



UNITED STATES MARINE CORPS  
MARINE CORPS RECRUIT DEPOT/EASTERN RECRUITING REGION  
PO BOX 19001  
PARRIS ISLAND, SOUTH CAROLINA 29905-9001

IN REPLY REFER TO:  
5220.5  
G-8/PPA  
14 NOV 2012

DEPOT ORDER 5220.5

From: Commanding General  
To: Distribution

Subj: MARINE CORPS RECRUIT DEPOT/EASTERN RECRUITING REGION (MCRD/ERR)  
CONTINUOUS PROCESS IMPROVEMENT (CPI) PROGRAM

Ref: (a) DoD Directive, 5010.42, 15 May 2008  
(b) DoD Continuous Process Improvement Transformation Guidebook, 12 May 2006  
(c) USMC Continuous Process Improvement Guidebook, 26 Dec 2007  
(d) MCO 5220.12, Marine Corps Continuous Process Improvement, 15 May 2009  
(e) MCRD/ERR Campaign Plan

Encl: (1) MCRD/ERR Continuous Process Improvement (CPI) Program

1. Situation. To comply with references (a) through (d), the enclosed program guidance is provided. This order cancels and supersedes any previous MCRD/ERR directive, letter of instruction or order regarding continuous process improvement.

2. Mission. To institutionalize the culture of CPI across MCRD/ERR in accordance with the above noted references. As a result of CPI implementation, the status quo will be challenged and decision making will be data-driven.

3. Execution

a. Commander's Intent and Concept of Operations. All senior leaders and staff members of MCRD/ERR are instructed to consult enclosure (1) of this order and Assistant Chief of Staff(AC/S) G-8 for guidance in matters of improving work processes under their cognizance. The G-8 will maintain a list of proposed, active, and completed projects conducted within MCRD/ERR functional areas.

b. Coordinating Instructions. An Executive Steering Committee (ESC) will be chartered to prioritize CPI projects large enough to involve multiple functional areas. The G-8 will maintain the prioritized projects list and provide project results as they become available.

4. Administration and Logistics

a. The AC/S G-8, is the sponsor for this Order.

b. Recommendations for changes or modifications to this Order will be provided to the AC/S, G-8 for staffing to the AC/S G-1. The G-1 will staff this Order to the appropriate subordinate commands and staff sections for consideration and will implement any changes or revisions.

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c. An electronic copy of this Order can be found on the Parris Island Intranet (<http://parrislandintranet.nmci.usmc.mil/G1/default.aspx>).

5. Command and Signal

a. Command. This Order is applicable to the MCRD/ERR.

b. Signal. This Order is effective on the date signed.

  
R. L. GRABOWSKI  
Chief of Staff

Distribution: A

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## Chapter 1

CPI Program Procedures

1. General. The provisions herein apply to all CPI initiatives that are sponsored or supported by MCRD/ERR to include, internal and external events that affect MCRD/ERR processes or require MCRD/ERR personnel (i.e., military or civilian employees) participation. CPI Initiatives can be identified administratively by anyone (employees, management, department heads, internal and external customers, etc.) programmatically through inspections (Ground Safety, Command Inspector, etc.), Interactive Customer Evaluation (ICE) comments, Beneficial Suggestion submissions, strategic planning, Scorecard, and even A-76 or BRAC initiatives.

2. Background. Government sponsored CPI events at MCRD/ERR will utilize the Define-Measure-Analyze-Improve-Control (DMAIC) approach, informally for Lean Value Stream Analysis (VSA) and Rapid Improvement Events (RIE), and formally for Six Sigma projects as illustrated in figure 2-1 in Chapter 2. Guiding directives include, but are not limited to the following, which can be found at <http://parrislandintranet.nmci.usmc.mil/G8/default.aspx>:

- a. DoD CPI transformation guidebook dated 12 May 2006 (or more recent version)
- b. DoD Directive 5010.42 dated 15 May 2008
- c. USMC CPI guidebook dated 26 Dec 2007 (or more recent version)
- d. MCO 5220.12, Marine Corps CPI dated 15 May 2009
- e. MCRD/ERR Campaign Plan

3. Definitions

- a. Consult Chapter 2 and references (b) and (c) for applicable terms.
- b. The process flow for conducting a CPI event is shown in figure 2-2 of Chapter 2.
- c. Materials and supplies for conducting government sponsored CPI events will be maintained by the CPI Program Manager at G-8.

4. Roles, Responsibilities and Execution. MCRD/ERR will establish a CPI infrastructure that selects and conducts meaningful CPI events aligned to command strategic goals, while developing personnel capable of participating in, facilitating and leading CPI events (i.e., Process Owners, Team Leaders, Yellow Belts, Green Belts etc.) The roles, responsibilities and actions required of the MCRD/ERR command are described below.

a. Command Deployment Champion. The Chief of Staff (CoS) is the command deployment champion for all CPI initiatives within MCRD/ERR. The CoS works for the Commanding General (CG) and interfaces directly in all MCRD/ERR matters. The CoS will support the CG in accomplishing those tasks identified in all CPI applicable guidance for the commanders and staff sections. The CoS may assign a CPI support team to assist in CPI initiatives for the command. As the command deployment champion, the CoS shall:

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(1) Motivate CPI teams to achieve their objectives. This is achieved best by attending the agency-level event kick-offs and outbrief meetings (as able) or designate the Implementation Leader to do so, and by stressing to CPI teams the importance of their roles in support of CPI.

(2) Work with all involved to ensure that the proper resources and organizational support are allocated to successfully complete CPI events.

(3) Review and endorse command level CPI charters.

(4) Evaluate CPI team progress by participating in the CPI event in-brief and outbrief, and by reviewing the implementation plan.

(5) Assist sponsors (refer to chapter 2) in sustaining benefits gained.

(6) Reward team participants as appropriate and acknowledge overall success of CPI events.

b. CPI Executive Steering Committee (ESC). The ESC is chaired by the MCRD/ERR CoS and its members consist of all MCRD/ERR commanders, the staff sections and principal staff, as well as the implementation leader and CPI program manager. The ESC shall:

(1) Ensure CPI disciplines are integrated with and support the MCRD/ERR campaign plan as currently published.

(2) Meet quarterly or as needed.

(3) Review and support the annual CPI training plan as developed by the CPI program manager.

(4) Provide a framework for CPI process selection by:

(a) Identifying processes that would benefit from CPI.

(b) Developing CPI selection criteria (e.g., process importance, potential benefits, potential product improvement, etc.).

(c) Making recommendations for resource allocation.

(5) Review and determine MCRD/ERR support/endorsement of charters for both internal and external CPI events that affect or require participation of MCRD/ERR personnel (i.e., military or civilian employees).

(6) Lead the culture integration of CPI throughout MCRD/ERR.

(7) Identify and remove barriers to CPI.

(8) Receive CPI status reports from event sponsors.

(9) Act as appropriate on the recommendations of the CPI Team.

(10) Communicate CPI results throughout MCRD/ERR.

c. Commanders and Staff. In accordance with section 3 of reference (c), all commanders and staff serve as CPI event/Project Champions, and shall:

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(1) Encourage all personnel to seek out opportunities in work processes to eliminate waste, reduce costs, and improve quality. Require all supervisors to encourage and recognize/award participation in support of CPI initiatives.

(2) Attend the ESC meetings as a voting member, and to share updates and/or results of their section's CPI events.

(3) Ensure all personnel within their section, military and civilian, attend CPI Basic Awareness Training (White Belt) within 120 days of reporting onboard. Additionally, encourage attendance in Yellow Belt training for personnel who may become involved in CPI events. Identify and develop appropriate personnel capable of facilitating CPI events, to include at least one trained Green Belt. Contact G-8 for the training schedule and to reserve seats.

(4) Review submitted recommendations for improvements, and if warranted initiate the process for conducting a CPI event. Review guiding directives and this program instruction prior to conducting a CPI event. Seek guidance from the CPI program manager to determine if a CPI event is the appropriate tool to address the issue under consideration.

(5) Champion CPI events by either acting as or assigning as a sponsor the appropriate individual who owns the process being reviewed.

(a) The Event/Project Sponsor is the individual who has ultimate responsibility and change authority for the performance results of the work processes being reviewed. Normally, the sponsor of a CPI event owns the process under review or controls the funding for that process. It is essential that the sponsor be involved in the CPI activity throughout the planning, execution and follow-up process.

(b) Sponsors are encouraged to select CPI projects within their sphere of approval authority, and to empower event teams to implement appropriate changes within boundaries provided. Due to the complexities of higher headquarters authority (i.e., MCRC, TECOM), changes and improvements may require senior management review and/or approval. Sponsors are responsible for ensuring appropriate review and approval is obtained from management prior to implementing changes to associated programs.

(c) The Sponsor will seek the ESC's endorsement of the event's team charter with the assistance of the CPI event/Project Champion. ESC endorsement is not required for a Just-Do-It (JDI), but should be briefed to the committee after completion to evaluate potential to validate and advertise resulting benefits. ESC endorsement is not required for CPI events that are not supported by MCRD/ERR or for events that will not affect a MCRD/ERR process.

(d) Provide updates to the ESC, via the champion, on the progress of CPI events. Ensure all action items are completed in a timely manner and that all process improvements are implemented and sustained.

