[SMS Series]
Production Control - Specification

Ver 1.0 / Sept. 2017

Why we have to learn this topics?

1. To understand next technical Information after VSS release

2. To understand how to check spec change on PC spec

![Toyota logo]

- After finish this training, participants should be able to:

1. Understand PC spec function and system link

2. Find spec change for New Project

Contents

1   **What is Production Spec (PC-SPEC System)?**
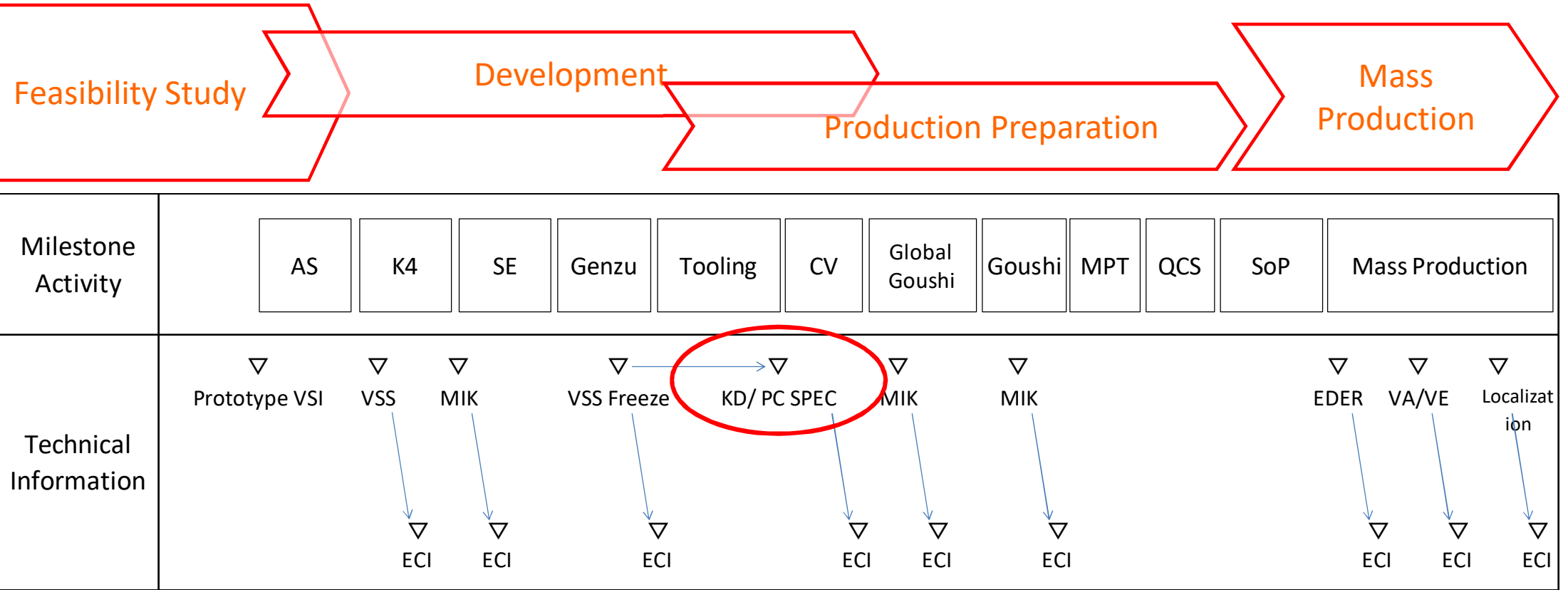
2   **How does Production Spec function?**

