Managing Complex Change

The following matrix was developed as a way to conceptualize the process of complex change in an organizational setting, and help those involved in implementing change to understand both the process and the ways in which their reactions to change might be understood.

Vision	Skills	Incentives	Resources	Action Plan	Consensus	Collegiality	
Vision	Skills	Incentives	Resources	Action Plan	Consensus	Collegiality	= Change
***	Skills	Incentives	Resources	Action Plan	Consensus	Collegiality	= Confusion
Vision	***	Incentives	Resources	Action Plan	Consensus	Collegiality	= Anxiety
Vision	Skills	***	Resources	Action Plan	Consensus	Collegiality	= Resistance
Vision	Skills	Incentives	***	Action Plan	Consensus	Collegiality	= Frustration
Vision	Skills	Incentives	Resources	***	Consensus	Collegiality	= Treadmill
Vision	Skills	Incentives	Resources	Action Plan	***	Collegiality	= Sabotage
Vision	Skills	Incentives	Resources	Action Plan	Consensus	***	= Isolation

Source: Ambrose, Adapted from Villa and Thousand (1995)

deBono Thinking Systems

Imagine it. Your team has the skills and techniques they need to make the best decision. Fast. Smart. Efficient.

It's not impossible. In fact, it's simple. Once they know how. That's where **_Dr. Edward de Bono_**'s **Six Thinking Hats®** comes in.

This systematic method of thinking in a completely new and different way will provide your employees with skills and tools that they can apply immediately! See results in days, not months.

It is a simple, effective technique that helps them become more productive. You and your team members can learn how to separate thinking into six distinct categories. Each category is identified with its own colored metaphorical "thinking hat." By mentally wearing and switching "hats," you can easily focus or redirect thoughts, the conversation, or the meeting.

The difference between brilliant and mediocre teams isn't so much in their collective mental capacity, but in how well they can tap into their collective wisdom and how well they function together. After your team learns the skills behind the **Six Thinking Hats®** system they'll:

- Hold critical meetings without emotions or egos making bad decisions

- Avoid the easy but mediocre decisions by knowing how to dig deeper

- Increase productivity and even more important -- be more effective

- Make creative solutions the norm

- Maximize and organize each person's thoughts and ideas

- Get to the right solution quickly and with a shared vision

The Six Thinking Hats (or modes)

The White Hat

The White Hat calls for information known or needed.

The Red Hat

The Red Hat signifies feelings, hunches and intuition.

The Black Hat

The Black Hat is judgment -- the devil's advocate or why something may not work.

The Yellow Hat

The Yellow Hat symbolizes brightness and optimism.
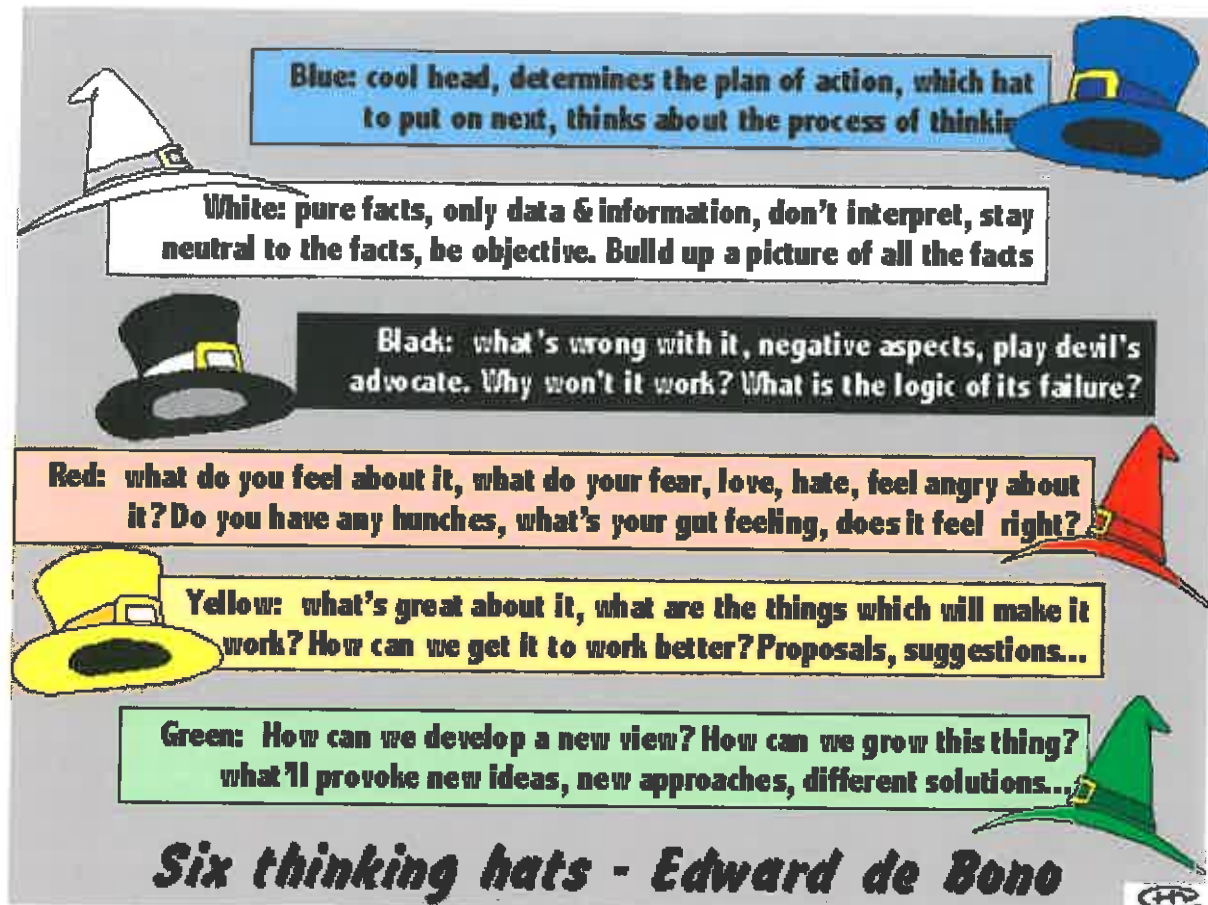
The Green Hat