(6) Identify/assign personnel as team members to CPI events (i.e., CPI Event Team), that could affect a related work process. Ensure the right people are assigned to the CPI team and that all involved are committed to supporting the CPI event. Communicate to these personnel their level of authority in making decisions for the respective area. Ensure assigned team

members and team leaders have a detailed understanding of the process being reviewed. Empower the CPI team to implement solutions within boundaries provided.

(7) Develop the CPI event team charter and submit to the CPI Program Manager for consideration at the next meeting of the ESC. Ensure the charter contains a clear and precise definition of the problem with well-defined objectives, deliverables and clear project boundaries.

(8) Receive "parking lot" (refer to Chapter 2) items from CPI teams. Review and upon concurrence forward to the appropriate level officials for consideration.

(9) Receive updates from the team leader on the status of action items.

(10) Support timely completion of all CPI events and process improvements to include implementation and sustainment. Assist action item completion as required by breaking down barriers and advocating for the team.

(11) Review benefits validation after a CPI event.

d. All Hands. All hands shall:

(1) Continually identify opportunities for improvement in order to eliminate waste, reduce costs, and improve quality of the products and services offered to our customers.

(2) Submit these identified opportunities to their department heads for possible submission to the ESC.

(3) Actively participate as a CPI event team member as needed.

(4) Attend CPI Basic Awareness Training (White Belt) within 120 days of reporting onboard (mission permitting), and consider attending Yellow Belt training in the event one may become involved as a CPI event team member. Training of personnel as duty allows is critical to the success of CPI deployment and execution, and the types of training for different levels of expertise will be conducted as recommended in the following table.

CPI Training Table

	Types of Training				
	White Belt (Awareness)	Senior Leader /Executive (Overview)	Yellow Belt (Team member)	Green Belt (Lean)	Black Belt (Six Sigma)
Installation Champion		X			
Program Manager		X		X	X
Organization Champions / Process Owners		X	X		
Directorate / Department Heads		X	X		
Installation CPI Support Team				X	X
Division / Branch Heads & other Process Owners			X	X	
All Employees	X				

Figure 1-1

(a) CPI Basic Awareness Training/White Belt (WB) is required for all military and civilian personnel assigned to MCRD/ERR as mission and duty allows. In situations where mission does not permit face-to-face training, a briefing will be provided for individual review. Training will be conducted at a minimum quarterly, or when requested by a unit/section via the CPI program manager.

(b) Yellow Belt (YB) training is recommended for personnel who are considered subject matter experts (SMEs) and could become a team member involved in an improvement event for their work section. Training will be conducted quarterly or as required by the CPI program manager or his/her designee. Personnel should obtain immediate supervisor approval prior to attending.

(c) Each department is encouraged to send their personnel to advanced CPI training such as the Green Belt (GB) course for professional development. Personnel desiring formal certification as a Green Belt or Black Belt (BB) shall follow the certification process outlined in reference (c), as well as Appendices C-F. Personnel should obtain immediate supervisor approval and project submission approval prior to attending. (See Appendix B).

e. CPI Certification Board (CPICB). The CPICB will meet as required to consider Green Belt and Black Belt certification applications. The CPICB will be chaired by the command CPI Implementation Leader (AC/S G-8). Other members will include the CPI program manager, a Master Black Belt or Black Belt as needed, and at least one other department head not in the chain of command of a belt certification candidate.

f. Belt Certification. Government belt certification candidates will follow the processes outlined in Chapter 3 and reference (c).

(1) Green Belts. Green Belts will be certified by the CG or CoS, at their discretion upon receiving a favorable recommendation from the CPICB. See Chapter 3 for local guidance.

(2) Black Belt. Black Belts are certified by the CPI program office at Headquarter Marine Corps Business Enterprise Office (HQMC/MCBEO), upon favorable recommendation from the MCRD/ERR CPICB via the CG. See Chapter 3 for local guidance.

(3) Master Black Belts. Enterprise/Organizational Master Black Belts are certified by the CPI program office at HQMC, upon favorable recommendation from the MCRD/ERR CPICB via the CG. Consult reference (c) for details.

g. MCRD/ERR CPI Implementation Leader. The AC/S for Plans, Programs, and Assessments (G-8), is the command's Implementation Leader for continuous process improvement events, and chairs the CPICB.

h. MCRD/ERR CPI Program Manager. The CPI program manager is assigned by and works for the AC/S G-8. The CPI program manager shall:

(1) Receive CPI charters from internal and external organizations and provide these charters to the ESC for review/endorsement.



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(2) Collect, compile, and display data on CPI initiatives provided by MCRD/ERR departments by ensuring the CPI Management System (CPIMS) website is updated with current data/information in a timely manner.

(3) Provide the AC/S G-8 with a report on MCRD/ERR CPI activity at each program performance review, and prior to each CG staff meeting or as required.

(4) Provide CPI data updates to AC/S G-8 as required by guiding directives.

(5) Plan, organize, and attend ESC meetings and record meeting minutes.

(6) Maintain a sufficient quantity of CPI activity supplies and support material.

i. CPI Support Team. If assigned, the CPI support team will assist the CPI program manager in all matters pertaining to command CPI initiatives. The team may be comprised of a Master Black Belt, Black Belts, Green Belts, and other support staff personnel. Duties and responsibilities of the CPI support team will be coordinated by the CPI program manager as the team leader.

j. CPI Event Team. The CPI event team is chosen during the preparation phase of a Lean event or the Define Phase of a Six Sigma project. CPI teams are comprised partly of people who have functional expertise in the work process being analyzed, i.e. the people who do the work. Other members may include stakeholders such as suppliers and customers involved in the work process. The CPI event team is responsible for studying a process and implementing changes within boundaries set by the event sponsor. Each event will include a team leader who is responsible to the sponsor for ensuring action items are being completed as assigned to team members.

k. Facilitator. Event facilitators are the Black Belt and Green Belt(s) assigned to the CPI team. They assist the sponsor and team leader in all matters pertaining to the CPI event, including advising the development of the event charter, data collection, facilitating the event, performing statistical analysis of data, and providing training to the team members as needed. The Green Belt is normally assigned by the sponsor and the Black Belt is normally assigned by the CPI Program Manager. Some minimal knowledge of the process being analyzed is helpful for the facilitators. However, the CPI team members provide the process expertise, not the facilitators. In fact, it can be difficult for a facilitator who happens to be a process subject matter expert to avoid influencing the event. If the belts are chosen from outside the sponsor's department, sufficient process knowledge can be picked up during the Lean pre-work or Six Sigma DMAIC define phase.

l. CPI Team Leader. The CPI team leader has positional authority during the CPI event. Each is a full time participant who keeps the team focused on the problem, objectives, and the deliverables. The team leader is the primary presenter during all update meetings and they document the results of the event. The CPI team leader, assisted by the facilitators is the person who manages and drives the CPI event. The team leader can be chosen from a variety of organizational roles such as a process owner, supervisor, or shop floor employee. Normally, the team leader works for the sponsor and must have a working knowledge of the process being reviewed. The team leader shall:

(1) Review guiding directives and this program instruction prior to participating in a CPI event.

(2) Assist the sponsor in drafting the CPI charter and completing pre and post CPI event checklists.

(3) Coordinate the CPI event. Provide guidance and direction to the team members to accomplish the objectives and achieve the deliverables as defined by the CPI charter.

(4) Maintain regular communication with all other CPI participants (e.g., sponsor, facilitators, team members, etc.), and prepare briefs with the assistance of the facilitators.

(5) Ensure the team's progress is documented through the use of metrics tracking. This includes tracking milestones, action items, and tasks.

(6) Oversee the team's collection of data and the analysis of that data.

(7) Draft and maintain the post-event implementation plan, which must state the requirements, expectations, and assign responsibility. The time frames must be realistic for project completion. Present the implementation plan to the sponsor for review and approval and assist the sponsor in ensuring the timely completion of all actions.

m. Stakeholder. A stakeholder is any person or organization that has a vested interest in the outcome of the CPI event. They may be an employee, supervisor, manager, department head, or an organization. Stakeholders should be members of the CPI team and attend the CPI event. Stakeholders should:

(1) Review guiding directives and this program instruction prior to participating in a CPI event.

(2) Ensure that the CPI team understands the stakeholder's interest or support function to the process being reviewed.

(3) Review the recommendations from the CPI team to determine what changes to their support function or process will be required.

(4) Assist the CPI team as required.

n. Team Member. Team Members are those individuals who represent their organization, sponsor, and/or stakeholder during the CPI event. They are the work horses of the CPI team, collecting and interpreting data, making recommendations for improvements, and in most cases implementing the changes needed to improve the process. Desirable to have received WB training at a minimum, and preferably YB training, team members should:

(1) Review guiding directives and this program instruction prior to participating in a CPI event. Be knowledgeable about the process being reviewed in order to seek ways to eliminate waste, reduce costs, and improve quality.

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(2) Participate in charter development and abide by it during the CPI event, and be available for the entire CPI event.

(3) Maintain communication with their leadership, and follow the guidance and direction of the team leader, facilitators, and sponsor.

Chapter 2

CPI Methodologies

1. General. CPI is about challenging the everyday status quo and acknowledging there is a better way to deliver value to our internal and external customers. As implemented by the DoD, CPI blends the recognized industry best practices of Lean (identifying and reducing waste), Six Sigma (identifying and reducing variation), and Theory of Constraints (identifying and eliminating bottlenecks), (See figure 2-1). Benefits of creating a culture of CPI are measured in terms important to our work force and customers, including quality, adherence to schedules, costs, work life and safety.

