

**LECTURE NOTES ON MARKET TARGET SELECTION, POSITIONING,
AND CUSTOMER ANALYSIS/MARKET SEGMENTATION (FIRST SET
OF NOTES FOR SECOND EXAM)**

I. Overview of major topics to be discussed and the logic for the sequence of discussion

The lecture notes on these related topics are going to take up a lot of space and go into a lot of detail. The amount of detail can make it difficult for you to understand the basic points and issues discussed. This overview is being presented to help you understand the basic points discussed in these notes, as well as in the next set of the notes, which is a continuation of this set.

- A. Basic description of how **perceptual mapping** can be used to identify dissatisfied **benefit** market segments that can be the basis for potentially profitable positioning options (discussed in “I” below in this set of notes)

Three key attitudinal components are introduced and discussed here. These components are discussed throughout both this set of notes and the next set. These attitudinal components are identified immediately below. They will be defined a little later.

- 1) Customer **perceptions** toward each brand on each relevant determinant benefit
- 2) Customer **ideal points** on each relevant determinant benefit
- 3) The degree of **importance** a customer places on each relevant determinant benefit

- B. Discussion of three limitations, or **unrealistic assumptions** of perceptual mapping that prevent it from accurately identifying the degree of customer satisfaction/dissatisfaction toward different brands in different benefit segments. These three unrealistic assumptions are discussed under II of this set of notes.

- C. Detailed and systematic description of a **calculational** process used to identify dissatisfied benefit market segments that can be the basis for potentially profitable positioning options (discussed in “III” in this set of notes)

This calculational approach is called the **weighted average difference (WAD)** approach. The WAD process uses ideas from perceptual mapping but does not actually use perceptual maps and it overcomes and addresses each of the three unrealistic assumptions of perceptual mapping.

- D. Criteria used to evaluate potentially profitable positioning options (IV in this set of notes) and to evaluate potentially profitable repositioning options (in next set of notes)
 - E. Use of information on three key attitudinal components discussed under A above to help evaluate repositioning options when initial positioning is successful. This information is combined into **six questions**. Each question asks about a dissatisfied benefit segment (in the next set of notes.)
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- I. Basic description of process used to identify potentially profitable positioning options using perceptual mapping
 - A. Description of perceptual mapping and of three critical attitudinal components involved on a perceptual map. These three attitudinal components are needed to understand the determinants of the degree of customer satisfaction toward different brands in different market segments, regardless of whether perceptual maps are used to identify this degree of customer satisfaction.

Description of example of perceptual mapping

The class one-page handout of a perceptual map of bar soaps is the example I use repeatedly in both this set of notes and the next set. This map has two of the three key customer attitudinal components listed on the previous page, namely customer **ideal points** on relevant determinant benefits and customer **perceptions** of different brands on relevant determinant benefits. The third component, namely the degree of **importance** customers place on each determinant benefit is not on the map. Each of these two components on the perceptual map is discussed below, along with presenting the map and background information on **determinant benefits**.

AN IMPORTANT RECOMMENDATION: You should find it a lot easier to understand this set of notes if you KEEP THE HANDOUT BAR SOAP PERCEPTUAL MAP IN FRONT OF YOU at all times you read and study these notes.

1) The customer **determinant benefits** on the map

(a) Description of concept

A determinant benefit is a **variable** that one or more customer segments use to evaluate brands within a product category.

(b) Examples of determinant benefits with automobiles

- i Gas mileage
- ii Acceleration
- iii Image associated with brand

- iv Appearance
- v Safety
- vi Purchase price
- vii Power and acceleration
- viii Popularity
- ix Estimated maintenance and repair costs

(c) Location of determinant benefits on a **perceptual map**

Most perceptual maps have two dimensions – a horizontal one (that goes from left to right) and a vertical one (that goes from top to bottom). Each dimension represents a customer determinant benefit, expressed as a **variable** that can take on a **range** of values. Putting it another way, a two dimensional perceptual map will have two determinant benefits on it. Because each determinant benefit takes on a range of values, it is necessary to **label each end** of each dimension on a perceptual map, with the each label representing an **extreme level** of the relevant determinant benefit.

The degree of **moisturizing** ability is one of the two determinant benefits on the bar soap perceptual map handout (It is the vertical dimension) while the degree of **deodorizing** ability is the second determinant benefit on bar soap perceptual map (It is the horizontal dimension.) With the moisturizing ability determinant benefit, the bottom of the DB should be labeled “**very low** moisturizing ability” and the top labeled “**very high** moisturizing ability.” With the deodorizing ability DB, the left side of the DB should be labeled “**very weak** deodorizing ability” with the right side of the DB being labeled “**very strong** deodorizing ability.”

2) Customer **ideal points** on each determinant benefit on the bar soap map

(a) Description of an ideal point on a DB

An ideal point is the amount (how much or how little), of a DB that a customer **most prefers**.

(b) Location of ideal points on a perceptual map along with examples to help understand the concept

Each numbered circle represents a **market segment** defined by the **combination** of ideal points on the two determinant benefits identified under 1c above.

For example, customers in segment 7 most **prefer** a bar soap with a very high degree of moisturizing ability combined with a moderate degree of deodorizing ability.

NOTE: I think you can begin to understand why I said two pages previously that you need to have the bar soap perceptual map **in front of you at all times** as you read these notes.

3) Customer brand **perceptions** toward each brand on each determinant benefit on the bar soap map

(a) Description of a brand perception on a DB

A brand perception on a DB is the amount of a DB (how much or how little again) that a customer thinks a **brand** has.

(b) Location of brand perceptions on a perceptual map

Each black dot on the map represents the **average** perception of all sampled consumers toward an existing brand on each determinant benefit. For example, Tone and Zest are perceived similarly in terms of moisturizing ability, with both being perceived as providing a high degree of moisturizing ability. However, these two brands are perceived quite differently on the deodorizing ability DB, with Tone being perceived as providing very little deodorant protection while Zest is perceived as offering a high level of deodorant protection.

It is critical to realize that we cannot directly determine how **satisfied** a customer is with a brand on a DB only from the perception. We need to know **both** the ideal point and the perception of a brand on a DB to know how satisfied a customer is with the brand on the DB. More specifically, we need to know how close the perception of a brand on a DB matches with the ideal point on the DB.

B. How can a perceptual map be used to identify potentially profitable positioning options?

This is an absolutely critical and central point to understand. The basic point is that these maps can identify benefit segment that **appear** to be **less than moderately** satisfied with existing brands. The below discussion starts with an explanation of why a less than moderately satisfied segment provides a potentially profitable positioning option.

Let me make an important addition to the previous paragraph. I am saying that **moderate** satisfaction is a **threshold** level of satisfaction for decision-making. This means that if a segment is **less than moderately** satisfied with all existing brands, then we do not care how much the satisfaction/dissatisfaction level is below this threshold. Sufficient opportunity for positioning to this segment would exist in this situation, regardless of whether the level of satisfaction is moderately low or whether the level of dissatisfaction is very high.

- 1) Discussion of why potentially profitable positioning options need to target a market segment that is less than moderately satisfied with all existing brands.

Positioning is considered when introducing a new brand, and most new brands are introduced in product categories with existing competition and the new positioned brand will be successful only if it can provide more perceived satisfaction to a market segment than the amount of satisfaction provided by one or more existing competitors. It basically will be impossible for an organization to provide more comparative satisfaction with a new brand if it positions the new brand to a segment that is quite satisfied with one or more existing competitive brands. However, it can provide more comparative satisfaction than existing competition of the segment is no more than moderately satisfied with any existing competitor.

- 2) Discussion of how and why perceptual maps can be used to identify segments that **appear** to be less than moderately satisfied with all existing brands

If **no** brands are perceived as being **close** to the **combination** of **ideal points** sought by a market segment on a perceptual map, then the market segment would **appear** to be dissatisfied with current brands. In this situation, no brand is perceived, on average, as **matching** the **preferences**, as determined by **ideal points**, sought by the segment.

