

# Business Intelligence med SharePoint 2013 og SQL server 2012

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# Oppgave

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- ❖ Installere og konfigurere den tekniske infrastrukturen for Business Intelligence i en fiktiv bedrift.
- ❖ Bruker produkter fra Microsoft: SharePoint Server 2012, SQL Server 2012 med Analysis Services, Reporting Services og PowerPivot.
- ❖ Fokus på BI-funksjoner i SharePoint, og integrasjon mellom SharePoint og SQL Server.
- ❖ Bruker den fiktive bedriften Exim As som eksempel.
- ❖ Bruker testdata fra Microsoft.

# BI-funksjoner i SharePoint

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- ❖ Excel Services og PowerPivot – Vise og behandle regneark i nettleser, analysere komplekse datasett.
- ❖ Performancepoint – Dashbord.
- ❖ Power View – Selbetjent BI i nettleser.
- ❖ Reporting Services – Rapporter basert på data i databaser.
- ❖ Visio Services – Diagrammer vist i nettleser.

Alle disse kan bruke data fra eksterne datakilder, for eksempel databaser.

# Exim AS

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- ❖ Produserer og selger spesialisert elektronikk til oljebransjen.
- ❖ 200 ansatte.
- ❖ 350 millioner i omsetning.
- ❖ Trenger mer og bedre styringsinformasjon.

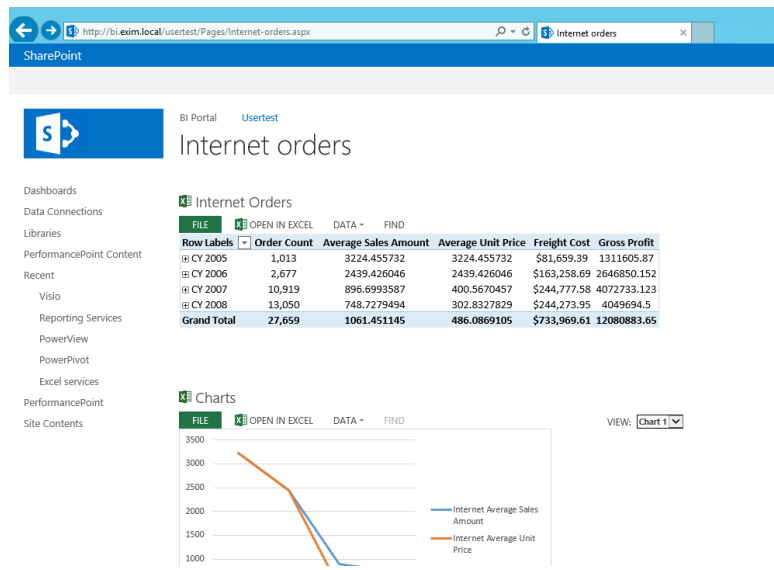
# Hvorfor denne oppgaven?

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- ❖ Business Intelligence er et spennende og komplisert fagområde.
- ❖ Jobber til daglig som forvalter av SharePoint, blant annet en eldre BI-løsning.
- ❖ Ønsket mer erfaring med integrasjon mellom SharePoint og SQL.

# Resultat

- ❖ Komplet system satt opp og konfigurert.
- ❖ Implementasjonsdokument som kan brukes til å sette opp tilsvarende løsninger.
- ❖ Rapporter i SharePoint basert på data som hentes fra datavarehus og BI-kube på SQL server.



The screenshot shows an Excel web application interface displaying a table titled 'Reseller'. The table lists various resellers and their performance metrics. The columns include 'Reseller', 'Average Sales Amount', 'Average Unit Price', 'Freight Cost', 'Gross Profit', 'Gross Profit Margin', 'Order Quantity', and 'Sales Amount'. The data is sorted by 'Average Sales Amount' in descending order.

