

Faculty Overview and Technical Note for MBTN

Login

Each student receives their own username and password via the email address provided by their professor. Students then login at www.management-by-the-numbers.com and pay on-line, unless university is billed directly.

NEW USERS: [registration guide and login help](#) Username: Password:

After login (and potentially payment) students will be directed to a main screen displaying all of the modules the faculty has selected for their class, with links to the self-paced tutorials and problem sets for each module. Current problem set completion rate and percent of questions answered correctly are provided here as well.

Student Access to Self-Paced Tutorials and Problem Sets

Each module contains a self-paced tutorial and 4-10 problem sets consisting of multiple questions. Tutorials are provided in html5 and pdf formats and are compatible with Windows, Macintosh and iPad operating systems, and all major browsers. Each problem set is based on a particular business situation, and has 4-10 questions on the topics covered in the particular module. Each module may optionally have a due date listed. Here is a sample screen of what the student will see when they sign in. This is considered “home base” for the student.



Current Course: Marketing Analytics with Julie Pirsch Section 2 - Spring 2015

Topic	Tutorial	Problem Sets	Problem Sets Completed	Module Score	Level Achieved
Market Share Metrics I	html5 / pdf	Launch	0 of 4	0.0%	Mail Clerk
Market Share Metrics II	html5 / pdf	Launch	0 of 4	0.0%	Mail Clerk
Perceptual Mapping	html5 / pdf	Launch	0 of 4	0.0%	Mail Clerk
Distribution	html5 / pdf	Launch	0 of 4	0.0%	Mail Clerk
New Product Forecasting	html5 / pdf	Launch	0 of 4	0.0%	Mail Clerk
Calculating Margins	html5 / pdf	Launch	0 of 4	0.0%	Mail Clerk

Tutorials

Tutorials are provided in html5 and pdf format. Students may download the pdfs for future reference, and faculty have access to the original ppts should they wish to integrate them into their classroom materials. The tutorials are to the point and provide examples for all important calculations in the module. A sample “page” from the CLV I tutorial is shown to the right.

The Value of a Customer

One way to illustrate the relationship with a customer from the manager's perspective is shown below as three distinct stages.

```
graph LR; Target[Target] --> Acquire[Acquire]; Acquire --> Satisfy[Satisfy]
```

Target
Decide whether to target the customer based on the lifetime value of the customer.

Acquire
Acquire the customer through a successful initial transaction (sale or trial).

Satisfy
Maintain and develop the customer relationship so long as it is profitable.

Insight
The fundamental driver of the relative success of a business is doing a better job than the competition at each of these stages. Customer Lifetime Value (CLV) is the underlying principle.

THE VALUE OF A CUSTOMER

MBTN | Management by the Numbers 4

Problem Sets

Each problem set has 4-10 questions on the topics covered in the particular module. The problem set is based on a realistic company situation with multiple variables that the student must use to answer the questions. Here is a sample problem set with the company situation background and the first (of multiple) questions.

Course: Marketing Analytics with Julie Pirsch Section 1 - Spring 2015
Module: Market Share Metrics II | Problem Set ID: 36

0 Problem Sets 0 Total Questions

0 4 0 20

All-over Shampoo is a leading brand in the company's western sales region. Of the **724,000** households in the region, 500,000 purchase the shampoo category. Among this group, **246,000** households purchased All-over shampoo. Households that bought All-over brand shampoo purchased **514,000** bottles of All-over. Those same households purchased **883,000** bottles of shampoo in total. The average consumption of households that bought any brand of shampoo was **2.0** 20oz bottles. However, All-over is targeted at heavy users.

What is the Unit Share of Requirements (%) for All-over shampoo?

0.0% percent

Submit Answer Exit

PS1 1 2 3 4 5 6



Problem set values are unique to each instance for the student. By default, students receive two opportunities to answer each question. If the student does not get the question right in two tries, they receive a detailed explanation of the correct solution before proceeding to the next question.