2. Background. Within DoD, CPI and Lean Six Sigma (LSS) are synonymous and actually describe three methodologies which can be used independently or in combinations.

a. Lean. Lean philosophy can be traced back decades and focuses on clearly identifying value from the customer's perspective and then structuring a value stream of process steps that creates the value in a continuous flow at the pace required by the customer. Process steps are said to be either value added or non-value added from a customer's perspective. The designation is not related to workers, but to the wasteful processes workers are required to use. By carefully analyzing a value stream and removing as much non-value added waste as possible, a future state can be developed which provides value to the customer more efficiently, safely and reliably.

b. Six Sigma. Six Sigma is defined as either a level of quality performance or as a business methodology. As a measure of quality, it is defined as 3.4 defects per million opportunities. As a business methodology, it is identifying, understanding and eliminating causes of variation in a process. In any process there are many inputs which impact the variability in the output. Variation is the enemy of quality and Six Sigma provides a structured approach to identify and control the significant few variables which drive quality.

c. Theory of Constraints (TOC). TOC is a business methodology which states that there is always at least one process which limits an organization's performance relative to its goal. A constraint is defined as any resource whose demand is greater than its capacity. TOC methods allow organizations to identify and alleviate constraints.

CPI Methodologies

Lean - Six Sigma - Theory of Constraints

Philosophy	Lean	Six Sigma	TOC
Theory	Remove waste	Reduce variation	Mitigate constraints
Application Guidelines	Specify customer value Identify the value stream Achieve flow Produce based on customer pull Seek perfection	Define Measure Analyze Improve Control	Identify the constraint Exploit the constraint Subordinate processes Elevate the constraint Identify the new constraint
Primary Effect	Reduced flow time	Uniform process output	Increased throughput

Figure 2-1

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d. Types of CPI Events. There are several types of events or activities commonly used to drive LSS process improvements.

(1) Value Stream Analysis (VSA). A VSA is typically a 3-5 day event during which a team analyzes the start to finish process of producing some product or service to a customer. A VSA is normally a top-down approach where an organization would conduct a high level VSA to determine opportunities for lower level events. For example, a battalion unit might conduct a VSA on an administrative process (unit diary entries, Limited Duty assignments, personnel readiness tracking, etc.), to determine causes for delays of documents or signatures, and prioritize action steps accordingly. During a VSA, the current state of a value stream is mapped at a level which reveals wastes and opportunities for improvement. Problems and solutions are identified and a future state vision is created. The main deliverable from a VSA is a Rapid Improvement Plan (RIP) which includes the follow-on kaizen events, projects and JDI required to achieve the future state. It is important to note that the VSA itself does little to nothing to improve a value stream. The improvements come as the Rapid Improvement Event (RIE) action items are completed.

(2) Kaizen Event. A Kaizen or RIE is typically a week-long event during which a team actually implements an improvement identified during a VSA. The goal of an RIE is to establish a continuous flow of a product or service at the rate the customer requires or pulls it. The kaizen event process typically operates on a seven week roadmap, which includes three weeks of preparation, one week for the whole team to meet (actual event), and another three weeks to follow-up and close out action items. An important consideration is to scope an event narrowly enough that the bulk of action items are closed out during the event week (the "Rapid" in RIE). Large scoped events which create dozens of action items, scheduled over months, have little chance for success.

(3) 5S Event. A 5S is a specialized kaizen event where a workspace is physically transformed to provide a highly visual, organized and safe environment which promotes the flow of value with minimal waste. The 5Ss are Sort, Simplify, Shine, Standardize, and Sustain. A 5S event employs at least a seven week cycle (the prep period may be lengthened to accomplish the sorting/scrapping).

(4) Project. The word "project" can be defined in terms of Lean or Six Sigma. A Lean project is any follow-on action item from a VSA which is too complex to be accomplished during the typical seven-week RIE cycle. A Lean project may require extensive research, coordination or data collection, and it may require a team to meet formally one or more times. A Six Sigma project specifically follows the formal DMAIC problem solving structure and requires tollgate reviews. Either kind of project would typically take 3-6 months to complete.

(5) Just-Do-It (JDI). A JDI is any action item resulting from a VSA or kaizen event which can be accomplished in a few days without a team or extensive coordination. Examples might include a simple change to a form or document, moving a piece of equipment, creating a shadow board for tools, etc. It could also simply be a good idea from a worker that is implemented on the spot by the worker or immediate supervisor with minimal cost or effort.

e. Terms and Phrases. There are many terms and phrases associated with LSS/Theory of Constraints. The references cited in Chapter 1 include extensive glossaries and a few of the more important terms are explained below.

(1) Charter. A one-page document summarizing the problem, rationale, goals and scope of a continuous process improvement activity. Charters are written by sponsors and submitted to the ESC for review and approval.

(2) Continuous Process Improvement Certification Board (CPICB). Group formed to certify MCRD/ERR Green Belts and recommend certification of Black Belts and Master Black Belts to the HQMC's/MCBEO.

(3) Continuous Process Improvement Executive Steering Committee (CPI ESC). Chaired by the MCRD/ERR CPI Deployment Champion (CoS), membership includes department heads and the CPI Implementation Leader and CPI Program Manager. The ESC reviews and approves CPI event charters and coordinates CPI efforts. See Appendix A for committee charter template.

(4) DMAIC (pronounced "Dee-MAY-ick"). A structured process improvement methodology used formally in Six Sigma projects and informally for Lean events. It is an acronym for "Define", "Measure", "Analyze", "Improve", and "Control". In the define phase, the problem is stated and the processes to be improved are identified. The measure phase determines the baseline performance of the process and identifies input and output variables. The analyze phase uses data to establish the relationship between inputs and outputs to determine causes of variations. The improve phase identifies improvements to optimize outputs and reduce defects and variation. The control phase documents, monitors and assigns accountability for sustaining gains. Each phase concludes with a Tollgate Review.

(5) Non-Value Added. Defined in Lean methodology as waste and is any process or activity or non-activity which takes time, material or space, but does not add value to the product or service from the customer's perspective. It is in no way related to how important a process step is and the term does NOT describe people.

(6) Non-Value Added, Required. A classification recognizing some waste may be required due to current technology, regulation or other constraint beyond a team's control. Teams must be reluctant to use this designation during an event and should always challenge the assumption that any non-value added step is required.

(7) Parking Lot. Due to the nature of MCRD/ERR's mission, CPI event teams are likely to develop solutions which are outside the sphere of influence boundaries set by the event sponsor. The parking lot is a facilitation tool which allows "out of bounds" ideas to be captured and forwarded to the sponsor for consideration so that the team is not sidetracked discussing problems out of their control or solutions they cannot implement.

(8) SIPOC (pronounced "SY-pock"). An acronym used for Supplier, Input, Process, Output, Customer. Used during the preparation period for a Lean event, or during the define phase of a Six Sigma project to document a process at a high level and visually show the process from suppliers' inputs to the product or service provided to the customer. A completed SIPOC defines the process boundaries, identifies stakeholders and provides insight

into data collection opportunities. It is also useful in keeping a team focused to prevent "scope creep" which can derail an event.

(9) Sponsor. The person ultimately responsible for the results of a CPI event. The sponsor normally owns the process under review or controls its funding. The sponsor empowers the team to implement changes within limits provided. For a DMAIC project, the sponsor is responsible for conducting tollgate reviews.

(10) Team Leader. The person responsible to the sponsor for executing the CPI event action plan and tracking completion of action items by the team members. The team leader works with the facilitator to guide the team through the improvement process.

(11) Tollgate Review. The formal status review of a DMAIC project which occurs at the end of each of the five phases. Progress is measured against tollgate criteria and a decision is made whether to continue, defer or shut down the project. The review also ensures a project is receiving adequate support. It is attended by the sponsor, stakeholders and facilitator at a minimum.

(12) Value Added. Defined in Lean methodology as a process step the customer is willing to pay for, and transforms the product or service, and is done right the first time. Historically no more than .5% to 5% of a typical organization's activity is strictly defined as value added. Even world class organizations such as Toyota can claim no more than 35% to 40% value added. The perceived importance of a process step is not related to whether it is value added according to the objective Lean definition.

(13) Value Added vs. Non-Value Added. A designation made by a team during a CPI event for each step of a process. It is not synonymous with "good" or "bad" and does not describe the people doing the process step. It is entirely a matter of the customer's perspective. For example, a process step regarding training a mechanic would likely be designated non-value added in a value stream analysis of transforming raw material into widgets, but value added during an event looking at an organization's training processes. Non-value added steps are considered waste in the process under review and provide opportunities for improvement.

(14) Variation. Describes the inherent instability and unpredictability of a process. As variation increases, uncertainty and defect rates increase and quality decreases.

(15) Visual Management. Techniques which allow anyone to determine at a glance whether a process is proceeding normally. For example, tools maintained on a shadow board provide an instant visual cue when a tool is missing or stowed incorrectly.

(16) Waste. Anything that adds cost or time without adding value from the customer's perspective. The eight wastes of LSS are remembered by the acronym TIMWOODU, and are:

(a) Transportation - Moving product or service between processes is a cost that adds no value.

(b) Inventory - Stockpiles of in-process or finished goods, often a result of overproduction.

