

Propel Efficiency: Revitalizing Gentech's Proposal Process

Team 390 NexusBlend |

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MEET OUR TEAM



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DMAIC



DEFINE

Define GenTech's issue



MEASURE

Quantify the issue



ANALYZE

Identify the cause



IMPROVE

Address the underlying problem and confirm enhancements

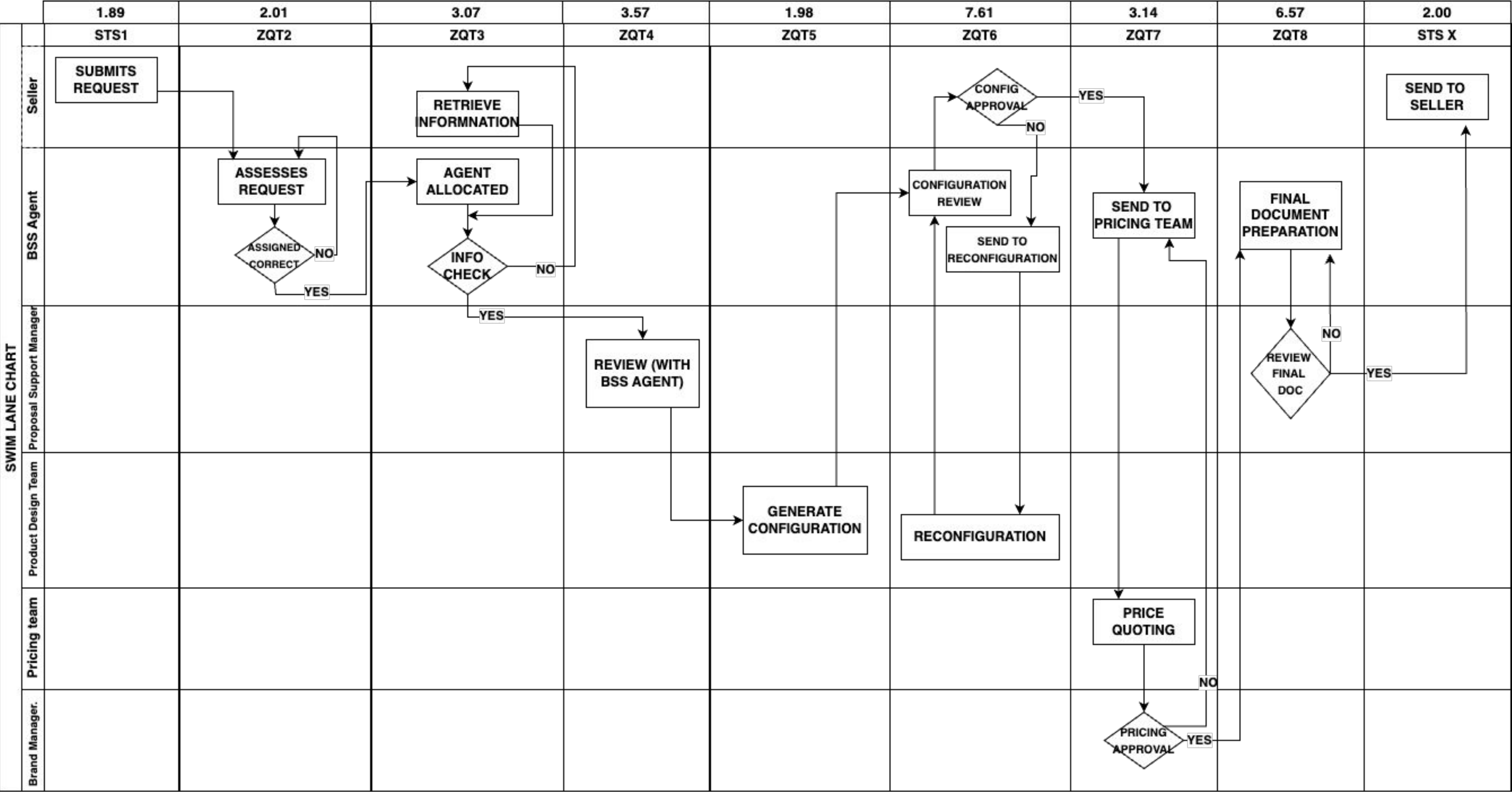


CONTROL

Sustain the improvement and strive for excellence

Cycle Time Optimization – Proposal Creation Process				
<u>Business Problem:</u> Gentech faces extended cycle times and inefficiencies in its sales proposal creation process, linderling its competitiveness and resulting in 18% reduction in revenue in the last 2 years.			<u>Executive Sponsor</u> Grace Monroe <u>Black Belt Champion</u> Jeff Hugh	
<u>Objective and Scope</u> <i>Objective:</i> The objective of this project is to streamline the proposal creation process, reduce cycle time by 15%, eliminate non-standard practices, standardize the process, reduce unnecessary approvals, eliminate inefficiencies, streamline the process, combine redundant tasks, and enhance the experience and expertise of Bid Support Staff. <i>Scope:</i> Brand approvals, Product pricing, Seller information completeness, and Bid Support Staff experience and expertise.			<u>Team Members</u> <div> <div>Sai Karun</div> <div>Xuanyu Wang</div> <div>Jason Chang</div> </div> <div> <div>Minghao Liu</div> <div>Ganesh</div> </div>	
<u>StakeHolders:</u> Sales Team, Bid Support Staff, Brand Managers, IT support, Quality Assurance Team, Customers, Partners.		<u>Operational Metrics</u> - Cycle Time	<u>Performance Benchmark</u> - Targeted proposal cycle time < 35 days	
DMAIC	Start	End	CTQs (Critical to Quality)	Expected Benefits
Define: 11/10/23 – 20/12/23			- Cycle time	- Reduced proposal cycle time
Measure: 01/10/24 – 02/28/24			- Proposal accuracy	- Standardized and efficient processes
Analyze: 03/01/24 – 04/30/24			- Seller satisfaction	- Enhanced expertise of Bid Support Staff
Improve: 05/01/24 – 08/20/24			- Bid Support Staff satisfaction	- Improved customer satisfaction
Control: 09/01/24 – 12/25/24				- Increased competitiveness and revenue opportunities.
			Target	Projected Savings
			Gentech aims to reduce average proposal creation cycle time by 15% across all geographies, aligning with the CEOs strategy for improved supply chain efficiency and increased market share.	1.1 Billions

