont American

CST/berger

David White

freud

Sia

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- Single-family starts -4.1%

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- NE 2.8%, MW -12.1%, W -6.1%, S -4.0%
- Single-family permits 0.5%

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- NE Unchanged, MW 43.8%, W 7.7%, S -3.1%

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Robert Bosch Tool
Corporation

1800 W Central Rd
Mount Prospect, IL
60056 USA

www.boschtools.com

U.S. ECONOMY

EXCHANGE RATES DECEMBER 30, 2016

Euro	1 Euro = \$1.055	\$1.00 = 0.9502 Euros
Canadian Dollar	1 CAD = \$0.743	\$1.00 = 1.3474CAD
Japanese Yen	1 Yen = \$0.009	\$1.00 = 117.005 Yen
Chinese Yuan	1 Yuan = \$0.144	\$1.00 = 6.945 Yuan
Mexican Peso	1 Peso = \$0.048	\$1.00 = 20.732 Pesos

MARKET WATCH DECEMBER 30, 2016

DOW	19,763	5.4%
NASDAQ	5,383	2.6%
S&P 500	2,239	3.4%

All three indexes recorded gains for the month of December as well as for the full year, as the DOW flirted with 20,000 throughout December. The DOW closed out the year at 19,763, gaining 639 points for the month and 13.5% for the year, the NASDAQ closed at 5,383, up 59 points for the month and 7.5% for the year and the S&P, the index most closely followed by economists, closed at 2,239, up 40 points for the month and 9.4% for the year.

CONSUMER CONFIDENCE RISES TO 113.7

The New-York based Conference Board's Consumer Confidence Index rose to 113.7 in December after jumping to an upwardly revised 109.4 in November. The Present Situation Index dropped to 126.1 from an upwardly revised 132 in November. The Expectations Index rose sharply to 105.5 from an upwardly revised 94.4. The big increase in Expectations was responsible for the overall increase in the Index, as consumers' view of the present situation deteriorated somewhat. The Conference Board said that the post-election surge in optimism was most pronounced among older consumers. Wells Fargo noted that the overall level of confidence is at a level typically seen near the peak of business cycles. Economists say a level of 90 indicates that the economy is on solid footing and a level of 100 or more indicates growth. Analysts caution that the real driver behind consumer spend-

ing is income growth and that labor market trends are a more accurate predictor of consumer behavior.

CONSUMER SPENDING RISES 0.2%

Consumer spending rose 0.2% in November after rising an upwardly revised 0.4% in October. It was the weakest showing since a 0.1% increase in August. Core consumer spending, which is adjusted for inflation, increased 0.1% in November after rising by the same percentage in October. Household income failed to rise for the first time in nine months, suggesting that the economy slowed in the fourth quarter. Economists say the moderation in consumer spending is likely to be temporary, and expect economic growth to accelerate in 2017. The personal consumption expenditures (PCE) price index was unchanged in November after edging up 0.1% in October. The core PCE price index fell to 1.6% from 1.8% in October. In the 12 months through November the PCE price index rose to 1.6%, the biggest year-over-year gain since October 2014. Consumer spending is closely watched by economists because it accounts for 70% of U.S. economic activity.

CONSUMER PRICES RISE 0.2%

The Consumer Price Index (CPI) rose 0.2% in November after rising 0.4% in October and was up 1.6% from October 2015. Core prices, which strip out volatile food and energy costs, also rose 0.2% in November after rising 0.1% in October and were up 2.1% from November 2015. Core inflation has been in a range between 2.1% and 2.3% since December of last year. Prices rose for gasoline, rent and used cars, but fell for groceries and clothing.

UNEMPLOYMENT RISES TO 4.7%

The unemployment rate ticked up to 4.7% in December from a nine-year low of 4.6% in November as more people entered the labor force, which is viewed as a sign of confidence in the jobs market. The economy added 156,000 jobs in December and October and November's data was revised to show 19,000 more jobs added than previously reported. Job growth for December was below economists' expectations. The economy created a total of 2.16 million jobs in 2016. Average hourly earnings increased 10 cents or 0.4% after slipping 0.1% in November. Average hourly earnings over the past 12 months

were up 2.9%, the largest increase since June 2009, and up from 2.5% in November. Employment growth in 2016 averaged 180,000 jobs per month, down from an average gain of 229,000 per month in 2015. The slowdown in job growth is consistent with a labor market that is statistically near full employment. There has been an increase in employers saying they cannot fill vacant positions because they cannot find qualified workers. The worker shortage in construction has been growing over the past year. December's job gains were broad, with manufacturing payrolls rising 17,000 after declining for four straight months. Construction payrolls fell 3,000 in December after three consecutive months of increases. Retail sector employment rose 6,300 after increasing 19,500 in November. Government employment increased 12,000 in December.