Let's return to our example of the bar soap perceptual map to help you understand the reasoning in the above paragraph. Customers in segment **7** **appear** to be no more than moderately satisfied with any of the established brands included on the perceptual map. Because no brand is perceived as being close to the ideal points of segment 7, they will not be highly satisfied with any of the established brands as long as both moisturizing and deodorizing ability are **important** DBs to most or all of the customers in segment 7, and as long as most customers in this segment perceive the brands close to the **average** perception.

- 3) How should a new brand be positioned to appeal to a segment that currently is less than moderately satisfied with all existing brands?

If you understand the discussion of perceptual mapping to this point, you probably can figure out the answer to this question by yourself. However, I will answer it for you. To provide a higher degree of comparative customer satisfaction with a new brand, the new brand needs to be **perceived** as being **closer** to the **ideal points** of a market segment or segments than existing brands are perceived as being. Thus, if a new brand selects segment 7 as a market target, it should position the brand as being very high on moisturizing ability and moderately strong on deodorizing

ability.

A NOTE FOR A POSSIBLE REFRESHER: You can see by now how important it is to understand the attitudinal components introduced and defined on page 3 of these notes. So far, the terms **ideal points** and **perceptions** (or “**perceived**” when used as a verb) have been used very frequently. If you do not understand these two terms when you read them, I urge you to go back to the definitions on page 3 and also have the perceptual map handout in front of you all the time you read these notes so that you can use this handout to help you truly understand these notes.

- C. Why are some of the circles, representing **ideal point** segments on the perceptual map larger than other circles?

The size of each circle represents the size of each segment, realizing that some ideal point segments are going to be realistically larger than other ideal point segments.

- D. How are the **perceptions** of each brand and the location and size of each **ideal point** market segment determined?

They usually are determined through **survey questionnaires** that are presented to a random sample of relevant customers. Examples of the types of scales used to measure ideal points and perceptions, as well as those used to measure the importance of DBs will be presented in lecture and should help you better understand each of these three attitudinal components.

- E. Which of the types of segmenting consumer markets discussed in the chapter in your text on market segmentation is most similar to the ideal point segments on a perceptual map?

The answer to this question is “**BENEFITS SOUGHT**” segmentation. Benefit segmentation actually segments customers by a) the degree of **importance** they attach to relevant DBs and b) their **ideal points** on relevant DBs.

- F. How common is it in the real world that different people have different ideal points on the same DB or DBs?

- 1) Reason for asking this question

In the bar soap perceptual map, different consumers have different ideal points on both deodorizing and moisturizing ability. For example some consumers prefer very high moisturizing ability (segments at the top of the map) while other consumers prefer very low moisturizing ability (segments at the bottom of the map)

Putting this another way, if all customers had the same ideal point on

moisturizing and also the same ideal point on deodorizing, then only **ONE ideal point** segment would exist.

As with all examples, it is important to ask whether the example is realistic and common.

- 2) Answer to the question of whether different customers realistically have different ideal points on the same DB

The answer to most questions about customers is “It depends.” This is the case here. It actually depends on the DB.

A few examples are below.

With **moisturizing** ability, I think it is easy to understand why different customers have different ideal points. The reason is that different consumers have different types of skin and thus need different degrees of moisturizing.

With **deodorizing** ability it is more difficult to understand why some consumers might prefer **weak** deodorizing ability since body odor is undesirable for virtually everyone, at least in our culture. I suspect the reason is that some consumers may think that a soap with high deodorizing ability will have additives or chemicals that are unsafe. In addition, deodorizing protection can be provided through deodorant even if a weak deodorizing soap is used.

Decay preventiveness with toothpaste is a DB with which I think most consumers would have the **same ideal point** – namely **high** decay preventiveness. I can think of no reason why anyone would prefer a toothpaste that causes cavities. As an important qualification, I am not saying that everyone places high **importance** on decay preventiveness. For those who place low importance on a DB, their ideal point is basically irrelevant.

- 3) Is it easier to find dissatisfied benefit segments when a) most people have the **same** ideal point on a DB or when b) different people have **different** ideal points on a BD?

The answer is b –Here’s why. When people have different ideal points, as is the case in our bar soap perceptual map, then a large number of ideal point segments will exist, including some that are smaller and possibly overlooked or neglected by competition. In contrast, if everyone had the same ideal point on both moisturizing and deodorizing, then there would be only one ideal point segment on the map and it would be huge. All existing competitors would try to position themselves to appeal to this one huge segment.

Let me give an example of the above with toothpaste. The earlier entrants, such as Colgate and Crest tended to focus on **decay preventiveness**, both because a lot of people placed high importance on this DB and because many people had similar ideal points on this DB. Thus, **later** potential entrants had to find other DBs that were neglected by Crest and Colgate on which to position their brands of toothpaste, such as whitening ability and breath freshening.

II. Discussion of three limitations or unrealistic assumptions of perceptual mapping

In addition to describing each of the three limitations of perceptual mapping, these notes discuss a) why perceptual mapping makes the assumption which often is mistaken, b) whether the assumption, when incorrect, causes perceptual mapping to **overestimate** and/or **underestimate** the degree of segment satisfaction, c) when, how, and why perceptual mapping causes the overestimation and/or underestimation when the assumption is incorrect, and d) the degree of significance of each of limitation of perceptual mapping. The first unrealistic assumption is discussed under A immediately below, the second one under B starting on page 15, and the third unrealistic assumption is discussed under C, starting on page 18.

A. Perceptual mapping makes the assumption, which often is an incorrect assumption, that both DBs on the map are of roughly **equal** importance to most or all customers. (the **first limitation** of perceptual mapping)

- 1) How do we know that perceptual mapping assumes that both DBs on the map are of roughly equal importance?

The answer to this question is that perceptual mapping treats the distance between an **ideal point** and a **perception** toward a brand on **one** DB the **SAME** as it treats the distance between an ideal point and a perception toward a brand on the **second** DB. For example, in the bar soap perceptual map, the map would assume that a consumer who perceives a brand as being close to her **deodorizing** ideal point but far from her moisturizing ideal point would be as dissatisfied with the brand as a consumer who perceives the brand as being close to her **moisturizing** ideal point but far from her deodorizing ideal point. As a more specific example, the bar soap map would assume that segment 2 has about the same degree of dissatisfaction with Lifebuoy and Dove since both brands appear to be about the same distance from the combined ideal points of segment 2 (even though one is largely a moisturizing difference and the other is largely a deodorizing difference). In making this assumption that the degree of dissatisfaction would be the same with both of these brands, the map is treating both moisturizing and deodorizing as being **equally** important or relevant.

- 2) Will a perceptual map always incorrectly estimate the true degree of customer satisfaction when one of the two DBs on the map is a lot more important than the second DB on the map?

The answer to this question is no. Even if one of the two DBs is a lot more important than the second DB, the perceptual map will accurately estimate the true degree of customer satisfaction towards a brand if and when the size of the **difference** between the **perception** of a brand and an **ideal point** on one DB is **consistent** with the size of the difference on the second DB, regardless of whether the distance is consistently small, consistently large, or consistently a medium distance. The general reason why the estimation of customer satisfaction will be accurate here is that the importance of the two DBs has no impact on the degree of satisfaction when the customer degree of satisfaction with a brand on one DB is **consistent** with the degree of satisfaction with the same brand on the second DB. The below examples from the bar soap perceptual map demonstrate this consistency concept and should help clarify this reasoning.

The first example is with Lever 2000 and segment 2. Here the very **small** difference between the deodorizing perception of Lever 2000 and segment 2's deodorizing ideal point is **consistent** with the very **small** difference between the moisturizing perception of Lever 2000 and segment 2's moisturizing ideal point. Thus, segment two will be highly satisfied with Lever 2000, regardless of the degree of importance of moisturizing versus deodorizing.

The second example is with Lava and segment 2. Here, the very **large** difference between the deodorizing perception of Lava and segment 2's deodorizing ideal point is **consistent** with the very **large** difference between the moisturizing perception of Lava and segment 2's moisturizing ideal point. Thus, segment two will be highly dissatisfied with Lava, regardless of the degree of importance of moisturizing versus deodorizing.