SWIM LANE CHART



PROJECT GOAL

PRESENT

Defects = 5418

Opportunities = 250000

DPMO = 21671

Process Sigma level = 3.5

FOR CYCLE TIME TO BE
REDUCED BY 15 %

REACH

Defects = 4600

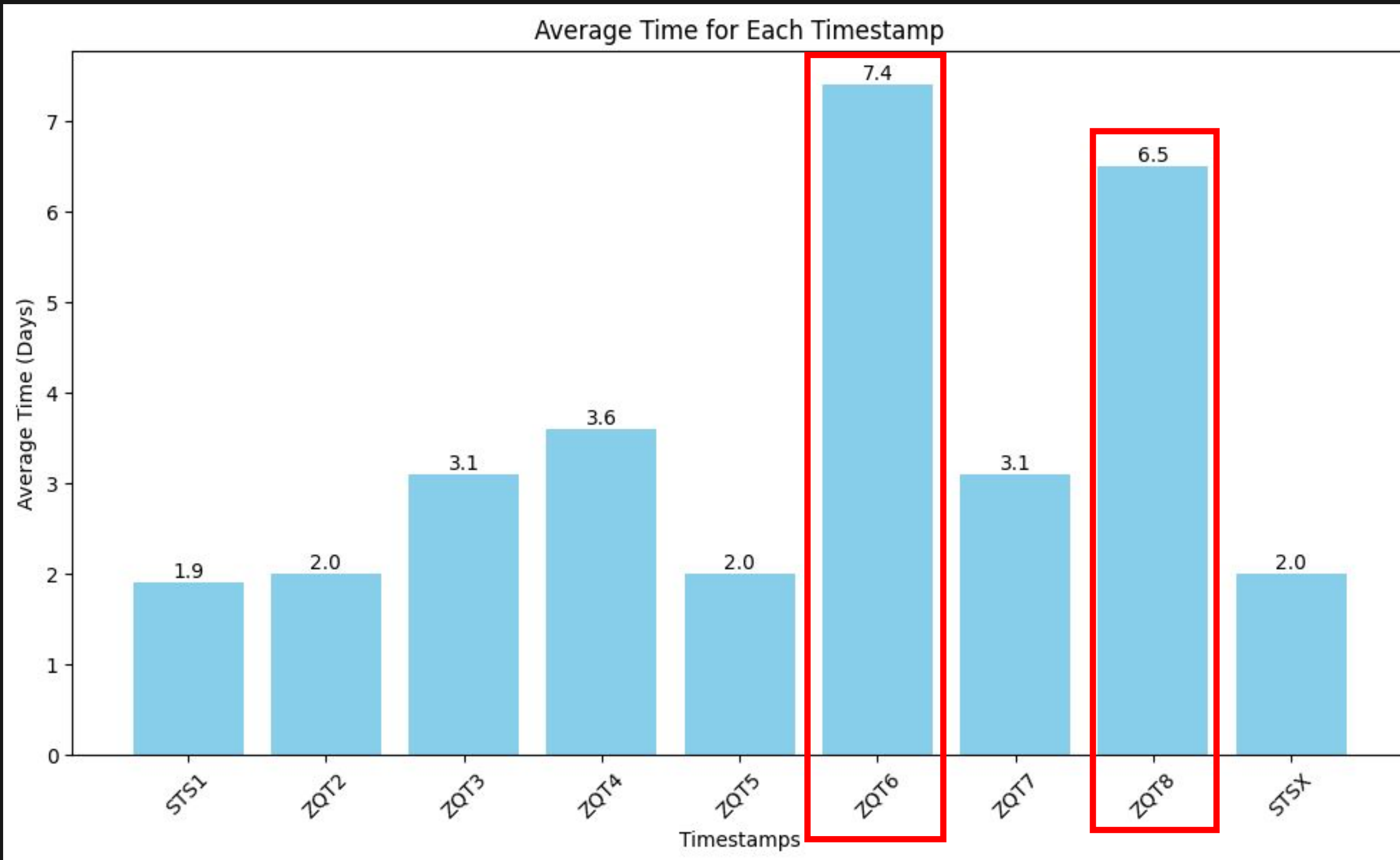
Opportunities = 250000

DPMO = 18400

Process Sigma level = 3.6

This would take us a bit close to Six Sigma Quality

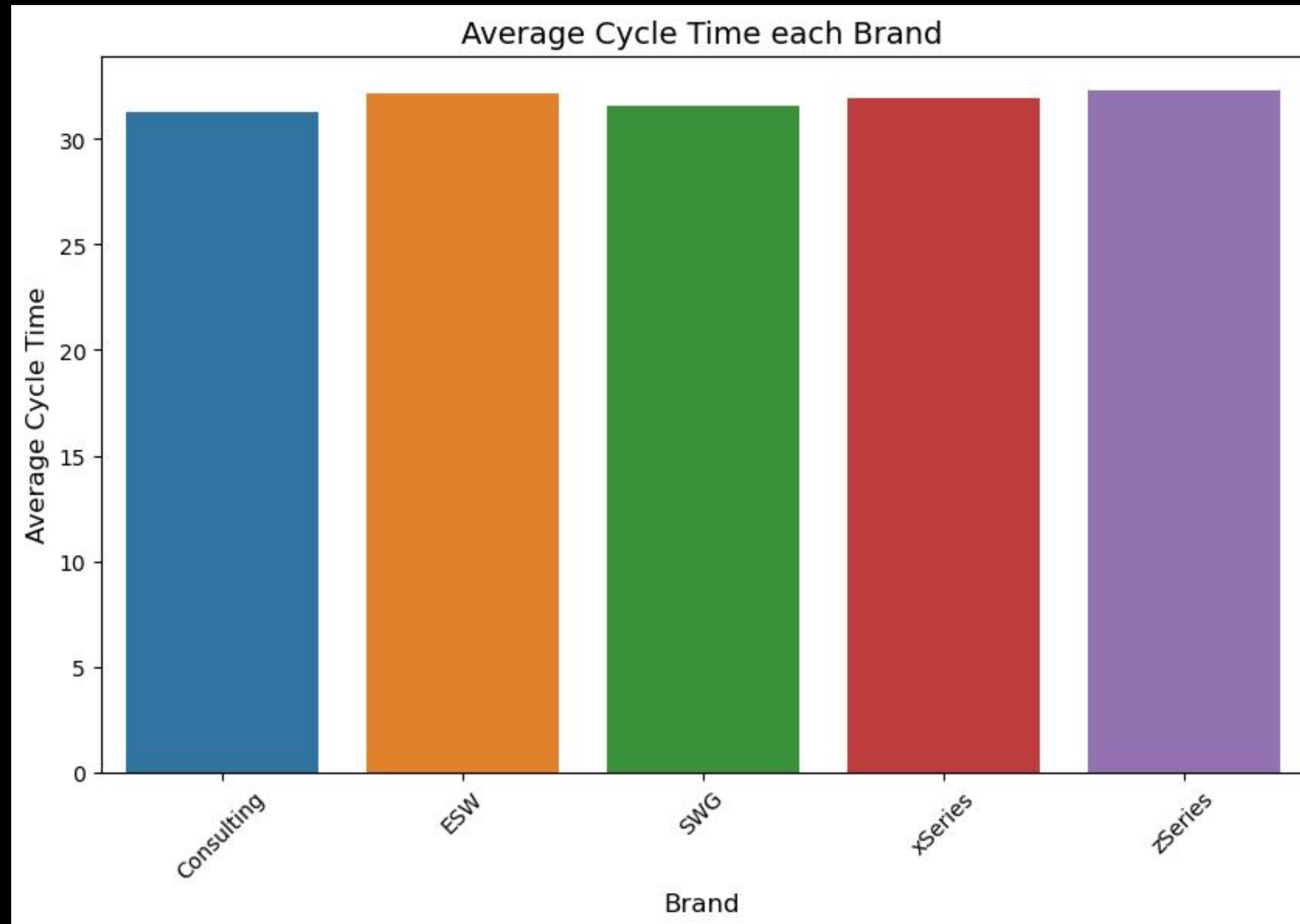
Average time in each Time Stamp



ZQT6 & ZQT8
appears to be the
main cause for
the long cycle
time.

Are they really??

Does Brand have an impact?



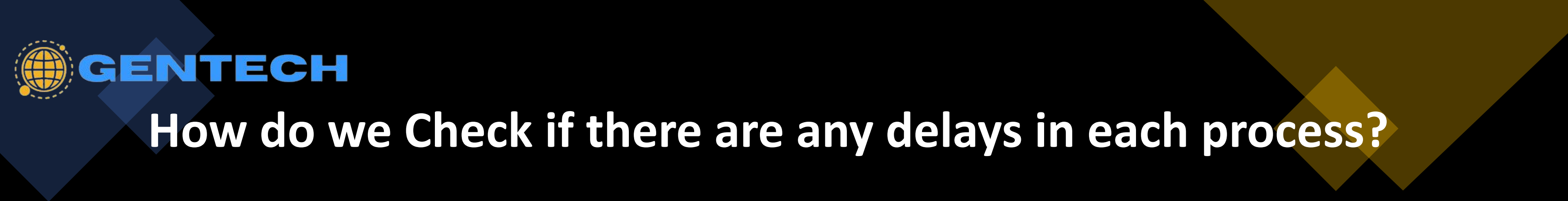
Brand doesn't look to affect average cycle time.