DURABLE GOODS ORDERS FALL 4.6%

Durable goods orders fell 4.6% in November; economists had been expecting a decline of 4.8%. Orders excluding transportation, which can be a highly volatile category, rose 0.5%, which beat economists' expectations. Capital goods orders for nondefense items excluding aircraft, which is seen as a proxy for business spending, increased by 0.9%, more than twice the growth that was expected. Shipments of non-defense capital goods excluding aircraft, which are used in the calculation of GDP, rose 0.2% in November after falling 0.3% in October. The durable goods report is often both volatile and subject to sharp revisions.

CHICAGO PMI FALLS TO 54.6

The Chicago PMI fell 3.0 points to 54.6 in December after rising to 57.6 in November. It was the lowest level for the index since January 2015. However, the PMI averaged 54.3 in the fourth quarter, the highest in two years. The December decline was led by a slowdown in New Orders, which fell 6.7 points to 56.5. Production fell to its lowest level since October, and Order Backlogs fell back into contraction. Prices Paid rose 1.2 points to 58.0 in December, the indicator's second highest reading of 2016. Panelists reported that the prices of metals, plastics and transportation costs were all increasing. The special question asked of the panel in November was how they expected the new administration's policies to impact their business in 2017. More than half expected their busi-

ness to prosper, citing anticipated tax reforms and deregulation. Most respondents remained upbeat heading into the new year. The December reading marked the seventh month of expansionary business activity in the U.S.

WHOLESALE PRICES RISE 0.4%

The Producer Price Index (PPI) rose 0.4% in November, much more than the forecast of a 0.1% increase and the largest gain since June. Wholesale prices rose 1.3% during the 12 months through November, the biggest gain posted since November 2014. Core PPI, which strips out the volatile food and energy categories as well as trade services, rose 0.2% for the month and was up 1.8% year-over-year. The report added to other signals that inflation is firming up as Americans pay more for housing and medical care. The PPI for inputs to construction fell 0.3% in November but was up 0.8% from November 2015.

Q3 GDP RISES 3.5%

GDP rose 3.5% in the third quarter, up from the second reading of 3.2% and the fastest pace in two years. GDP increased just 1.4% in the second quarter. The third and final estimate of GDP is based on more complete source data than was available earlier. Nonresidential fixed investment, personal consumption expenditures (PCE), and state and local government spending increased more than previously estimated. Residential fixed investment subtracted from GDP. Consumer spending grew at a 3% annual rate, up from the 2.8% pace estimated previously. The overall picture of economic growth remains the same. Real gross domestic income increased 4.8% in the third quarter after rising just 0.7% in the second. Growth for the entire year is likely to be around 1.5%, which would be the weakest performance since the economy shrank 2.8% in 2009 at the depths of the Great Recession. The economy has not grown more than 3% since 2005. The nonpartisan Congressional Budget Office projects GDP will grow about 2% annually through 2026. The Atlanta Fed, which produces the GDP Now forecast, downgraded its view for fourth quarter GDP, lowering it to 2.4% from 2.6% first forecast after retail sales were weaker than expected.

JOB OPENINGS SLIP 1.8%

Job openings slipped 1.8% to 5.5 million in October, according to the Labor Department's monthly Job Openings and Labor Turnover Survey, or JOLTS. Hiring also fell to just under 5.1 million, while the number of people quitting declined by 66,000 to about 3 million. The quit rate has stubbornly remained at 2.1% for five consecutive months. Quits are typically voluntary separations, and an increase in quits generally indicates that people are more confident about their ability to find another job. Layoffs remained exceptionally low. Wells Fargo says that in a tight labor market with slow productivity growth, employers would seem to be trying to hold on to existing workers. Although job growth picked up in the third quarter, hiring is expected to continue at a moderate pace in the coming months. The JOLTS report is one of Fed Chair Janet Yellen's preferred economic indicators.

FED RAISES INTEREST RATES

The Federal Reserve raised interest rates by 0.25% at their meeting in December. The increase was widely expected. Fed Chairman Janet Yellen said the increase was a reflection of the confidence they have in the progress the economy has already made as well as confidence that progress will continue and the economy will continue to strengthen. The Federal Reserve also increased their outlook on the number of interest rate hikes anticipated for 2017 from two to three, although Yellen stressed that the pace of those rate increases would be moderate and that the Fed expects only moderate economic growth of 2.1% for 2017, with unemployment at 4.5% and core inflation rising to 1.9%. Some analysts viewed the Fed's plans for a possible three rate increases as too aggressive based on their growth projections.

NABE ECONOMIC FORECAST

The U.S. economy will grow 2.2% in 2017, according to economists surveyed by the National Association for Business Economics. Those surveyed also predicted a 4.7% unemployment rate and an increase of 2.3% for consumer prices. While an improvement over this year's expected anemic growth of 1.6%, that's still slow by historical standards. GDP Annual Growth Rate (AGR) in the

United States averaged 3.2% from 1948 until 2016, reaching an all-time high of 13.4% in the fourth quarter of 1950 and a record low of -4.10% in the second quarter of 2009, according to the Congressional Research Service. But the business economists say Americans should get used to slower growth being the new normal. A full 80% of those surveyed believe the potential growth rate of the American economy will remain at 2.5% or lower over the next five years. Still, the economists see the risk of a recession as remote; 90% expect the current economic expansion to continue until at least 2018. They expect employers to add an average 168,000 jobs a month in 2017, down from 180,000 a month to date in 2016. Two-fifths of the economists say increased spending on roads, bridges and other infrastructure projects would be the best way to boost economic growth over the next four years; 36% chose tax reform, which usually includes reducing the high official U.S. corporate tax rate in exchange for closing tax loopholes. The association surveyed 52 professional economists between the end of October and mid-November. Those who responded before the presidential election were allowed to send in new estimates after Trump's unexpected win.