The Green Hat focuses on creativity: the possibilities, alternatives and new ideas.
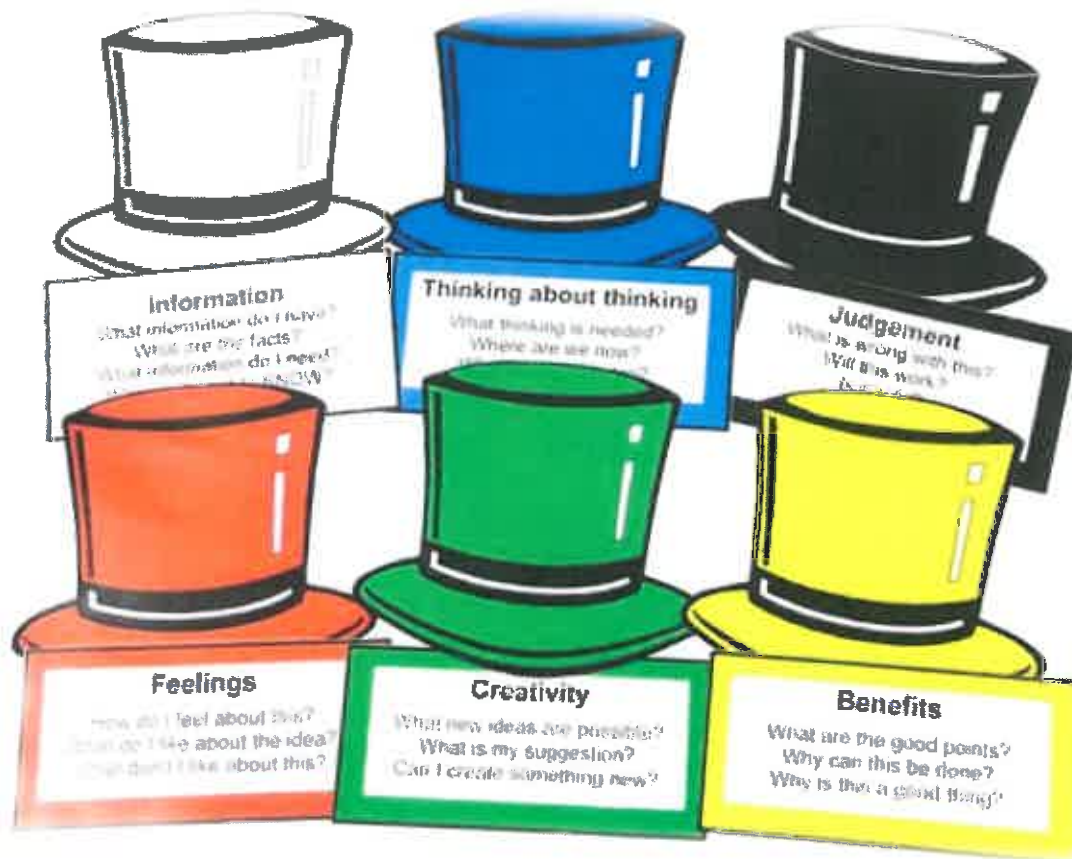
The Blue Hat

The Blue Hat is used to manage the thinking process.