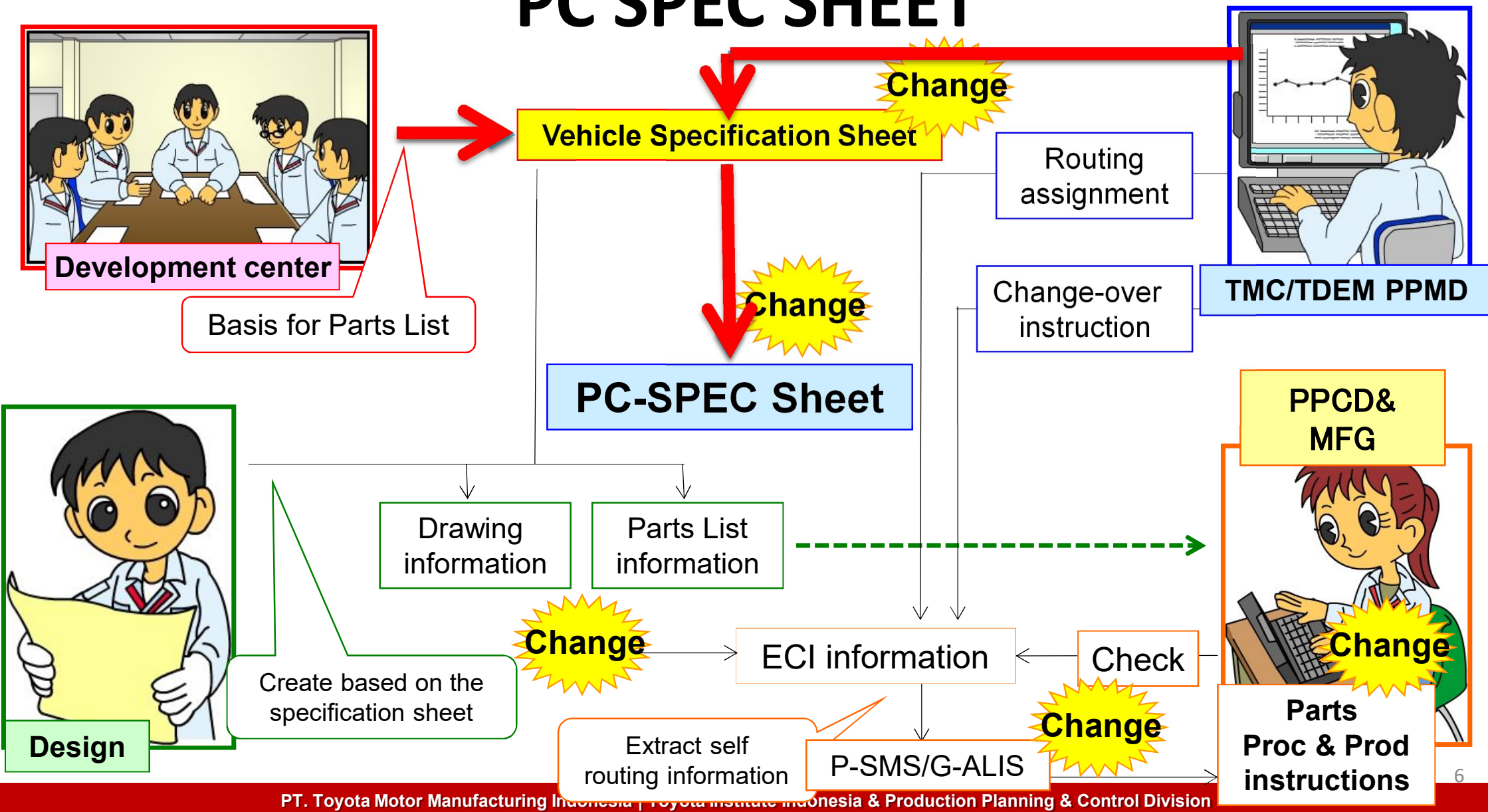**3**   **How is Production Spec linked to downstream process?**

PC SPEC SHEET

Correlation Vehicle Development Stage & Technical Information

Feasibility Study → Development → Production Preparation → Mass Production

Milestone Activity	AS	K4	SE	Genzu	Tooling	CV	Global Goushi	Goushi	MPT	QCS	SoP	Mass Production

Technical Information

Prototype VSI	VSS	MIK		VSS Freeze	KD/ PC SPEC	MIK	MIK			EDER	VA/VE	Localization

ECI (VSS) · ECI (MIK) · ECI (VSS Freeze) · ECI · ECI (MIK) · ECI (MIK) · ECI (EDER) · ECI (VA/VE) · ECI (Localization)

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PC SPEC SHEET

PC SPEC SHEET (*System Linked)

PC SPEC SHEET

[1] What is Production Spec (PC-SPEC System)?

PC-SPEC is the system that contains spec list which Manufacturing (PPM) uses to specify :

(Based on) VSS issued by Toyota Development Center

1. What specs can be ordered and produced
2. From when to when (Time Control)

(Use) For the downstream process :