KIPLINGER INFLATION FORECAST

Kiplinger expects inflation to rise to 2.5% by the end of 2017, up from 2.0% at the end of 2016. Core inflation, which excludes the volatile food and energy categories, is expected to end 2017 at 2.3%, up just slightly from the 2.2% they expect for 2016. Despite the Fed's projections of three rate increases in 2017, Kiplinger expects the Fed to raise rates just twice during the year, with a quarter-point increase each time. Rising costs for health care, dining out, health insurance and shelter are expected to contribute to the increase in inflation.

TRUMPONOMICS

Financial analysts are rewriting their expectations for 2017 and beyond, saying everything changed with Donald Trump's unexpected victory. In general, economists are expecting more robust growth under the Trump administration and a Congress with a Republican majority in both the House and the Senate, which is expected to end years of legislative gridlock. Trump's disdain for red tape and cumbersome regulations is generally viewed

favorably by business leaders, less so by environmentalists. His tax plans would slash the corporate tax rate and do away with regulations businesses say make it hard for them to grow. Trump also plans to spend \$1 trillion over ten years to rebuild the nation's crumbling infrastructure.

TOP TECH LEADERS MEET WITH TRUMP

President-elect Donald Trump met with technology industry leaders to discuss jobs, immigration and China, as well as internet security and regulation. Trump tried to strike a conciliatory tone, and assured the tech companies that he wanted them to succeed and would make fair trade deals that would make it easier for them to trade across borders. Apple, Alphabet (Google's parent company), Microsoft, Amazon and Facebook are five of the seven most valuable companies in the U.S., yet they employ fewer people than big firms in other industries, and many employees work abroad. The five together employ about 600,000 people worldwide; Walmart Stores employs 1.5 million people in the U.S. alone. Trump has made it clear he wants there to be "consequences" for U.S. companies that move jobs overseas, which has many tech giants very nervous. Tech execs uniformly opposed Trump during the campaign, and many openly supported Hillary Clinton.

CEOS ADVISE ON JOB CREATION

President-elect Donald Trump announced the creation of an economic advisory council filled with heads of major corporations, including Walmart CEO Doug McMillon, as well as the CEOs of Walt Disney, IBM, General Motors and Blackstone. Trump says his administration is committed to drawing on private sector expertise and cutting government red tape.

HOUSING & CONSTRUCTION

HOUSING STARTS FALL 18.7%

Housing starts fell 18.7% in November to a seasonally adjusted annual rate of 1.09 million units after rising to 1.32 million units in October. **Single-family starts fell 4.1%** to a seasonally adjusted annual rate of 828,000

units after rising to 869,000 in October. Year-to-date single-family starts were up 9.6%. Multifamily starts plunged 45.1% to 262,000 units after rising 68.8% to 454,000 units in October. **Starts fell in all regions.** Starts were down 52.1% in the Northeast, 14.2% in the Midwest, 9.3% in the South and 22.1% in the West. NAHB says that strong builder confidence, a firming job market, growing economy, rising household formation and a reduction in red tape and regulations should keep the housing recovery on track into next year.

BUILDING PERMITS FALL 4.7%

Building permits fell 4.7% in November to a seasonally adjusted annual rate of 1.20 million after inching up to 1.23 million in October. **Single-family permits rose 0.5%** to a rate of 762,000 and multifamily permits fell 3.3% to 467,000. **Regional permit issuance was mixed.** Permits fell 12.1% in the Midwest, 6.1% in the West and 4.0% in the South. Permits rose 2.8% in the Northeast. Permits have been above the one million level for seventeen consecutive months, the longest stretch in seven years.

NEW-HOME SALES RISE 5.2%

Sales of new single-family homes rose 5.2% in November to a seasonally adjusted annual rate of 592,000 units after falling to 563,000 units in October. The inventory of new homes for sale rose to 250,000 in November after rising to 246,000 in October, a 5.1-month supply at the current sales pace, down from a 5.2-month supply in October. **Regional sales were mixed.** Sales increased 43.8% in the Midwest and 7.7% in the West. Sales were unchanged in the Northeast and fell 3.1% in the South. NAHB expects an increase in new home construction this year, fueled by a growing economy and solid job growth, as long as prospective first-time buyers have access to affordable home loans. Sales of new homes are tabulated when contracts are signed and are considered a more timely barometer of the housing market than purchases of previously-owned homes, which are calculated when a contract closes.

