



FINAL PROJECT

EXCEL

Samuel Benny Dito
Data Science Track A

DATA MENTAH

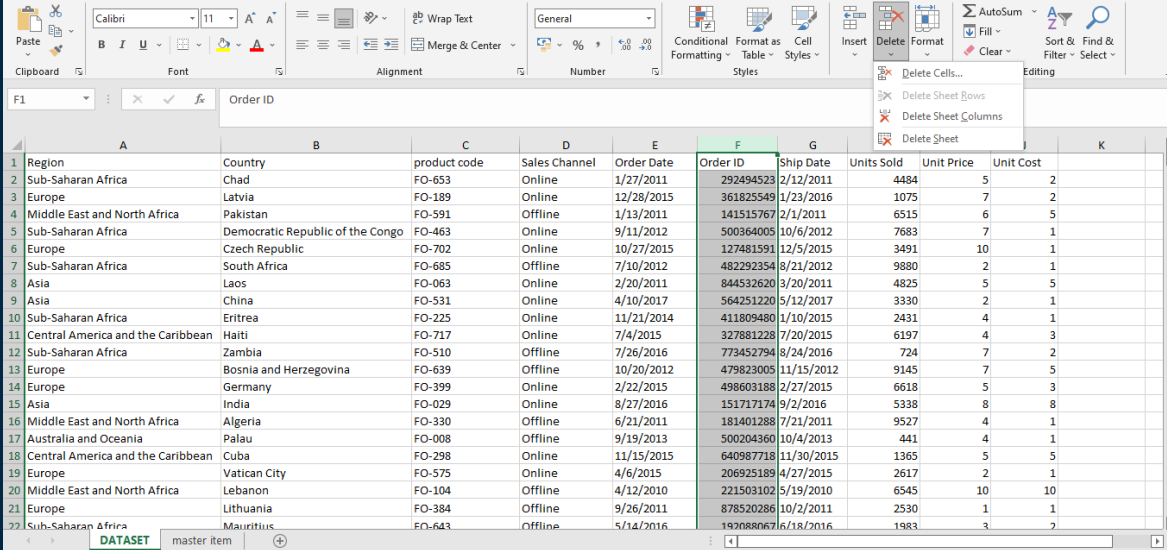
Data dibawah ini memiliki 10000 baris dan 10 kolom yang akan dianalisis dengan tujuan untuk melakukan ekspansi bisnis dalam bentuk laporan (dashboard).

| Region | Country | product code | Sales Channel | Order Date | Order ID | Ship Date | Units Sold | Unit Price | Unit Cost |
|-----------------------------------|----------------------------------|--------------|---------------|------------|-----------|------------|------------|------------|-----------|
| Sub-Saharan Africa | Chad | FO-633 | Online | 1/27/2011 | 292494523 | 2/12/2011 | 4484 | 5 | 2 |
| Europe | Latvia | FO-189 | Online | 12/28/2015 | 361825049 | 1/23/2016 | 1075 | 7 | 2 |
| Middle East and North Africa | Pakistan | FO-591 | Offline | 1/13/2011 | 141535767 | 2/1/2011 | 6515 | 6 | 5 |
| Sub-Saharan Africa | Democratic Republic of the Congo | FO-463 | Online | 9/11/2012 | 500394005 | 10/6/2012 | 7683 | 7 | 1 |
| Europe | Czech Republic | FO-702 | Online | 10/27/2015 | 127481591 | 12/5/2015 | 3491 | 10 | 1 |
| Sub-Saharan Africa | South Africa | FO-685 | Offline | 7/10/2012 | 482292354 | 8/21/2012 | 9880 | 2 | 1 |
| Asia | Laos | FO-063 | Online | 2/20/2011 | 844532620 | 3/20/2011 | 4825 | 5 | 5 |
| Asia | China | FO-531 | Online | 4/10/2017 | 564251220 | 5/12/2017 | 3330 | 2 | 1 |
| Sub-Saharan Africa | Eritrea | FO-225 | Online | 11/21/2014 | 411809480 | 1/10/2015 | 2431 | 4 | 1 |
| Central America and the Caribbean | Haiti | FO-717 | Online | 7/4/2015 | 327881228 | 7/20/2015 | 6197 | 4 | 3 |
| Sub-Saharan Africa | Zambia | FO-510 | Offline | 7/26/2016 | 773452794 | 8/24/2016 | 724 | 7 | 2 |
| Europe | Bosnia and Herzegovina | FO-639 | Offline | 10/20/2012 | 479823005 | 11/15/2012 | 9145 | 7 | 5 |
| Europe | Germany | FO-399 | Online | 2/22/2015 | 498603188 | 2/27/2015 | 6618 | 5 | 3 |
| Asia | India | FO-029 | Online | 8/27/2016 | 151717174 | 9/2/2016 | 5338 | 8 | 8 |
| Middle East and North Africa | Algeria | FO-330 | Offline | 6/21/2011 | 181401288 | 7/21/2011 | 9527 | 4 | 1 |
| Australia and Oceania | Palau | FO-008 | Offline | 9/19/2013 | 500204960 | 10/4/2013 | 441 | 4 | 1 |
| Central America and the Caribbean | Cuba | FO-298 | Online | 11/15/2015 | 540097718 | 11/30/2015 | 1365 | 5 | 5 |
| Europe | Vatican City | FO-575 | Online | 4/6/2015 | 206925189 | 4/27/2015 | 2617 | 2 | 1 |
| Middle East and North Africa | Lebanon | FO-104 | Offline | 4/12/2010 | 221503102 | 5/19/2010 | 6545 | 10 | 10 |