To find a **Six Thinking Hats®** training seminar or certification course near you, please refer to the **Global Training Schedule** or contact an **Authorized Distributor** in your region.

HOME

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Blue: cool head, determines the plan of action, which hat to put on next, thinks about the process of thinking

White: pure facts, only data & information, don't interpret, stay neutral to the facts, be objective. Build up a picture of all the facts

Black: what's wrong with it, negative aspects, play devil's advocate. Why won't it work? What is the logic of its failure?

Red: what do you feel about it, what do your fear, love, hate, feel angry about it? Do you have any hunches, what's your gut feeling, does it feel right?

Yellow: what's great about it, what are the things which will make it work? How can we get it to work better? Proposals, suggestions...

Green: How can we develop a new view? How can we grow this thing? what'll provoke new ideas, new approaches, different solutions...

Six thinking hats - Edward de Bono

Information
What information do I have?
What are the facts?
What information do I need?
What information do I... KNOW

Thinking about thinking
What thinking is needed?
Where are we now?

Judgement
What is wrong with this?
Will this work?

Feelings
How do I feel about this?
What do I like about the idea?
What don't I like about this?

Creativity
What new ideas are possible?
What is my suggestion?
Can I create something new?

Benefits
What are the good points?
Why can this be done?
Why is this a good thing?

Defining a Process with SIPOC

What is SIPOC?

SIPOC is an abbreviation of:

Suppliers – Inputs – Process – Outputs – Customers

It provides a "template" for defining a process, before you begin to map, measure, or improve it.

Why use it?

Whenever you are planning to start some process management or improvement activity, it's important to get a high-level understanding of the scope of the process first. A SIPOC Process Definition helps the Process Owner and those working on the process to agree the boundaries of what they will be working on.

It provides a structured way to discuss the process and get consensus on what it involves before rushing off and drawing process maps.

How to use it:

To create a SIPOC process definition:

1. Agree the name of the process. Use a Verb + Noun format (e.g. Recruit Staff).

2. Define the Outputs of the process. These are the tangible things that the process produces (e.g. a report, or letter).

3. Define the Customers of the process. These are the people who receive the Outputs. Every Output should have a Customer.

4. Define the Inputs to the process. These are the things that trigger the process. They will often be tangible (e.g. a customer request)

5. Define the Suppliers to the process. These are the people who supply the inputs. Every input should have a Supplier. In some "end-to-end" processes, the supplier and the customer may be the same person.

6. Define the sub-processes that make up the process. These are the activities that are carried out to convert the inputs into outputs. They will form the basis of a process map.

SIPOC Example:

Process: Recruit Staff				
Suppliers	**Inputs**	**Process**	**Outputs**	**Customers**
Line Manager	Request to fill a vacancy	1. Specify needs 2. Authorise recruitment 3. Place adverts 4. Assess applicants 5. Offer appointment 6. Confirm start	New member of staff	Line Manager

Above is a simplified example of a SIPOC. In practice, you may need to include several other suppliers (e.g. Candidates, Recruitment Agencies) and other customers (HR Dept., Candidates).

Adding more definition:

There are several elements that you can add to make a SIPOC process definition more useful…

Include a **Process Purpose** statement. Define why the process exists; e.g. the recruit Staff process exists to provide the right people, with the right skills at the right time. The purpose should reflect a benefit to the organisation, not simply be a re-statement of the name of the process.

Identify the **Process Owner**. Decide who is the single, named individual with responsibility for the end-to end process. That person needs to be involved in any definition and improvement activities.

Define the **start and end-points** of the process. These will be the first and last activities on the process map. Note that some processes may have multiple start and end points.

