Info 5001
Digital Marketing Design and Programming

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Objectives

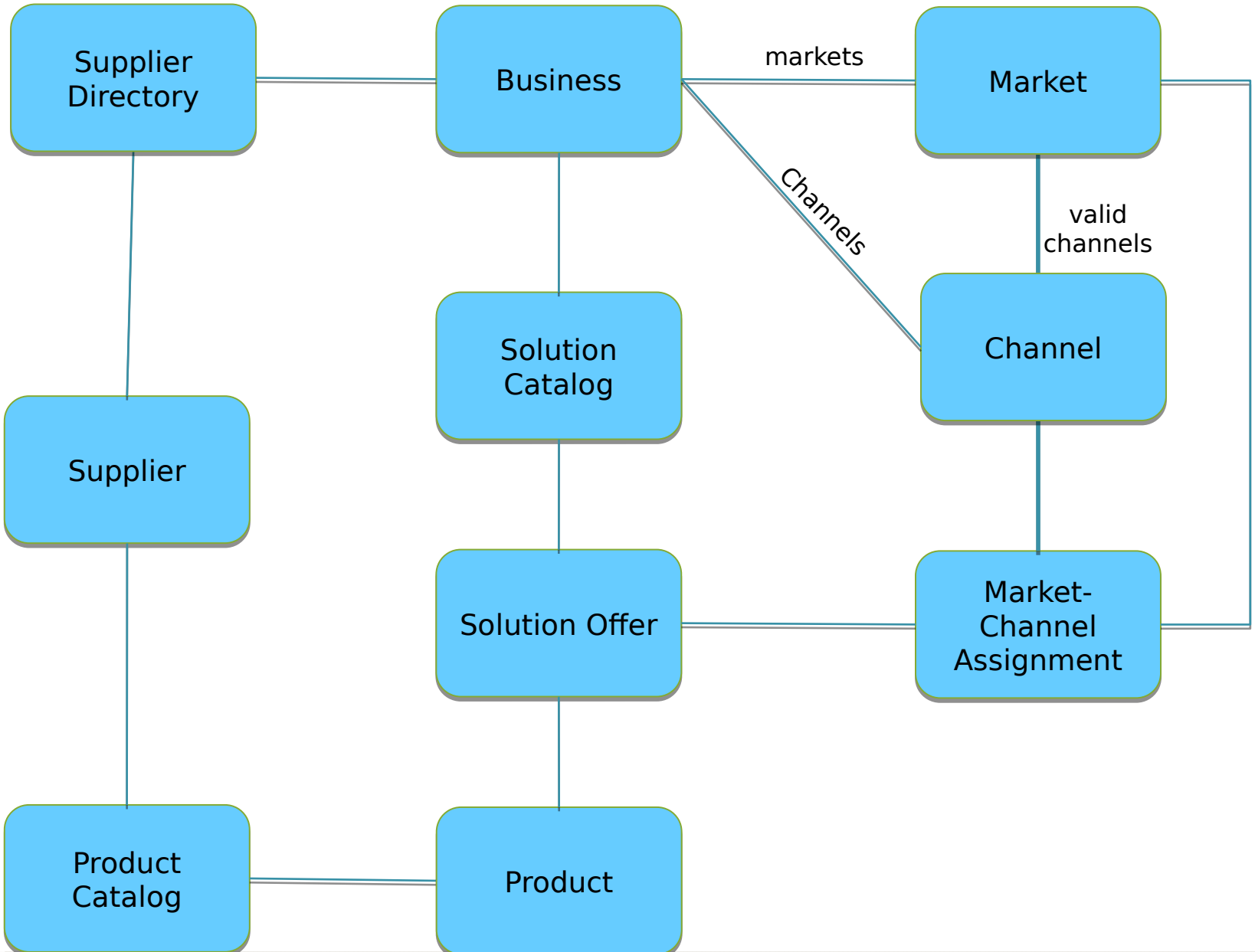
- Learn how to extend the existing range pricing design to support solution selling with dynamic pricing driving by market and channel.
- Learn how good design can make it simple to measure and monitor the impact of advertising on revenues.

Market bundling or Solution Selling

1. Define Business
2. Define markets
3. Define channels
4. Define market/channel combination
5. Manage solution catalog
6. Define solution bundles for different markets/channel combinations
7. Select products for the solution bundles
8. Assign price for each bundle/market/channel combination
9. Classify Customers in certain market/channel combination
10. Order solutions from the solution catalog based on customer market profile

Market bundling or Solution Selling

1. Customer logs in through a channel
2. System identifies customer as belonging to a specific market
3. New solution order is created using the market-channel combination
4. Solutions tailored for the market-channel combination Order solutions from the solution catalog based on customer market profile


Supplier Directory
Business
markets
Market
Channels
valid channels
Solution Catalog
Channel
Supplier
Solution Offer
Market-Channel Assignment
Product Catalog
Product

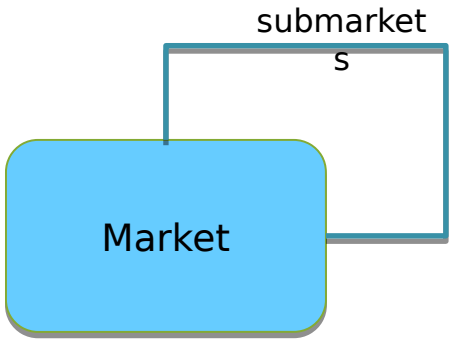
What is a Market?

Market means a group of people that possess certain common features and characteristics such as gender, age, geography, ethnicity, profession, etc.

- This allows you to understand their common needs in relation to your products and services.
- Must articulate how your solution responds to their needs. This makes it easy to come up with ads (market messages) that get their attention
- But ads can be expensive, so you want to know if the ads are working in attracting customers to buy. If ads are not bringing revenues then you must make changes to products or market

Market
Teenagers
College undergrads
Millennial
Z Generation
Seniors

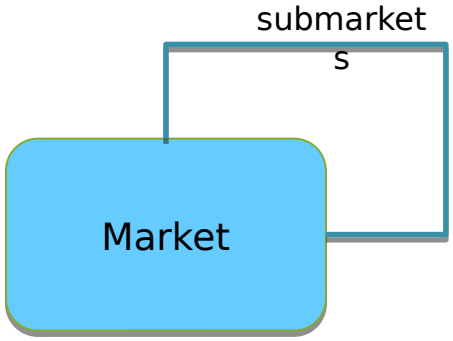
Breaking down Markets to submarkets



- Markets can be broken down to smaller markets for more accurate targeting of customers (with the hope for more sales). For example, teenage girls might respond differently to certain colors than boys would. That way, one might attract better response due to sharper definition of **needs and wants** of target customers

Market	Submarket
Teenagers	Girls
	Boys
College undergrads	
Millennial	
Z Generation	
Seniors	

Market Class Definition




```
public class Market {

    String name;
     ArrayList<String> characteristics; //a way to describe what is that group
    ArrayList<Market> submarkets;
    int size;

    public Market(String m) {
        name = m;
        characteristics = new ArrayList();
        submarkets = new ArrayList();
}

:
}
```

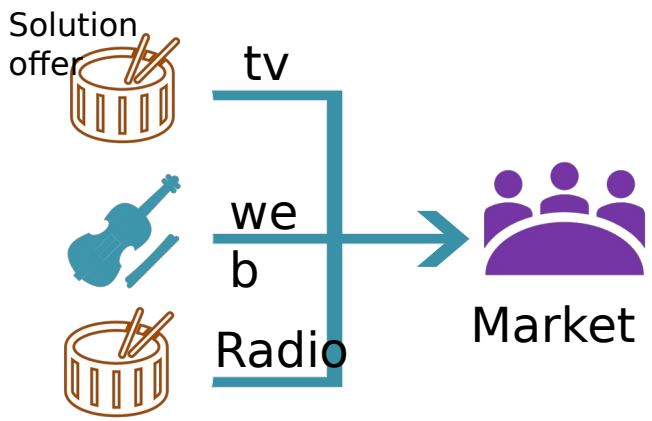
Channel Class Definition

Channel defines the route to reach customers

- Defines cost or price per unit of measure (time, size, etc.)
- Can be expensive so one must be careful