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(c) Motion - Movement of people due to poor workplace layout or ergonomics.

(d) Waiting - Anytime a product or service is not moving or being processed.

(e) Over-production - producing a product or service before it is required by a downstream customer. Often a result of "push" processes.

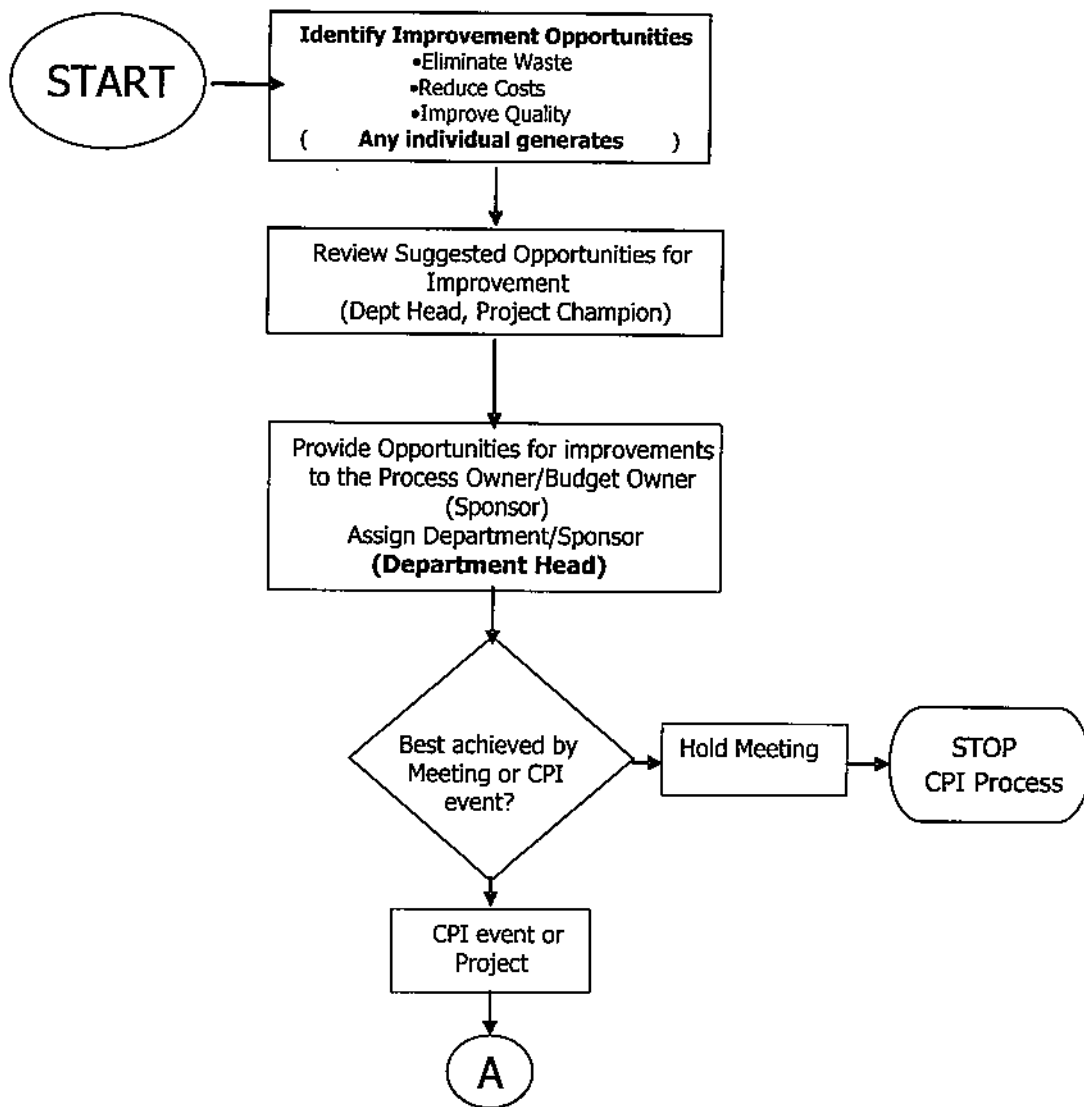
(f) Over-processing - "Using a bazooka to swat flies." Often the cumulative result of years of knee jerk fixes to one-time events.

(g) Defects - Rework is costly in time and money.

(h) Under-utilization - of manpower, an individual's skills set, time or other resources.



### CONTINUOUS PROCESS IMPROVEMENT (CPI) EVENT PROCESS FLOW



Return to Previous as Required

Figure 2-2

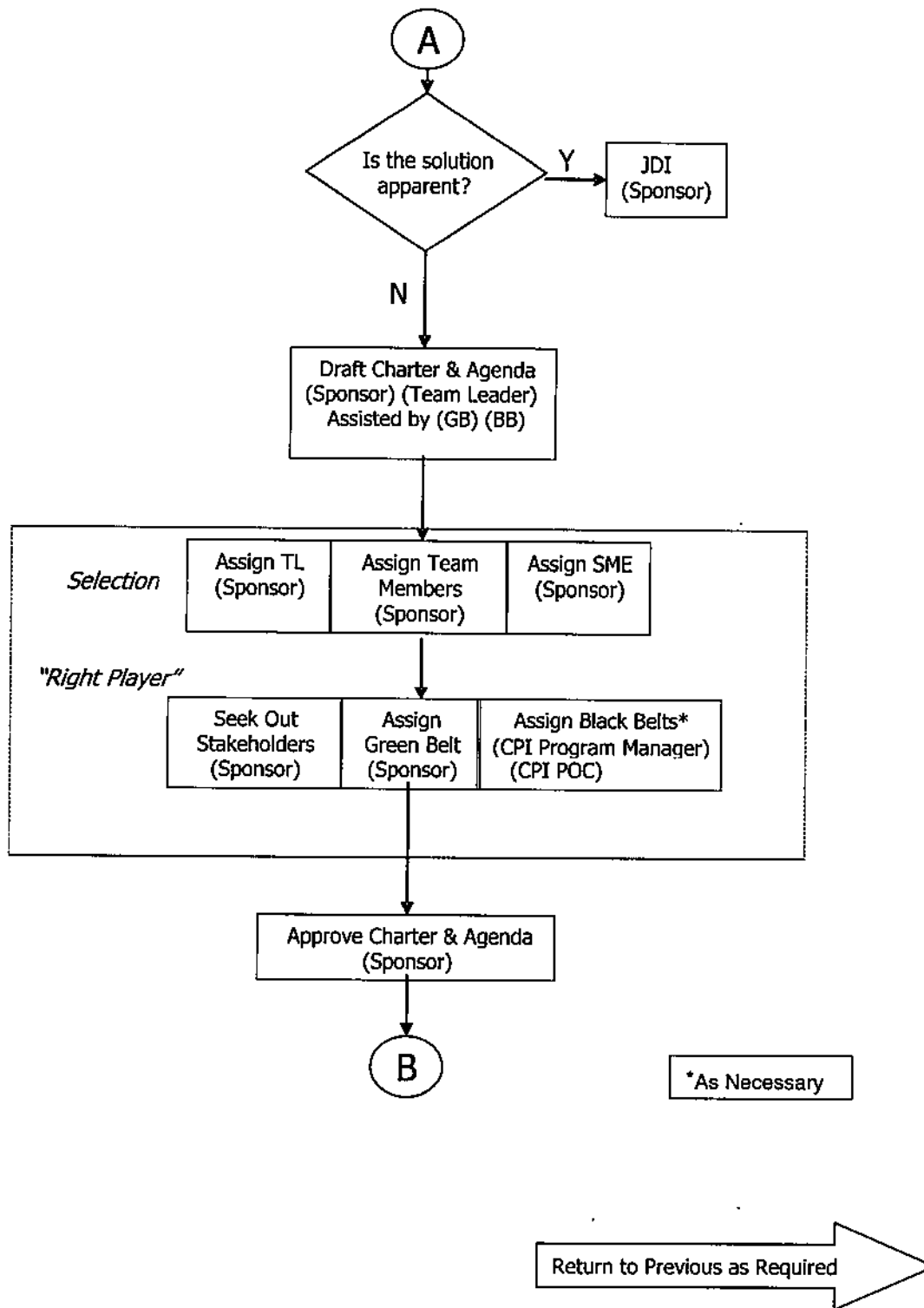
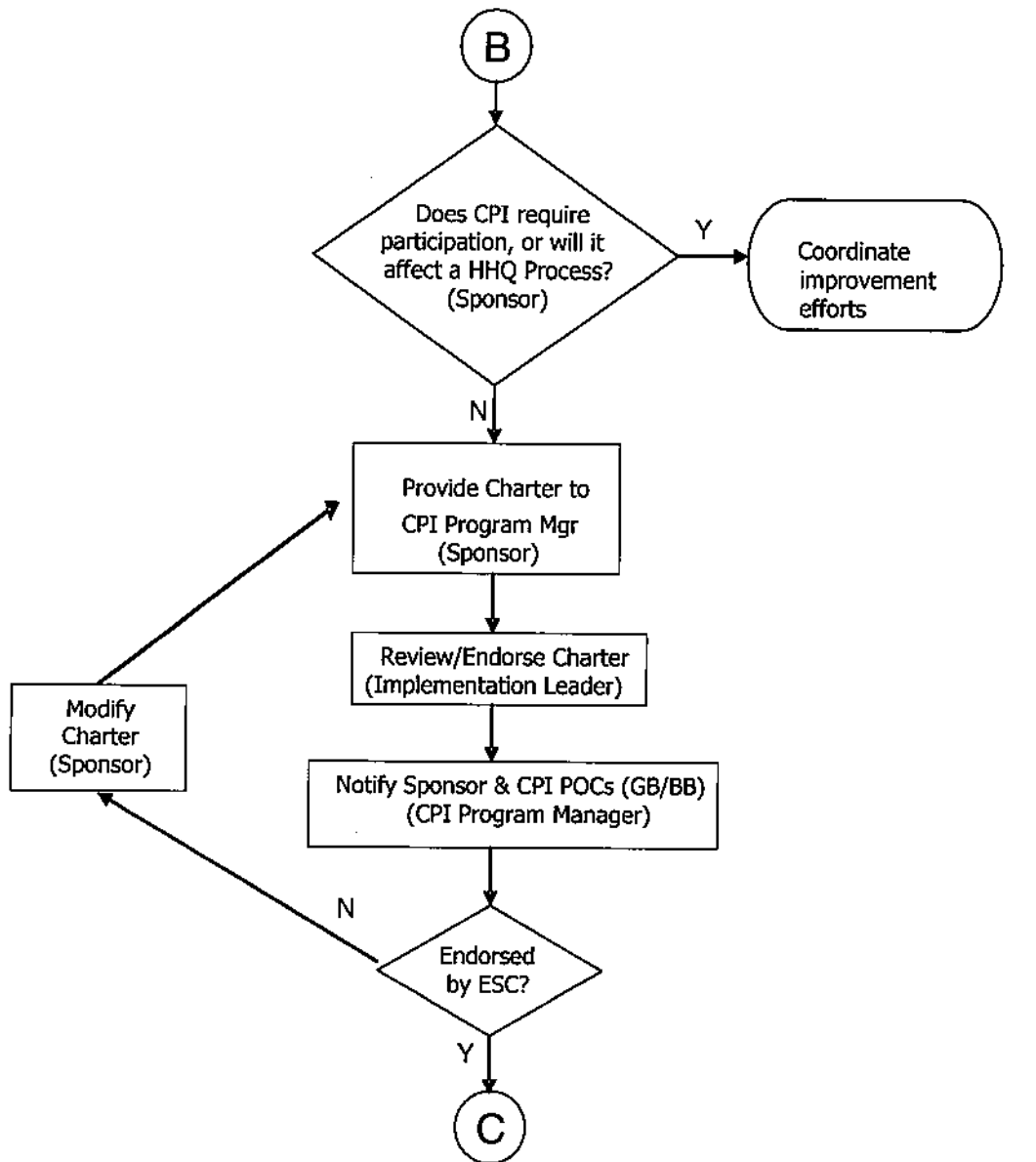


Figure 2-2 Continued



Return to Previous as Required

Figure 2-2 Continued

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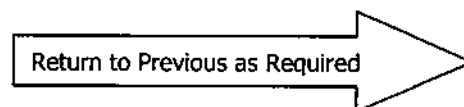
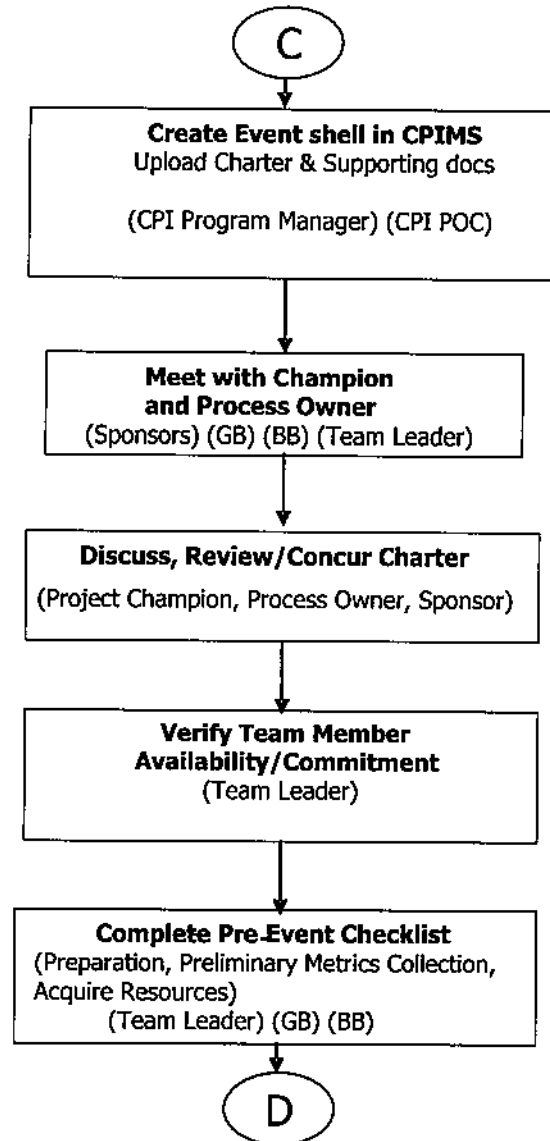
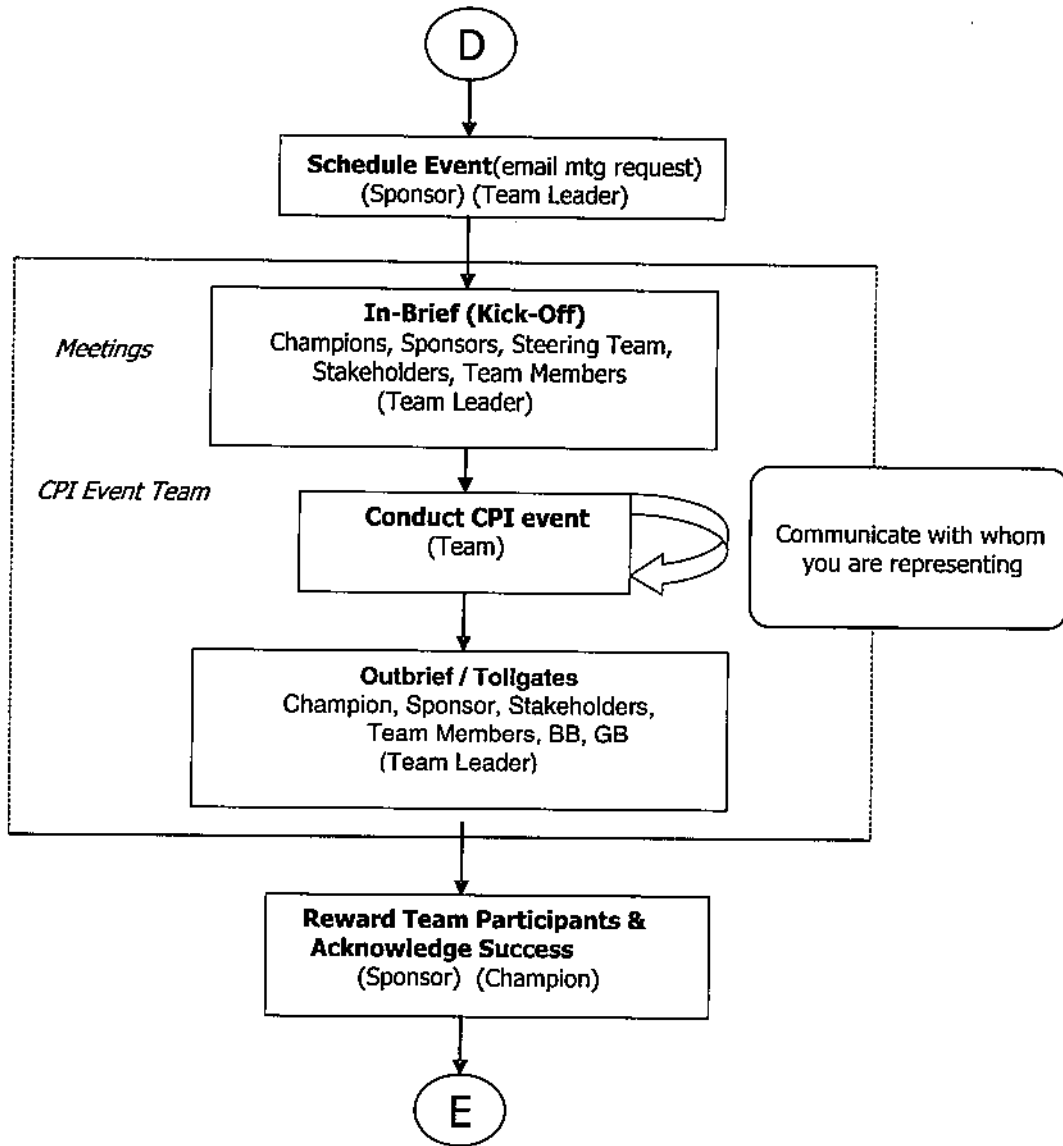


Figure 2-2 Continued



Return to Previous as Required

Figure 2-2 Continued

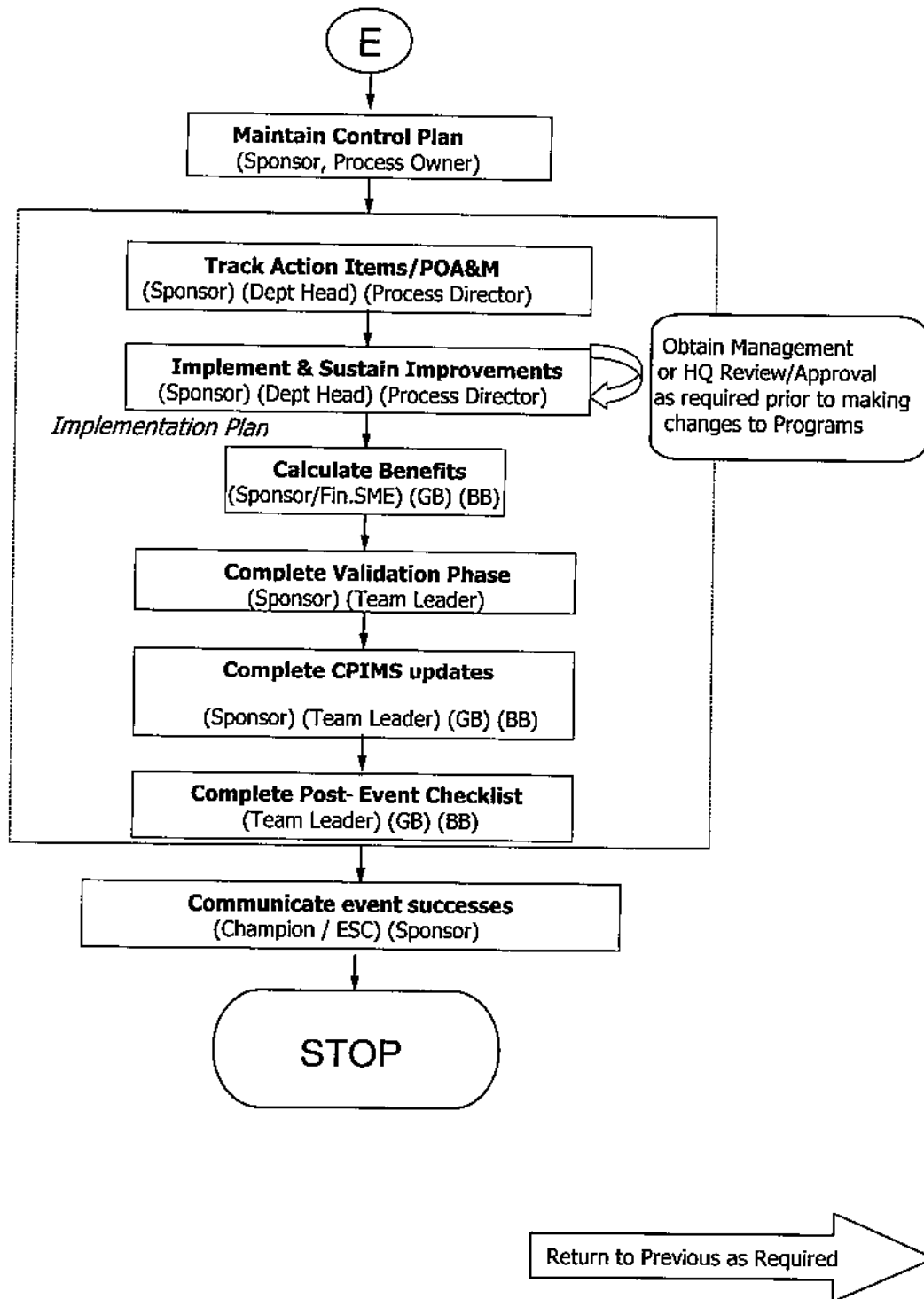


Figure 2-2 Continued

### Chapter 3

#### Green Belt and Black Belt Certification Process

##### 1. Purpose

a. To provide training and certification criteria for government MCRD/ERR personnel seeking LSS Green Belt or Black Belt certification. Consult reference (c) for detailed certification criteria.

b. To standardize the evaluation, assessment and certification process to ensure repeatability and fairness at the local installation level.

##### 2. Green Belt Certification

a. Green Belts facilitate Rapid Improvement Events (RIEs) and small scope VSAs, as well as execute small scope Six Sigma events. A certified Green Belt is expected to execute a CPI event start to finish with minimal guidance and supervision. Successful Green Belts possess a few common characteristics:

- (1) An innovative, questioning and inquisitive mind
- (2) Ability to work independently
- (3) Ability to devote necessary time for certification and follow-on planning and execution of CPI events
- (4) Willingness to learn and apply CPI skills and tools
- (5) People skills sufficient to facilitate teams of diverse people through a CPI event

b. Green Belt Certification candidates are subject to the following requirements:

(1) Training. Green Belt candidates must complete and submit a Training and Commitment Agreement (Appendix B) to the CPI Program Manager in order to obtain a seat in the next available training session. Candidate must then complete 40 hours of USMC approved classroom Green Belt training with a passing score as determined by the provider. Other sources of training may be evaluated by the CPICB to determine alignment with DoD methodologies.

(2) Timeline. LSS skills and knowledge are perishable. Green Belt candidates should submit their certification package within six months, but not later than one year after the completion of training.

(3) Facilitation Experience. Green Belts are facilitators and there is no substitute for "up front" time. The Green Belt Certification Endorsement Form (Appendix C) lists required tasks and attributes. They cannot be "talked through", but must be demonstrated during one or more CPI events.

(4) Black Belt Endorsement. The Green Belt's mentor (a Black Belt) will submit a completed Certification Endorsement Form (Appendix C) on the

Green Belt's behalf to the CPICB with a copy to the Green Belt. The Green Belt should use the form as a checklist to plan, execute, and close out their certification plan. The Black Belt will use the form to mentor the Green Belt to ensure proficiency. Additional guidance on Green Belt requirements can be found in reference (c).

(5) Project Portfolio. The Project Portfolio is found in CPIMS and contains documentation of CPI events facilitated by the Green Belt. Green Belts should consult the CPI Program Manager to gain access to CPIMS in order to upload required CPI event documentation.

(6) Certification Questionnaire. The Green Belt will submit answers to the following questions along with their Project Portfolio.

(a) Describe your pre-event actions taken to prepare for success and your post-event actions taken to prepare for improvement implementation and sustainment.

(b) Describe how you chose the tools you used during your facilitation. List them and describe their effectiveness in accomplishing their purpose.

(c) Describe your challenges and effectiveness in keeping the CPI event team focused within the boundaries of the charter.

(d) Discuss your greatest challenge during the CPI event. How did you handle it?

(e) Describe what you believe to be the role of a Green Belt. Explain how you achieved it during the CPI event.

(7) Presentation and Interview. The CPICB will schedule a presentation and interview time after receiving the Certification Endorsement Form, Project Portfolio and Questionnaire answers.

(8) Recommendation. Upon reaching a positive certification recommendation decision, the CPICB will forward the results to the CoS for final approval. If the CPICB determines additional CPI event experience is required, the results will be forwarded to the Black Belt mentor for action.

c. DoD Green Belt certification achieved prior to employment at MCRD/ERR will be considered as follows:

(1) Department of the Navy (DON) Green Belt certification achieved in accordance with a USMC approved certification process will be recognized upon submission of certification documentation to the CPICB.

(2) Other DoD and private sector Green Belt certifications will be considered by the CPICB on a case by case basis upon submission of certification documentation and a copy of the applicable certification standards.

### 3. Black Belt Certification

a. The Black Belt training and certification process is intended to recognize employees who have reached a significant level of understanding and application of CPI methodologies as a certified Green Belt. Additional



guidance can be found in reference (c).

b. Black Belt certification candidates are subject to the following requirements:

(1) Prerequisite. Black Belt candidates must be a certified Green Belt with at least one year of experience after certification. Waivers on GB certification will be considered on an individual basis subject to CPICB consideration of material submitted to the CPI Program Manager.

(2) Training. Complete 160 hours of USMC approved formal Black Belt training with a passing score as determined by the provider. Candidates must pass a rigorous 150-question, timed exam based on the DON LSS body of knowledge. Other sources of training may be evaluated by the CPICB to determine alignment with DoD LSS methodologies.

(3) Timeline. LSS skills and knowledge are perishable. Black Belt candidates should submit their certification package within six months, but not later than one year after the completion of training.

(4) Facilitation Experience. Facilitate at least two CPI events as a certified Green Belt (may include CPI events executed in conjunction with formal Black Belt training).

(5) Mentorship Experience. Mentor two Green Belts through one CPI event each.

(6) Teaching Experience. It is desirable for Black Belts to teach or co-teach a complete Green Belt or Senior Leader/Executive class.

(7) Black Belt Endorsement. The Black Belt candidate's mentor will submit the completed Certification Endorsement Form (Appendix E) to the MCRD/ERR CPICB.

(8) Certification Storyboard. Create a six-panel storyboard illustrating a CPI event/project (may be the storyboard created as required at the end of formal Black Belt training).

(9) Certification Questionnaire. Submit answers to the following questions to the CPICB along with the CPI event Certification Notebook.

(a) Describe your pre-event and post-event actions taken to guide your team leader through the improvement implementation process.

(b) Regarding team dynamics (forming, storming, norming, performing), discuss your greatest challenge encountered during the CPI event and how you worked through it.

(c) Describe how you were able to keep your team focused within the boundaries of the CPI event charter. If you were not successful, what was the result?

(d) Discuss the challenges of mentoring a Green Belt.

(e) Describe what you believe to be your role as a Black Belt. Have you achieved your expectation?

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(10) Presentation and Interview. The CPICB will schedule a presentation and interview time after receiving the Recommendation Form, Project Portfolio and Questionnaire answers.

(11) Recommendation. Upon reaching a positive certification recommendation decision, the CPICB will forward the results to the Commanding General for concurrence prior to forwarding the recommendation to the MCBE0 for final approval. If CPICB determines additional CPI event experience is required, the results will be forwarded to the Black Belt mentor for action.

(12) Black Belt certification may be attained via the HQMC LSS Black Belt Certification process. Candidates desiring that method of certification must submit an application package to MCBE0 via the CPICB, which includes documented CPI event experience.

c. Black Belt certification achieved prior to employment at MCRD/ERR will be considered as follows:

(1) DON Black Belt certification achieved in accordance with a USMC approved certification process will be forwarded to the CPICB upon submission of certification documentation to the G-8.

(2) Other DoD and private sector Black Belt certifications will be considered by the CPICB on a case by case basis upon submission of certification documentation and a copy of the applicable certification standards.

#### 4. Master Black Belt Certification

a. The Master Black Belt certification process is intended to recognize exceptional performance and mastery of LSS methodology and theory. Master Black Belts mentor Black Belts and senior leadership in all aspects of CPI implementation.

b. Master Black Belt certification candidates are subject to the requirements detailed in reference (c).

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APPENDIX A  
CHARTER

**MCRD/ERR CONTINUOUS PROCESS IMPROVEMENT (CPI)  
EXECUTIVE STEERING COMMITTEE (ESC)**

**1. Purpose:** This Charter establishes the Marine Corps Recruit Depot/Eastern Recruiting Region (MCRD/ERR) Continuous Process Improvement (CPI) Executive Steering Committee (ESC). The ESC will act as an overarching advisory body to the Commanding General in support of the MCRD/ERR Campaign Plan and Continuous Process Improvement (CPI).

The intent of the ESC is to formally bring executive members of the leadership together to consider issues and to provide appropriate recommendations relating to CPI as it aligns with the Campaign Plan. The ESC provides a forum for discussing issues, ideas and projects which cross organizational and functional lines of authority. The ESC will annually assess and propose updates and suggest changes to the plan to ensure that it remains a viable path toward our future vision.

The ESC's goal will be to prioritize and de-conflict strategies and objectives within the Campaign Plan which relate to Continuous Process Improvement (CPI) and Lean Six Sigma (LSS) projects, Core Values, Command Climate Surveys and other issues as identified by the Commanding General.

**2. Mission:** The ESC serves as the focal point for strategic planning initiatives, workforce cohesion, and continuous process improvement and assists the Commanding General by providing an executive level of oversight leading to cohesion, continuity, continuous oversight, consistent guidance, policy development and resource support enabling realization of our vision as stated within our Campaign Plan.

The mission of the ESC is to: (1) identify, prioritize, and charter CPI projects; (2) establish long-range priorities relating to Core Values; and (3) provide input to Equal Opportunity/Command Climate survey questions at the Depot/ERR and major subordinate command levels, review those survey results and then establish action teams to directly address issues identified by the surveys as deemed appropriate. The Committee's actions, recommendations and guidance should support OSD, SECNAV, and Marine Corps strategy, policies and goals.

**3. Membership:** Membership will be at the senior leader level as from the following:

Chairman: Chief of Staff

Members:	CO, H&SBn	AC/S, Comptroller
	CO, RTR	AC/S, Religious Ministries
	CO, WFTBn	Staff Judge Advocate
	AC/S, G-1	Command Inspector
	AC/S, G-3	Force Preservation Officer
	AC/S, G-4	Regional Contracting Officer
	AC/S, G-6	Public Affairs Officer
	AC/S, G-8	

Ad Hoc: EEO Officer (HR) Deputy Director (MCCS)

To maximize the interchange of information and ideas, other staff members and senior leaders will be invited as non-voting members to attend ESC meetings. Subject Matter Experts (SMEs) will be requested to participate as needed.

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**4. Roles and Responsibilities:** The business and functioning of the ESC will be conducted as follows:

- a. The Chair will:
- Direct all ESC activities.
  - Act as "Champion" for LSS projects.
  - Maintain situational awareness (SA) of CPI, climate and Core Value issues, and progress relating to our strategic initiatives for possible elevation and consideration by the ESC.
  - Conduct quarterly meetings.
  - Charter and source CPI project teams which cross functional or organizational lines of authority. Direct others to attend meetings in an advisory capacity when deemed necessary.
  - Be well versed in the fundamentals of a Scorecard and ensure Goal Keepers are accountable for performance measures.
  - Maintain the viability of the Campaign Plan by ensuring visibility to command members at all levels.
- b. The ESC members will:
- Support the ESC and its project by providing membership, as required, that will contribute to developing a position or baseline, analyzing data, reviewing and recommending improvements and exploiting opportunities.
  - Maintain SA of CPI, LSS, and other programs and issues which may come before the Committee. Successfully complete LSS Senior Leader/Executive training.
  - Be familiar with the 38 recognized installation processes.
  - Be well versed with the MCRD/ERR Campaign Plan.
  - If you are an action officer for a Goal within the Campaign Plan, ensure that you achieve the objectives identified within the plan and provide data to support each objective.
  - Be knowledgeable of the fundamentals of a Scorecard and contribute by providing data and performance metrics as required.
  - Assist in maintaining the viability of the Campaign Plan.
- c. The AC/S, Plans, Programs and Assessments (G-8) will act as the Facilitator and Executive Secretary of the ESC and provide staff resources for its operation, to include:
- Recommend and coordinate issues to go before the Committee.
  - Schedule and announce meetings, develop agendas, and prepare minutes of the meetings.
  - Monitor progress of project teams and follow-up actions resulting from ESC meetings.
  - Schedule CPI/LSS training as required.

**5. Training Requirements.** ESC members will receive training provided by the command in the following areas: USMC CPI overview or LSS Senior Leader/Executive training, MCRD/ERR Campaign Plan and strategic planning basics, 38 installation processes and EO survey analysis.

(Signature)  
Brigadier General



## APPENDIX B

**Training and Commitment Statement for  
MCRD/ERR PISC Green Belt Candidates**

I, \_\_\_\_\_, understand that my  
Commander/Supervisor, \_\_\_\_\_, has nominated me as a  
USMC Green Belt Candidate. In order to successfully address my responsibilities, I will  
comply with the following expectations of all MCRD/ERR PISC Green Belt Candidates  
with the mentorship of USMC Black Belts and/or Master Black Belts:

(Please initial each of the following statements in acknowledgement.)

1. I will provide a draft Project Charter to the AC/S G-8 Implementation Leader no later than 14 days prior to the start of training and will bring hard copy to the training session. Initial (\_\_\_\_)
2. Within one year of the start of Green Belt Training, I will lead one Green Belt project through completion. Initial (\_\_\_\_)
3. I will complete all mandatory requirements as stated in the Green Belt Pre-work documents. Initial (\_\_\_\_)
4. I agree that I have a basic understanding of statistics and data processing software such as Microsoft Excel prior to the training. Upon course completion, I am expected to apply statistical tools to my CPI-LSS projects. Initial (\_\_\_\_)
5. I understand that I must obtain a grade of 80% on the knowledge exam at the end of the training session. Initial (\_\_\_\_)
6. I understand that the role of a Green Belt may require working up to 20% of my time on a CPI-LSS project, although that time may vary based on the project and phase within the project. Given my current responsibilities, I can allocate this time to ensure successful project completion. Initial (\_\_\_\_)
  - a. I will keep the CPI Management System (CPIMS), the system of record for CPI-LSS projects, current and accurate throughout the course of the project. I will ensure that formal tollgate reviews are captured in the software and that required deliverables and documents are loaded into the system. Initial (\_\_\_\_)

- b. I will ensure that all financial achievements have been approved by the selected financial subject matter expert and documented within CPIMS when savings or cost avoidance is achievable. Initial (\_\_\_\_)
7. After completion of the training course, exam, and Green Belt project requirements, I am eligible to submit an application and obtain certification as a Green Belt from the US Marine Corps. Initial (\_\_\_\_)
8. As work load permits, I will participate in monthly meetings of the Tri-Command CPI Council. The purpose of these meetings is to discuss and share project experiences and obtain project mentoring with a LSS Master Black Belt or Black Belt. Initial (\_\_\_\_)
9. I will assist with the identification of LSS project ideas for myself as well as future Green Belt Candidates. Initial (\_\_\_\_)

I understand that as a Green Belt Candidate I play a vital role in supporting MCRD/ERR PISC Strategic Initiatives. I will apply and execute CPI -LSS problem solving methodology as well as associated tools to my improvement projects and will encourage my colleagues to promote these work practices.

Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

I nominate the above named for MCRD/ERR PISC Green Belt candidacy.

Printed Name: \_\_\_\_\_

Commander/Supervisor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Acknowledgement of Implementation Leader:

Printed Name: Darrell E. Coleman

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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## APPENDIX C

Green Belt Certification Endorsement Form

## Instructions

1. Black Belt Mentor. Please complete this form in its entirety and submit by e-mail to the AC/S, G-8 via the CPI Program Manager. Scan the completed form into a PDF file for e-mailing. Use Part III as a tool to mentor the GB candidate and to ensure they demonstrate all listed tasks during one or more CPI events.

2. Green Belt Candidate. Use Part III as a checklist to prepare for your CPI event(s). Ensure your mentor observes and documents each task as you complete them.

## Part I: Candidate Information

- a. Name:
- b. GB training dates and provider:
- c. Passed the GB exam? (Attach certificate)

## Part II: Documented CPI event

- a. CPI event Name:
- b. Completion Date:
- c. Sponsor:

## Part III: Assessment

- a. Assess the candidate's performance of the tasks listed while planning, executing and following up the CPI event.
- b. Place a check in the appropriate column for each task.

## A. CPI Event Planning

Task	Yes	No
1) Create and submit a schedule to the BB. Manage to the schedule		
2) Schedule and conduct required pre-CPI event meetings		
3) Send out necessary communications and files to the team		
4) Create the CPI event electronic folder and start-up files		
4) Assist the sponsor in drafting the charter		
5) Develop a SIPOC with the sponsor and team leader		
6) Work with the team leader to identify:		
a) Baseline metrics		
b) Data collection plan		
c) Potential ROI		
7) Conduct a GEMBA to "go see" the process (security access permitting)		
8) Interview team members to get their perspective on the process		
9) Conduct CPI training for team members as required		
10) Prepare an in-brief presentation for the team leader		

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## B. Event Week Facilitation

Task	Yes	No
1) Stage event room prior to each day and each agenda activity		
2) Arrive before the team members each day		
3) Record sponsor/team leader expectations and refer to them as required to maintain team focus		
4) Post daily agenda and objectives		
5) Lead the team in formulating ground rules and post them on a wall		
6) Refer to ground rules as required to maintain decorum		
7) Lead team through a discussion of "consensus"		
8) Debrief team leader at the end of each day to discuss lessons learned and plan for next day		
9) Explain each agenda activity prior to execution		
10) Answer all team member questions		
11) Encourage disengaged team members to participate		
12) Demonstrate you can stay out of content		
13) Summarize each agenda activity before moving on		
14) Control frustration, stress or anger towards team members. Remain posed and neutral		
15) Refer to team leader as required to maintain decorum and discipline		
16) Manage the time available each day to complete daily goals		
17) Clearly articulate your role as a facilitator, not a team member		
18) Recognize when you have lost control of the team and regain		
19) Remain open to suggestions, corrections and mentoring from your BB		
20) Facilitate conversations without injecting your opinions		
21) Demonstrate enthusiasm and encouragement throughout the event		
22) Use techniques as required to recover from periods of low team energy		
23) Don't wait for your BB to tell you what to do next. Be proactive and seek consensus from your BB prior to each agenda activity.		
24) Demonstrate ease in front of the team, no matter how you actually feel		
25) Demonstrate that you can capture ideas without filtering them		



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C. Event Lean Six Sigma Agenda Activities

Task	Yes	No
1) Facilitate creation of a SIPOC		
2) Facilitate a business case statement discussion		
3) Facilitate a customer value statement discussion		
4) Facilitate a current state mapping exercise		
5) Facilitate current state data boxes exercise		
6) Facilitate current state VA/NVA designation exercise		
7) Facilitate a brainstorming exercise		
8) Facilitate an affinity exercise		
9) Facilitate a PICK chart exercise		
10) Facilitate a future state mapping exercise		
11) Facilitate an action plan creation		
12) Facilitate a daily plusses and deltas exercise		

D. After the CPI Event

Task	Yes	No
1) Assist team leader in developing the outbrief		
2) Electronically capture event data		
3) Mentor team leader as required to complete action plan		

Part IV: Recommendation. Completed by the Black Belt mentor.

Based on your observations of tasks in Part III, provide your recommendation. Circle one.

1. Recommended
2. Not recommended. (State reason)

I attest that the above is truthful and accurately reflects my observations as a Black Belt mentor.

\_\_\_\_\_  
(Signature)

Date: \_\_\_\_\_

\_\_\_\_\_  
(Print Name)

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APPENDIX D

Green Belt Certification Scoring Form

Candidate Name:

Date of Review:

Part I. CPI Event/Project Portfolio Review Directions: Place a "3" in the "Score" column if the candidate answered each element of the question, a "1" for only addressing part of a question, or a "0" for failing to address the question. Minimum score of 12 is required with no scores of "0".

Criteria	Score
1. Demonstrated a firm grasp of the DMAIC process by presenting evidence of completing each phase	N/A
a. Define (e.g. problem statement, SIPOC, business case)	
b. Measure (e.g. process map, pareto chart, data collection plan)	
c. Analyze (e.g. fishbone diagram, FMEA, graphical analysis, DOE, ideal and future state maps)	
d. Improve (e.g. PICK chart, implementation plan, DOE, pilot run data, control charts)	
e. Control (e.g. control chart, storyboard, communications plan, control charts, recalculated FMEA)	
2. Lessons Learned (From a facilitation experience viewpoint. E.g. Take-aways. What worked? What didn't?)	
Total Score	

Part II. Questionnaire Review

Directions: Place a "3" in the "Score" column if the candidate answered each element of the question, a "1" for only addressing part of a question, or a "0" for failing to address the question. Minimum score of 10 is required with no scores of "0".

Criteria	Score
Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
Total Score	

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Green Belt Certification Scoring Form, cont'd

Candidate Name:

Date of Review:

Part III. Interview

Directions: Place a "3" in the "Score" column if the candidate answered each element of the question, a "1" for only addressing part of a question, or a "0" for failing to address the question. Minimum score of 10 is required with no scores of "0".

Criteria	Score
Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
Total Score	

Part IV. Certification Recommendation

The Green Belt candidate is recommended/not recommended for certification.  
(circle one)

\_\_\_\_\_  
(CPICB Chairman)

\_\_\_\_\_  
(CPI Program Manager)

\_\_\_\_\_  
(CPICB Member)

\_\_\_\_\_  
(CPICB Member)

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APPENDIX E

Black Belt Certification Endorsement Form

Instructions: Mentor - Please complete Parts I, II, III and V and submit a scanned PDF via email to the CPI Program Manager to provide to the CPICB Chairman.

Part I. Candidate Information

- A. Name:
- B. GB Certification Date:
- C. Black Belt Training Dates:
- D. Black Belt Training Provider:

Part II. Documented CPI Events

- A. CPI Event 1 Name:  
Completion Date:  
Sponsor:  
1. Candidate's facilitation skills: Strong\_\_\_ Adequate\_\_\_ Weak\_\_\_  
2. Candidate's grasp of LSS methods used:  
Strong\_\_\_ Adequate\_\_\_ Weak\_\_\_
- B. CPI Event 2 Name:  
Completion Date:  
Sponsor:  
1. Candidate's facilitation skills: Strong\_\_\_ Adequate\_\_\_ Weak\_\_\_  
2. Candidate's grasp of LSS methods used:  
Strong\_\_\_ Adequate\_\_\_ Weak\_\_\_

Part III. Mentorship Experience

- A. GB Name: \_\_\_\_\_ Dates: \_\_\_\_\_  
CPI Event Type/Name:  
Sponsor:
- B. GB Name: \_\_\_\_\_ Dates: \_\_\_\_\_  
CPI Event Type/Name:  
Sponsor:

Part IV. Teaching Experience (to be completed by course lead instructor)

- A. Title of Course: \_\_\_\_\_ Date: \_\_\_\_\_  
1. Candidate's teaching ability: Strong\_\_\_ Adequate\_\_\_ Weak\_\_\_  
2. Candidate's knowledge of topics:  
Strong\_\_\_ Adequate\_\_\_ Weak\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

Part V. Recommendation

Based on my observations of the candidate, I (check one):

- 1. Recommend\_\_\_
- 2. Do not recommended\_\_\_ (State reason)

I attest that the above is truthful and accurately reflects my observations as a Black Belt mentor.

\_\_\_\_\_  
(Signature)

Date: \_\_\_\_\_

\_\_\_\_\_  
(Print Name)

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APPENDIX F

Black Belt Certification Scoring Form

Candidate Name:  
Date of Review:

Part I. Storyboard Review

Directions: Place a "3" in the "Score" column if the candidate's storyboard addresses the element listed below, a "1" for only addressing part of the element, or a "0" for failing to address the element. Minimum score of 4 is required with no scores of "0".

Criteria	Score
DMAIC Phases	
Benefits Projection	
Total Score	

Part II. Questionnaire Review

Directions: Place a "3" in the "Score" column if the candidate answered each element of the question, a "1" for only addressing part of a question, or a "0" for failing to address the question. Minimum score of 10 is required with no scores of "0".

Criteria	Score
Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
Total Score	

Part III. Interview

Directions: Place a "3" in the "Score" column if the candidate answered each element of the question, a "1" for only addressing part of a question, or a "0" for failing to address the question. Minimum score of 10 is required with no scores of "0".

Criteria	Score
Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
Total Score	

Part IV. Certification Recommendation

The Black Belt candidate is recommended/not recommended for certification.  
(circle one)

\_\_\_\_\_  
(CPICB Chairman)

\_\_\_\_\_  
(CPI Program Manager)

\_\_\_\_\_  
(CPICB Member)

\_\_\_\_\_  
(CPICB Member)