Define any **boundaries,** or scope limitations for the process. For example, does the process deal with all types of customer, or just some (e.g. Retail vs. Business Customers)? Or, does the process only deal with a particular type of transaction (e.g. high risk vs. low risk)? These boundaries can help you decide whether you need more than one process map, or if everything can be included in one map.
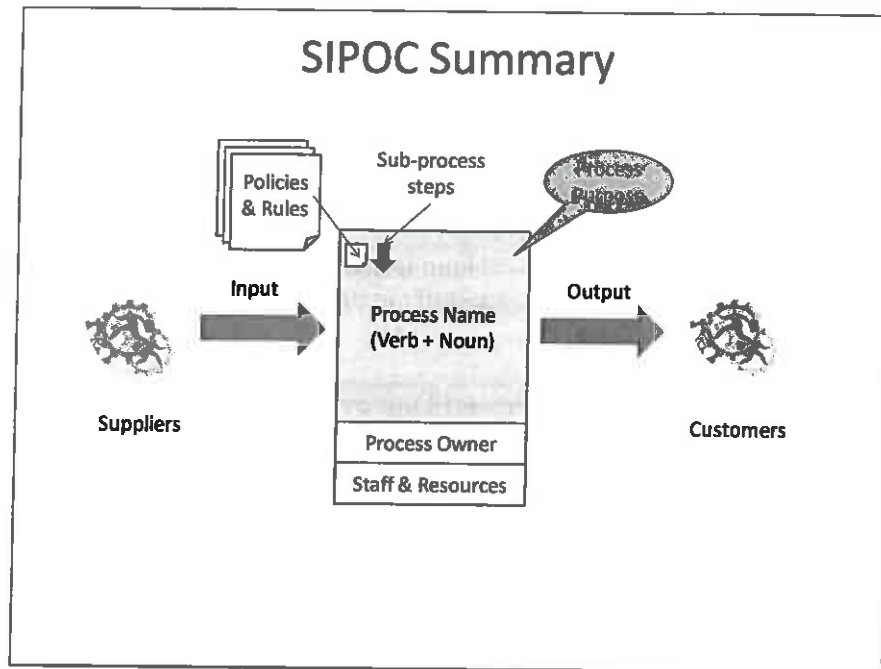
Getting it right:

To be useful, your SIPOC process definition needs to follow the basic steps listed above. There are some common errors that people make when defining a process. Here's how to avoid them...

	Good practice	Common errors
Process names define how you "do stuff"; no more, no less.	Use Verb + Noun format: e.g. "Recruit Staff" or "Prepare Reports".	Names that use the "past tense": e.g. "Staff Recruited", or "Reports Produced"
Process names should not define performance requirements or improvement objectives.	Use the Process Purpose Statement to define why the process exists. That will help you to identify improvement objectives and performance measurements.	Names that define what the process is trying to achieve: e.g. "Recruit Staff Quickly", or "Improve Report Timeliness". These are improvement objectives, not names of the process.
Outputs should specify what the process delivers, not what it achieves.	Outputs are "things". They may be right, or with errors. They may meet customer needs, or not.	Outputs that are actually outcomes; e.g. "Satisfied Customers" or "On-time Reports".
Inputs should specify what triggers the process and what gets "worked on" by the process.	Inputs are "things" provided by suppliers to the process.	Staff and other resources included as inputs. They don't trigger the process and don't get worked on by it. Policies and Rules included as inputs. These guide the process, but don't get worked on by it.

SIPOC Summary

SIPOC Process Definition Template:

Process:

Purpose:

Owner:

Suppliers	Inputs	Process Steps	Outputs	Customers

Boundaries:

Start-point:	End-point:
Includes:	Excludes:

SIPOC Diagram

font size   Print   5 comments

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A SIPOC diagram is a tool used by a process improvement team to identify all relevant elements of a process improvement project before work begins. Read more about SIPOC, view samples, and download templates.

By Kerri Simon

Many recent inquiries and discussions have focused on the SIPOC diagram – a tool used in the Six Sigma methodology. Because of the interest level, a further explanation is presented here along with a sample and template for your use.

Related articles

Using the DMAIC Model to Achieve Buy-in

Harvesting Value in Transactional Processes with Lean Six Sigma

The Cause and Effect (a.k.a. Fishbone) Diagram

Most Practical DOE Explained (Free Template!)

Six Sigma Project Charter

A SIPOC diagram is a tool used by a team to identify all relevant elements of a process improvement project before work begins. It helps define a complex project that may not be well scoped, and is typically employed at the Measure phase of the Six Sigma DMAIC methodology. It is similar and related to Process Mapping and 'In/Out Of Scope' tools, but provides additional detail.