Regional Performance in each Time Stamp

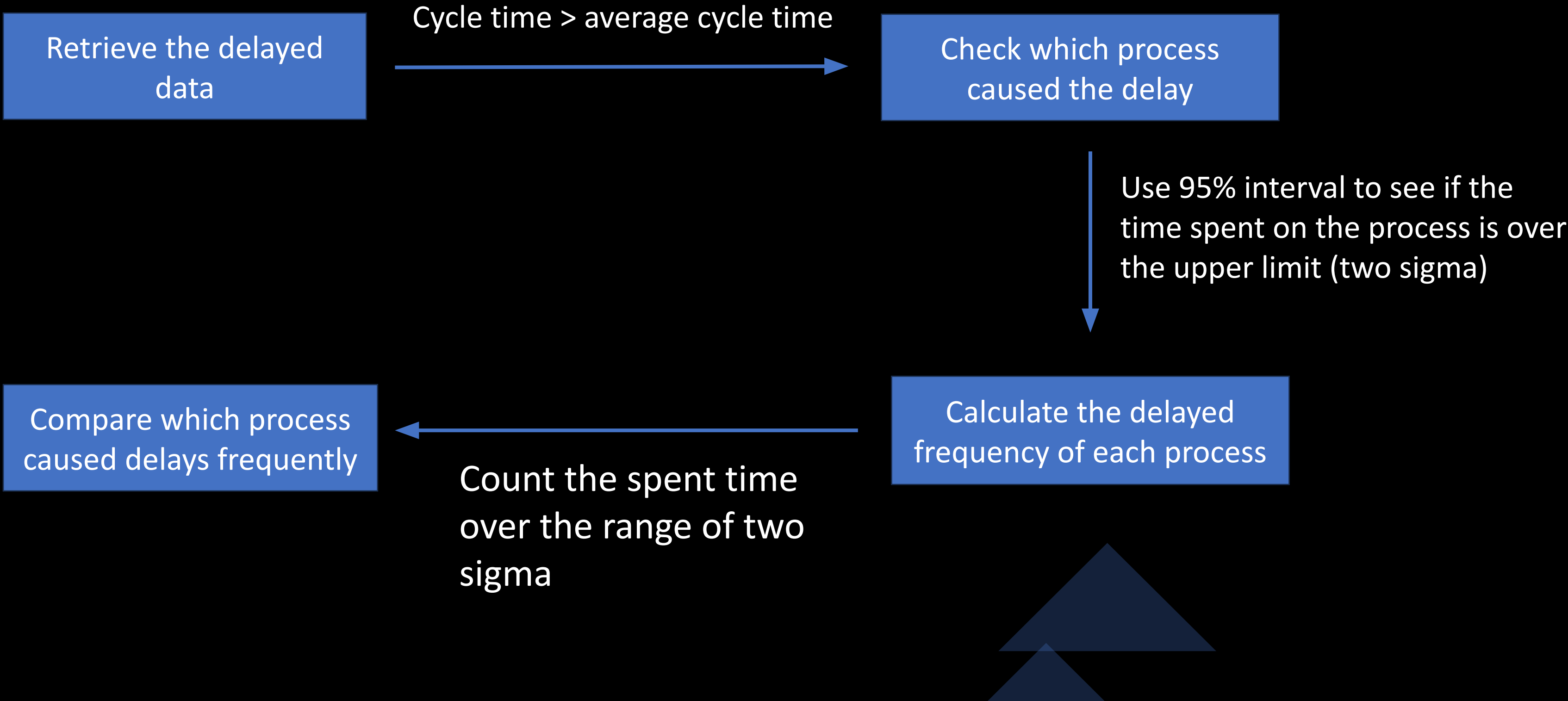


- ZQT 6 & 8 are high for all regions. They might be naturally high
- The variations are more visible in ZQT3, ZQT4 and ZQT7

SO LET'S DIVE DEEP INTO THESE

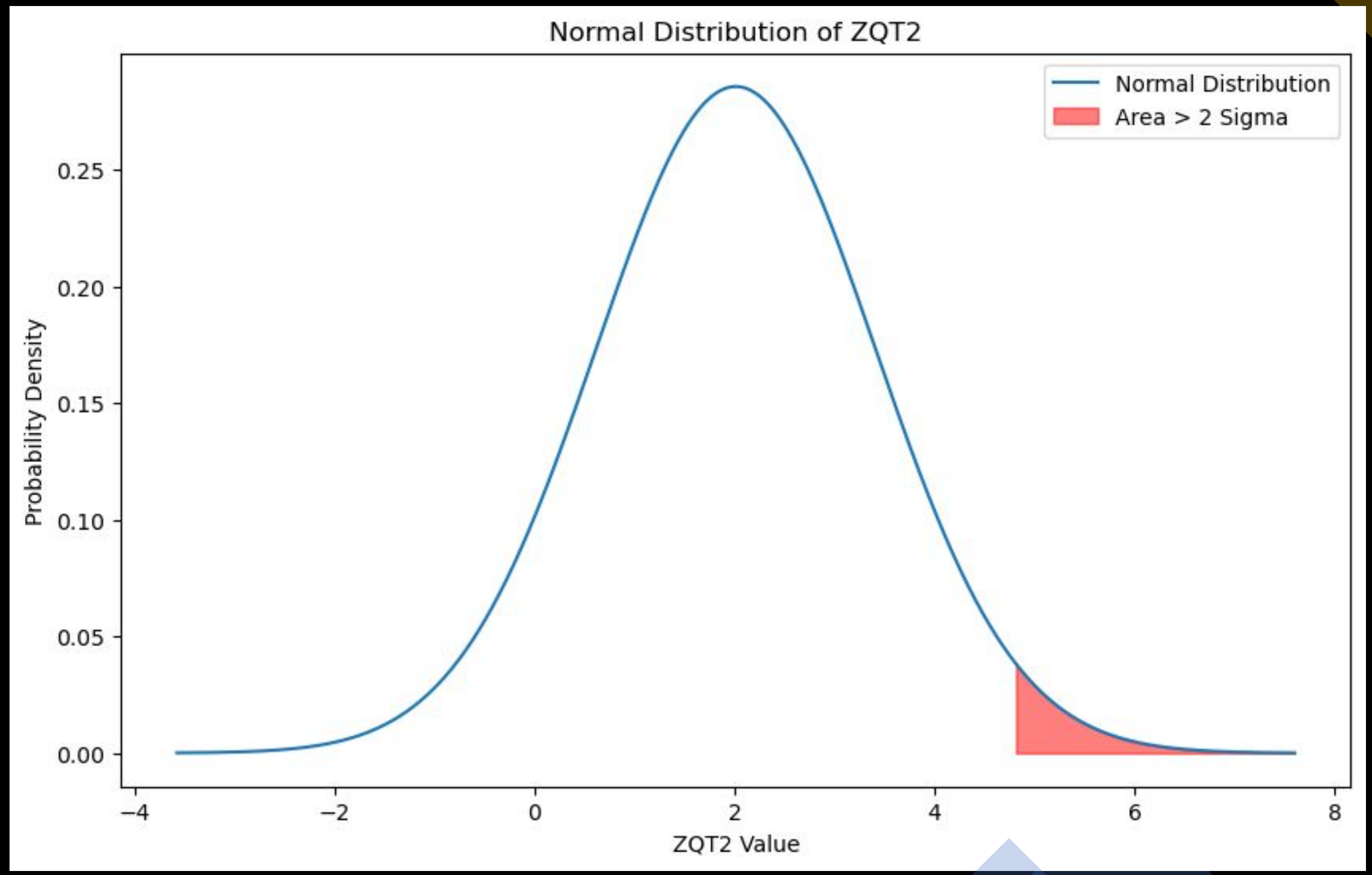


How do we Check if there are any delays in each process?