Channel

Internet	TV	Magazine

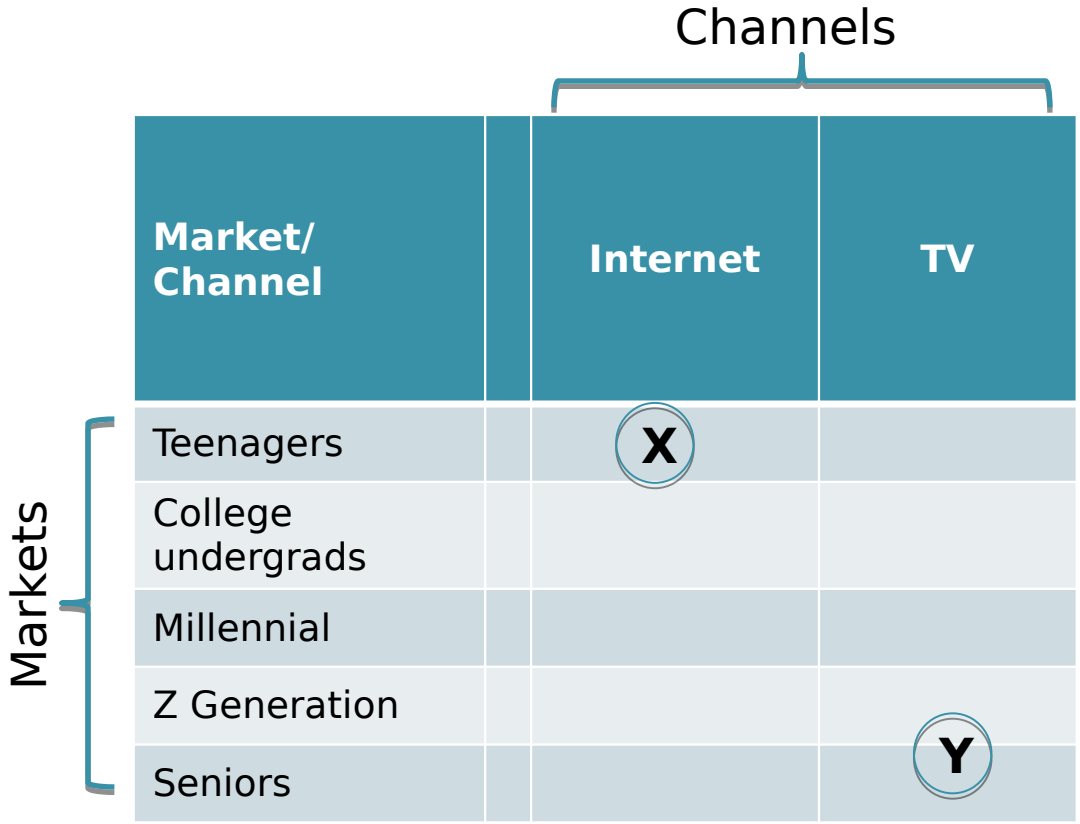



```
public class Channel {
    String channeltype; //tv, internet,
    int price;
    String unitofmeasure; //per minute, length, …

public Channel(String t){
        channeltype = t;
    }
```

Market Channel Assignment

Helps us learn how effective our marketing campaign over a channel

Market Channel Assignment



X Means (Teenagers, Internet) Combination
Customers who are considered teenagers buying from us vi
the Internet

Y Customers who are considered seniors buying from us by learning about us via TV


```
public class MarketChannelAssignment {

    Market market;
    Channel channel;
    int adbudget;
    int targetrevenue;

    public MarketChannelAssignment(Market m, Channel c){

        market = m;
        channel = c;

    }
:
}
```

Market Channel Assignment

Market	Internet			TV		
	Ad Budget ($)	Target revenue ($)	Actual Sales	Ad Budget ($)	Target ($) Revenue	Actual Sales
Teenagers	5M	15M	?	20M	70M	?