The tool name prompts the team to consider the Suppliers (the 'S' in SIPOC) of your process, the Inputs (the 'I') to the process, the Process (the 'P') your team is improving, the Outputs (the 'O') of the process, and the Customers (the 'C') that receive the process outputs. In some cases, Requirements of the Customers can be appended to the end of the SIPOC for further detail.

The SIPOC tool is particularly useful when it is not clear:

- Who supplies inputs to the process?
- What specifications are placed on the inputs?
- Who are the true Customers of the process?
- What are the Requirements of the customers?

Sample SIPOC Diagram

A SIPOC diagram is a tool used by a team to identify all relevant elements of a process improvement project before work begins. It helps define a complex project that may not be well scoped, and is typically employed at the Measure phase of the Six Sigma DMAIC methodology.
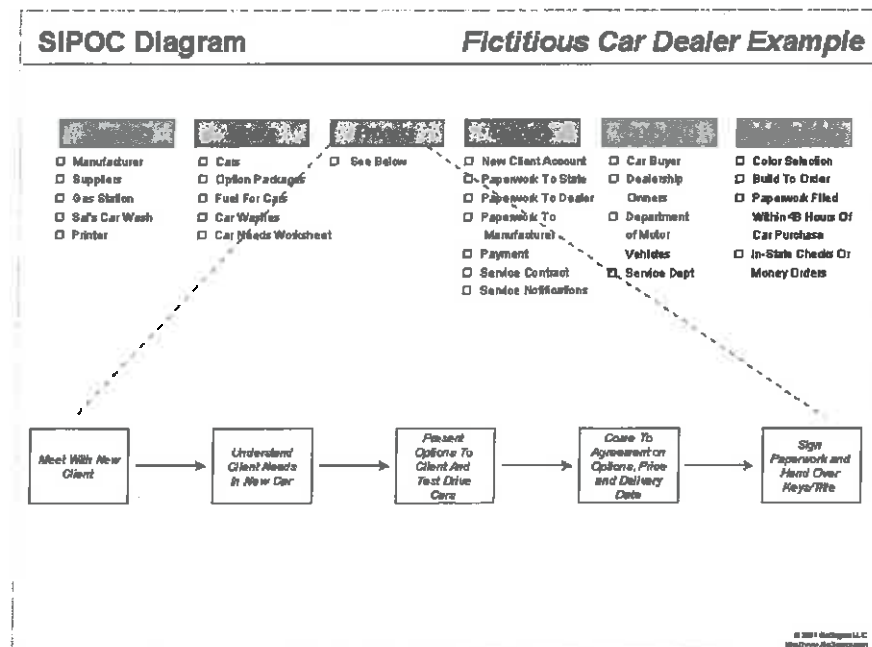
Steps To Complete The SIPOC Diagram

SIPOC diagrams are very easy to complete. Here are the steps you should follow:

1. Create an area that will allow the team to post additions to the SIPOC diagram. This could be a transparency (to be projected by an overhead) made of the provided template, flip charts with headings (S-I-P-O-C) written on each, or headings written on post-it notes posted to a wall.

2. Begin with the Process. Map it in four to five high level steps.

3. Identify the Outputs of this Process.

4. Identify the Customers that will receive the Outputs of this Process.

5. Identify the Inputs required for the Process to function properly.

6. Identify the Suppliers of the Inputs that are required by the Process.

7. *Optional*: Identify the preliminary requirements of the Customers. This will be verified during a later step of the Six Sigma measurement phase.

8. Discuss with Project Sponsor, Champion, and other involved stakeholders for verification.

SIPOC Templates

The following SIPOC templates are for immediate download and use. The Adobe Acrobat version allows you to print and input your SIPOC information by hand, perhaps by overhead. The Microsoft PowerPoint version allows you to input your SIPOC information and print.