On the other hand, if one of the two DBs is a lot more important than the second one, then a perceptual map will **always** inaccurately estimate the true degree of customer satisfaction with a brand **when** there is an **inconsistent** difference between the perception of the brand and the ideal point on one DB with the difference on the second DB. Some examples of an inconsistent difference are below.

Lifebuoy and segment two is one such example. Here, the deodorizing difference is very small but the moisturizing distance is quite large. Lever 2000 and segment 4 is another example of an inconsistent difference where the moisturizing difference is quite small but the deodorizing distance is quite large. Lava and segment 7 is a third example of this inconsistency where the deodorizing difference is a lot smaller than the

moisturizing difference. A number of other examples could be given from the bar soap perceptual map.

- 3) Which is more likely to occur- that there is an **inconsistent** difference between a brand perception and an ideal point on one DB compared to the size of this difference on a second DB, or that there is a **consistent** difference?

This question is asked because a perceptual map will provide an **inaccurate** estimate of the true degree of customer satisfaction only when an **inconsistent** difference exists. If an inconsistent difference is unlikely to happen, then this limitation of a perceptual map would be insignificant. Unfortunately, at least for the use of a perceptual map, inconsistent differences probably exist more frequently than consistent differences. For example, there is almost always an inconsistent difference between price and quality with most brands either having higher quality (which is a positive) but at a higher price (which is a negative) or else having a lower price, a positive, but at a lower quality, a negative. Even dealing strictly with quality-related DBs, there often is a perceived inconsistency. For example, Crest toothpaste is perceived as being more of a toothpaste that prevents cavities than one that whitens teeth, while Rembrandt is perceived as being more of a toothpaste that whitens teeth than as one that prevents cavities.

- 4) When this assumption is **incorrect** –meaning that one of the two DBs on the map is a lot more important than the second DB and when an **inconsistent** distance exists between the perception of a brand and an ideal point on one DB compared to this distance on a second DB - how will perceptual mapping be **inaccurate** in estimating how satisfied an ideal point segment truly is?

The general answer to this question is that sometimes a perceptual map sometimes will overestimate the true degree of customer satisfaction but will sometimes underestimate the true degree of customer satisfaction. The overestimation situation is discussed under 5) immediately below and the underestimation is discussed in more detail under 6).

- 5) When, how and why can perceptual mapping **overestimate** the degree of satisfaction of an ideal point segment if one of the DBs on the map is a lot more important than the second DB and when the difference between the perception of a brand and an ideal point is an **inconsistent** difference from one DB to the other DB?

The map will overestimate the degree of satisfaction when the DB on which there is a **large** difference between the perceptual of a brand and the ideal point on the **more** important DB (It is important to remember that a large difference involves dissatisfaction.). This is because this large

difference has even more impact on the overall degree of satisfaction with the brand than the map suggests if this DB is of high importance. At the same time, the small difference on the second DB has less impact on the overall degree of satisfaction with the brand than the map suggests if this DB is of low importance. An example is below.

Let's take Lifebuoy and segment 2. Here Lifebuoy is perceived quite close to the deodorizing ideal point of segment 2 (meaning that segment 2 is highly satisfied with Lifebuoy's deodorizing ability) but is perceived rather far from the moisturizing ideal point of segment 2 (meaning that segment 2 is somewhat dissatisfied with Lifebuoy's moisturizing ability), demonstrating an inconsistency. Overall, the map would suggest that segment 2 is approximately moderately satisfied with Lifebuoy. However, for those in segment 2 who place a lot more importance on moisturizing, where the difference is large, than on deodorizing, where the difference is small, then these customers actually would be at least somewhat dissatisfied with Lifebuoy rather than being moderately satisfied with Lifebuoy, as the map suggests.

- 6) When, how and why can perceptual mapping **underestimate** the degree of **satisfaction** of an ideal point segment if one of the DBs on the map is a lot more important than the second DB and when the difference between the perception of a brand and an ideal point is an **inconsistent** difference from one DB to the other DB?

As you might expect, the answer is the opposite of that presented under 5) above with the overestimation. More specifically, the map will underestimate the degree of satisfaction when the DB on which there is a **large** difference between the perceptual of a brand and the ideal point (meaning dissatisfaction) is the **less** important DB. This is because this large difference has a lot less impact on the overall degree of satisfaction with the brand than the map suggests if this DB is of low importance. At the same time, the small difference on the second DB has more impact on the overall degree of satisfaction with the brand than the map suggests if this DB is of high importance. An example is below.

Since the explanation here with the underestimation is the opposite of the prior explanation with the overestimation, we can **start** with the same example, namely Lifebuoy and segment 2. However, now let's assume that the DB on which the difference between the perception of Lifebuoy and the ideal point is **small**, namely with deodorizing (remember that a small difference indicates high satisfaction), is a lot more important than moisturizing, where the difference between the perception of Lifebuoy and the ideal point of segment 2 is large. Here this small difference with deodorizing, where there is high satisfaction with Lifebuoy has a lot greater impact on the overall degree of satisfaction with Lifebuoy than the large difference with moisturizing, where there is low satisfaction with

Lifebuoy, which means that the degree of satisfaction with Lifebuoy for these people in segment 2 would be a lot greater than the map suggests. They actually would be highly satisfied with Lifebuoy rather than the moderate satisfaction suggested by the map.

- 7) How often is this simplifying assumption wrong? In other words, how often do consumers place significantly different degrees of importance on their two or three most important DBs?

It is wrong a lot of the time. Many consumers place primary importance on one DB with lesser or no importance placed on all other DBs. For example, some consumers place primary importance on price in many product categories while other consumers place primary importance on quality. This is particularly true with low involvement purchases like grocery and other low priced and frequently purchased products. It is a lot **easier** to make a purchasing decision when placing primary importance on one DB than when trying to equally weigh price/quality tradeoffs. For example, many consumers generally purchase store or private label brands because of their lower price while other consumers rarely buy such brands. This is easier than trying to weight and evaluate specific price and quality tradeoffs here.

- 8) How **significant** is this first limitation of perceptual mapping (involving the assumption that the two determinant benefits on the map are of approximately equal importance)?

(a) Identification of two conditions that need to exist for a limitation to be significant

- i One condition is that the assumption involved with perceptual mapping needs to be **frequently** incorrect (since the map will provide an inaccurate estimate of satisfaction only if the assumption is incorrect)
- ii The second condition is that there frequently will be a **large** error in estimation of customer satisfaction on a map when the assumption is incorrect. (Obviously, large errors are more significant than small errors or no errors.)

(b) How often does this first limitation meet both of the above conditions?

The general answer, which is explained in more detail in the next two subsections, is that this first limitation **frequently** meets both of the above two conditions, particularly in **low involvement** purchases such as product categories purchased in grocery stores. Thus, this is a **very significant** limitation. The reasoning is explained below in more detail.

- (c) Explanation of why the assumption of perceptual mapping that both DBs are of roughly equal importance often is an incorrect assumption (the first condition above – “i”)

This actually was explained on the previous page (page 12) under 7.

- (d) Explanation of why the error in estimation of customer satisfaction with perceptual mapping often will be a **large** error when one of the two DBs is a lot more important than the second DB (the second condition above – “ii”)

First, as discussed previously under “2” starting at the top of page 9, there will be an estimation error only when there is an **inconsistent** difference between the ideal point and the brand perception on one DB compared to the size of this difference on the second DB. However, as discussed under “3” starting toward the top of page 10, this **inconsistency** often exists.

Second, when the difference between an ideal point and a brand perception on one DB is a lot larger than this same difference on the other DB, then there will be a **large** error in the ability of the map to estimate customer satisfaction because the importance weights have a big impact on actual customer satisfaction. Let me give you a **numerical** example from the bar soap perceptual map to demonstrate that importance weights have a significant impact on customer satisfaction. This numerical example actually uses the **weighted average difference** (WAD) calculational approach that is explained in more detail later in these notes but is described immediately below.

The weighted average difference approach first separately calculates the **difference** between the ideal point and a brand perception on each of the two DBs, as this difference represents how satisfied a segment is with a brand on the relevant DB. It then **multiplies** each of these two differences by the importance weight of the DB and then **adds** the results together. This final number indicates the average size of the difference between ideal points and brand perceptions, with **smaller** differences indicating **higher** levels of satisfaction.