EXISTING HOME SALES RISE 0.7%

Existing home sales rose 0.7% in November to a seasonally adjusted annual rate of 5.61 million from a down-

wardly revised 5.57 million in October. November's sales pace was the highest since February 2007, and was up 15.4% from November 2015. Total housing inventory at the end of November dropped 8.0% to 1.85 million existing homes available for sale, 9.3% lower than in November 2015 and a 4.0-month supply at the current sales pace, down from a 4.3-month supply in October and unchanged from November 2015. Housing supply is very tight, which is impacting affordability and driving up rents as well. The median price of an existing single-family home was up 6.8% from November 2015. Wells Fargo notes that as the population has aged, fewer people are moving, lessening turnover and making people less willing to part with their current home. Also the number of homes that have been converted to rentals has reduced the supply of fixer-uppers on the market that provided a gateway to ownership for many first-time buyers. Inventory has fallen year-over-year for 18 consecutive months. **Regional sales were mixed.** Sales rose 8.0% in the Northeast and 1.4% in the South. Sales fell 2.2% in the Midwest and 1.6% in the West.

BUILDER CONFIDENCE JUMPS TO 70

Builder confidence jumped seven points in November to 70 after falling to 63 in October, according to the HMI (National Association of Home Builders/Wells Fargo Housing Market Index). The component measuring buyer traffic rose six points to 53, the first time this gauge has been over 50 since October 2005. The index gauging current sales conditions rose seven points to 76 and the index charting sales expectations in the next six months jumped nine points to 78. The three-month moving averages for HMI scores rose six points in the Northeast (51), three points in the Midwest (61), two points in the West (79) and one point in the South (67). It was the twentieth consecutive month the HMI remained above 50 and the highest level of confidence since July 2005. Analysts say that the big 7-point jump can largely be attributed to a post-election bump, as builders are reportedly hopeful that the new administration will reduce regulatory burdens that have been weighing on housing affordability. Unseasonably mild weather during November most likely also boosted sentiment.

MORTGAGE RATES RISE

The 30-year mortgage rate rose to 4.32% at the end of December after rising to 4.03% in November. In November of last year 30-year rates averaged 4.01%. Though still extremely low by many measures, rates have gone up more than half a point since Trump's election, and as of the end of December were at the highest level since October of 2014.

FREDDIE MAC MORTGAGE RATES REVIEW

The biggest economic surprise for 2016 was the decline in interest rates throughout most of the year. In December of 2015, the Federal Reserve Open Market Committee (FOMC) raised the federal funds rate for the first time since 2006 and most analysts expected to see more increases in 2016. However, concerns about overseas economic growth, particularly in Europe, contributed to declines in mortgage rates to start the year and they continued to drift down through early summer. But the late June Brexit vote shook up markets, sending the 10-year Treasury to its lowest-ever yield and pushing 30-year fixed mortgage rates below 3.5%. Rates remained low throughout the rest of the summer and into early fall. At the beginning of September, rates drifted upward until they stood at 3.54% on the Tuesday before the U.S. election. Interest rates rose substantially following the election, increasing by more than 0.5% in just a few weeks.

FREDDIE MAC HOUSING FORECAST

Over the next two years, Freddie Mac expects that the economy will keep growing at a modest pace, inflation will pick up and the labor market will stay at full employment. Interest rates will gradually rise as the Federal Reserve continues on its path of policy normalization. Housing markets will slow a bit in 2017 but they will recover after they absorb the initial shock of higher interest rates. Mortgage origination activity will slow significantly in 2017 as refinancing activity slows. In 2018, mortgage origination activity will increase slightly, but the composition will shift to a purchase-dominated market last seen in the 1990s.

WELLS FARGO HOUSING OUTLOOK

The higher-interest rate environment largely expected to prevail in 2017 will create some challenges for the

housing market, according to the 2017 Housing Market Outlook from Wells Fargo. Housing affordability, while near historic highs, has been falling as home prices have risen much faster than incomes in recent years. The inevitable rise in mortgage rates will further reduce affordability. The strengthening of the dollar will also reduce sales to international buyers. Within starts, Wells Fargo says there is a subtle shift toward less expensive homes. Builders, particularly in the South, the nation's largest housing market, are focusing more intently on homes priced at or below the median new home sales price, currently at a near historic premium relative to existing homes.

POWER TOOL INDUSTRY

STANLEY BLACK & DECKER

SB&D is selling the majority of their lock and door security business to Swiss company dormakaba for \$725 million. They are keeping the electronic security and automatic doors business. President and CEO James Loree said that the commercial electronic security business is inherently linked to the digital world and provides both stable recurring revenue and an opportunity to develop and market high growth high value customer solutions. The automatic door business also offers attractive growth opportunities. Dormakaba says the acquisition will make them a top-three provider to the American market.