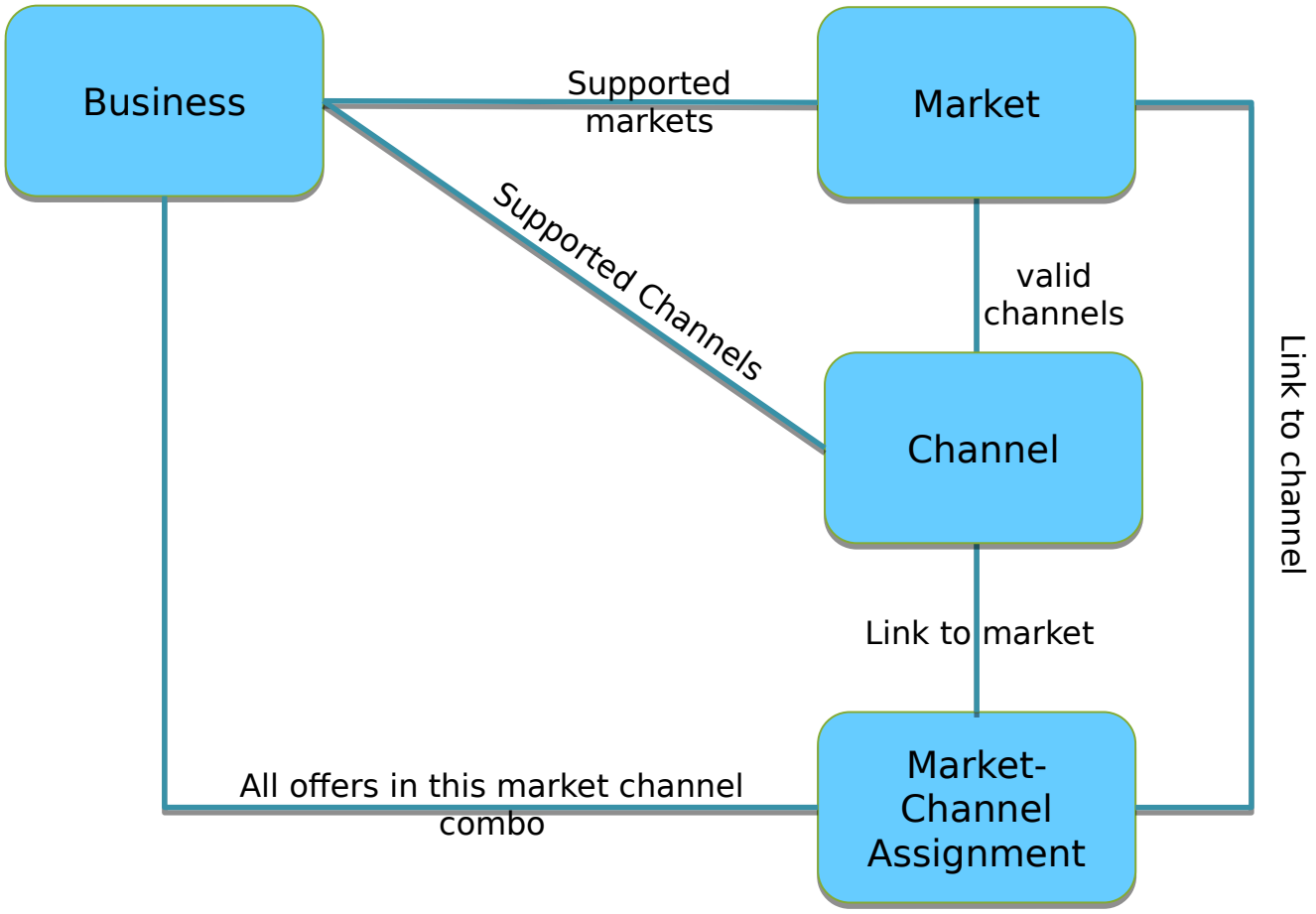
What is our Ad budget for advertising to teenagers over the web?
What is our target revenue for this market, channel combination?
What is our actual revenues (orders) from advertising in this market-channel combination?
And most importantly, are our ads working for this group

How do we find the actual revenues in response to market over a channel?