Adobe Acrobat (.PDF)

Microsoft PowerPoint (.PPT)

Tagged under SIPOC Template

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Catching Up with iSixSigma's Editorial Advisory Family
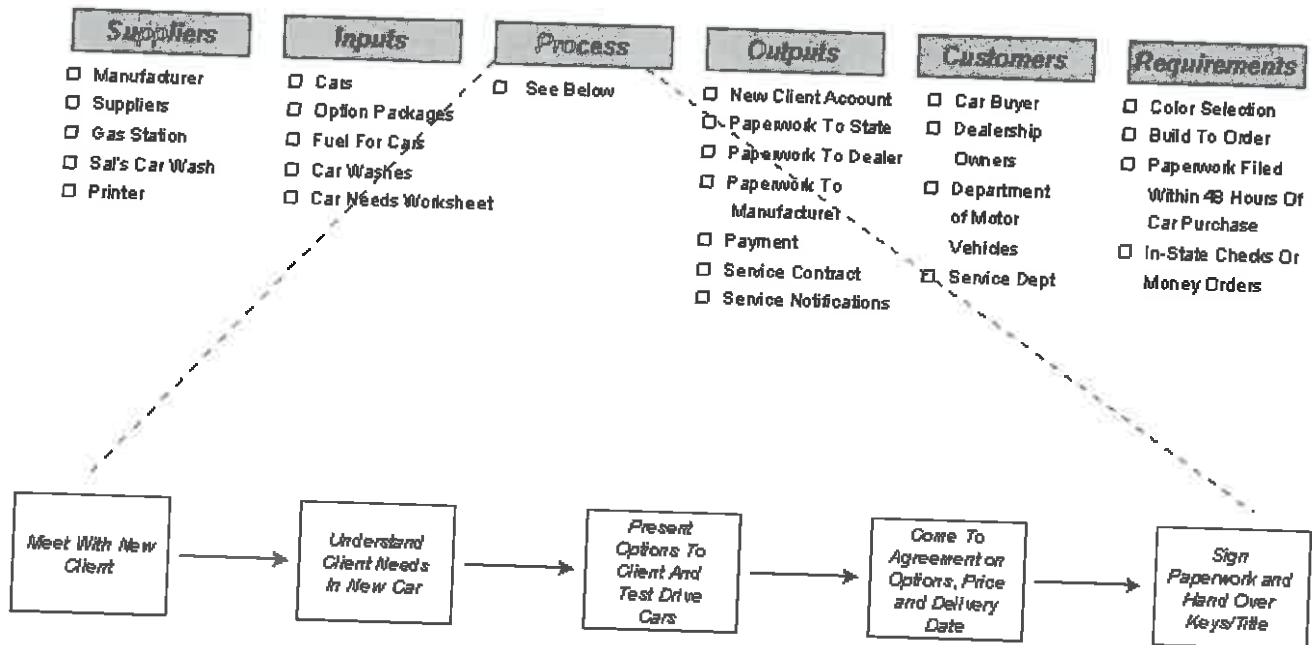Is There Bias In Your Random Sample?
Rounding and Round-Off Rules
No Projects In The Hopper?
Interview With Nick Nauman, MBB At Commonwealth Health

back to top

SIPOC Diagram

Fictitious Car Dealer Example

Suppliers	Inputs	Process	Outputs	Customers	Requirements
☐ Manufacturer	☐ Cars	☐ See Below	☐ New Client Account	☐ Car Buyer	☐ Color Selection
☐ Suppliers	☐ Option Packages		☐ Papework To State	☐ Dealership	☐ Build To Order
☐ Gas Station	☐ Fuel For Cars		☐ Paperwork To Dealer	Owners	☐ Paperwork Filed
☐ Sal's Car Wash	☐ Car Washes		☐ Paperwork To	☐ Department	Within 48 Hours Of
☐ Printer	☐ Car Needs Worksheet		Manufacturer	of Motor	Car Purchase
			☐ Payment	Vehicles	☐ In-State Checks Or
			☐ Service Contract	☐ Service Dept	Money Orders
			☐ Service Notifications		

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┌──────────────┐    ┌──────────────┐    ┌──────────────┐    ┌──────────────┐    ┌──────────────┐
│ Meet With New│ →  │  Understand  │ →  │   Present    │ →  │   Come To    │ →  │     Sign     │
│    Client    │    │ Client Needs │    │  Options To  │    │ Agreement on │    │  Paperwork and│
│              │    │  In New Car  │    │  Client And  │    │Options, Price│    │  Hand Over   │
│              │    │              │    │  Test Drive  │    │ and Delivery │    │  Keys/Title  │
│              │    │              │    │     Cars     │    │     Date     │    │              │
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SIPOC Diagram

Suppliers	Inputs	Process	Outputs	Customers	Requirements
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	☐ See Below	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Step 1: → Step 2: → Step 3: → Step 4: → Step 5: