Facebook, Inc., Infrastructure Construction Management (ICM)

Change Communications

Infrastructure Construction Management (ICM) is the unit that builds Facebook's data centers across the globe and includes more than 350 employees. I partnered with multiple stakeholders across ICM to develop the communications strategy and execution playbook for ICM Blueprint, an end-to-end process- and change-management initiative.

Data centers are a central part of Facebook's business infrastructure and present a range of real estate, finance, technology, data security, energy, and environmental challenges that are unique and exceed the scope and complexity of any other industry or property type.

Boiled down, ICM Blueprint is the playbook for how Facebook builds data centers across the world. The challenge we faced was that there was no centralized repository of knowledge and information within ICM: no single source of truth for data center construction. Instead, our construction teams had to work from folders on shared drives and search through goodness knows how many email folder histories to track down consensus decisions regarding process issues that had never been mainstreamed, all while ICM was growing and scaling quickly to a corporate business-as-usual environment. Therefore, ICM Blueprint was created to:

- Facilitate connections and communication across ICM and with third-party general contractors
- Increase organizational knowledge management
- Enable effective and efficient management and quick revision of process documentation
- Get all data center projects across the finish line using the same predictable best-practice standards
- Strengthen new-hire training programs and blunt tribal knowledge transfer, which, in fact, is an initiative that Mark Zuckerberg has enacted across Facebook

My contributions to the program included:

- Creating the strategic communications plan
- Driving the tactical communications calendar
- Building out portions of the SharePoint site and writing original content for the site
- Creating monthly enterprise-wide updates on various Workplace Group channels
- Creating monthly program updates for the senior leadership team

Digital Asset Management Proposal

FACEBOOK Infrastructure

Digital Asset Management

Say goodbye to poorly organized and disconnected filing systems that inadvertently limit the use of our valuable digital assets

Definition

The term "digital asset management" describes the policies and practices used to manage digital assets by streamlining file creation and repurposing, providing more efficient workflows, ensuring brand consistency, and, most importantly in our day-to-day work, reducing file search times.

As an example, consider FedEx. FedEx uses complex systems to know where each truck is at any moment, what each truck contains, who's driving the truck, when the truck is due for maintenance, and if the truck is properly registered with local governments.

Rationale

Digital assets are clogging up our file storage systems, and productivity, agility, and brand identity are suffering. File storage is one thing, but best practices for organizing and optimizing content storage processes, procedures, and guidelines make file retrieval a thing of beauty.

Implementing this modest proposal will help build a file directory structure that provides for consistent and sustainable execution across all departments. This exercise is by no means overkill and by no means am I recommending an overblown digital assets management application that manages digital indexing, workflows, version control, and rights and permissions.

Instead, I'm proposing a straightforward set of documented procedures and processes for organizing, storing, and retrieving our digital assets as they relate to the ICM business unit using clearly articulated standards for file storage, as well as guidelines and conventions for naming files so files are easily found.

Deliverable

Reference sheet titled, "Naming and Organizing Files"

File Naming Standards

How we organize and name our files has a huge impact on our ability to find those files later and to understand what they contain

File Naming Best Practices

File names should allow anyone (not just the creator) to identify precisely what's in the file and its version in the creation process. Choose a format for naming your files and use it consistently.

These are suggestions. Include whatever information will allow you and your colleagues to distinguish your files from each other and clearly indicate to you what is in them.

File names for any given project or program should follow a consistent pattern. Adopt a pattern that enables you to make file names unique within each project and are machine friendly.

You might consider including some of the following information in your file names, but you can include any information that will allow you to distinguish your files from one another.

1. Project name or acronym
2. Program name or acronym
3. Event name
4. Organization name
5. Location related to the contents of the file
6. Content owner name or initials
7. Date or date range of project or event
8. An ordinal number padded with zeroes (when the file needs to be sequenced with many other files). Use a minimum of two zeroes for padding
9. Version number of file (prefaced by "_v," or another indicator of the file content's status, such as "_draft" or "_final." Don't start the file name with the version number

Rules for Naming Files

1. Date designations should follow this format: YYYYMMDD or YYYY-MM-DD. This format ensures that all your files stay in chronological order, even over the span of many years.
2. Try not to make file names too long, since long file names do not work well with all types of software. Try to limit file names to 25 characters in length, if possible.
3. Omit spaces and punctuation other than hyphens and underscores. Special characters should be avoided.
4. When using a sequential numbering system, use leading zeros for clarity and to make sure files sort in sequential order. For example, use "001, 002, ...010, 011 ... 100, 101, etc." instead of "1, 2, ...10, 11 ... 100, 101, etc."
5. Don't use spaces. Some software doesn't easily recognize file names with spaces, and file names with spaces must be enclosed in quotes when using the command line. Other options include:
   • Underscores (e.g., file_name.xxx)
   • Dashes (e.g., file-name.xxx)
   • No separation (e.g., filename.xxx)
   • Camel case (stylized as camelCase, where the first letter of each section of text is capitalized, e.g., FileName.xxx)