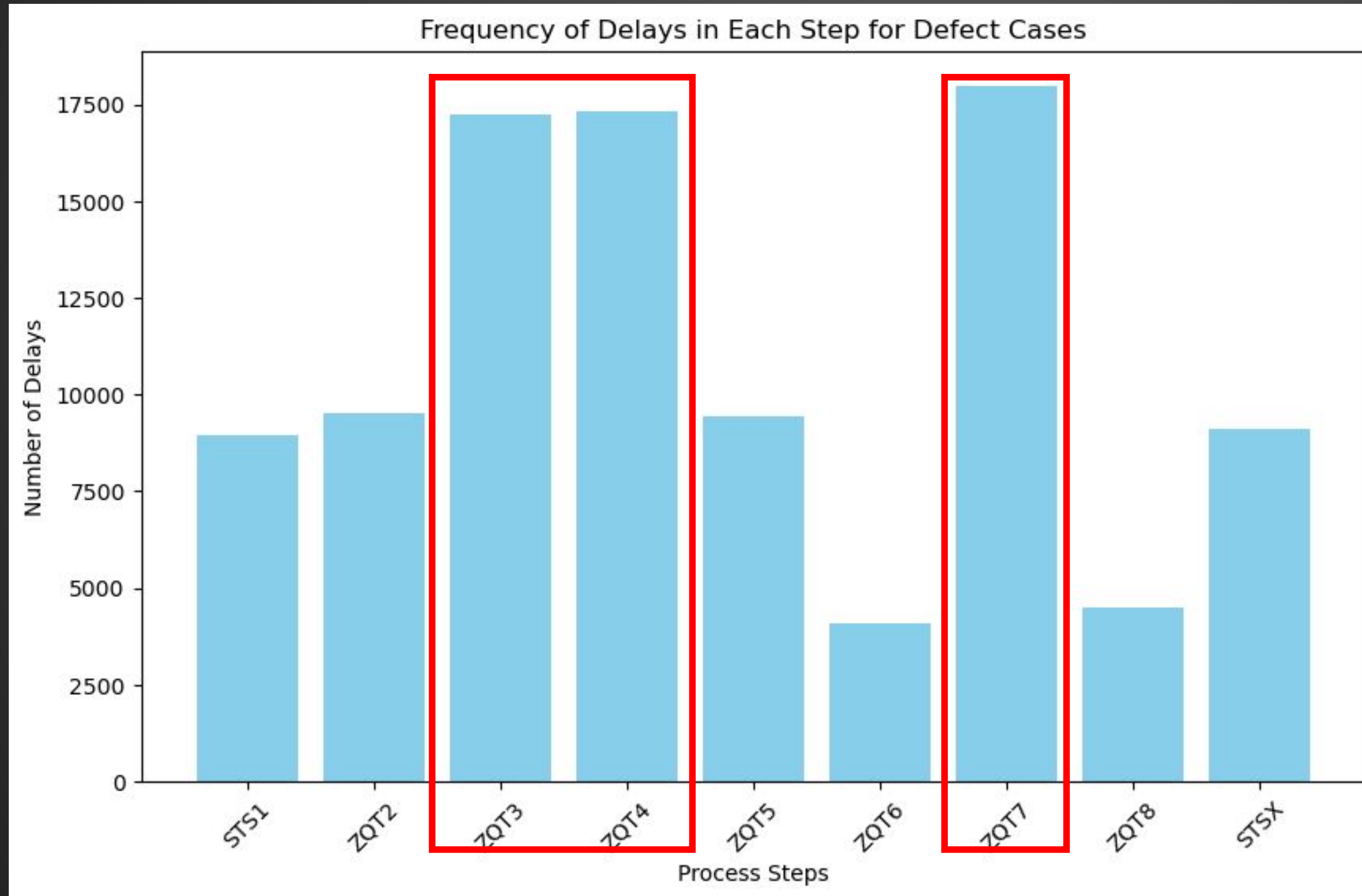




Example

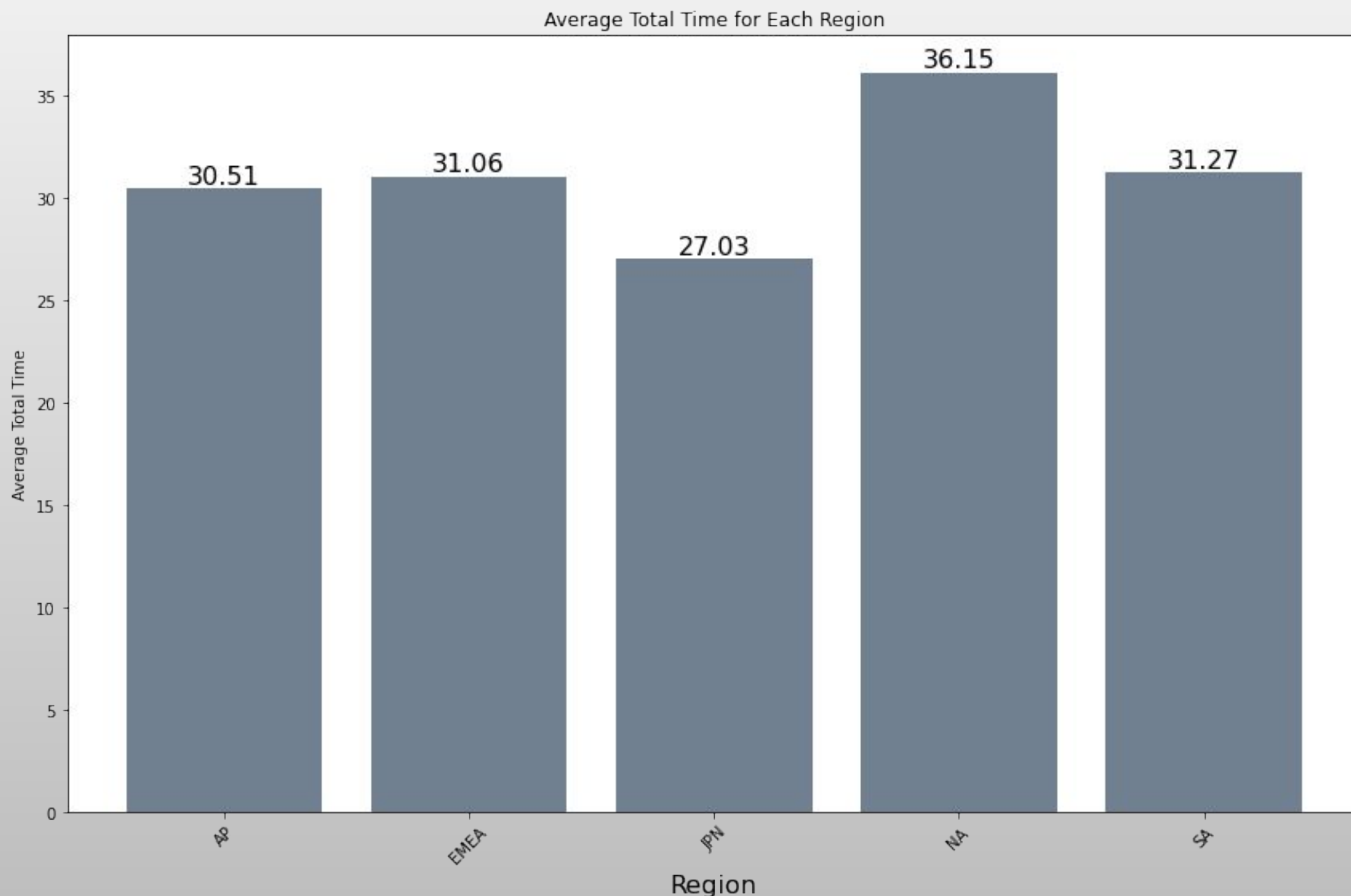


After analyzing what we found...



