

Aggregate planning

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Agenda

- Aggregate plan for production.
- Aggregate plan for similar products.
- How to develop the best aggregate plan?



What is aggregate plan?



What is aggregate plan?

- The aggregate plan specifies how the company wants to use the resources most efficiently.
- To reach the goals and satisfy demand.



What is aggregate plan?

Aggregate plan is dynamic.

What do we mean when we say that aggregate plan is dynamic?



What is aggregate plan?

Aggregate plan is dynamic that needs constant updates.

Because in real life, the demand and the production capacity are uncertain.

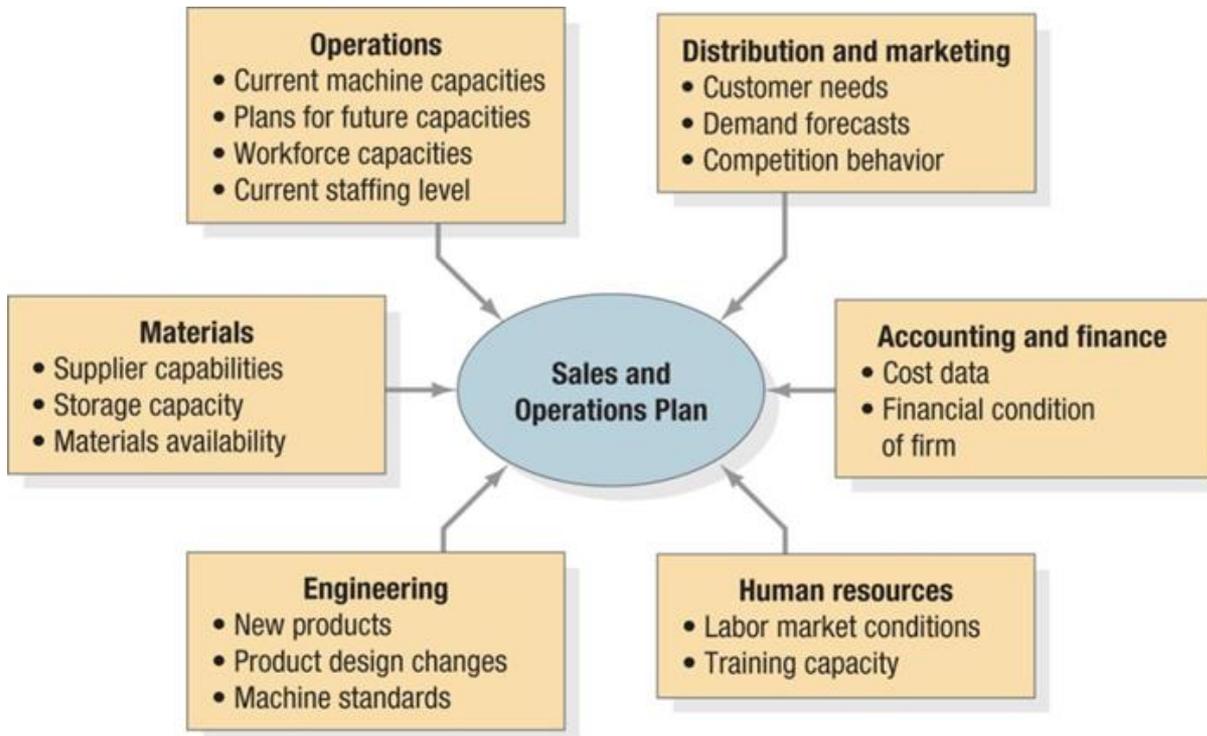


What is aggregate plan?

Another term for aggregate plan is S&OP, Sales and Operations Plan.



What is aggregate plan?