Examples of Well-Formed File Names

20200724_Project-Zorro_Stakeholder-Presentation_v04
Project-Zorro-Communications-Plan_20200724_v14
Finance_Townhall_Presentation_ 2020-0724_v10
Finance_YearEndResults_20201231_FINAL
BWE_CCAR_Capital_Planning_Committee_Material_2014-11-05_FINAL

File Organization Standards

There are any number of directory structures. A single-level hierarchical directory is the simplest directory structure. In it, all files are contained in the same directory, which makes it easy to support

File Organization

Just as with naming files, consistency is key with file structures. File directories should be organized in a way that makes sense within the context of a project, program, or workgroup. Doing so helps your current colleagues and those who take over when you're promoted and won't be intimately familiar with your file system.

It's a good idea to set up a clear directory structure that includes information like the project title, a data, and some type of unique identifier. Individual directories may be set up by date, subject manager expert, content owner, project name, or whatever makes sense for each of us and our work environments.

Ultimately, how files are nested in directories is dependent on the number of files you're working with and what's most important to you and your team for analyzing and reusing the information in them.

For example, if you have thousands of image files collected over many years from many different locations, you may want to organize first by year, then month, then location. You could also organize the files entirely by date and include the location in the file name. Alternatively, you could organize by location and include the date in the file name.

The bottom line is this. Organize files into directories that follow a consistent pattern.

Single-Level Directory

In most cases, a single-level directory is the perfect solution. However, single-level directory structures present problems when the number of files increases dramatically or when the directory has more than one owner. (In the first case, searching becomes time-consuming. In the second case, because all the files are in the same directory, they must have unique names; however, if two users call their file "Project Zorro Plan," the unique name rule is violated.

Example of a Single-Level Hierarchy
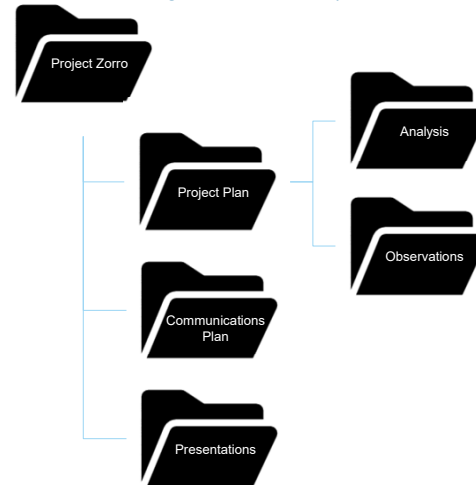
ICM Blueprint

Strategic Communications Plan

ICM

Deck Contents

Business Mandate

Measurable Communications Objectives

New Build Stakeholder Categories

Messages

Retrofit-Specific Messages

Communications Timeline

Business Mandate

Rethink ICM's construction processes by institutionalizing value construction and pushing repeatable and consistent processes. The initiative will benefit all levels of the organization and begins with ICM employees in mind.

1. Establish a project delivery framework applicable across all functions within ICM

2. Develop an optimized, end-to-end project planning and execution process map with swim lanes

3. Create a one-stop shop for all processes and documents

4. Support n00b onboarding at the site and regional levels. (Historically, n00b onboarding has happened via tribal knowledge transfer from their managers, which is time consuming and dependent on the tribal knowledge of Geography and regional leaders. Today, many of the Geography and regional leaders are new to all or part of their roles, so tribal knowledge can no longer play the expansive role it has in the past. ICM Blueprint therefore is a tool for both n00Bs and leaders new to their positions to leverage.)

5. Support strategic decision-making so we can move our fastest. Today, it's hard to map out the implications of a change in strategic approach. By having the map that ICM Blueprint provides, leadership can better understand the areas affected by their decisions and the business can clearly communicate and roll out changes based on these decisions.

6. ICM Blueprint is a global initiative, and we mustn't forget about Europe in our communications. However, ICM Blueprint will be socialized in the U.S. first.