George Buckley became the new chairman of SB&D January 1, succeeding John Lundgren, who retired in July as CEO after more than 12 years with the company, and stayed on as chairman until the end of the year. Lundgren will serve as a special adviser to the company through April 30, 2017. Buckley has been with the board since March 2010 and had been a director since 2006. He was previously CEO of 3M and Brunswick Corporations. Buckley actually began his career as an electrician apprentice in SB&D's Sheffield, United Kingdom plant, where his family also worked.

TTI/TECHTRONIC INDUSTRIES

Horst Pudwill, now 71 and founder of Techtronics, has no plans to retire, according to a recent interview in *South China Morning Post*. His 39-year-old son Stephan Pudwill, who is now vice chairman, says they are not going to let the senior Pudwill retire, he is too important to the business. Pudwill Senior says he wants to remain involved and see TTI double from its current \$5 billion value.

TRIMBLE

Trimble is collaborating with Umbra to explore the use and integration of Umbra 3D graphics optimization technology as part of Trimble's mixed-reality solutions to process and optimize complex 3D Building Information Models (BIM). The collaboration with Umbra is part of Trimble's mixed-reality pilot program and solutions strategy designed to enable users to gather, analyze, visualize and share spatial information in a mixed-reality environment.

RETAIL

RETAIL SALES RISE 0.1%

Retail sales inched up 0.1% in November after rising a downwardly revised 0.6% in October and were up 3.8% year-over-year. Economists had been expecting sales to rise 0.3%. Online retail sales rose a seasonally adjusted 0.1% from October but were up 11.9% compared to November 2015. Core retail sales, which exclude automobiles, gasoline, building materials and food services, rose 0.9% in October after rising an upwardly revised 1% in September and were up 4.3% from October 2015. Core retail sales correspond most closely with the consumer spending component of GDP. Sales at building material, garden equipment and supplies dealers were up 0.3% in November after rising 1.1% in October and were up 4.3% from November 2015. Data from Redbook Research showed that retail sales were sluggish during the first two weeks of November, but picked up substantially through the Thanksgiving weekend. Retail sales account for about one-third of all spending, with services making up the other two-thirds.

PRELIMINARY HOLIDAY SHOPPING RESULTS

A jump in consumer spending in the final stretch of December significantly offset a slow start to the U.S. holiday shopping season, and is likely to help many retailers beat sales forecasts, according to the National Retail Federation (NRF). Spending over the Thanksgiving weekend in November fell 3.5% from 2015 despite a strong jump in online sales on Cyber Monday, according to the NRF. Brick-and-mortar sales in the week ending December 24 rose 6.5% year-over-year after having fallen for the rest of the month, according to data from analytics firm RetailNext. Strong demand for furniture, home furnishings and men's apparel from the start of November through Christmas Eve pushed U.S. retail sales up 4%, higher than the previously expected 3.8%, according to data from MasterCard's holiday spending report released during the last week in December. The report, which tracks spending by combining sales activity in MasterCard's payments network with estimates of cash and other payment forms, offers an early look into how the holiday season shaped up. Official results will not be available until later in January.

MOODY'S RETAIL FORECAST

Moody's forecasts retail sales will increase 3% to 4% in 2017 and operating income will be up 4% to 5%.

Moody's believes that Dollar stores will be among the top performers. They also believe that home improvement stores such as Home Depot and Lowe's will benefit from the continuing robust recovery of the housing market. Moody's expects Walmart to continue to see bottom-line pressure as wage hikes and investments in future growth squeeze profits.

FITCH FORECAST

Fitch projects U.S. retail sales, excluding automobiles and gasoline, will grow 3% to 4% in 2017, which is in line with the 2016 forecast of 3.8% growth. Facing a shift in customer shopping habits and attitudes toward discretionary expenditures, many retailers have responded by moving to omnichannel models that holistically serve the customer across their online and bricks-and-mortar presence. "Spending focus on services and experiences appears here to stay, so the dividing line between best-in-

class retailers and market share donors is increasingly going to be determined by which retailers can cater to the evolving landscape," said David Silverman, senior director, U.S. Corporates. "Those that find success have invested in the omnichannel model and have differentiated their products and customer service to draw customers in."

THE HOME DEPOT

Chain Store Age named Home Depot as one of the top ten brands to watch in 2017, saying that THD is growing sales faster and is more profitable than rival Lowe's.

LOWE'S

Over the last half of 2015 Lowe's Canada performed an in-depth analysis aimed at redefining the market segments and better targeting customers. They have now adopted a new structure comprised of four business units: Big Box, Proximity, Pros and Contractors and Affiliate Dealers. RONA is planning a number of new growth and marketing projects in 2017. Since Lowe's acquired RONA in May 2015 they've opened 13 new stores.

WALMART

Walmart offered shoppers a Christmas Eve store pickup for eligible orders placed online by 6 p.m. local time on December 23rd. Walmart also launched a dedicated online destination so that customers could easily find items that were locally available for same-day pickup in the days leading up to Christmas. Walmart closed stores at 6 p.m. Christmas Eve, two hours earlier than in 2015.