Market/Channel	Internet			TV			magazines
	Ad Budget ($)	Target revenue ($)	Actual Sales	Ad Budget ($)	Target ($) Revenue	Actual Sales	
Teenagers	10 M	25 M	?	40 M	100 M	?	
College undergrads	3M	12 M	?	10 M	20M	?	
Millennial	29 M	50 M	?	2M	4M	?	
Z Generation	12 M	25 M	?			?	
Seniors	2M	3M	?	6M	22M	?	

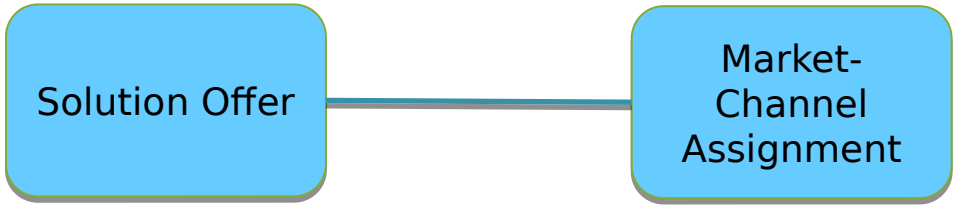
Submarkets sharpens the focus on details

Market	Submarket	Internet			TV		
		Ad Budget ($)	Target revenue ($)	Actual Sales	Ad Budget ($)	Target ($) Revenue	Actual Sales
Teenagers	Girls	5M	15M	?	20M	70M	?
	Boys	3M	10M	?	20M	30M	
College undergrads		3M	12M	?	10M	20M	?
Millennial		29M	50M	?	2M	4M	?
Z Generation		12M	25M	?			?
Seniors		2M	3M	?	6M	22M	?


Business
Supported markets
Market
Supported Channels
valid channels
Channel
Link to channel
Link to market
All offers in this market channel combo
Market-Channel Assignment

Solution Offer

A bundled set of product selections fro the product catalog and offered as a solution priced specifically for a certain target market and sold over a particular channel. The price is for the whole bundle of products. We can offer the same set of products (solution) to different audiences at different prices (based on their ability to pay--not on how much money the seller wants.




```
public class SolutionOffer {
    ArrayList<Product> products;
    int price;//floor, ceiling, and target ideas
    MarketChannelAssignment marketchannelcomb;

    public SolutionOffer(MarketChannelAssignment m){
        marketchannelcomb = m;
        products = new ArrayList();
    }
```

Solution Catalog

Hosts and manages all solution offers for all market-channel combo
Enable the creation and update of solution offers customized to markets and channels
Capable of returning all solution offers meant for a customer in a market coming in an identified channel.


```
public class SolutionOfferCatalog {

    ArrayList<SolutionOffer> solutionoffers;

    public SolutionOfferCatalog() {
        solutionoffers = new ArrayList();
    }

    public SolutionOffer newSolutionOffer(MarketChannelAssignment mca){
```

Solution Catalog


```
public class SolutionOfferCatalog {

    ArrayList<SolutionOffer> solutionoffers;

    public SolutionOfferCatalog(){

        solutionoffers = new ArrayList();
    }

    public SolutionOffer newSolutionOffer(MarketChannelAssignment mca){
        SolutionOffer so = new SolutionOffer(mca);
        solutionoffers.add(so);
        return so;
    }
```