The numerical example will use Lava and segment 7. Using a 1-10 scale, with 10 representing **high** moisturizing (at the top of the map) and 10 also representing **strong** deodorizing (at the right of the map), assume that the moisturizing ideal point of segment 7 is 9 (since this segment is at the top of the map) and that the deodorizing ideal point of this segment is 5.5 (since this segment is in the middle of the map). Also assume that the average moisturizing perception of Lava is 2 (since Lava is at the bottom of the map) and that the average deodorizing perception of Lava is about 4 (since Lava is somewhat to

the left of the middle of the map).

Given the two numbers for both ideal points with segment 7 and the two numbers for perceptions with Lava, we calculate the difference between the moisturizing ideal point and the moisturizing perception of Lava, and calculate the same difference with deodorizing. The moisturizing difference is very large ($9-2=7$), which means these customers are very dissatisfied with Lava's moisturizing ability (Lava has a lot less moisturizing than the very high amount preferred by this segment), while the deodorizing difference is quite small ($5.5-4=1.5$) which means that these customers are quite satisfied with Lava's deodorizing ability.

Given this very high degree of **inconsistency** between the moisturizing difference and the deodorizing difference, the degree of average satisfaction with Lava depends on the importance of moisturizing versus deodorizing. I will use three sets of importance weights to demonstrate this. The first set will be equal weights of .5 for both moisturizing and deodorizing, which is what perceptual mapping will assume. I then will use weights that are a lot higher for one of the two DBs than for the other DB to demonstrate that the estimate of customer satisfaction is substantially different when one DB is a lot more important than the other DB and I will use one set of weights where moisturizing is a lot more important than deodorizing and a second set where deodorizing is a lot more important than moisturizing, with the weight of the more important DB being .8 and the weight of the less important DB being .2. The three sets of weights are summarized immediately below.

.5 for moisturizing and .5 for deodorizing
 .8 for moisturizing and .2 for deodorizing
 .2 for moisturizing and .8 for deodorizing

Also, remember that the moisturizing difference from above for Lava is 7 while the deodorizing difference from above with Lava is 1.5.

The actual calculations involve first multiplying the importance weight by the relevant difference and then adding these results together, with the number representing the degree of overall or average satisfaction with Lava, remembering that lower numbers represent higher satisfaction. The three sets of calculations are below.

$.5*7 + .5*1.5 = 4.25$ (This would be the result with perceptual mapping which assumes equal weights.)

$.8*7 + .2*1.5 = 5.9$ (Given that these values can range only from 0-9, this result is substantially different than the above result with perceptual mapping.)

$.2*7 + .8*1.5 = 2.6$ (Again, this result is substantially different from the first result with equal weights, which is what perceptual mapping assumes.)

The whole point of the above calculations involves demonstrating that the equal importance assumption involved with perceptual mapping will result in a large error in estimating customer satisfaction, at least when there is a larger difference between the ideal point and the brand perception on one DB compared to the difference with the other DB.

- B. Perceptual mapping makes the assumption, which often is a mistaken one, that each potential customer has similar **perceptions** on a determinant benefit towards a given brand represented on a perceptual map. (the **second limitation** or simplistic assumption of perceptual mapping)
- 1) How do we know that perceptual mapping assumes that each potential customer has similar perceptions on a determinant benefit towards a given brand represented on a perceptual map?

The answer to this question is that each brand on the perceptual map is in a single location on the map. This means that the perception towards a brand realistically is a **mean** average across all customers whose perceptions are represented on the map. A mean is an accurate representation of most customers' perceptions only when most customers have similar perceptions. Putting this another way, a mean is not an accurate representation of most consumers' perceptions when **high variance** in perceptions exists with a brand on a DB.

Let me use a simple example with grading to demonstrate that a mean is an accurate representation only if most people are similar on the relevant variable. If the average grade is a C, this is an accurate representation of performance of the whole class if most people get a C, along with a few As and Bs combined with a few Ds and Fs. However, this same mean grade is a misleading or an inaccurate representation of class performance if only a few people get Cs and most get either an A or an F (which still would result in a C average but is a high variance situation).

- 2) When this assumption is incorrect – meaning that different customers would have significantly different perceptions on at least one determinant benefit towards at least one given brand on a perceptual map - how will perceptual mapping be inaccurate in estimating how satisfied an ideal point segment truly is?

As with the first limitation, perceptual mapping can **sometimes** overestimate and **sometimes** underestimate the true degree of customer satisfaction when high variance exists with perceptions towards one or more brands on a DB. The reasoning for these statements is presented below under (3).

- 3) When and why will perceptual mapping sometimes overestimate and sometimes underestimate the degree of satisfaction of an ideal point segment when different customers have substantially different perceptions on a determinant benefit towards at least one given brand represented on a perceptual map?

The general reason why perceptual mapping will be inaccurate in this situation is because some customers' perceptions will definitely be **further** from the relevant ideal point of the segment than the mean perception toward the brand on the map while **other** customers' perceptions towards the brand could be either closer or further from the relevant ideal point of the segment, depending on **how close** the **mean perception** of the brand is to the **ideal point**.

To better understand the conclusions in the last two sentences in the prior paragraph, the basic concept to know is that the perception towards a brand on a map is a **mean** perception. Thus, when **maximum variation** exists in customer perceptions towards a brand on a determinant benefit, one half of the customers' perceptions will be rather far from the mean on one **side** of the average perception toward a brand on the map while the other half of the customers' perceptions will be equally far from the mean on the other **side** of the average perception toward the brand on the map. (I will give a **visual** example in class with the bar soap perceptual map to help you better understand this conclusion.) Although my visual examples in class will involve **maximum** variance because the examples can then be rather simple, realize that **maximum** variance never exists with perceptions in the real world.

Two examples from the bar soap perceptual map will be discussed to explain how and why evaluations of customer satisfaction with a brand will be inaccurate with perceptual mapping when **high variation** exists with customer **perceptions** toward a brand on at least one DB. The first example will be when the mean perception of a brand that is **close** to one of the ideal points of a market segment (Dial with the moisturizing ideal point of segment 1) and the second example will be with a brand that is **further** from one of the ideal points of a market segment (Tone with segment 7's deodorizing ideal point). To better help you understand the below examples, a visual example will be given in class.

With Dial, if **maximum variance** in perceptions existed on moisturizing this would mean that about half the respondents would perceive Dial to

have significantly more moisturizing than on the map while the other half of respondents would perceive Dial to have significantly less moisturizing than on the map. Because the **mean** moisturizing perception of Dial is **close** to the moisturizing ideal point of segment 1, this means that both halves of customers would perceive Dial to be further from their moisturizing ideal point than the map indicates. Both halves in segment 1 then would be substantially **less** satisfied with Dial than it would appear on the map.

With Tone, if **maximum** variance in perceptions existed on deodorizing, this would mean that about half the respondents would perceive Tone to have significantly less deodorizing ability than the **mean** perception on the map while the other half would perceive Tone to have significantly more deodorizing than the **mean** perception on the map. Here the first half's deodorizing perception would be further from the ideal point than the deodorizing perception on the map (which would make them even less satisfied than they appear to be on the map) However, here the second half of deodorizing perceptions would be closer to the deodorizing ideal point of segment 7 (which would make them **highly satisfied** with Tone). Thus, this **UNDERestimation** of the percentage of a segment who are at least moderately satisfied with Tone on deodorizing ability would be a serious problem because the good positioning opportunity suggested by perceptual mapping is not nearly as good as it would appear from the map.

- 4) How common is it that different consumers have significantly different perceptions towards the same brand on the same DB?

It depends on the DB and how **subjective** evaluation is, with higher variance likely to exist with more subjective DBs and low variance existing with more objective DBs. For example, price generally is a more objective DB since price is a number that can be easily assessed. Thus, little variance in **price** perceptions will exist towards a brand. On the other hand, the two DBs in our bar soap example tend to be rather **subjective** where more variance in perceptions towards a brand on a DB is likely to exist.