Walmart is testing a 16-foot tall tower that serves as a distribution station for online orders being picked up in the store by customers. The tower works much like an ATM or vending machine for customers who have ordered general merchandise online. Shoppers enter their name into a kiosk, get an order number, scan the receipt at the machine and then pick up their product. The machine can hold up to 300 packages that can be as big as 24" high or 30" long. Larger packages must be delivered by employees, but so far about 80% of the store's pickup orders are small enough to be stored in the machine. The biggest issue right now is that the device is not yet fully automated; a Walmart employee must help customers collect their

packages. Walmart is trying to cut down their average pickup time of 10 to 15 minutes; so far with the dispenser they are at about 6 minutes. Retailers refer to the final step of the process that gets products into the hands of the customer as “the final mile.” Walton College of Business says that that last leg of product delivery is expensive, representing about 30% of total logistics costs. Having customers pick up purchases in the store is much more cost effective because packages can be delivered directly to the store. Right now the device is in the early stages of testing in Rogers, Arkansas.

SEARS

Sears revenue fell to \$5.0 billion in the third quarter from \$5.8 billion last year. Comp store sales dropped 7.4%, down 10% at Sears and 4.4% at Kmart. Analysts note that Sears is selling off assets in order to fund operations, and speculate that the end is in sight. Sears has a \$500 million term loan maturing in July 2017, and some retail analysts expect them to file for bankruptcy sometime in the summer. Sears CEO Eddie Lampert insists Sears is fully committed to restoring profitability. Lampert says Sears is on the way to a membership-based retailer relying on the Shop Your Way program and smaller stores.

Sears will start closing more stores in January, with about 30 Kmart and Sears stores expected to close. The latest round of store closures is in addition to those announced in September. That will mean that Sears will have closed more than 200 stores in the current fiscal year, which ends January 31, 2017.

Sears Holdings and Uber are expanding their Rider Rewards program to 23 new markets. The service launched in fall 2016 in New York City and Chicago. It allows members of Sears Shop Your Way loyalty program to link their memberships to their Uber accounts; every Uber ride they take earns them \$2 in loyalty points. More than 10,000 Shop Your Way loyalty members have linked accounts and earned more than \$250,000 in points in the past two months, according to Sears. They are also running a sweepstakes that awards a total of \$10,000 in points every month to riders who link their Uber account to Shop Your Way. Sears Auto Centers are also an Uber Preferred Maintenance partners, and reward drivers with discounts on oil changes and labor services.

Sears announced a series of executive changes. Jeff Balagna, executive vice president, left in December as did Joelle Maher, Sears’ president and chief member officer. They were two of Sears’ top 14 executives. No replacements were named. Mark Cohen, director of retail studies at Columbia Business School and the former CEO of Sears Canada, told *Business Insider* that the timing of the departures was “highly unusual” coming in the middle of the critical holiday season and several days before third quarter earnings were announced.

Sears Hometown and Outlet Stores have been cropping up inside existing Ace locations around the country, and in some cases, built from the ground up as a combo store. The unique store format makes major Sears brands more available to customers in small communities. Seventeen new Sears Hometown and Outlet Stores opened in 2016, all but one featuring this new format.

ACE HARDWARE

Ace Hardware reported on results of its SAVINGSource program, launched in early 2015 to leverage its combined purchasing power in order to cut costs for its members. It’s already reduced operational costs by \$120 million and improved members’ contract terms with vendors. Through SAVINGSource, Ace stores have access to pre-negotiated pricing for products and services within 40 operational categories across five functional areas, including: technology and communication; supplies and replenishment; professional services; facilities services; and, capital projects and construction.

W.W. GRAINGER

Daily sales dropped 3% in November after being flat in October. The decline was driven by a 1% drop in volume, a 1% drop in price and a 1% decline from lower sales of seasonal products. Sales were down 3% in the U.S. and 17% in Canada in local currency and in U.S. dollars.

AMAZON

Amazon accounted for 30.9% of all U.S. online spending over Cyber Weekend, according to data from Slice Intelligence. According to ComScore, 65% of all U.S.

Internet users visit Amazon.com in any given month. Less than 5% of total web users visit specialty retail sites.

Amazon Prime Now promised subscribers in 30 cities nationwide that they could order by 9:45 p.m. Christmas Eve and have packages delivered before Christmas. Home Depot and Sears accepted online orders Christmas Eve for pick up in store, as long as customers ordered early enough in the day and picked up in person.

Amazon says they shipped more than 1 billion items world wide over the holiday season, which they termed their best ever. The Amazon Echo smart home assistant and its smaller and less expensive version, Echo Dot, were the best sellers, and despite ramping up production, Amazon was unable to keep them in stock. Sales were nine times greater than during last year's holiday season. While Amazon does not release hard sales data, analysts estimate that they likely sold between 4 million and 5 million Echos in 2016. More than 72% of Amazon's customers worldwide shopped through mobile devices, with December 19 being the busiest shopping day. Prime customers are spending twice as much as other consumers using Amazon, according to Retail Metrics.

