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# Six Sigma Improvement Project – Residential Sales DESIGN SELECTION

In the past year, a mixed-use Development and Construction firm in the Chicago metro area has not met the Sale to Closing time interval target of 3.0 months for their residential units. Average time has been documented at 3.8 months. This negatively impacts cash flow, related are excessive change order costs and exerts undue pressure on margins. In their Executive Team’s estimation, Sales interaction with the Buyer from initiation to closing is a crucial relationship, key to performance. This value stream process is the focus of this Six Sigma process improvement initiative.

Following is the sequence of events (SOE) of this Six Sigma initiative to design and implement the solution to the root cause of excessive Sale to Closing intervals using the Six Sigma, {Define, Measure, Analyze, Improve, Control (DMAIC)}, problem-solving methodology.

## Define

1. Define a business problem area for focus
2. Identify Critical Customer Requirements for selected business process
3. Create a Project Charter that defines and scopes specific improvement objectives and goals
4. Process map targeted process and conduct Value Analysis
5. Identify quick wins and assess contribution to goals

## Measure

6. Determine measures that relate to Critical Customer Requirements
7. Manage collection and display data in focus area
8. Determine Sigma performance

## Analyze

9. Analyze to determine problem statements
10. Determine ‘root cause’ of problem(s)

## Improve

11. Determine solution to the ‘root cause’

## Control

12. Conduct a pilot of the solution
13. Determine corrective actions to reconfigure solution to rectify identified issues from the Pilot.
14. Implement the broad based solution and sustain gains

## Define

Opportunity Focus: **Business Performance is negatively impacted by extended intervals between close of sale and unit delivery (closing). Sales manages passage of the Buyer through the necessary stages to unit hand-over and interfaces with all functional entities tasked with elements of product delivery. This Sales process is the focus of this Six Sigma process improvement initiative.**

Business Case development estimated that by delivering units from Sale contract to Closing in 3.8 months instead of the Buyer expected of 3.0 months (CCR – Critical Customer Requirement) resulted in 10% of sales lost to competitors that meet that target. Through development of a business process improvement Project Charter; scope, specific improvement objectives, goals and timelines are detailed. Deliverable performances that lead to 3.8 months, equates to a low 1.0 Sigma. Closing that gap to 3.0 months, a Sales increase of 8% is expected. A goal of reducing Sale to Closing interval to 3.0 months by 3<sup>rd</sup> quarter will increase performance (3.0 Sigma) significantly, resulting in aforementioned benefits. Scope of process improvement initiative is focused in the interactions between Sales and Buyer, recognizing that interfaces with other groups (e.g. Construction, Vendors and Executive Team) are crucial to success. The process improvement project plan documents a 5 month initiative from start to solution implementation, with fulltime efforts from the Six Sigma Project Manager and supporting role efforts from Sales and Executive Team.

To gain significant insight into how Sales' end-to-end business processes flow, a functional deployment process map (swim lane) was created. Sequence of steps and accountability, starting from first customer engagement to unit hand-over (closing), necessary to bring the Buyer through required phases to deliver high quality and timely residential units, are shown. Value Analysis of mapped summary process steps yielded confirmation of value-added deliverables for each step. A finer analysis of detailed steps required for the deliverables are expected to yield identification of waste and is tasked for future projects. Also, it is recognized that deviation from mapped process exists. As a result, increases in process costs, delays and key information exchange interruption are likely and could result in margin impacting change orders. Therefore, it is recommended that mapped processes are standardized, along with control metrics to sustain.

'Quick wins' were identified through brainstorming parallel to gathering information for developing this map. Quick wins result from ideas that pass through the filters of 'easy', 'fast', 'cheap' and 'reversible'. Following are 11 'quick wins' identified and an Implementation Matrix is attached;

1. Assign deadline and accountability for pre-dry wall design selection quotes.
2. Assign deadline and accountability for interior design selection quotes.

3. Require Construction Manager's presence at Buyer / Sales design selection meetings.
4. Construction Manager and Sales conducts a dry-run walk-thru.
5. Include procedure and cut-off reports in contract post-execution packet to Buyer.
6. Enforce premium change charges for build-out phase changes.
7. Thank you contact reminder trigger.
8. Query restart sales process on Thank you follow-up call.
9. Create off-line meeting checklists for Sales training or refreshers.
10. Provide a weekly activity, with comments and feedback, to Executive Team.
11. Provide walk-thru report to Executive Team for every unit.

Assessment estimated that some of these 'quick wins' implemented will compliment the solution to the root cause for meeting the Sale to Closing goal of 3.0 months. Favorable by-products of 'quick win' implementations include improved free flow of critical criteria for strategic decision-making, improved customer experience, increased revenue per unit, increased sales, and improved sense of organization / Buyer teamwork, and therefore, should be pursued.