The Number of delays corresponds to the number of times the corresponding Time stamp falls outside (rightside) the 2 sigma range

Geographical Influence on cycle time:



NA - Highest Cycle time

So, should we look to reduce cycle time in NA ?

Bid Size stats:

Geo	AVERAGE	Q1	Q2
AP	57293	41250	59989
EMEA	56207	46148	65856
JPN	42338	38101	47201
NA	83733	52468	110872
SA	57996	45416	67997

NA accounts for highest Bid sizes.

For NA, Tight measures to reduce cycle time might lead to losing high bids.

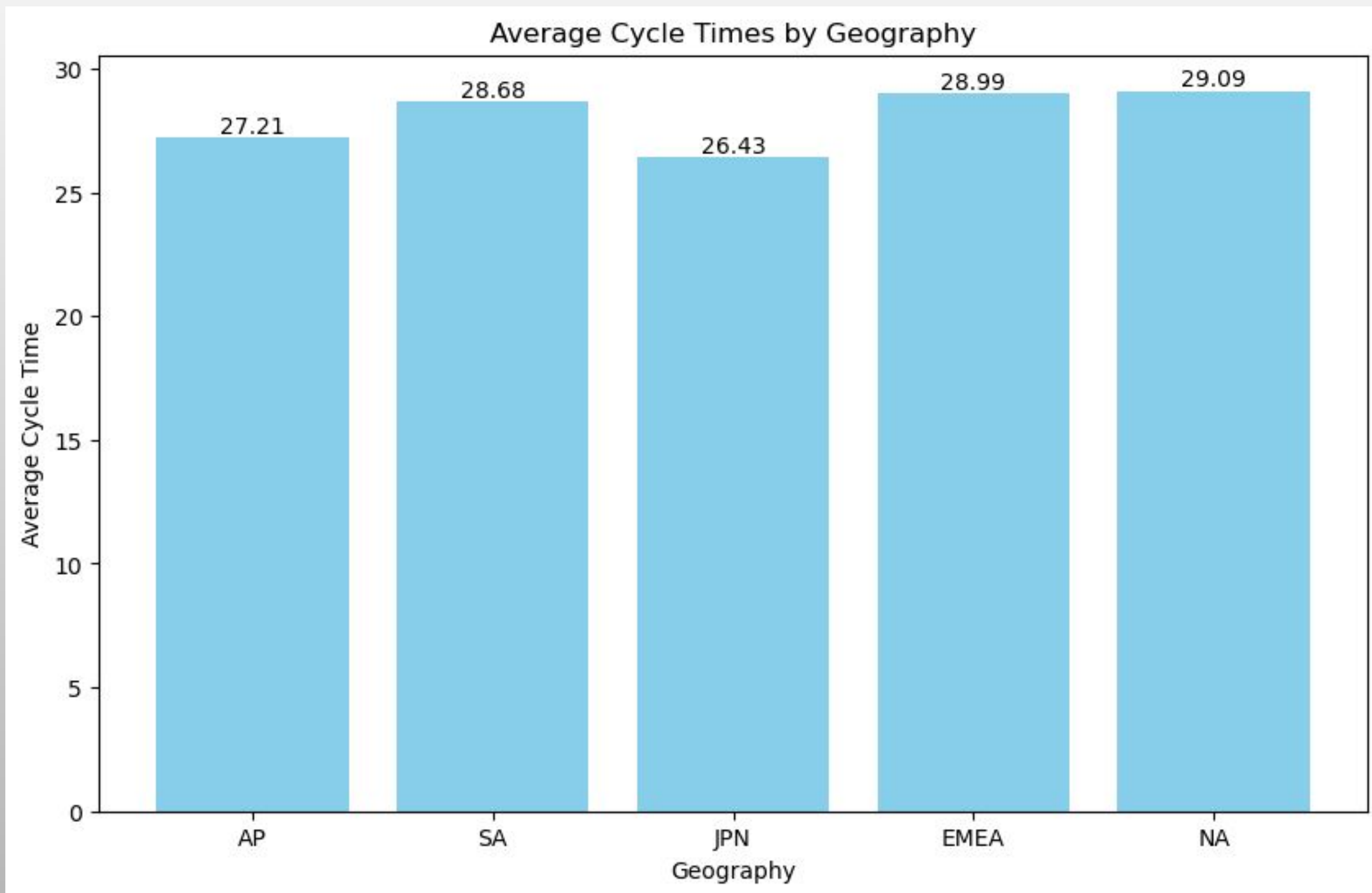
Impact of Bid Size

	Bid Size (\$)	End-to-End Cycle Time	ZQT2	ZQT3	ZQT4	ZQT5	ZQT6	ZQT7	ZQT8	STSX
Bid Size (\$)	1.000000	0.834282	0.159371	0.681126	0.698380	0.156775	0.187366	0.681279	0.183952	0.150123
End-to-End Cycle Time	0.834282	1.000000	0.207870	0.782541	0.811487	0.204951	0.268146	0.782681	0.257531	0.197411
ZQT2	0.159371	0.207870	1.000000	-0.011300	-0.003735	0.157705	0.017032	-0.012895	0.046549	0.151374
ZQT3	0.681126	0.782541	-0.011300	1.000000	0.763549	-0.010057	-0.003947	0.748089	-0.010428	-0.013295
ZQT4	0.698380	0.811487	-0.003735	0.763549	1.000000	-0.004375	0.004277	0.760716	-0.006019	-0.007222
ZQT5	0.156775	0.204951	0.157705	-0.010057	-0.004375	1.000000	0.022032	-0.013397	0.053275	0.139887
ZQT6	0.187366	0.268146	0.017032	-0.003947	0.004277	0.022032	1.000000	-0.013507	-0.003305	0.022532
ZQT7	0.681279	0.782681	-0.012895	0.748089	0.760716	-0.013397	-0.013507	1.000000	-0.009298	-0.012958
ZQT8	0.183952	0.257531	0.046549	-0.010428	-0.006019	0.053275	-0.003305	-0.009298	1.000000	0.033524
STSX	0.150123	0.197411	0.151374	-0.013295	-0.007222	0.139887	0.022532	-0.012958	0.033524	1.000000

Strong correlation between Bid Size and Total cycle time

Important to take Bid size into account before making recommendations just by looking at the High Average Cycle times in 'NA'