Measurable Communications Objectives

ICM Blueprint

Dashboard

1. Ensure communications are consistent and aligned with organizational and program goals and objectives
   Metric: Darin's leadership team agrees that communications outreach is aligned with the program goals and objectives (quarterly via one-on-one interviews)

2. Ensure that ICM Blueprint communications address the growth across the organization as a result of the reorganization on July 29, 2020 by confirming that there is a strong transfer of knowledge at the Geography and regional layer because of the new regional managers brought aboard
   Metric: 95% of the Geography and regional layers agree that they're fully informed regarding the rollout of ICM Blueprint (via anonymous surveys following major milestones)

3. Raise awareness and understanding of ICM Blueprint across ICM
   Metric: 80% of the ICM organization can identify the key elements of the initiative (via anonymous surveys)

4. Clearly communicate any actions needed by Soft-Launch, Phase Gate Review, and Lucky 13 partners
   Metric: 95% of each of the three teams feel that communications were sufficient in describing their roles and responsibilities (via anonymous surveys)

5. Promote the ICM Blueprint landing page
   Metric: 80% of the ICM population visits the ICM Blueprint landing page within one month of launch (via a review of hits on the landing page)

New Build Stakeholder Categories

| ICM Leadership Team | Process Subject Matter Experts | Soft-Launch Partners *and* Phase Gate Review Partners | Process Owners (responsible for ongoing maintenance and sustainment communications) | All of ICM (including FTEs, CWs, and n00bs) |

Messages (1 of 2)

1. ICM has created a competitive culture of growth and innovation, and the recently announced (July 29, 2020) reorganization ensures that innovation and intelligent growth will flourish.

2. Facebook leads the world in data center innovation, and our advances in data center construction are transforming the entire construction industry.

3. ICM continues its laser focus on utilization planning and capacity scaling, setting the stage to enable and support strategic and focused growth.

4. Redesigning ICM's business processes, including ICM Blueprint, will establish a project delivery framework applicable across all functional areas.

5. ICM Blueprint supports the goals of organizational transformation, operational excellence, and scaling growth. Blueprint will therefore help ICM move forward resolutely. ICM Blueprint brings the following efficiencies to ICM:

   - A one-stop shop for all processes and documents, establishing clarity, trust, and continuity across our construction initiatives, finally putting an end to the inconsistencies of tribal knowledge transfer
   - A comprehensive n00b-onboarding program for individual contributors and Geography and regional leaders alike
   - Cross-functional awareness of business operations for managers (line of sight, synergies, and efficiencies) and employees (professional growth and a deeper understanding of the business)

Messages (2 of 2)

6. Learning and development are important commitments in time for employees, and we encourage active participation in the transformative and foundational ICM Blueprint initiative.

7. The ICM leadership team values our employees and encourages their professional development and career mobility within the organization. Providing professional development to our employees is an important part of their success at ICM.

8. People managers need to make leveraging the ICM Blueprint product a priority by incorporating Blueprint into their onboarding training and by support phase gate reviews.

9. ONE-ON-ONE MESSAGING TO BE COMMUNICATED ONLY BY RYAN. ICM Blueprint will be rolled out in North America first and, then, in the EU.

Retrofit-Specific Messages

ICM Blueprint brings the following Retrofit-specific efficiencies to ICM:

1. Tactical clarity (areas of responsibility between Fac Ops and ICM) and communications with Fac Ops

2. Strengthened Fac Ops staff onboarding

3. Deeper understanding of the downstream impact of process changes proposed by both Fac Ops and ICM

Communications Timeline (1 of 3)

Gather stakeholder feedback

Responsibility: Ryan

New Builds relaunch

Tools: Townhall presentation, post to Workplace, posts to specific Workplace Groups, and an introduction on the ICM Wiki with links for more information