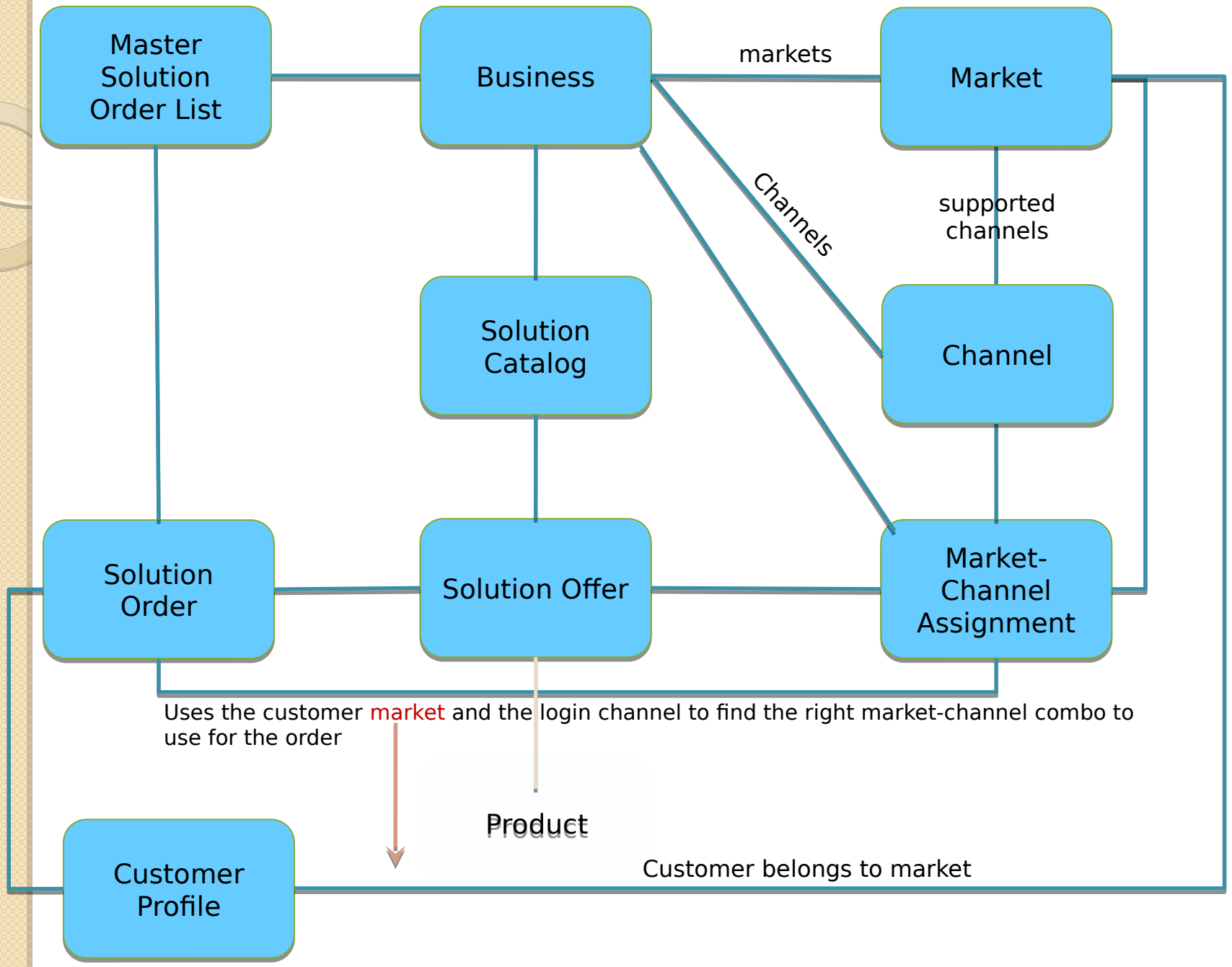
Solution Catalog


```
 //this method will identify all solution offers meant for customers in a market coming in over a channel
// the app will extract the market and channel combo from the user profile and use it to pull all offers

public ArrayList<SolutionOffer> findSolutionsForMarketChannelCombo(MarketChannelAssignment mcc) {
        ArrayList<SolutionOffer> foundsolutions = new ArrayList();

        for (SolutionOffer so : solutionoffers) {

            if (so.isOfferTargetMarketChannel(mcc) == true) {
                foundsolutions.add(so);
            }
            //find all solution offers available in the market/channel combin
        }
        return foundsolutions;

    }
```