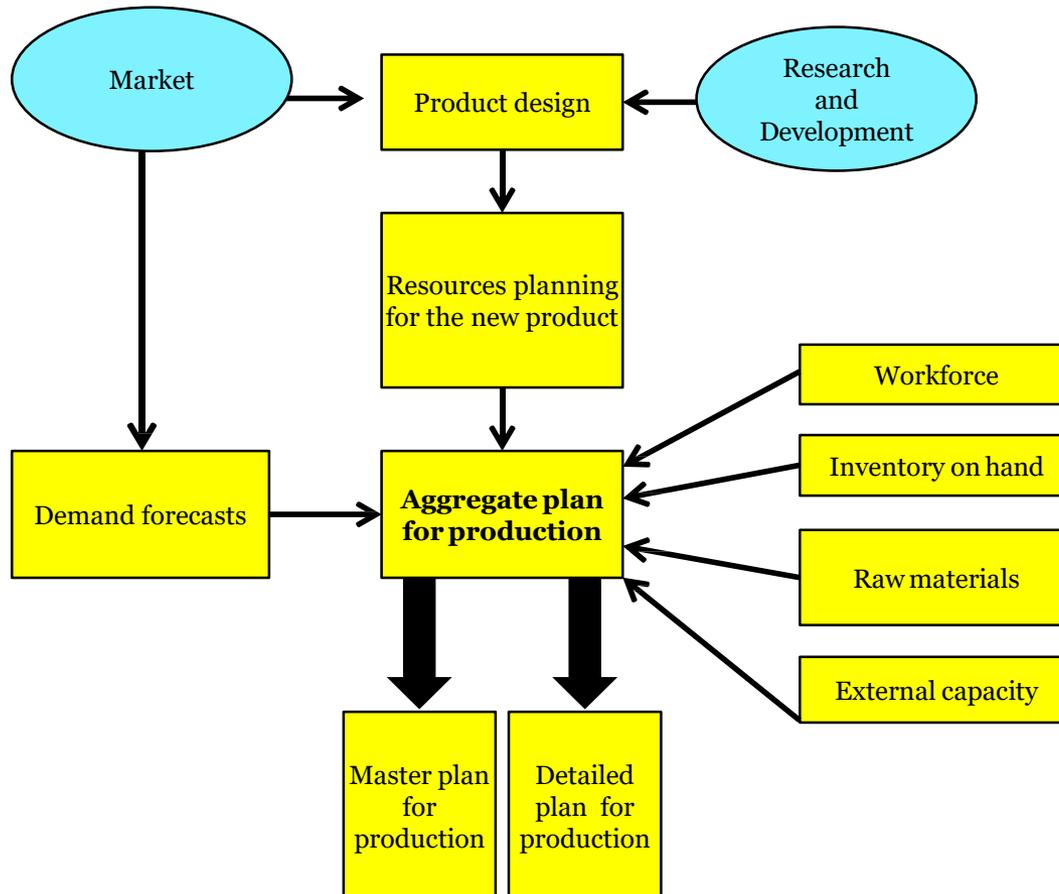




Example 1: Aggregate plan for production



Example 1: Aggregate plan for production





Example 2: Aggregate plan for similar products



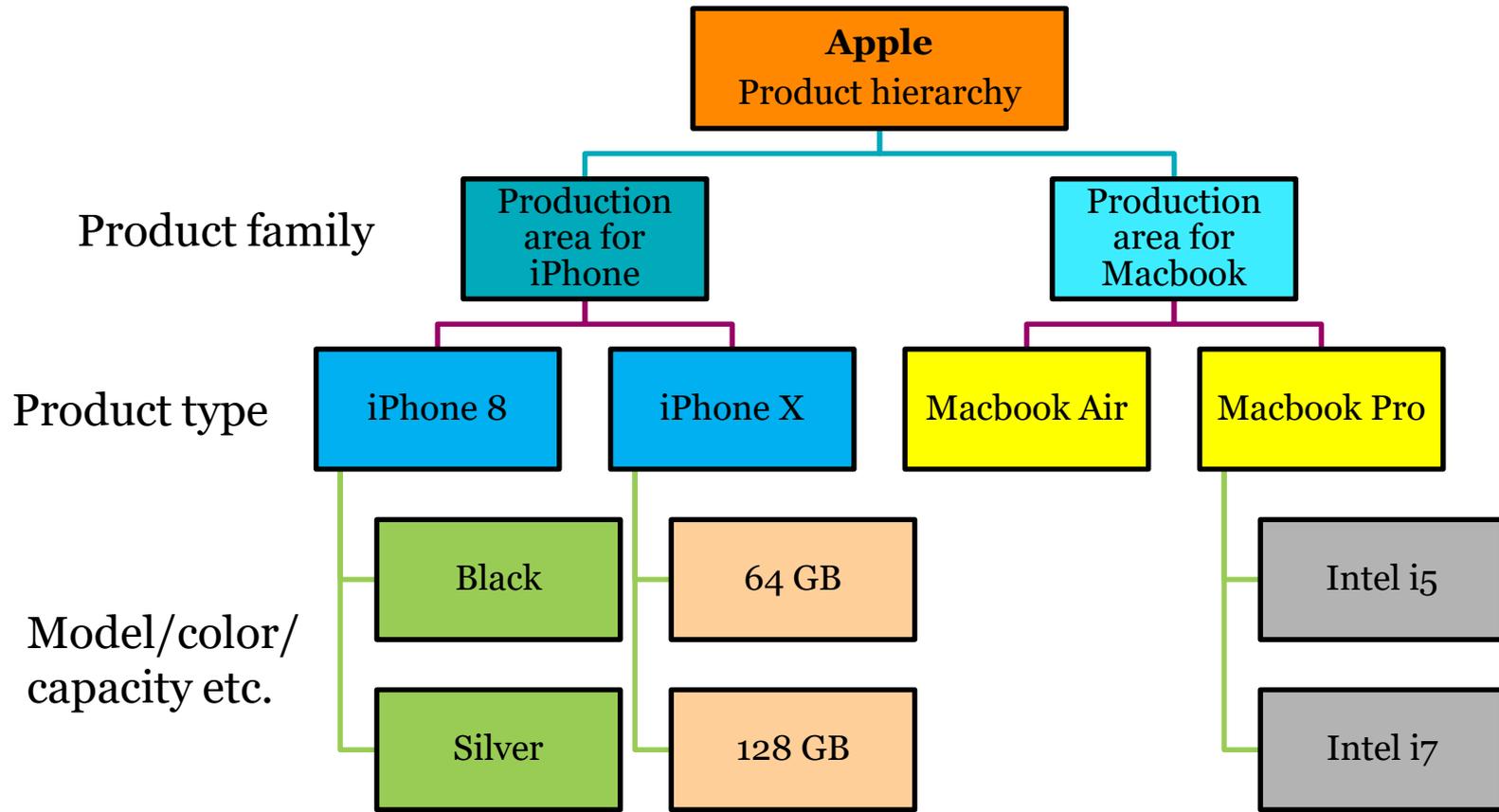
Example 2: Aggregate plan for similar products

Instead of planning for individual products, similar products are planned together in groups.

In aggregate plan, one group of similar products is as one unit.



Example 2: Aggregate plan for similar products





**Some definitions when
working with aggregate
planning.**



Definitions during working with aggregate planning

- **Backlog**
 - Accumulation of customer orders, for delivery at some future date.
- **Backorder**
 - An order that a customer is (reluctantly) prepared to wait a limited time for.
- **Stockout**
 - The customer is not ready to wait and therefore the order is lost.



So, how to do to develop the best aggregate plan?



So, how to do to develop the best aggregate plan?

Developing the best aggregate plan in 3 main steps.



So, how to do to develop the best aggregate plan?

Developing the best aggregate plan i 3 main steps:

1. Process for data collection, demand planning etc.
2. Six supply options to discuss when developing the best aggregate plan.
3. Two stragies for searching for the best aggregate plan.