Once they have gone through all the problem sets they will be cycled back to begin again on problem set #1, question #1, with new values. In this way, students will be given the opportunity to answer all of the questions in all of the problem sets correctly. A problem set is considered complete when all of its questions have been answered correctly, thus demonstrating mastery of that set of questions.

Answer and Explanation:

$$28,322 - 25,761 = 2,561 [+/- 77]$$

Remember, growth (\$ or units) is just the change from time period $t - 1$ to time period t .

0 is **INCORRECT**.

Next Question Exit

PS1 1 2 3 4 5 6 7 8

Below is a general overview of how the system works from the student perspective. Note that students may continue to work on the problem sets as long as they like without negatively affecting their score (once a question is right, it is always right). The idea behind MBTN is mastery and practice, not assessment per se.

Customer Lifetime Value I (Basic)

This module introduces the concepts of customer profitability, customer lifetime value (CLV), and multi-period revenue streams.

MBTN | Management by the Numbers

Author: Stu James
Marketing Metrics Reference: Chapter 9
© 2015 by Jones and Bartlett Publishers, Inc.

The Value of a Customer

One way to illustrate the relationship with a customer from the manager's perspective is shown below as three distinct stages.

Target Decide whether to target the customer based on the lifetime value of the customer.

Acquire Acquire the customer through a successful initial transaction or trial.

Satisfy Maintain and develop the customer relationship so long as it is profitable.

Insight The fundamental driver of the relative success of a business is doing a better job than the competition at each of these stages. Customer Lifetime Value (CLV) is the underlying principle.

MBTN | Management by the Numbers

Tutorials introduce the topic and provide examples. Typically 20 ppt slides.

COMPANY BACKGROUND: Eastern Motors Auto Dealership wanted to estimate the average CLV over a 5 year time horizon of a customer who purchases a new vehicle. The average vehicle sells for **\$23,900** and has a margin of 1%. Based on historical averages, 74% of people buying a new vehicle at Eastern will return for service 10 times over the next 5 years. Though it varies considerably, Eastern generates approximately **\$148** in margin on each service visit after accounting for parts and direct labor costs.

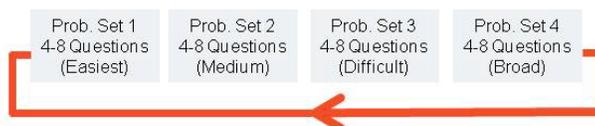
QUESTION 1: What is the average dollar margin generated for each new vehicle sold?

0 dollars (\$)

Submit Answer Exit



Problem sets allow students to apply concepts in a realistic setting. Each student is served unique values. Continue to practice until they reach a faculty defined level of mastery.



Faculty Access and Reporting

If you are interested in evaluating MBTN, we will be happy to provide you with a faculty evaluation ID and Password. This will allow you to review all the currently released modules from the student perspective.

MY ACCOUNT	PRODUCT
CLASS ROSTER	
STUDENT PERFORMANCE	
CUSTOM REPORTS	
FACULTY RESOURCES	
ALL AVAILABLE MODULES	
ACCOUNT INFO	
LOG OUT	

Once you adopt MBTN for a course, your ID will be upgraded to a faculty account (or you will be provided a "TA" account) which is linked to the students in your class. You will also have access to the original ppt tutorials for the modules that you have selected (found on the **FACULTY RESOURCES** page under **MY ACCOUNT**). You are free to use those in your class that semester. Most importantly, you will also now be able to dynamically monitor student progress.

By clicking on **STUDENT PERFORMANCE** under **MY ACCOUNT**, faculty can see a complete list of the modules assigned to their students.

Current Course: Darden FYM--Section A with Tom Steenburgh Fall 2014

Course Modules	Topics	Student Scores	Due Date
Calculating Margins	Margins and Selling Prices	View / Excel	08-29
Breakeven Analysis	Variable and Fixed Costs, Contribution, ...	View / Excel	08-29
Profit Dynamics	Target Volume, Target Profit, and Price-...	View / Excel	09-05
Cannibalization	Cannibalization	View / Excel	09-05
Conjoint Analysis	Conjoint analysis, attribute importance,...	View / Excel	09-12

To see how your students are progressing on a particular module, click on "View" to see a pop up screen such as shown in *this* example or click on "Excel" to download the information into Excel.

Distribution Operations with Bob Robicheaux Spring 2015
Student Performance for Financial Metrics I module
As of January 17, 2015, 9:15 am CST

Name	User ID	Tutorial Viewed	Problems Completed	Module Score	Level Achieved	Time Spent (min)
Boyd, Brittany	UAB630	No	0 of 4	0.0%	Mail Clerk	0.0
Casey, Jonarvis	UAB628	Yes	0 of 4	82.8%	Brand Mgr	83.9
Davis, James J.	UAB611	Yes	4 of 4	100.0%	CEO/CMO	24.0
Godwin, Austin M.	UAB612	Yes	4 of 4	100.0%	CEO/CMO	91.4

Along with displaying problem sets completed, their overall score on that module, and level achieved (which the students have), professors may also see whether students have viewed the tutorial and an estimate of the time spent on the particular module.

Faculty also have the option of seeing the performance breakdown by individual student. Under **MY ACCOUNT**, select **CLASS ROSTER**:

Current Course: Darden FYM--Section A with Tom Steenburgh Fall 2014

Name	User ID	Paid in Full?	Module Status	Last Login mm-dd 24hr
Ahmad, Ashraf Uddin	DFYM011	Yes	View	11-01 17:00
Arias, Roberto	DFYM012	Yes	View	11-02 11:16
Bravo Beneitez, Guillermo	DFYM013	Yes	View	10-31 08:15
Brear, Catherine	DFYM014	Yes	View	10-24 11:06

Detailed Performance for Catherine Brear (DFYM014)

Topic	Problem Sets Completed	Module Score	Level Achieved
Calculating Margins	4 of 4	100.0%	CEO/CMO
Breakeven Analysis	4 of 4	100.0%	CEO/CMO
Profit Dynamics	4 of 4	100.0%	CEO/CMO
Cannibalization	4 of 4	100.0%	CEO/CMO
Conjoint Analysis	4 of 4	100.0%	CEO/CMO
New Product Forecasting	4 of 4	100.0%	CEO/CMO
Sales Force Management II	4 of 4	100.0%	CEO/CMO
Customer Lifetime Value II	4 of 4	100.0%	CEO/CMO
Customer Lifetime Value I	4 of 4	100.0%	CEO/CMO

Print

From this screen, clicking on "View" will bring up a list of that particular student's results for all modules as shown at the left.

Custom Reports

MBTN now offers the option of customizing reports for your convenience. Under **MY ACCOUNT**, select **CUSTOM REPORTS** to get to this screen:

- Select a report type from the drop down menu (you will see a brief description of that report to the right).
- Highlight which modules you want the report to include, check off which options, and select which file format.
- Click on download to generate this report.

Customize the export

Report:	Student Performance By Module
Module(s): <small>Click + Drag Ctrl + Click Ctrl + Space</small>	Calculating Margins Breakeven Analysis Profit Dynamics Cannibalization Conjoint Analysis
Options:	<input checked="" type="checkbox"/> Only include modules with results? <input checked="" type="checkbox"/> Hide cells with no results?
File Format:	xlsx (Excel 2007)

[Download](#)

This report tracks student performance by listing student Scores, Time Spent, Completion percentages, and their Problem Set progress.

Results are grouped by module and each module is output on its own page within the file.

In this way you have the ability to create 4 different types of reports, with whichever modules you select, in one of three different formats, at any time.

NOTE: This tool can also be accessed by clicking on the **Custom Reports** button on the **STUDENT PERFORMANCE** screen.

In addition to these performance reports for their classes, professors also receive full access to the tutorials and problem sets for all MBTN modules under **MY ACCOUNT, ALL AVAILABLE MODULES**. The modules that have been adopted are listed first at the top of the screen, and below is the rest of the complete list

To receive a faculty evaluation ID, please provide your business card to the MBTN representative at our exhibit booth or email a request to info@management-by-the-numbers.com.