AVERAGE CYCLE TIMES FOR SIMILAR BID SIZES ACROSS REGIONS



For each region the **Bid Sizes are different**

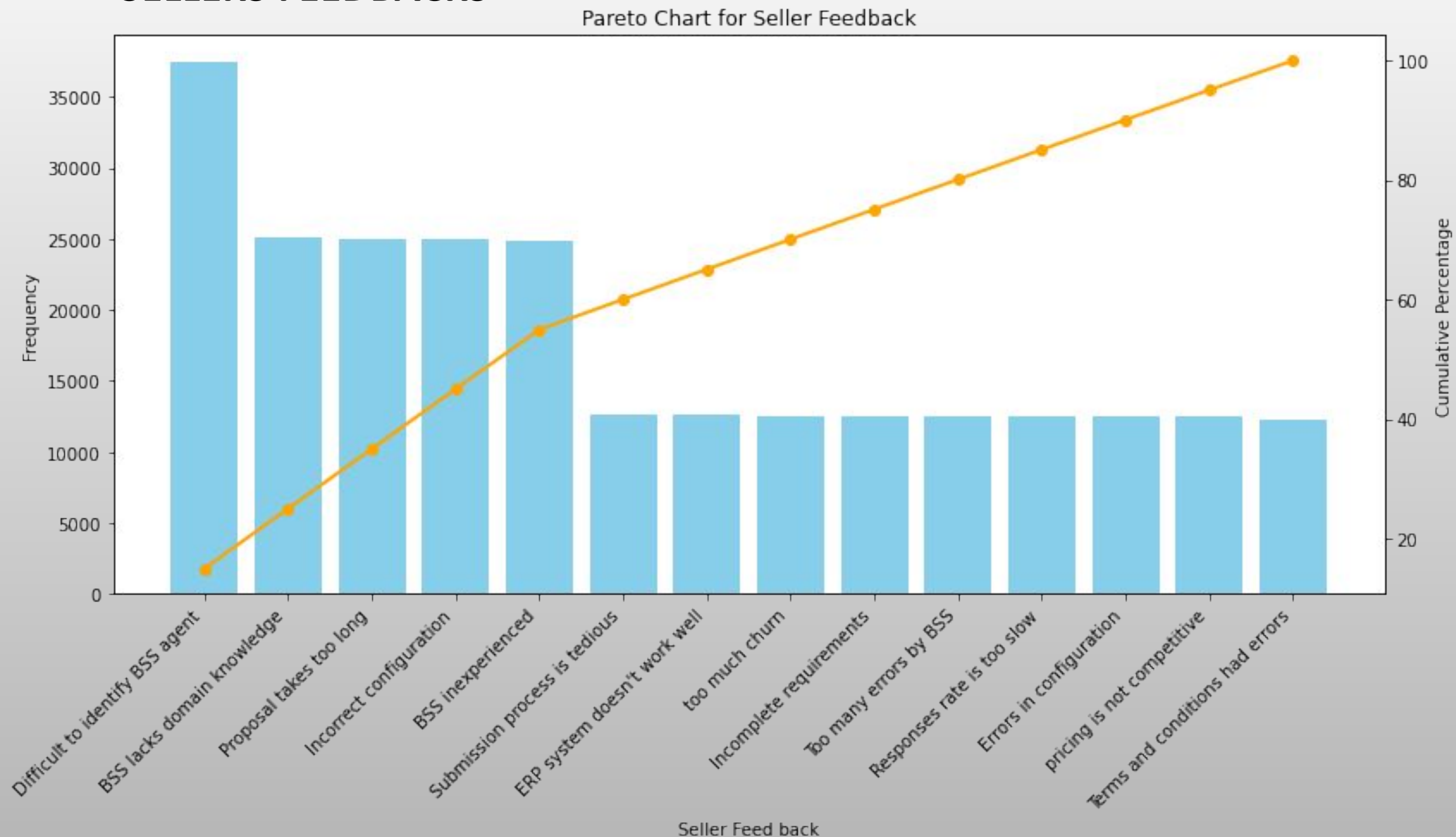
Unfair to compare the Total cycle times

Compared each region for the same **Bid Size Range**

All regions perform same in this range

Cannot expect a drastic improvement in efficiency by **just focusing on region** with high average cycle time

SELLERS FEEDBACKS



Top Feedbacks:

- Difficulty in communication
- Inexperienced/ Incorrect BSS
- Incorrect configuration

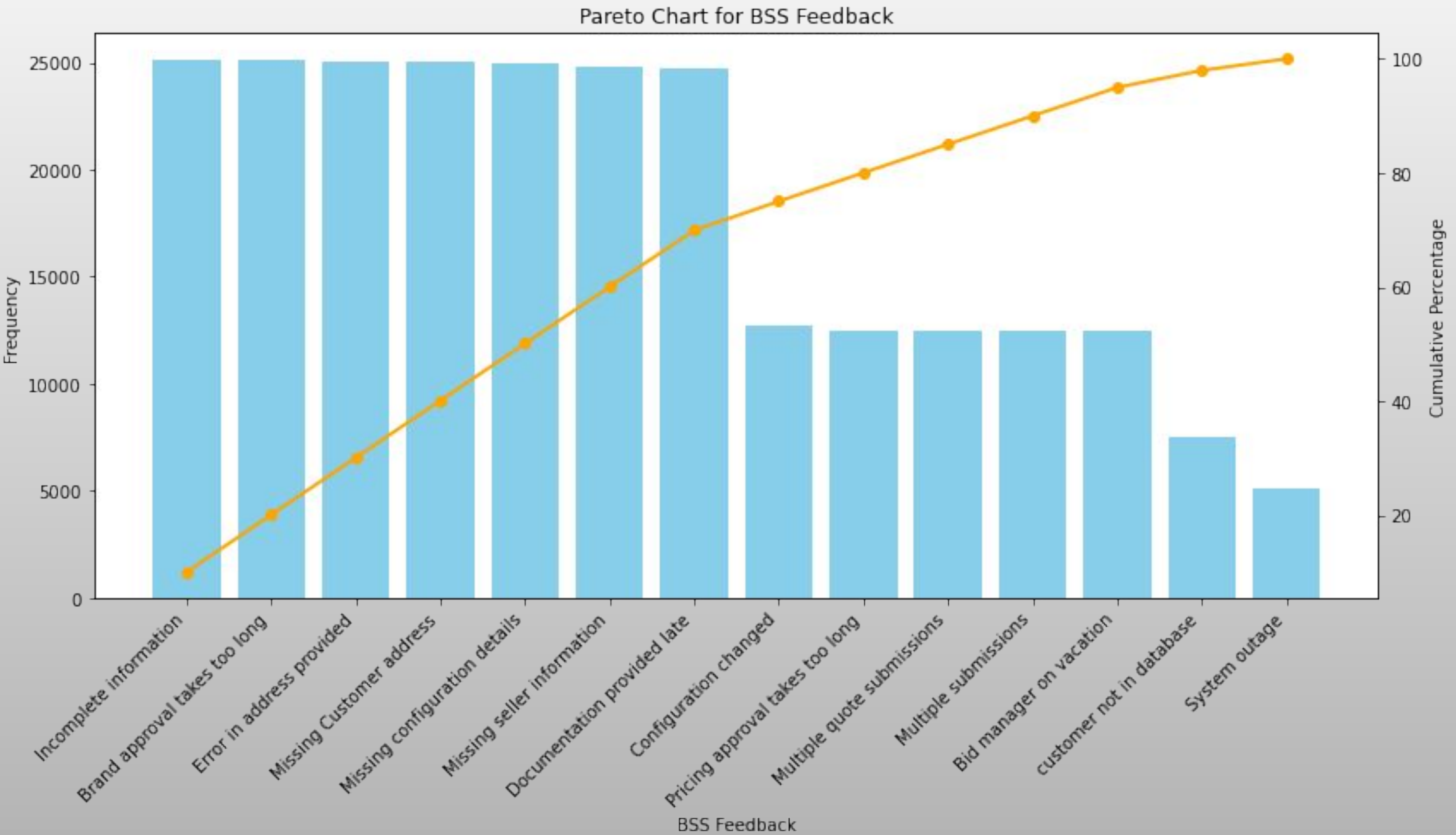
Most of these are issues related to BSS agents.