However, even with more subjective DBs, the degree of variance in perceptions is, at most, moderate, rather than the maximum variance examples I have used to keep things simple. More specifically, even when moderate variance exists, there is likely to be a **normal distribution**, with many of the customer's perceptions falling close to the mean.

- 5) How significant is this second limitation, which involves the perceptual map assumption that only limited variance in perceptions towards a brand on a DB exists?

This question of significance was also discussed with the first limitation, where we started with two conditions that need to exist in order for a limitation to be a significant one. For your convenience, the two conditions identified previously are pasted below.

- (a) Identification of two conditions that need to exist for a limitation to be significant
- i One condition is that the assumption involved with perceptual mapping needs to be **frequently** incorrect (since the map will provide an inaccurate estimate of satisfaction only if the assumption is incorrect)
 - ii The second condition is that there frequently will be a **large** error in estimation of customer satisfaction on a map when the assumption is incorrect. (Obviously, large errors are more significant than small errors or no errors.)
- (b) To what extent does this second limitation involving the limited variance in perceptions assumption, meet the two above conditions?

The general answer to this question is that the first above condition realistically does not exist, at least to a substantial extent, most of the time. I actually discussed this on the previous page under “4)” when I stated that, at most, **moderate** variance in perceptions exists. Thus, although, in my extreme **maximum** variance examples, the perceptual map has a large error in estimating the degree of customer satisfaction, the maximum variance examples will not exist in the real world. Putting this another way, moderate variance will produce, at most, moderate errors in estimation when the mean is used.

- C. Perceptual mapping makes the assumption, which sometimes is a mistaken one, that each ideal point segment places importance on **no more than two** DBs at a time. (the **third limitation** or unrealistic assumption of perceptual mapping)
- 1) How do we know that perceptual mapping assumes that each ideal point segment places importance on no more than two DBs at a time?

The answer to this question is that usually only **two** DBs are shown on a single perceptual map. (Although only two DBs are on a single map, there often are multiple maps with different segments used. Certainly, moisturizing and deodorizing and not the only DBs used and neither of these may be important to some soap buyers and users.) Although it is technically possible to have more than two DBs on a perceptual map, it is very difficult for managers to interpret even a three-dimensional perceptual map with three DBs because it is hard to see and interpret the

third dimension, which would be a depth dimension, on a two-dimensional surface.

If only two dimensions or two DBs are shown on a single perceptual map, then it is assumed that ideal point segments on this map will place importance **only** on the two DBs on the map, rather than placing importance on one or more DBs in addition to the two DBs on the map.

- 2) When this assumption is incorrect – meaning that three or more DBs realistically may be important to many ideal point segments, how will perceptual mapping be inaccurate in estimating how satisfied an ideal point segment truly is?

The true degree of customer satisfaction with existing competition can either be over or under estimated if this assumption is incorrect, for reasons discussed under both 3 and 4 below.

- 3) When, how and why can perceptual mapping **OVERestimate** the degree of satisfaction of an ideal point segment when three or more DBs are **important** to an ideal point segment?

Perceptual maps will **OVERestimate** the degree of customer satisfaction when satisfaction based on the two DBs on the map is quite **high**. When customers are quite satisfied with a brand on the two DBs shown on a map, then average or overall satisfaction really can't increase if a third DB, not on the map, is also important to them. However, it is quite possible that the average satisfaction can decrease when this third DB is considered. As a simple general example, if a student gets an A on the first two of three exams (which would be equivalent to a high degree of satisfaction on **two** DBs on the map), then even with best possible grade of A on a third exam (equivalent to a third important DB not shown on the perceptual map), the overall or average grade (equivalent to overall or average satisfaction) would not increase. However, any grade on this third exam lower than an A would decrease the grade and a grade of F would decrease the overall grade from an A to a B-/C+, assuming that the three exams are weighted equally.

Although I just gave a general example to demonstrate the reasoning in the previous paragraph, let me also give an example using the bar soap perceptual map. Segment 1, whose ideal point combination on the two DBs is moderately high moisturizing ability and very high deodorizing ability, appears to be quite satisfied with a few brands, such as Zest. However, let's assume that many in this segment also placed high importance on price and have an ideal point at the low end of the price DB. It is quite possible that none of the three brands that are perceived as being close to the ideal points of this segment on moisturizing ability and deodorizing ability would also be close to this segment's ideal point on

price. If this were the case, dissatisfaction with current brands would be higher than indicated on the perceptual map because the map does not include price along with including moisturizing ability and deodorizing ability as DBs.

- 4) When, why, and how could this second limitation cause perceptual mapping to **UNDERestimate** the degree of customer satisfaction? (which is the **opposite** estimation error than the one discussed above under 3 above)

If you are thinking carefully and evaluating what I am saying, you should be thinking that adding a third DB could increase the degree of satisfaction, which means that this limitation could cause perceptual mapping to UNDERestimate the degree of satisfaction, when this limitation exists (which is the opposite conclusion to the **OVERestimation** impact that I discussed above under 3).

Let's start with the opposite result on the two exams than what I used in the above example under 3, meaning that the student gets grades of Fs on the first two exams. Here, if they got a score of A on the third exam (**assuming** that the third exam is equivalent to a perception on a third DB **not** on the perceptual map), then this third score obviously would raise their grade, but only to a **D+**, even assuming equal weighting. (which would be equivalent to an increase in average satisfaction) Thus, perceptual mapping would actually **UNDERESTIMATE** satisfaction in this example by leaving out the third DB.

- 5) How significant is this third limitation, with perceptual mapping assuming that only two DBs are important to a customer?

Once again, let me paste the two conditions necessary for a limitation to be significant.

- (a) Identification of two conditions that need to exist for a limitation to be significant
- i One condition is that the assumption involved with perceptual mapping needs to be **frequently** incorrect (since the map will provide an inaccurate estimate of satisfaction only if the assumption is incorrect)
 - ii The second condition is that there frequently will be a **large** error in estimation of customer satisfaction on a map when the assumption is incorrect. (Obviously, large errors are more significant than small errors or no errors.)
- (b) Evaluation of this third limitation on the two conditions

More than two DBs are often used by customers, at least with more important and less frequent purchase decisions, which can be labeled **high involvement** purchases, such as computers, cars, household appliances, etc. These decisions are more important and the products realistically often have a rather large number of DBs that can potentially be used. Thus, this limitation often meets the first condition.

However, even when three or more DBs are used, this limitation usually does not result in a perceptual map producing a large error in estimating customer satisfaction. Here is why. Realize that a perceptual map is going to include the two **most important** DBs to each market segment (which means we will have different maps for different market segments.) If the two most important DBs already are included on a perceptual map, then even in the most extreme instance where the third DB has the same weight or degree of importance as the two DBs on the map, it still will result in a only a small or moderate change in average satisfaction. My prior examples with grading demonstrated this, as I assumed equal importance of the third exam with the first two exams. In addition, my example was a very extreme one where the results on the first two DBs was either **extremely** positive or **extremely** negative, with the result on the third DB being the **extreme** opposite of the result on the first two DBs. Less extreme and more realistic results will produce an even smaller difference between actual average satisfaction and the degree of satisfaction shown on a perceptual map.

- III. Description of calculational WAD process used to correctly and accurately identify the degree of customer satisfaction towards each existing brand in each benefit segment.

This calculational process can be labeled the **weighted average difference** approach (WAD), as the basic calculations involve first taking the **difference** between a customer's ideal point on a DB and the customer's perception of a brand on a DB, then taking the **weighted average** of these differences across each relevant DB, using the importance weight of each DB as the weights. The calculated WAD for each brand indicates how satisfied or dissatisfied a customer is with that brand, with a **lower** weighted average difference indicating **higher** satisfaction. This is because a small difference means that a brand is **perceived** as meeting the **most preferred** level of a DB. For example segment 8's ideal points indicate that it most prefers a soap that is moderately strong in its deodorizing ability and moderate in its moisturizing. Customers in this segment whose true perceptions equal the average perceptions of Coast on the map would be highly satisfied both with Tone's moisturizing ability (It is perceived as being only slightly more moisturizing than the moderate moisturizing they most prefer and it also is perceived as being only a little less strong than the moderately strong amount of deodorizing that they most prefer.)