| Region | Country | product code | Sales Channel | Order Date | Order ID | Ship Date | Units Sold | Unit Price | Unit Cost |
|-----------------------------------|----------------------------------|--------------|---------------|------------|-----------|------------|------------|------------|-----------|
| Middle East and North Africa | Bahrain | FO-587 | Online | 1/20/2010 | 992872941 | 3/5/2010 | 2022 | 1 | 1 |
| Asia | Brunei | FO-314 | Offline | 7/19/2017 | 144625842 | 7/24/2017 | 6855 | 5 | 2 |
| Europe | Greece | FO-585 | Offline | 6/6/2010 | 694237935 | 6/26/2010 | 9287 | 2 | 1 |
| Sub-Saharan Africa | Ghana | FO-832 | Online | 10/9/2012 | 810508048 | 10/26/2012 | 6196 | 10 | 3 |
| Central America and the Caribbean | Saint Lucia | FO-732 | Offline | 11/4/2011 | 982547509 | 12/15/2011 | 6497 | 5 | 2 |
| Sub-Saharan Africa | Rwanda | FO-451 | Online | 11/27/2014 | 869780147 | 12/18/2014 | 6129 | 1 | 1 |
| Asia | Laos | FO-427 | Offline | 2/24/2015 | 651942288 | 2/28/2015 | 3066 | 9 | 3 |
| Europe | Moldova | FO-395 | Offline | 8/10/2010 | 579082763 | 9/2/2010 | 2313 | 9 | 7 |
| Australia and Oceania | East Timor | FO-688 | Online | 7/12/2015 | 521562898 | 8/6/2015 | 907 | 7 | 7 |
| Australia and Oceania | Marshall Islands | FO-245 | Offline | 2/22/2011 | 420656521 | 4/8/2011 | 2914 | 1 | 1 |
| Sub-Saharan Africa | Guinea | FO-755 | Online | 1/18/2010 | 735549962 | 2/16/2010 | 4434 | 2 | 2 |
| Asia | Laos | FO-527 | Online | 7/15/2014 | 199342048 | 7/31/2014 | 8597 | 4 | 1 |
| Europe | Liechtenstein | FO-006 | Online | 10/27/2012 | 763044106 | 11/1/2012 | 562 | 1 | 1 |
| Sub-Saharan Africa | Democratic Republic of the Congo | FO-759 | Offline | 2/14/2013 | 848579967 | 3/20/2013 | 2524 | 1 | 1 |
| Sub-Saharan Africa | South Africa | FO-066 | Online | 2/19/2017 | 298185956 | 2/22/2017 | 8706 | 3 | 1 |
| Asia | Mongolia | FO-589 | Offline | 4/12/2016 | 824410903 | 4/16/2016 | 361 | 2 | 1 |