BSS AGENT FEEDBACKS

Top Feedbacks:

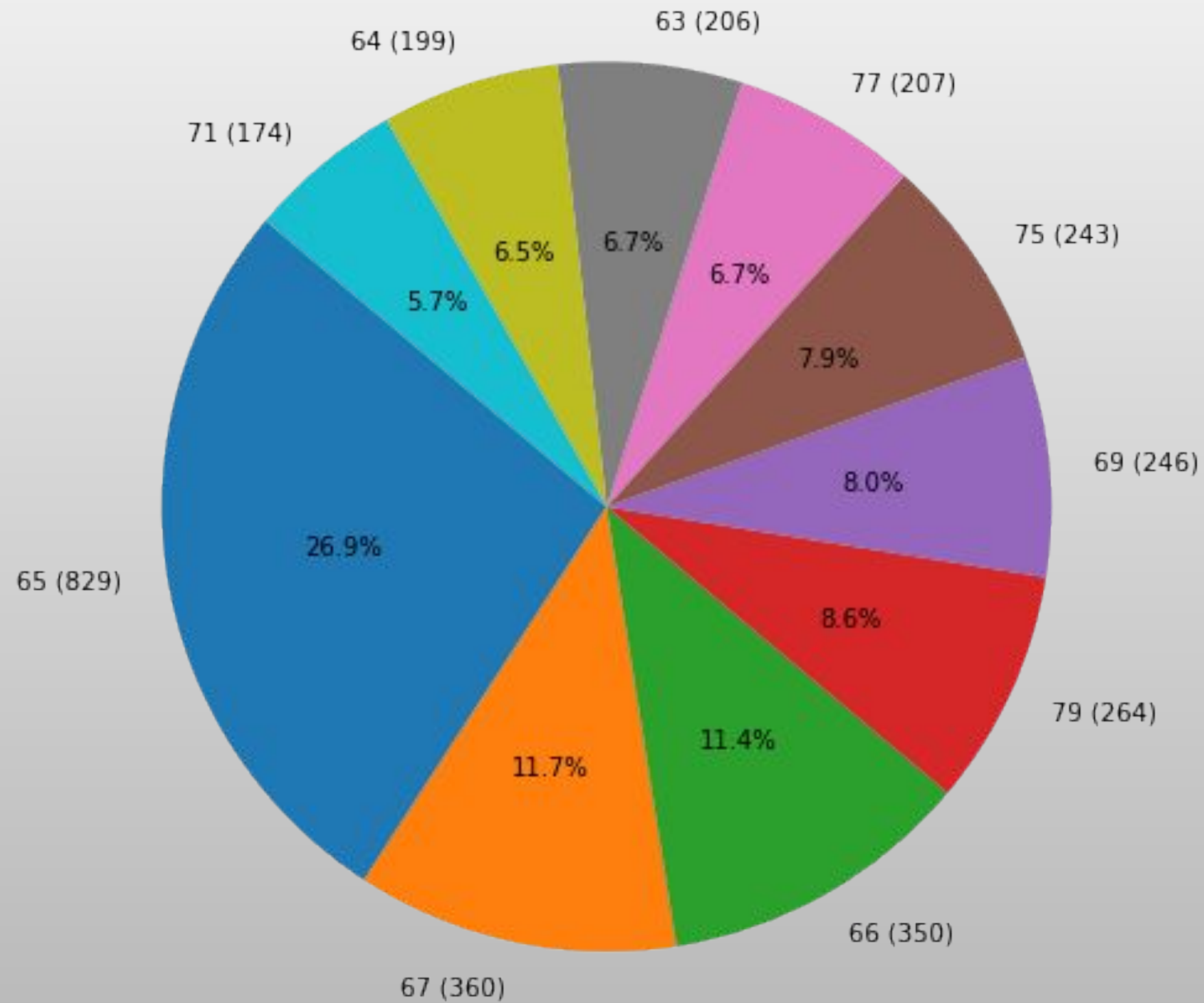
- Missing information
- Most of them are related to errors in information

Most of these are related to issues with Sellers

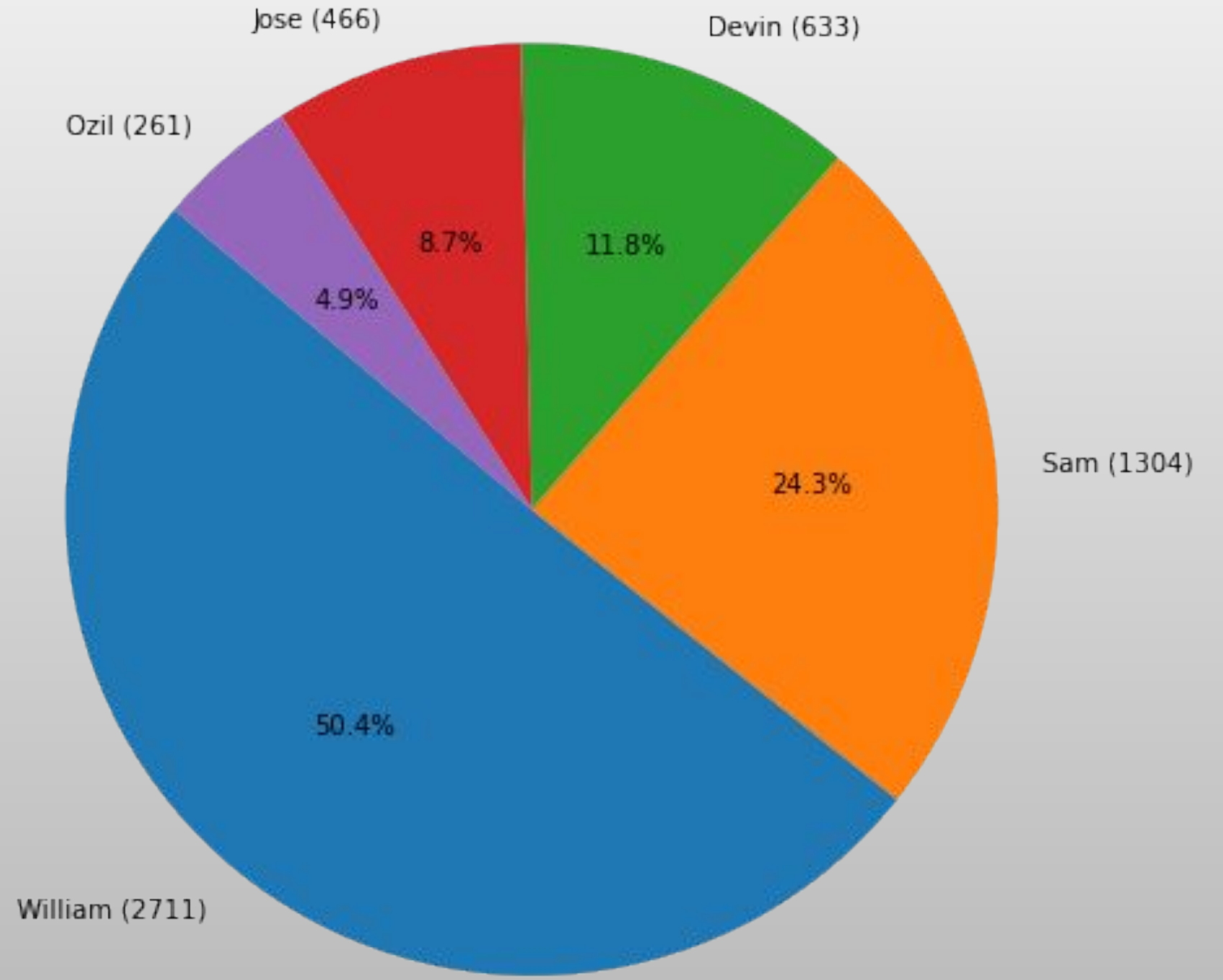


TOP BSS AGENTS & SELLERS INVOLVED IN DEFECTS

Top 10 BSS with Most Defective Bids



Top 5 Sellers with Most Defective Bids



BSS AGENT - SELLER PAIRS INVOLVED IN DEFECTS

BSS	Seller	Defects	Total_Collaborations	Defect_Proportion
65	William	452	513	88.10%
65	Sam	376	522	72.00%
67	William	233	646	36.10%
66	William	232	760	30.50%
79	William	188	649	29.00%
17	Jose	170	391	43.50%
69	William	166	631	26.30%
75	William	165	648	25.50%
63	William	155	627	24.70%
77	William	150	648	23.10%

Is Communication the Core Issue?

Are there other causes for long cycle times?