I actually already used the WAD approach in my previous numerical examples on pages 14 and 15. Here, I will go into a lot more detail in describing and explaining the WAD process.

The WAD eliminates each of the three limitations of perceptual mapping discussed previously, which means this WAD will accurately identify the degree of satisfaction towards existing brands of market segments (actually of **individual** respondents within each market segment)

A. **Similarities** between the **WAD** process and **perceptual mapping**.

- 1) Both the WAD process and perceptual mapping correctly assume that positioning opportunities exist with market segments that are **less than moderately** satisfied with existing brands.
- 2) Both the WAD process and perceptual mapping use **ideal points** to define **market segments**.
- 3) Both the WAD process and perceptual mapping assume that the degree of satisfaction with a brand on a DB is determined by the **distance** between the **perceptions** of the brand on an important DB and the **ideal point** of the market segment on the DB. If a brand is **perceived** as being **close** to the ideal point **preferences/desires** of the segment on the DB, then the customers in the segment would be **highly satisfied** with the brand on these DBs. On the other hand, if the brand is perceived as being far from the ideal point desires of the segment, then the customers would be less than highly satisfied with the brand on these DBs. For example, customers in segment 7 have a moisturizing ideal point that means that they most prefer a soap with very high moisturizing. The average perception of Tone on moisturizing is that Tone has the very high degree of moisturizing that they most prefer. Thus, since the perception of Tone on moisturizing meets the desired amount of moisturizing segment 7 is looking for, this segment would be extremely satisfied with Tone's moisturizing. At the same time, this segment would be very dissatisfied with Lava's moisturizing ability because it is perceived as having a lot less moisturizing than what this segment most prefers. (**This concept probably is one of the important ones to understand and you almost certainly will need to give your own example and explanation of this on the exam at some point so make sure you understand it.**)

B. **Differences** between the **WAD** process and **perceptual mapping**

- 1) Unlike perceptual mapping, which looks at ideal point segments using only two DBs to define each segment, the WAD process is flexible in the number of DBs used to define a market segment. If there are market segments that place importance on three or more DBs, then a WAD can easily be calculated using the relevant number of DBs.

This difference exists so that the WAD can eliminate the **third limitation** of perceptual mapping discussed previously. Because you may not remember this limitation, it is pasted below.

Perceptual mapping makes the assumption, which often is a mistaken one, that each ideal point segment places importance on **no more than two** DBs at a time.

- 2) Unlike perceptual mapping, which assumes that each of the DBs used to define a market segment is of **roughly equal importance** to all customers in the segment, the WAD process directly considers the degree of importance of each DB for each customer **individually**. The WAD does this by using importance weights for each individual customer that represent the degree of importance of the relevant DB and weighting/multiplying the difference between the individual customer's perception and ideal point by this importance weight.

This difference exists so that the WAD process can eliminate the **first** limitation of perceptual mapping discussed previously. This limitation is pasted below.

Perceptual mapping makes the assumption, which often is an incorrect assumption, that both DBs on the map are of roughly **equal importance** to most or all customers.

- 3) Unlike perceptual mapping, which has only a **mean** perception for each brand on the map, the WAD process considers and examines perceptions towards a brand separately for each **individual** customer.

This difference exists so that the WAD approach can eliminate the **second** limitation of perceptual mapping. This limitation also is pasted below.

Perceptual mapping makes the assumption, which often is a mistaken one, that each potential customer has **similar perceptions** towards a given brand on a given DB represented on a perceptual map.

C. Description of the calculations done with the WAD approach.

- 1) Overview of calculations

There are three specific calculational steps conducted, each of which is described below, along with discussing the logic behind each one of the three calculational steps. It is very important that you understand the logic, much of which has already been explained, as you almost certainly will be asked about the logic on the second exam. These calculations are done

separately for sampled customers in different ideal point segments. As discussed under 2) below, the results from survey questionnaires are used to generate the numbers calculated. Once the results are generated, they are then analyzed and interpreted, which is discussed below under D.

- 2) Use of survey questionnaires to generate numbers for each of the three relevant attitudinal components, with these three components being a customer's ideal point on each DB, the importance of the DB, and perceptions of each existing brand on each DB.

Although you may think it is unrealistic to ask customers to provide numbers representing their perceptions, ideal points, and degree of importance, realistically such numbers are generated all the time in real-world marketing research using **attitude scales** to measure each component. The numerical scales used are discussed below to help you better understand the concepts and the research approach. It should be emphasized that survey questionnaires and attitude scales also are needed to construct perceptual maps, which means that using the WAD approach will cost the same amount as using perceptual mapping.

- (a) Descriptions of numeric scales used to measure and quantify each of the **three attitudinal components**
 - i **Ideal points** for each of sampled customer on a large number of possible DBs will be quantified using a **1 to 10** scale where **1** represents an ideal point **preference** or desire at one extreme of the DB, such as for very low moisturizing and a **10** represents an ideal point preference for the other extreme, such as very high moisturizing.
 - ii **Perceptions** towards each existing brand on a large number of DBs also will be quantified using a **1 to 10** scale where **1** represents a perception of a brand having one extreme of the DB, such as having **very low** moisturizing ability and/or having very weak deodorizing protection and where a **10** represents a perception of the brand at the other extreme of the DB, such as having very strong deodorizing protection and/or very high moisturizing.
 - iii A different type of scale is used to quantify the **importance weight** of a large number of DBs than the scale described above to quantify perceptions and ideal points. An importance **weight** usually is quantitatively expressed as a **percentage**, and this percentage is then easily converted into **decimal** format. As is always the case with **percentages**, the weights for the DBs **must add to 100%** (or add to **1.0** in decimal format).

The three calculational steps with the WAD approach are described below, along with the logic of each step. A key thing to understand and remember with the logic is that the final numbers calculated represent the overall or average degree of satisfaction or dissatisfaction that a sampled customer in an ideal point market segment has towards the brand in question, with small WAD numbers representing higher satisfaction.

3) Description and logic of **first** calculational step with the WAD approach

(a) Description

Separately, for each sampled customer in each ideal point market segment, calculate the **absolute value** of the **difference** between the quantitative **perception** towards the relevant brand on a DB and the **ideal point** of the market segment on the same DB. This calculation is done for each DB that has some importance to the sampled customer and also done separately for each brand.

This number represents the degree of satisfaction or dissatisfaction that the sampled customer has towards the brand in question on the DB in question, remembering that there are multiple differences calculated for each brand on different DBs. For example, if there are 5 brands and 3 DBs, there would be 15 such differences calculated for each sampled customer.

(b) Logic behind this first calculational step

There are two aspects of this calculation that need explanation in terms of logic.

The first logical issue to address here is the question of why this is done separately for each sampled customer rather than done just once for the entire market segment. You might be able to understand this logic based on a recollection of the **second** limitation of perceptual mapping. This limitation involved the assumption of perceptual mapping that all customers in an ideal market segment had the same perception towards a given brand on a given DB. As we discussed under this limitation, this assumption often is wrong, which means we need to use the **perceptions** of each **individual** customer rather than just using the average perception of all customers in the relevant market segment.

The second logical issue is understanding why this calculated difference indicates the amount of satisfaction or dissatisfaction a customer in an ideal point market segment has with a brand on a DB. In others words, why is it that a perfect match between a customer's ideal point on a DB and his or her perception toward a brand on the

same DB would indicate maximum satisfaction with the brand on the DB? Actually, this critical concept has been discussed at least three times with a different example each time. It was discussed on page 5 under 3, on page 21 towards the bottom, and on page 22 under 3. Although I may be beating the proverbial dead horse, the idea is that the ideal point is the **most preferred/desired** amount of a DB and brands that are perceived as matching their preferences will be ones with which there is high satisfaction.