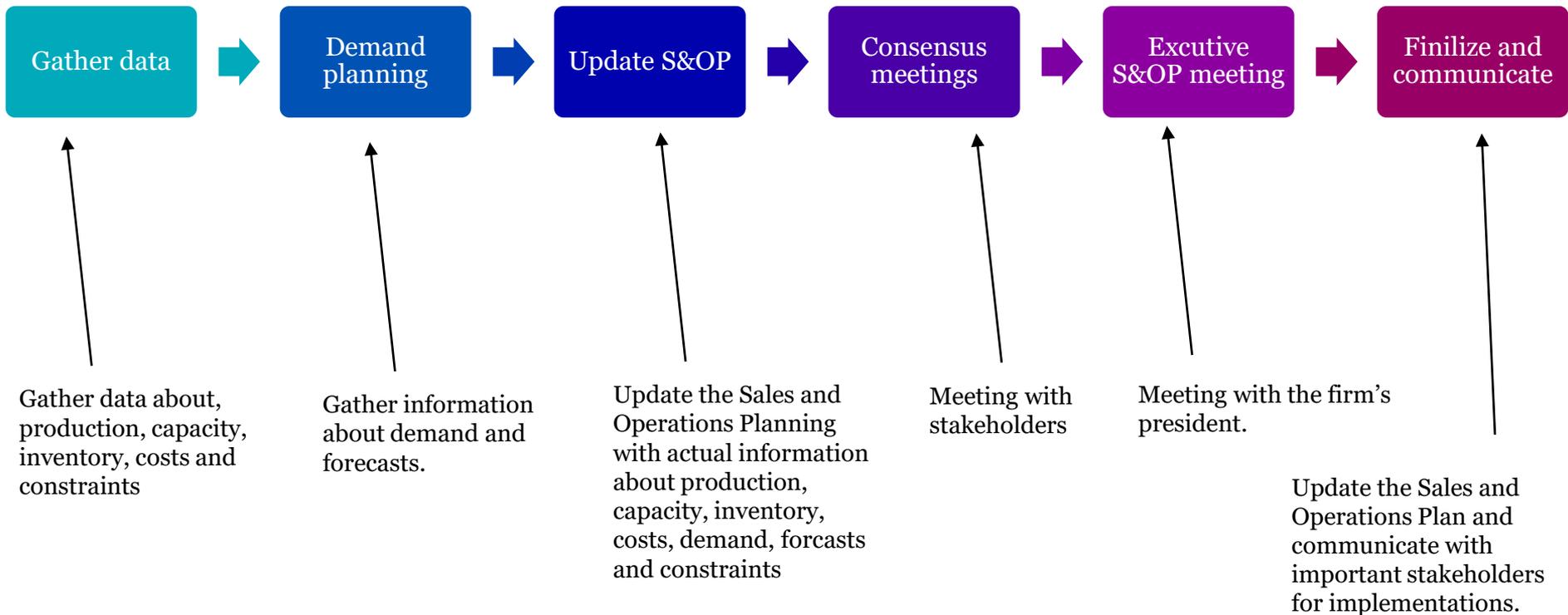
So, how to do to develop the best aggregate plan?

1. Process for data collection, demand planning etc.



So, how to do to develop the best aggregate plan?

Process for data collection, demand planning etc.





So, how to do to develop the best aggregate plan?

2. Six supply options to discuss when developing the best aggregate plan.



So, how to do to develop the best aggregate plan?

Six supply options to use when developing the best aggregate plan, singly or in combination:

- **Anticipation inventory**
 - It is an extra inventory to meet uneven rate of demand and supply.
- **Workforce adjustment**
 - It is about workforce adjustment by hiring or laying off employees.
- **Workforce utilization**
 - It is about workforce utilization by working overtime or undertime.



So, how to do to develop the best aggregate plan?

Six supply options to use when developing the best aggregate plan, singly or in combination:

- **Part-time workers**
 - Is about hiring workers for a short time.
- **Subcontractors**
 - External capacity.
- **Vacation schedules**
 - It is about vacations planning. During this period can manufacturer shut down and has employees to perform preventive maintenance.



So, how to do to develop the best aggregate plan?

3. Two strategies for searching for the best aggregate plan.



So, how to do to develop the best aggregate plan?

Two strategies in searching for the best aggregate plan.

Level strategy

Work undertime and overtime to keep employees.

Chase strategy

Hiring and laying off employees, depending on the demand.



Chapters in coursebook

- **CHAPTER 10: PLANNING AND SCHEDULING OPERATIONS.**