DATA CLEANING

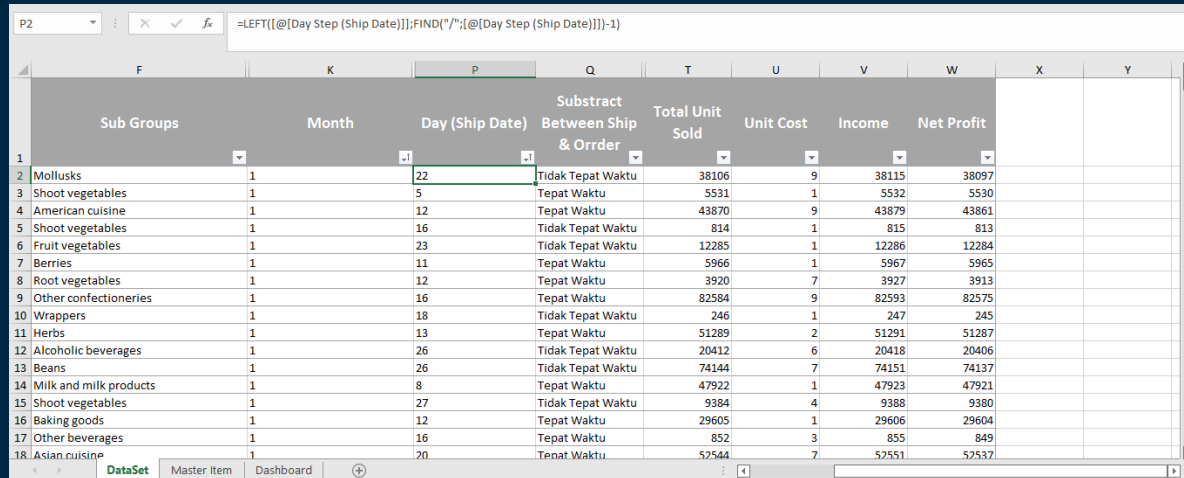
Pada tahap pertama, data mentah akan dilakukan pembersihan untuk mencegah garbage in garbage out (GIGO). Lebih detailnya, yang saya lakukan yakni menghapus kolom yang tidak digunakan, membuat kolom baru yang diperlukan, menghapus duplikat data dan membuat range menjadi tabel.