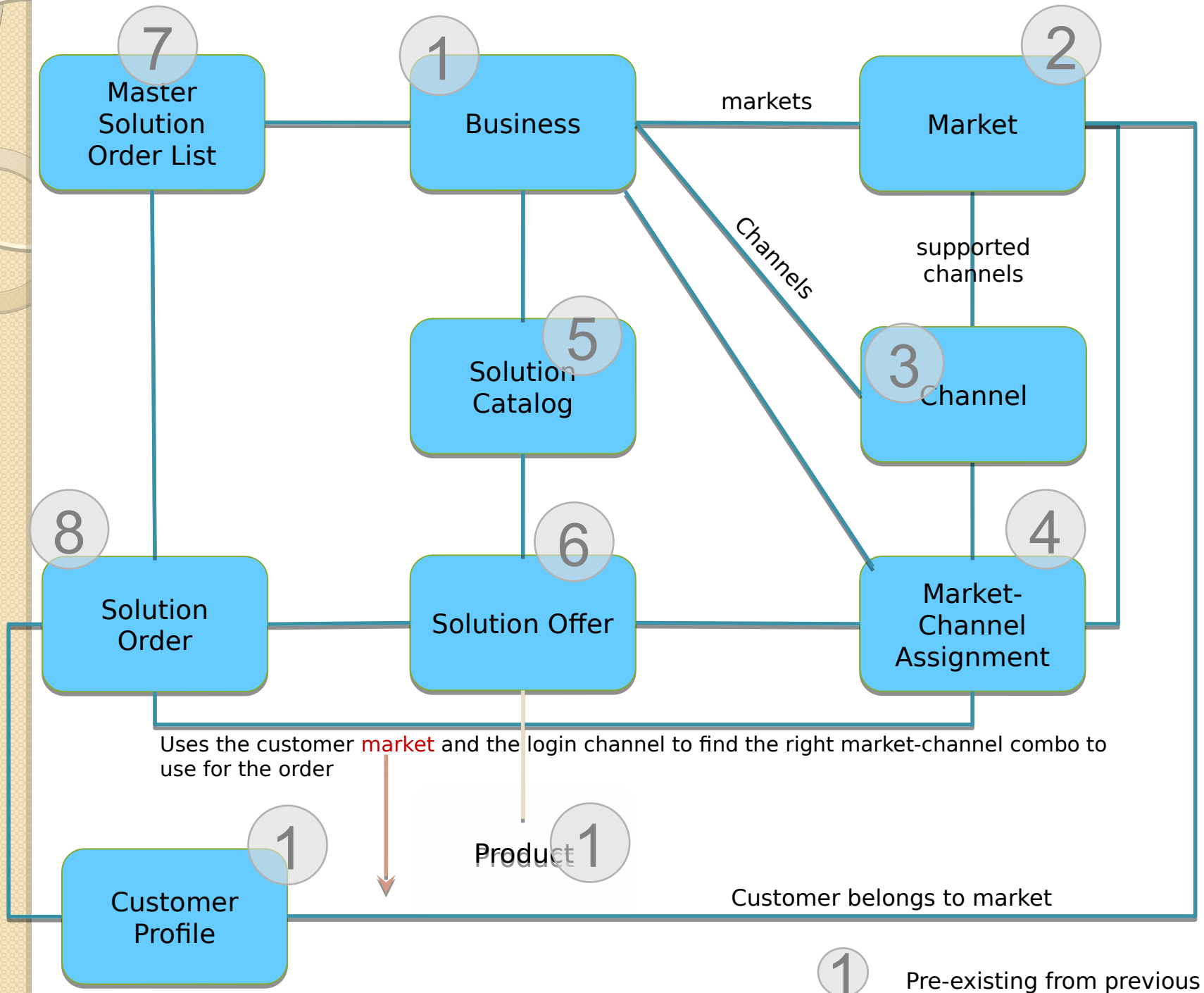
Solution Offer

```
public class SolutionOffer {
    ArrayList<Product> products;
    int price;//floor, ceiling, and target ideas
    MarketChannelAssignment marketchannelcomb;

    public SolutionOffer(MarketChannelAssignment m){
        marketchannelcomb = m;
        products = new ArrayList();
    }

    public void addProduct(Product p){
        products.add(p);
    }
    public void setTotalPrice(int p){
```

The Model


Master Solution Order List
Business
markets
Market
Channels
supported channels
Solution Catalog
Channel
Solution Order
Solution Offer
Market-Channel Assignment
Uses the customer market and the login channel to find the right market-channel combo to use for the order
Product
Customer Profile
Customer belongs to market

The Model Coding Steps



Linking the solution order to market and channel combo