Responsibility: Peter

Phase gate reviews

1. Pre-Review Meeting (ICM Blueprint 101, introductory primer)

   Responsibility: Peter and Ryan

2. Review Meeting 1 (iterations of the DR deck, customized for each phase)

   Responsibility: Jeff, DR, and Ryan

3. Post-Review Meeting (Summary deck with lessons learned and outstanding action items, and next steps).

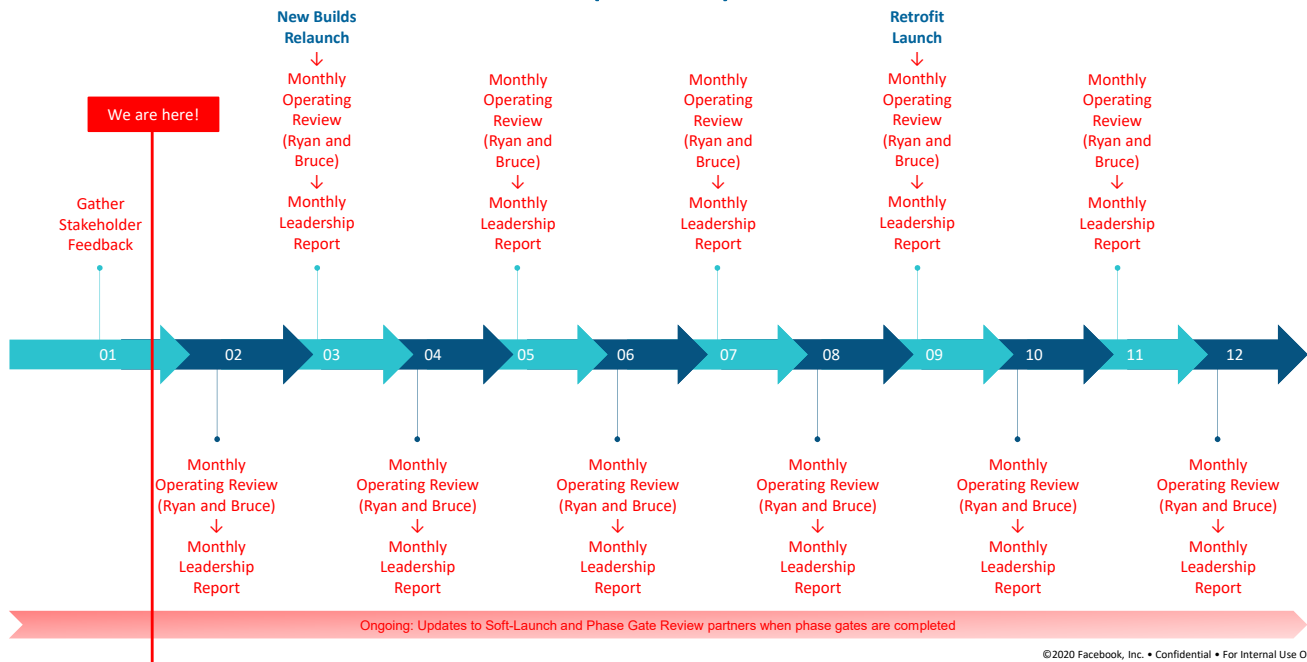   Responsibility: Ryan, Jeff, DR, and Peter

Leadership updates

1. Monthly Operating Review (one to one, by video conference, from Ryan to Bruce)
2. Monthly Executive Report (one to many, by video conference, from Bruce to Darin's leadership team)
3. When phase gates are completed (one to many, by video conference, from Ryan to Soft-Launch partners)

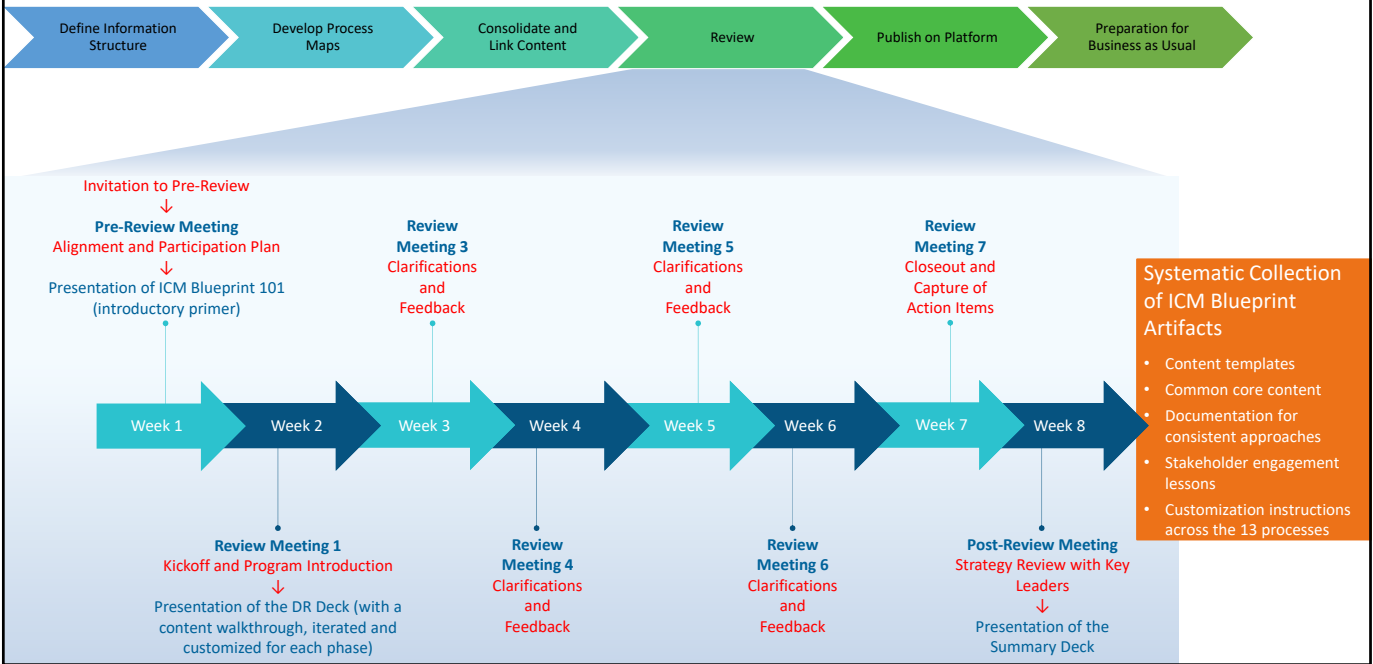Responsibility: Peter will draft original content and curate content from Ryan, Eve, Jeff, and DR