Amazon Web Services (AWS) hosted a huge gathering of developers and cloud computing enthusiasts called the re:Invent conference. Amazon says that one day Alexa will understand the meaning of everything people say and be able to respond accordingly. Alexa's name is a tribute to the library of Alexandria, but the developers were also looking for a simple but distinctive name that was easy to say and pronounce. Amazon is reportedly working on an upscale version of the Echo speaker that offers a big touch screen in addition to responding to voice commands.

Amazon is developing mobile technology to schedule and track truck shipments of products with a few taps or clicks, which analysts see as Amazon's next step in their quest to become their own global freight broker. They are reportedly looking to acquire or build an application capable of matching available trucks to shipments from a seaport hub to a distribution center or from a warehouse to a parcel-delivery facility. Sources said that

Amazon could make the service available to non-Amazon shippers as well.

Amazon is exploring the use of giant airships that would serve as mobile, flying warehouses that could help Amazon deliver more goods by drone. Amazon thinks it would be more efficient to deploy drones from airships, as they could float or glide most of the way down to earth and use less energy.

Amazon.com made their first drone delivery to an actual customer, dropping off a Fire TV device and a bag of popcorn to a house in the rural English countryside 13 minutes after receiving an online order. The flight was conducted under British restrictions that currently prohibit such deliveries on a widespread basis, but the delivery was seen as a milestone in the race to use unmanned vehicles to transform how customers buy and receive goods. Routine commercial drone flights in the U.S. are not allowed over people and must stay within sight of an operator on the ground.

MARKET TRENDS

ECOMMERCE TRENDS

Absolunet released its list of the top 10 ecommerce trends that will impact North American retailers in 2017. They include the replacement of Black Friday and Cyber Monday with Cyber November, increased use of Artificial Intelligence (AI), increased acceptance of AI by consumers, the use of Predictive Analysis by merchants to accurately predict their customers' next purchase and the merging of commerce and ecommerce.

SMART HOME DEVICES OFFER WAYS TO ADVERTISE

Digital Voice Assistants like Amazon's Alexa, Google Home and Apple's Siri will account for about \$890 million in revenue for 2016, according to research firm Futuresource Consulting. About 6.3 million voice assistants were shipped in 2016. Brands are anxious to take advantage of this new way to reach consumers. Notable brands are creating their own "skills," which let users ask

questions. For example, Tide gives consumers detailed information on how to remove stains. Johnnie Walker helps people find nearby liquor stores that sell their brand, and then recommends cocktail recipes. The possibilities are almost endless as long as brands offer relevant content. Microsoft is reportedly working on something called “Home Hub” that will be built into Windows 10.

AMAZON AND WAREHOUSE CLUBS FULFILL DIFFERENT NEEDS

Amazon.com and warehouse clubs like Costco are not mutually exclusive, according to a recent study by Morgan Stanley. Of the 23% of respondents surveyed who are Costco members, 45% of them are also Amazon Prime members. Of the 33% surveyed who are Prime members, 32% are also Costco members. Only 8% of people shopping at both Amazon and Costco plan to shift dollars away from Costco. A very high 94% of Prime members and 95% of Costco members intend to renew their memberships, which points to low turnover and high lifetime value. A full 85% of those surveyed attributed “Retailer I trust” to both Amazon and Costco. Amazon scored notably higher than Costco in perceived prices, selection, convenience, quality of checkout and ease of navigation. The average Costco member is 49 years old vs. 44.5 for the average Amazon Prime member; that age difference could have implications concerning the appeal of warehouse clubs to millennials.

WHAT MILLENNIALS WANT FROM HOLIDAY SHOPPING

Consumers below the age of 35 played a key role in the record-breaking surge that made Black Friday the first day ever to rack up more than \$1 billion in mobile sales. There are now about 75 million millennials, which means they now outnumber baby boomers. Their holiday buying power was projected at \$85 billion, nearly 10% of the \$1 trillion forecast to be spent overall. Understanding millennials is proving to be challenging; there are parts of shopping in a physical store they really like, such as looking at and touching merchandise, and talking with sales people, and parts they really dislike, such as waiting in long lines. They are entertainment-oriented, and appreciate a holiday experience that’s worthy of becoming an

Instagram or SnapChat moment. Nike offered a variety of immersive digital experiences in their Nike Soho store in New York, including the ability to try on basketball sneakers and try them out in a virtual game of hoops at Brooklyn Bridge park, take a virtual jog through Central Park or connect with various apps via touch-screens. Nike says the response to their digital experiences is very strong. Millennials also appreciate uniqueness, enjoy giving business to local, independent retailers, and prefer one of a kind items. PwC’s holiday report found that 43% of millennials are very or extremely likely to purchase handmade items compared to 35% of Gen Xers and 28% of baby boomers. They are also charitably focused, with an eBay survey finding that 67% are more likely to choose a holiday gift from a company that donates some of the proceeds to charity. Lastly, they are research-focused, spending time online to evaluate a product’s quality, compare prices and read reviews. They are much more heavily influenced by social media and word of mouth, compared to retailer driven promotions and advertising.