| Reseller                      | Average Sales Amount | Average Unit Price | Freight Cost | Gross Profit | Gross Profit Margin | Order Quantity | Sales Amount   |
|-------------------------------|----------------------|--------------------|--------------|--------------|---------------------|----------------|----------------|
| Specialty Bike Shop           | 5900.581816          | 412.6221423        | \$168,904.31 | 27797.6479   | 0.41%               | 22,076         | \$6,756,166.18 |
| A Great Bicycle Company       | 1509.21505           | 463.7348357        | \$226.38     | 27.3113      | 0.30%               | 21             | \$9,055.29     |
| Accessories Network           | 721.9296333          | 583.225875         | \$54.14      | -242.7712    | -11.21%             | 5              | \$2,165.79     |
| Active Systems                | 713.2271             | 30.97183333        | \$16.00      | 141.7983     | 22.10%              | 20             | \$619.98       |
| Activity Center               | 531.299425           | 297.4693877        | \$1,066.26   | -1621.2471   | -3.80%              | 167            | \$42,650.40    |
| All Cycle Shop                | 375.40035            | 37.53423929        | \$75.08      | 893.136      | 29.74%              | 93             | \$3,003.20     |
| Alpine Ski House              | 1620.983057          | 403.9644714        | \$283.67     | -47.0819     | -0.41%              | 27             | \$11,346.88    |
| Alternative Vehicles          | 3042.608033          | 470.4693           | \$228.20     | -32.0173     | -0.35%              | 18             | \$9,127.82     |
| Area Sheet Metal Supply       | 489.27552            | 207.9031143        | \$61.16      | 57.2084      | 2.84%               | 15             | \$2,446.38     |
| Authentic Sales and Service   | 404.59625            | 48.8855            | \$40.46      | 460.2406     | 28.44%              | 40             | \$1,618.39     |
| Basic Sports Equipment        | 4853.005542          | 437.0504797        | \$1,455.90   | 4759.6386    | 8.17%               | 215            | \$58,236.07    |
| Best o' Bikes                 | 4630.0652            | 305.0687206        | \$463.01     | -779.9728    | -4.21%              | 100            | \$18,520.26    |
| Bicycle Exporters             | 7662.0235            | 556.1147368        | \$766.20     | -2075.9409   | -6.77%              | 62             | \$30,648.09    |
| Bicycle Warehouse Inc.        | 904.4656333          | 67.38164615        | \$135.67     | 1120.0961    | 20.64%              | 123            | \$5,426.79     |
| Bike World                    | 11816.85523          | 319.2407903        | \$2,363.37   | 10955.3817   | 11.59%              | 365            | \$94,534.84    |
| Bikes for Kids and Adults     | 3706.388863          | 439.5871273        | \$741.28     | 3606.4934    | 12.16%              | 115            | \$29,651.11    |
| Black Bicycle Company         | 1236.18535           | 1236.18535         | \$61.81      | 248.4448     | 10.06%              | 2              | \$2,472.31     |
| Blue Bicycle Company          | 1307.4265            | 465.64982          | \$98.06      | 74.4577      | 1.90%               | 8              | \$3,922.28     |
| Brightwork Company            | 15403.85301          | 627.7025693        | \$4,621.16   | 14683.9069   | 7.94%               | 388            | \$184,846.24   |
| Cash & Carry Bikes            | 1002.215675          | 778.97854          | \$100.22     | 423.5192     | 10.56%              | 10             | \$4,008.86     |
| Central Discount Store        | 9147.005892          | 635.1188989        | \$2,744.10   | 1740.4266    | 1.59%               | 246            | \$109,764.07   |
| Certified Bicycle Supply      | 5018.503738          | 201.6717525        | \$1,003.70   | -167.1404    | -0.42%              | 265            | \$40,148.03    |
| Channel Outlet                | 719.296              | 32.5809            | \$51.95      | 416.4908     | 19.30%              | 68             | \$2,157.89     |
| Commendable Bikes             | 1160.3963            | 352.0776385        | \$174.06     | -148.5958    | -2.13%              | 17             | \$6,962.38     |
| Community Department Stores   | 6829.207213          | 274.2785667        | \$1,365.84   | 6606.1768    | 12.09%              | 304            | \$54,633.66    |
| Consolidated Sales            | 16142.38292          | 602.6289088        | \$4,842.72   | 16557.1526   | 8.55%               | 441            | \$193,708.60   |
| Convenient Bike Shop          | 8161.58065           | 428.3710032        | \$816.16     | 156.6385     | 0.48%               | 80             | \$32,646.32    |
| Cross-Country Riding Supplies | 17287.57735          | 1545.468516        | \$1,728.76   | 4344.5583    | 6.28%               | 46             | \$69,150.31    |
| Cycle Clearance               | 2568.783725          | 645.7010455        | \$258.88     | -523.3763    | -5.05%              | 21             | \$10,355.13    |
| Cycles and Scooters           | 5002.428167          | 420.7544285        | \$275.18     | 36.7026      | 0.24%               | 30             | \$15,007.28    |
| Cycles Sales and Repair       | 16531.579            | 602.3680109        | \$1,653.16   | -6569.923    | -9.94%              | 134            | \$66,126.32    |
| Cycling Goods                 | 7615.983738          | 286.5289619        | \$1,523.20   | -1016.4191   | -1.67%              | 222            | \$60,927.87    |
| Discount Bicycle Specialists  | 419.4589             | 419.4589           | \$10.49      | 6.3126       | 1.50%               | 1              | \$419.46       |

# Videre arbeid

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- ❖ Integrasjon med Exims egne systemer.
- ❖ Utvikle kuber i Analysis Services basert på bedriftens data.
- ❖ Publisere rapporter og datamodeller i SharePoint.