4) Description and logic of the **second** calculational step with the WAD approach

(a) Description of the second calculational step

Still with each individual customer in an ideal point market segment, **multiply** the difference calculated in the first step above (between a perception of a brand on a DB and the customer's ideal point on the same DB) by the importance weight of the DB with the weight expressed as a decimal. This is done for each DB that has some importance to the customer.

(b) Logic behind this step

First, this step is done separately with different sampled customers in the same ideal point segment because they can realistically place different degrees of importance on each DB even though they have the same ideal point. For example, some customers in segment 1 may place a lot more importance on achieving the very strong deodorizing they most prefer than on achieving the moderately low moisturizing that they most prefer and other customers in this same segment may place higher importance on achieving the moderately low moisturizing they most prefer.

Second, remember that the whole idea is to determine the total amount of satisfaction/dissatisfaction with each brand across all DBs that are important to each customer in an ideal point market segment. Particularly because it is rather common that a customer may be significantly more satisfied with a brand on one DB than on other DBs that are important to him or her, it is necessary to calculate the **average** difference between ideal points and perceptions. Since realistically, one DB can be a lot more important than another DB to the same customer, we need to calculate a **weighted** average rather than a simple mean, which actually assumes equal weights.

5) Description and logic of the **third** calculational step with the WAD approach

(a) Description of the third calculational step

Separately, for each sampled customer in the relevant ideal point segment, **add** the results from step **two** above together for the brand across all DBs important to the customer.

This summed number will give us a single number for each customer and each brand, with the lowest possible number being 0 (which would happen only when a customer perceives a perfect match on each DB of importance between his or her ideal point and the brand) and the highest possible number being 9 (which would occur if the ideal point is at one extreme, having a value of either 1 or 10 and the perception at the other extreme, having a value of either 10 or 1. Taking the difference between 10 and 1 obviously results in a calculation of 9.

As discussed multiple times previously, this summed number represents the degree of average or overall amount of satisfaction or dissatisfaction the customer in the ideal point market segment has with the brand in question. Once again, lower numbers represent more satisfaction, with maximum satisfaction being represented by a value of 0.

(b) Logic of this step

Actually, there is no new logic here since this step basically just summarizes the first two steps. I have already explained why we start with looking at the difference between a customer's preferred amount of a DB, represented by an ideal point of a customer, and his or her perception of a brand on the same DB (under step 1), where a small difference represents higher satisfaction with the brand on the DB (also discussed previously with the first step) and why we then take a **weighted** average of these differences (discussed previously under the second step).

6) Discussion of how the calculational results of a large number of customers are summarized and then interpreted.

Using the calculated WAD results measures the degree of **overall** satisfaction or dissatisfaction of each respondent in the relevant ideal point segment towards each existing brand. (Remember, we are doing this analysis separately for different market segments to determine which segments, if any, offer potential for a new competitor to attract people from the segment.) We develop three categories of results, place each sampled customer in an ideal point segment into the appropriate one of three categories based on the WAD score, and then calculate the **percentage** of respondents from the relevant segment in each of the three categories. The three categories are a) those who are **highly satisfied** with

one or more current brands, b) those who are **moderately satisfied** with one or more current brands, and c) those who are **less than moderately satisfied** with one or more current brands.

The main decision to make here is selecting the specific **quantitative boundaries** or dividing points between one category and the next one. This is somewhat arbitrary, particularly when a lot of respondents are close to the boundary selected.

In our example discussed in class, I will use a **WAD** of 1.0 as the boundary between the **highly** and **moderately** satisfied categories and a WAD of 2.0 as the boundary between the moderately satisfied and the less than moderately satisfied categories.

The only remaining thing to explain is how and why the percentage of respondents in each of the three specific categories is used and interpreted, so let me explain the logic here. Remember, as I said towards the beginning of these notes, that a positioning opportunity exists with a market segment that is **less than moderately** satisfied with all existing brands. This explains why one of the three categories is less than **moderately** satisfied. The remaining question is why I have a **separate** category for those who are **highly** satisfied even though the only threshold decision level I have set is at the **less than moderately** satisfied level. Nevertheless, because the positioning potential is less if a high percentage are **highly** satisfied than if they are **moderately** satisfied, a separate category should be made for those who are **highly** satisfied with one or more competitive brands.

Since ideal point segments that offer potential for a new market entrant should be less than moderately satisfied with all existing brands (as discussed at the top of page 5 of these notes), the ideal percentage distribution would be one with which 100% of the segment is in the third or last category, involving less than moderate satisfaction.

- IV. Description of additional factors that need to be considered to more fully evaluate potentially profitable positioning/targeting options identified under “III” above.
 - A. Relationship of this topic to the prior topic involving the WAD process used to identify **potentially** profitable positioning options.

A key word in the prior topic is “potentially.” Let me explain. The prior WAD process basically involved trying to identify ideal point market segments in which at least a reasonably large number of potential customers were **less than moderately satisfied** with **existing brands**. Only these segments would offer any reasonable potential for a new brand to enter the market with any possibility of establishing some source of competitive advantage. However, such segments will not necessarily be profitable because other factors in

addition to segment dissatisfaction, are needed to evaluate the degree of profitability of potentially profitable market segments, or positioning opportunities. These additional factors are discussed in this section of the notes. Four additional factors are discussed – a) expected future competition (under B immediately below), b) degree of **technical** feasibility of meeting the ideal points of the segment in question (under C in a few pages), c) degree of **perceptual** feasibility of meeting the ideal points of the segment in question (discussed under D), and d) expected marketing, production, distribution, and administrative costs of meeting the ideal points of the segment.

B. Expected **future** competition with a potentially profitable positioning option being evaluated

1) General explanation of importance of this criterion or factor

The prior analysis in the WAD process, discussed under “III,” involved looking at customer perceptions based upon **current** competitive positioning. It is critical to realize that competition can change very rapidly and that current and possibly even new competitors may be doing the same research and analysis of the three attitudinal components that our firm is doing. If current competitors are doing this analysis, they could **reposition** their brands, particularly using a **differentiated** targeting approach for repositioning. (A differentiated market target strategy was discussed in the set of notes for the first exam. If you do not remember this strategy, you should review the part of the notes that discusses this strategy from pages 2 and 3.).

For example, the company that markets Lava could decide to introduce a high moisturizing version of Lava targeted at segment 7. If they are doing the same attitudinal analysis our hypothetical firm is doing, they would see an opportunity with segment 7, just as we see this opportunity.

Sometimes we also can expect competition from new entrants. Again, they may be doing the same analysis we do and see the same opportunities that we see.

2) How do we estimate the probability that current or new competitors might try to take advantage of the same potentially profitable positioning/targeting options that we see?

There is no simple answer to this question, as competitors are not going to tell us their positioning/targeting plans. In fact, they often will go to great lengths to disguise their plans. Nevertheless, there are some things we can do when analyzing this issue.

(a) We should realistically assume that competitors will see the same opportunities that we see.

- (b) We should carefully assess the degree of strength of **barriers to competitive entry**: If barriers are low, there will probably be new competition. If barriers are high, competition will most likely come from current competitors.

Some factors to consider in looking at barriers to entry are below—

i Maturity of a market

Barriers are higher in mature markets as brand loyalties tend to be higher here, which scares off new competitors, and product category sales are not experiencing much growth in mature markets, which also tends to discourage new competitors from entering the market.

ii Difficulty in getting established distributors

This can be difficult with consumer products where retailers often are hesitant to carry new and unproven brands and it also can be difficult (as we will discuss later in the semester with channels of distribution) in business markets to get reputable distributors to carry and sell a new and unproven product.

This barrier applies more to new entrants than to established competitors who may be introducing a new brand. Established competitors would already have retail acceptance of their established brands and often can use their existing reputation and relationship with retailers to get the retailers to carry new brands.

iii Size of the initial investment needed to break into the market

Some markets have high research and development costs and high production costs and these high costs tend to deter competition from entering a market by serving as a barrier to entry. This barrier also applies more to new entrants than to existing competition that may be introducing a new brand.

- (c) Should a firm necessarily decide to avoid positioning to a segment that is dissatisfied with current competition if it predicts that other new and/or established competitors will adopt a similar positioning approach?