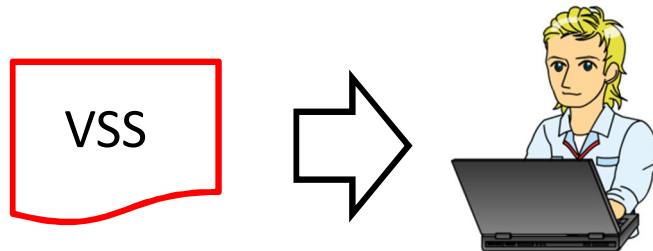Parts Order (Kanban)　　　　　Prod Indication　　　　Vehicle Planning & Prod Sequence
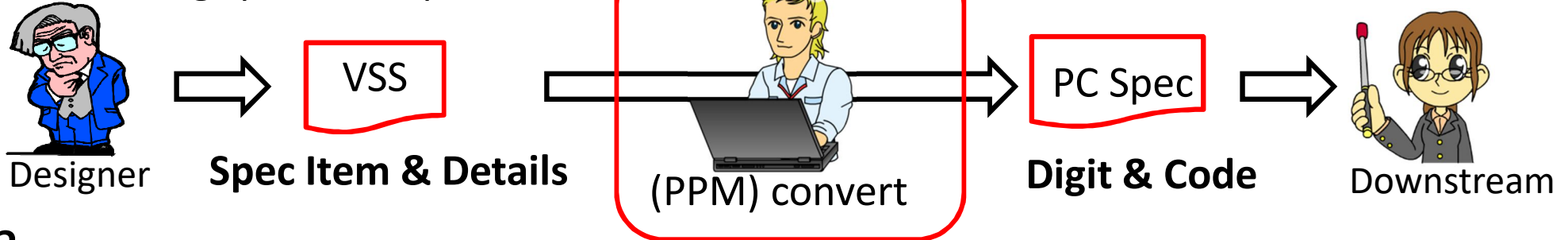

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PC SPEC SHEET

[2] How does Production Spec function?

1. Setting specs necessary for order and production

VSS

PPM Select + Set spec necessary for vehicle order
from Sales with supplementary (New or Delete)

2. Converting spec descriptions

Designer → VSS → (PPM) convert → PC Spec → Downstream

Spec Item & Details   **(PPM) convert**   **Digit & Code**   Downstream

Why?

Toyota had 2 companies : **Manufacturing** (Toyota Motor Co., Ltd.) and **Sales** (Toyota Motor Sales Co., Ltd.)
in the past, and both companies built their own systems.

→ Considering the current situation : The sales system is used by dealers in the world and it costs much
and may cause troubles to consolidate the 2 systems, it is efficient that PPM converts spec descriptions.

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PC SPEC SHEET

3. Specifying applicable periods

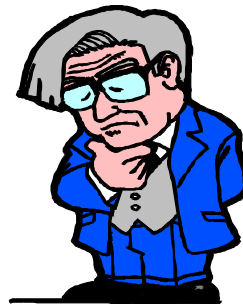**Vehicle Specification Change**

1997-2004 2004-2015 2015-Now

Vehicle Spec Change :
➢ New Vehicle Project
➢ Sales strategy
➢ Model Year Life
➢ Regulation, etc

VSI/VSS → PC SPEC (Time Control)

Designer PPM

(Equivalent to **ECI** implementation instruction in SMS System.)

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PC SPEC SHEET

VSS | **PC SPEC**

Example: Conversion from Spec Item in VSS into Digit (B1B→010)

1. Extract a Spec Item with the order availability mark "=".

Kata Shi ki	A1A			=B1B			C1C		
	B	C	I	B	C	I	B	C	I
W1			S			S		D	S
W2		S			P	S		D	S
W3	S			S	P		S		

2. Convert it into Digit and code

Kata Shi ki	010(B1B)		
	B	C	I
W1			S
W2		P	S
W3	S	P	

Example: Specification of available period (Spec "010" changes from Dec. 2010)

Kata shiki	010(B1B)					
	B		#C		I	
	Old	New	Old	New	Old	New
W2		#P	P	#		S

(The mark "#" means "changed".)

3. Specify available periods.

Digit	Spec Item	Code	Kata shiki	P or S	Notice No.		T/C	
					From	To	From	To
010	B1B	B	W2	P	B002	-	2010/12/1	-
010	B1B	C	W2	P	B001	B002	2008/6/1	2010/11/30
010	B1B	I	W2	S	B001	-	2008/6/1	-

"010C" ends in Nov. 2010 and 010B is available from Dec. 2010.

PC SPEC SHEET

[3] How is Production Spec linked to downstream process?
Please open your Hand Out Slide 4 (*System Linked)

1 Based on the data created by using PC-SPEC System (Specification Sheet), Sales receives orders from dealers.

2 PC creates a production plan (which vehicle? when? how many?) by considering order status, sales forecast and inventory status. (Then informs plants in the forms of <u>*VCT and VLT*</u>*.)

> **VCT (Vehicle Control Table)** : *Daily production plan issued monthly*
> **VLT (Vehicle Linkage Table)** : *Daily production plan issued daily*

3 Plant Admin. calculates necessary parts quantity by using VCT, VLT and parts list, then informs suppliers about forecast and places order (E-Kanban)

4 Mfg. creates Production Instruction by using VLT, parts list and Specification Sheets, and manufactures vehicles according to Production Instruction.

QC examines inspection items, Quality Div. and Customer Quality Engineering Div. Maintain production data, and many other divs in the downstream use the data for their jobs.

Mistakes in setting specs make a great impact on the downstream process and require many man-hours to modify and check them.

Thank You