| | A | B | C | D | E | F | G | H | I | J | K |
|----|-----------------------------------|----------------------------------|--------------|---------------|------------|-----------|------------|------------|------------|-----------|---|
| 1 | Region | Country | product code | Sales Channel | Order Date | Order ID | Ship Date | Units Sold | Unit Price | Unit Cost | |
| 2 | Sub-Saharan Africa | Chad | FO-653 | Online | 1/27/2011 | 292494523 | 2/12/2011 | 4484 | 5 | 2 | |
| 3 | Europe | Latvia | FO-189 | Online | 12/28/2015 | 361825549 | 1/23/2016 | 1075 | 7 | 2 | |
| 4 | Middle East and North Africa | Pakistan | FO-591 | Offline | 1/13/2011 | 141515767 | 2/1/2011 | 6515 | 6 | 5 | |
| 5 | Sub-Saharan Africa | Democratic Republic of the Congo | FO-463 | Online | 9/11/2012 | 500364005 | 10/6/2012 | 7683 | 7 | 1 | |
| 6 | Europe | Czech Republic | FO-702 | Online | 10/27/2015 | 127481591 | 12/5/2015 | 3491 | 10 | 1 | |
| 7 | Sub-Saharan Africa | South Africa | FO-685 | Offline | 7/10/2012 | 482292354 | 8/21/2012 | 9880 | 2 | 1 | |
| 8 | Asia | Laos | FO-063 | Online | 2/20/2011 | 844532620 | 3/20/2011 | 4825 | 5 | 5 | |
| 9 | Asia | China | FO-531 | Online | 4/10/2017 | 564251220 | 5/12/2017 | 3330 | 2 | 1 | |
| 10 | Sub-Saharan Africa | Eritrea | FO-225 | Online | 11/21/2014 | 411809480 | 1/10/2015 | 2431 | 4 | 1 | |
| 11 | Central America and the Caribbean | Haiti | FO-717 | Online | 7/4/2015 | 327881228 | 7/20/2015 | 6197 | 4 | 3 | |
| 12 | Sub-Saharan Africa | Zambia | FO-510 | Offline | 7/26/2016 | 773452794 | 8/24/2016 | 724 | 7 | 2 | |
| 13 | Europe | Bosnia and Herzegovina | FO-639 | Offline | 10/20/2012 | 479823005 | 11/15/2012 | 9145 | 7 | 5 | |
| 14 | Europe | Germany | FO-399 | Online | 2/22/2015 | 498603188 | 2/27/2015 | 6618 | 5 | 3 | |
| 15 | Asia | India | FO-029 | Online | 8/27/2016 | 151717174 | 9/2/2016 | 5338 | 8 | 8 | |
| 16 | Middle East and North Africa | Algeria | FO-330 | Offline | 6/21/2011 | 181401288 | 7/21/2011 | 9527 | 4 | 1 | |
| 17 | Australia and Oceania | Palau | FO-008 | Offline | 9/19/2013 | 500204360 | 10/4/2013 | 441 | 4 | 1 | |
| 18 | Central America and the Caribbean | Cuba | FO-298 | Online | 11/15/2015 | 640987718 | 11/30/2015 | 1365 | 5 | 5 | |
| 19 | Europe | Vatican City | FO-575 | Online | 4/6/2015 | 206925189 | 4/27/2015 | 2617 | 2 | 1 | |
| 20 | Middle East and North Africa | Lebanon | FO-104 | Offline | 4/12/2010 | 221503102 | 5/19/2010 | 6545 | 10 | 10 | |
| 21 | Europe | Lithuania | FO-384 | Offline | 9/26/2011 | 878520286 | 10/2/2011 | 2530 | 1 | 1 | |
| 22 | Sub-Saharan Africa | Mauritius | FO-643 | Offline | 5/14/2016 | 190688067 | 6/18/2016 | 1983 | 3 | 2 | |

DATA PROCESING

Pada tahap kedua, data yang telah dibersihkan akan dilakukan transformasi/perubahan menjadi sebuah format sesuai dengan kebutuhan. Lebih detailnya, yang saya lakukan pada tahap ini yakni membuat formula khusus untuk mencari data yang diperlukan seperti memisahkan hari, bulan, tahun dan lain sebagainya serta membuat pivot table di setiap bagiannya.



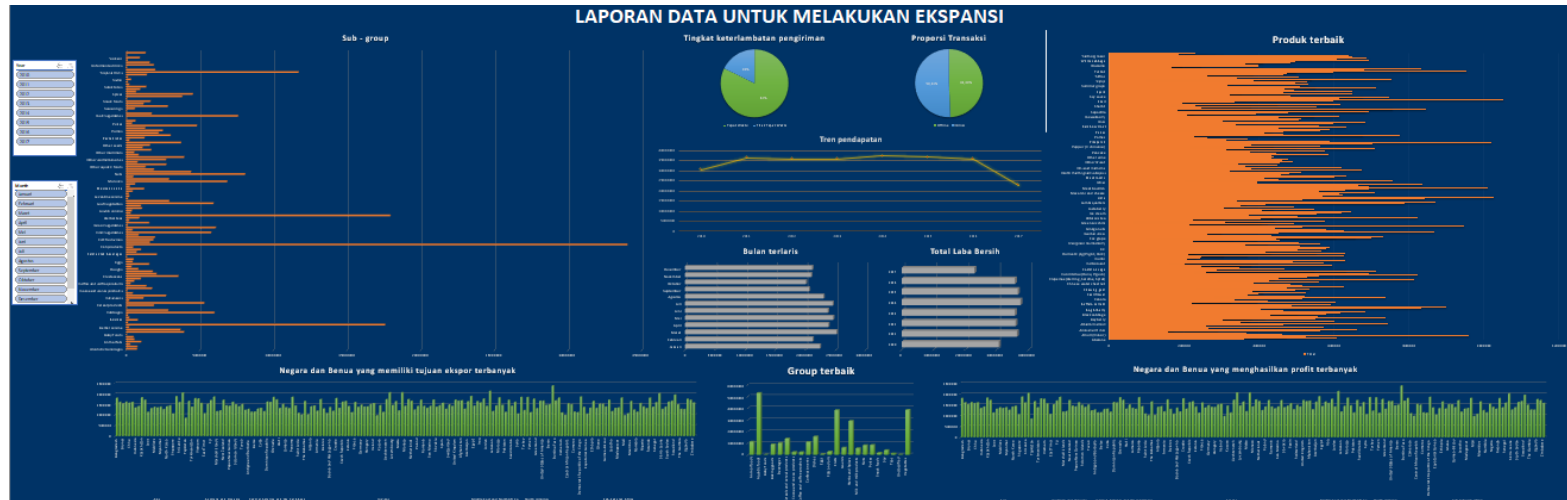
Excel formula bar: `=LEFT([@Day Step (Ship Date)];FIND("/";[@Day Step (Ship Date)]))-1`