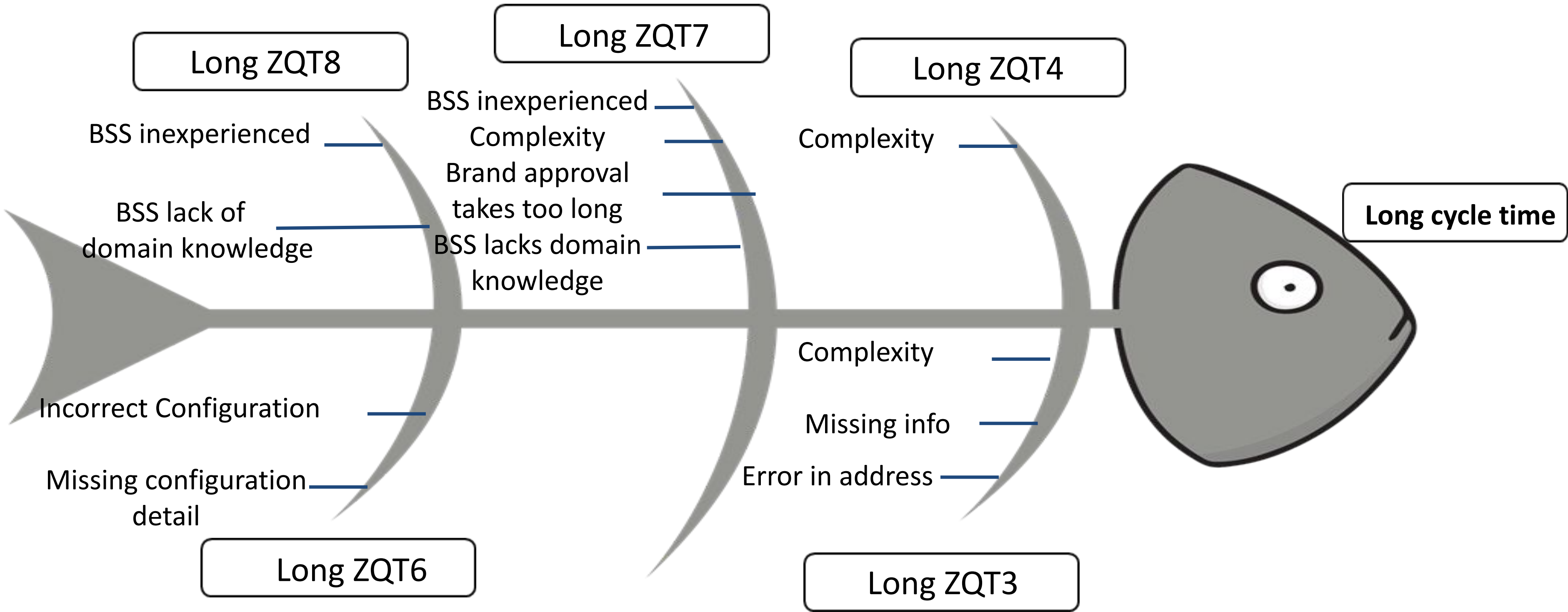
Very high percentage of the collaborations between the Top 2 pairs led to defects.

The potential causes might be:

- Lack of clear instructions about bid details.
- Inefficient or unclear channels for communication and query resolution.



CAUSE ANALYSIS



FMEA

- Error in address provided

- Complexity
- Error in address provided
- Missing seller info
- BSS lacks domain knowledge
- Missing customer address
- BSS inexperienced
- Missing configuration detail
- Difficult to identify BSS
- Brand approval takes too long
- Incorrect configuration

S O D

$$10 \times 10 \times 5 = 500$$

$$8 \times 8 \times 5 = 320$$

$$8 \times 7 \times 5 = 280$$

$$8 \times 6 \times 5 = 240$$

$$8 \times 5 \times 5 = 200$$

$$8 \times 4 \times 5 = 160$$

$$10 \times 3 \times 5 = 150$$

$$5 \times 9 \times 3 = 135$$

$$8 \times 2 \times 5 = 80$$

$$10 \times 1 \times 5 = 50$$

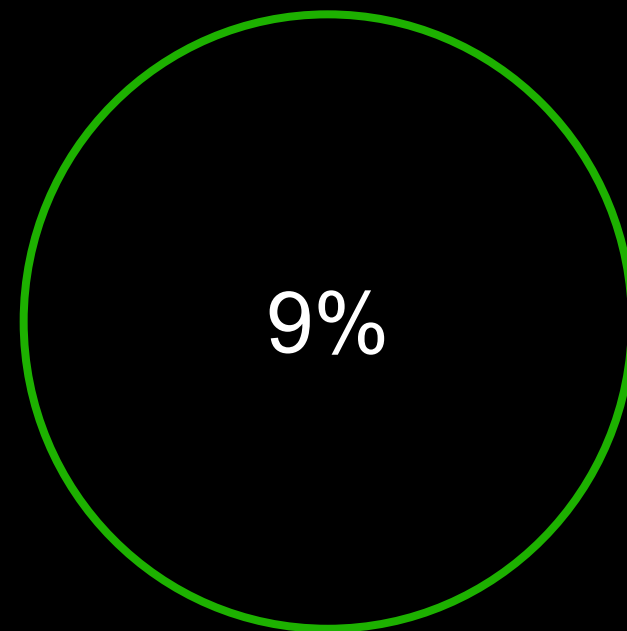


Recommendations

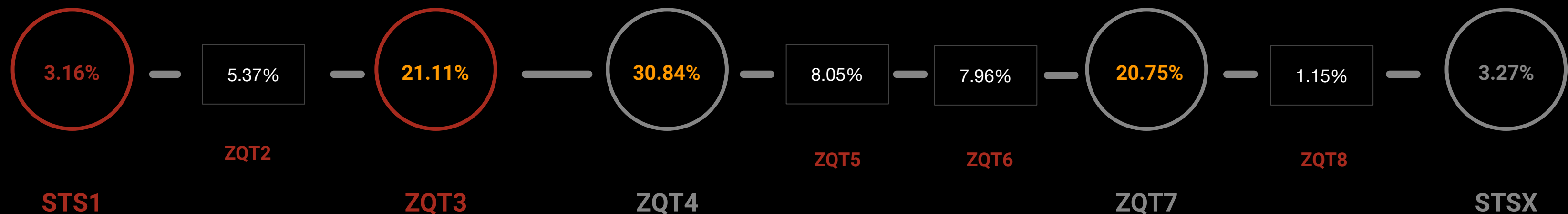
Optimising Cycle time
with **immediate effect**

Long term Optimization

Immediate Next Steps



- When the data is sliced based on the bid size range falling in the 2 std range of Japan for every region we observe similar process times
- Keeping Bid Size constant and observing process times for each step we can aim to achieve an overall reduction of 9% in the cycle times
- **This implies by simply implementing the learning from other regions we can immediately optimise the cycle by 9%**
- When broken down into timestamps below are the improvement for each process that can be achieved
- **It is important to note that in ZQ3, ZQ4 and 7 huge improvements can be made which significantly contribute to overall efficiency**



Recommendations to further optimize the process on the long run

01	ERP System Optimization	<ul style="list-style-type: none">• Upgrade or replace the current ERP system to address reported performance issues.• Integrate real-time validation for data completeness to reduce the number of incomplete requirements and errors in submissions
02	Training & Development	<ul style="list-style-type: none">• Implement comprehensive training programs to enhance BSS's domain knowledge and understanding of common errors in configuration.• Create a mentorship program where inexperienced BSS can learn from senior agents.
03	Automated Routing & Matching	<ul style="list-style-type: none">• Use an automated system for intelligent routing of requests to appropriately skilled BSS agents.• Implement a feature for Sellers to flag urgent requests and ensure they are prioritized accordingly.
04	Response Time Improvement	<ul style="list-style-type: none">• Set up Service Level Agreements (SLAs) to standardize response times and improve accountability.• Monitor response times and provide regular feedback to BSS to improve their response rates.
05	Process Streamline & Standardization	<ul style="list-style-type: none">• Simplify the submission process with a user-friendly interface and clear step-by-step guidance.• Create standardized templates and checklists for Sellers and BSS to minimize errors and omissions.