As is often the answer in marketing to a question like this, the answer is “it depends” on answers to related questions that need to be answered. Some of the additional questions are below

- i Are we likely to be the first or one of the first to adopt the positioning/targeting strategy we are considering or are other competitors likely to beat us to this dissatisfied segment?

Even if we expect strong competition, if we think we can get a head start on competition, we probably should go for it, depending on the answer to the next two questions though.

- ii How **long** will it take before most of the target market give our brand or competitors' brand a try?

If we expect that competitors will beat us to the market, then we would hope the answer to this question would be a **long** time, as few customers would be loyal to competition prior to our entry.

On the other hand, if we expect that we will beat competition to the market, then we would hope that the answer to this questions would be a **short** time.

- iii How brand loyal is this market segment likely to be to the first brand they try?

In some product categories, a high potential for brand loyalty exists, such as with computer **software** (due to the hassle of learning a new software) while in other product categories, such as grocery store shopping, very little brand loyalty will exist (because many grocery stores carry the same products and brands so the decision comes down to price in many instances and prices are constantly changing from week to week with grocery stores)

If we expect competitors will beat us to the market, then we would hope that **limited** brand loyalty exists, because any loyalty would tend to benefit the early entrants, which would be competition here.

If we expect that **we** will beat competitors to the market, then we would hope that **substantial** brand loyalty exists, because this loyalty would benefit us, as the early entrant.

- iv What are the competitive strengths and weaknesses of the expected competitors compared to our strengths and weaknesses?

The point in asking this question is that we should not always be frightened of new competition or competition from existing competition, particularly if we have some strengths, such as a **technological** edge, or a **reputation** edge.

- C. The degree of **technical** feasibility of actually developing a product with the combination of characteristics that are involved with a potentially profitable positioning option being considered

Sometimes, **new** technology will be needed to achieve competitive advantage on a combination of DBs on which current competition is not currently providing a high degree of satisfaction. Because it may be less than extremely likely that the necessary new technology can be developed within a reasonable time frame and at a reasonable cost, the degree of technical feasibility needs to be considered when evaluating potentially profitable positioning options that require new technology for successful positioning. In other words, if a **low** degree of technical feasibility exists, then the potentially profitable positioning approach, discovered by finding a dissatisfied ideal point segment might be avoided.

- 1) When and why will a low degree of technical feasibility exist?

One generalization can be made here, which is that a low degree of technical feasibility can exist when there are technical **tradeoffs** between two or more DBs. When such a tradeoff exists, it is difficult to develop the technology to adequately meet ideal points on the **combination** of DBs involved. Some examples of technological tradeoffs are below, and a number of other ones could be given, as this problem is rather common.

- (a) Electric vehicles:

If technology could be developed at a reasonable cost to have increase the number of miles driven **without recharging** and/or significantly reduce the recharging time, then these vehicles probably would be quite popular due to **low operating costs**, and less dependency on middle eastern oil.

- (b) Gillette's Mach II razor system.

The challenge here was trying to develop a system that provided a very close shave combined with a very comfortable shave at a cost that also would allow a competitive price. This technical challenge was developed but only with about 8 years of Research and Development with hundreds of millions of dollars if not billions of dollars spent on this Research & Development.

- (c) Developing a pain reliever that is very powerful, quick acting, and long acting, without strong negative side effects existing. To my knowledge, such a pain reliever does not currently exist due to technical hurdles.

Although technical feasibility can be low when technological tradeoffs exist, it also can be low even when such tradeoffs do not exist.

- 2) Should we shy away from a potentially profitable positioning option when technical feasibility is judged to be low?

Not necessarily. This depends on the probability of being able to obtain effective **patent** protection if we are successful in overcoming the technological challenges. Effective patent protection, which can occur only with new technology, can give a **long-term** competitive advantage to the risk taker.

- 3) How is the degree of **technical** feasibility of a potentially profitable positioning/targeting option assessed?

Similar to the first previously discussed additional criterion, involving expected future competition, **uncertainty** exists in trying to determine the degree to which it is feasible to develop new technology. Nevertheless, it must be assessed whenever new technology is needed to satisfy ideal points on a combination of DBs. Some suggestions for assessing the degree of technical feasibility are presented below.

- (a) Try developing the new technology and if you try long enough and you cannot 'lick the problem,' then conclude that the degree of technical feasibility is very low. Of course, this **trial and error** process can be quite expensive if a feasible technology is not developed.
- (b) Rely on advice from technical professionals, but at the same time, be aware of their personal motives that might provide biased responses. They may suggest that a higher degree of technical feasibility exists than the amount that actually exists because they are confident in their own ability and/or because they want to get funding for a technical project that they are interested in doing or to get additional funding on an ongoing R & D project to keep their jobs.

- D. The degree of **perceptual** feasibility involved with a potentially profitable positioning/targeting option being evaluated

- 1) Explanation of why a lack of perceptual feasibility may exist with a positioning/targeting option being evaluated

A lack of perceptual feasibility may exist when you have combination of DBs because customers may perceive that the combination, which you are attempting to position on, realistically may not be feasible. Putting this another way, customers may perceive a **tradeoff** between determinant benefits.

Some examples are below:

- (a) Customers may have difficulty perceiving that a pain reliever can be powerful, fast reacting, and, at the same time, have no side effects. It might be difficult to convince such skeptical customers otherwise, even if this combination technically can exist.
 - (b) Another example was when a 'low-cal' beer was trying to position itself as a kind of "real man's" drink. Low-cal beer may have given the impression of being watered down or weaker than a strong and robust tasting beer that "true" men prefer. To some extent, this perceptual challenge was resolved by Miller Light, but only after a very expensive and long-term advertising campaign that had many stereotypical males in the ads that continually talked about the great taste of Miller Light.
 - (c) Club Med has been trying for a number of years to get people to perceive that it can be a vacation spot for families with children in addition to being a romantic and fun vacation for swinging singles. They have not been highly successful in changing these perceptions. In addition, the attempt to attract families has been a turnoff for swinging singles so CM has lost some of their core market.
 - (d) In general, consumers tend to have difficulty perceiving that a really good tasting food can also be a healthy food.
- 2) How can the degree of **perceptual** feasibility of a positioning/targeting option be assessed or evaluated?

- (a) The challenge

As with the previous two criteria, it is hard to accurately assess positioning/targeting options on this perceptual feasibility criterion. Some suggestions are below.

- i Use common sense to determine if a perceived **tradeoff** is likely to exist with the combination of determinant benefits involved.

For example, we are told as children to drink our milk because it is good for us and told we cannot have dessert, which we desire, unless and until we first drink our milk. This conditioning creates the impression that milk is not enjoyable.

If so, perceptual feasibility will tend to be low.

- ii Examine whether the desired perceptions involved with a positioning option can be **verified** with **actual use** of the brand.

Perceptual feasibility will tend to be low if desired perceptions cannot be verified.

For example, Southwest Airlines faced a perceptual challenge getting flyers to accept the concept that a low price airline could also provide reliable service. However, they have been successful with this perceptual challenge largely because reliable service can be verified through the experience of flying SWA, as well as verified through reliable statistics provided by outside agencies.

- iii Estimate the extent to which customers will try the brand in question.

This relates to the above point. Even if the desired perceptions can be verified with actual use of a brand, this does little good if customers do not actually try the new brand.

This is a problem with many software products, such as word processing software. It certainly is possible to convince people that a new word processing software might be better than Microsoft's if you could get them to try the new software. However, it would take some learning and adjusting, so many people stay with Microsoft even when they are less than highly satisfied with it.

E. Costs of implementing a positioning option being evaluated

A variety of costs need to be evaluated:

Technological R&D

Marketing, including promotion costs involved when perceptual feasibility may be difficult

Distribution: trying to get a retailer to sell your brand. Being able to afford shelf space.

Production for a new production line or even a new plant facility.

Unlike the prior three criteria, it is rather easy to evaluate positioning/targeting options on this criterion as costs generally are based on internal factors within the organization. However, as discussed previously under technical feasibility, the amount of time and money needed for research and development can be difficult to estimate, as can production costs when new production technology is needed.