| | F | K | P | Q | T | U | V | W | X | Y |
|----|------------------------|-------|-----------------|---------------------------------|-----------------|-----------|--------|------------|---|---|
| | Sub Groups | Month | Day (Ship Date) | Substract Between Ship & Orrder | Total Unit Sold | Unit Cost | Income | Net Profit | | |
| 1 | | | | | | | | | | |
| 2 | Mollusks | 1 | 22 | Tidak Tepat Waktu | 38106 | 9 | 38115 | 38097 | | |
| 3 | Shoot vegetables | 1 | 5 | Tepat Waktu | 5531 | 1 | 5532 | 5530 | | |
| 4 | American cuisine | 1 | 12 | Tepat Waktu | 43870 | 9 | 43879 | 43861 | | |
| 5 | Shoot vegetables | 1 | 16 | Tidak Tepat Waktu | 814 | 1 | 815 | 813 | | |
| 6 | Fruit vegetables | 1 | 23 | Tidak Tepat Waktu | 12285 | 1 | 12286 | 12284 | | |
| 7 | Berries | 1 | 11 | Tepat Waktu | 5966 | 1 | 5967 | 5965 | | |
| 8 | Root vegetables | 1 | 12 | Tepat Waktu | 3920 | 7 | 3927 | 3913 | | |
| 9 | Other confectioneries | 1 | 16 | Tepat Waktu | 82584 | 9 | 82593 | 82575 | | |
| 10 | Wrappers | 1 | 18 | Tidak Tepat Waktu | 246 | 1 | 247 | 245 | | |
| 11 | Herbs | 1 | 13 | Tepat Waktu | 51289 | 2 | 51291 | 51287 | | |
| 12 | Alcoholic beverages | 1 | 26 | Tidak Tepat Waktu | 20412 | 6 | 20418 | 20406 | | |
| 13 | Beans | 1 | 26 | Tidak Tepat Waktu | 74144 | 7 | 74151 | 74137 | | |
| 14 | Milk and milk products | 1 | 8 | Tepat Waktu | 47922 | 1 | 47923 | 47921 | | |
| 15 | Shoot vegetables | 1 | 27 | Tidak Tepat Waktu | 9384 | 4 | 9388 | 9380 | | |
| 16 | Baking goods | 1 | 12 | Tepat Waktu | 29605 | 1 | 29606 | 29604 | | |
| 17 | Other beverages | 1 | 16 | Tepat Waktu | 852 | 3 | 855 | 849 | | |
| 18 | Asian cuisine | 1 | 20 | Tepat Waktu | 52544 | 7 | 52551 | 52537 | | |

Excel tabs: DataSet, Master Item, Dashboard

DATA VISUALIZATION

Pada tahap terakhir ini, data yang telah ditransformasi akan dilakukan visualisasi agar informatif. Lebih detailnya, yang saya lakukan yakni membuat pivot chart, slicer dan membuat tampilan dashboard.



The background is a dark blue field decorated with various geometric elements. It includes numerous small squares in teal, orange, and pink, some of which are solid while others are hollow. Thin white vertical lines of varying lengths are scattered across the composition, creating a modern, minimalist aesthetic.

TERIMA
KASIH