MARKETING TECH BUDGETS RISING

Half of U.S. marketers polled by Walker Sands Communications expect to slightly increase their investment in marketing technology in 2016; one in five expect to greatly increase their investment. The study found that most marketers devote less than 25% of their marketing budget to marketing technology tools and/or vendors. Roughly one-third allocate between 1% and 10% and 36% allocate between 11% and 25%. Only 9% allocate more than half of their budgets to marketing tech tools and/or vendors.

SCAN AND GO TECHNOLOGY

Amazon is testing a grocery store model in Seattle without checkout lines. At Amazon Go, shoppers scan their Amazon app when they enter the store. Sensors register items that shoppers pick up and automatically charge them to the Amazon app. If the shopper returns the item to the shelf, it’s automatically deleted. When you’re done shopping, you just leave. The store offers ready-to-eat meals, staples like bread and milk and meal-making kits. The store is being tested with Amazon employees now, and is expected to open to the public in early 2017. Amazon has been working at carving out a share of the \$795

billion food and beverage market. Analysts report that Amazon is also testing at least two other grocery store concepts with the potential for more than 2,000 physical locations. Amazon denies that they have plans to open 2,000 physical locations “for anything” and says they are still in the early learning phase.

Analysts see the launch of the “Just Walkout Store” as an industry catalyst that will likely stir up competition to deploy technology in brick-and-mortar spaces and ramp up ecommerce. In addition, it’s seen as having major implications for Amazon, including the fact that more consumer data will lead to better shopping recommendations and an ever-improving customer experience. People shop differently for convenience purchases and food than they do online, so Amazon will be able to gather new and different kinds of data. The technology powering Amazon Go will likely become more widespread, and Amazon can choose to offer it to other retailers as a complement to Amazon Web Services.

Costco reported that they tried a version of scan-and-go literally 20 years ago. Customers got an RF scanning gun when they came in, and scanned their own items as they shopped. They then handed the scanner to a cashier who printed out a receipt. Costco says of course it could be a lot more efficient today, and they are currently looking at the technology again, but have no plans to introduce it or test it in the immediate future. They have done self checkout for a while, but have eliminated it at their higher volume stores because they can efficiently get people checked out without it. Sam’s Club started offering a smartphone app last October called Scan & Go that lets customers scan items as they shop and pay on their phone, skipping a physical checkout entirely.

THE FUTURE OF WORK

General Electric recently hosted a Minds + Machines conference that showed various ways technology can help workers do their jobs better and more safely. The mission of GE Digital is to integrate the worker and the digital world. One of the prototypes they showed was a suit for an electrical utility worker that has sensors sewn in that automatically cut the flow of electricity to panels, eliminating the risk of electrocution. They talked about the

IIoT, the Industrial Internet of Things, which leverages internet connectivity and cloud-based data crunching to streamline the worker experience, drive efficiencies into manufacturing logistics and optimize energy resources. GE currently is known for making big-ticket hardware such as MRI machines and jet engines; they are heavily investing now in software and IIoT. GE’s open-source Predix operating system will account for \$7 billion in revenue in 2016, and the company expects to hit \$15 billion by 2020. Some 20,000 industrial app designers are developing for Predix. GE software researchers see a future where you would not need to be a computer whiz to use technology to solve a problem. For example, a worker who has an idea on how to solve a problem can use speech interface to dictate a request to the computer, which can then write the code that is needed to solve the problem.

AUTOMATION ADDING JOBS

Many argue that automation kills jobs, but at Amazon’s newest and most high-tech warehouse, they need a higher head count than at a traditional warehouse, because the large staff of robots works so quickly they can process many more orders, which requires humans. Orange, pallet-sized robots that move faster than people can carry shelves full of merchandise to stations where workers can reach them. Screens show the workers what the desired item looks like and where it is placed so they can get it off the shelf quickly and accurately. Amazon has built 26 new warehouses this year, and says that the new technologies they are employing allow them to train workers in as few as two days compared to the six weeks it generally takes to train someone for a traditional warehouse job. In today’s competitive labor market, shorter training means Amazon could offer higher wages and will have less down time when people quit. Walmart has added 10 new ecommerce hubs over the past two years, along with 80 stores that ship directly to consumers. UPS has introduced color-coded scanning technology in some locations which eliminates the need for workers to memorize more than 120 ZIP codes.

MOBILE PRICE COMPARISONS

Nearly half of U.S. mobile device users ages 14 and older will use their mobile device to research a competitor’s prices when they are in a store shopping, accord-

ing to a survey conducted in September 2016 by Opera Mediaworks. One-third said they looked up product reviews, and 30% would use their device to sign up for in-store promotions. However, just 12% of retail marketers told BDO USA in October that they planned to use flash sales and daily deals as a mobile marketing tactic during the holidays and just 8% planned to use mobile coupons. Some 80% of U.S. adults had either a smartphone or a home broadband subscription in 2015, according to Pew Research. However, 80% of consumers still want to go to stores and browse and shop.