Retrofit launch

1. A full launch, with New Builds having gone first
2. Tools: Townhall presentation, post to Workplace, posts to specific Workplace Groups, and an introduction on the ICM Wiki with links for more information

Responsibility: Peter

Communications Timeline (2 of 3)

We are here!

Gather Stakeholder Feedback (01)

New Builds Relaunch
↓
Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Retrofit Launch
↓
Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Timeline: 01 02 03 04 05 06 07 08 09 10 11 12

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Monthly Operating Review (Ryan and Bruce)
↓
Monthly Leadership Report

Ongoing: Updates to Soft-Launch and Phase Gate Review partners when phase gates are completed

Communications Timeline (3 of 3)

| Define Information Structure | Develop Process Maps | Consolidate and Link Content | Review | Publish on Platform | Preparation for Business as Usual |

Invitation to Pre-Review
↓
Pre-Review Meeting
Alignment and Participation Plan
↓
Presentation of ICM Blueprint 101
(introductory primer)

Review Meeting 3
Clarifications and Feedback

Review Meeting 5
Clarifications and Feedback

Review Meeting 7
Closeout and Capture of Action Items

Systematic Collection of ICM Blueprint Artifacts

- Content templates
- Common core content
- Documentation for consistent approaches
- Stakeholder engagement lessons
- Customization instructions across the 13 processes

| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 |

Review Meeting 1
Kickoff and Program Introduction
↓
Presentation of the DR Deck (with a content walkthrough, iterated and customized for each phase)

Review Meeting 4
Clarifications and Feedback

Review Meeting 6
Clarifications and Feedback

Post-Review Meeting
Strategy Review with Key Leaders
↓
Presentation of the Summary Deck

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ICM Blueprint Master Stakeholder List
Summary of New Build Stakeholder Categories

Stakeholder Categories	Comments
Workstream Valaidation Partners	Verified by Ryan
Soft-Launch Partners & Phase Gate Review Partners	Verified by Ryan
Process Subject Matter Experts	Verified by Ryan
Workstream Pillar Leads	Verified by Ryan
ICM Leadership Team	Verified by Ryan
Lucky 13 Functions	Verified by Ryan
All of ICM (FTEs, CWs, and n00bs)	Verified by Ryan

Last Updated: 2020/10/29

Stakeholder Buckets | Workstream Validation Partners | Soft-Launch & Phase Gate Review | Process Subject Matter Experts | Workstream Pillar Leads | ICM Leadership Team | Lucky 13 Functions | ICM Global Employees

ICM Blueprint Communications Calendar

Editorial Calendars Are Used to Manage the Publication of Content Across Different Channels

Updated: October 20, 2020

KICKOFF COMMUNICATIONS (mid-September 2020)

Date of Communication	Stakeholders	Delivery Methods (Channel)	Content Owner, Sender	Message or Topic	Responsibility for Creating Content	Responsibility for Approving Content	Channel Owner	Notes/Frequency/Status/Next Steps
2020-09-03	Bruce	Email	Ryan	Request to review and approve launch communications. All proposed communications in a single package will go to Bruce at one time, as opposed to one-off requests for approval	Ryan, Peter (Peter will send the first draft to Ryan by 2020-08-31 for review and comment, with content to be finalized by 2020-09-02)	Bruce	N/A	
2020-09-07	LABOR DAY HOLIDAY							
2020-09-08	All ICM staff	SharePoint	Ryan	Post ICM Blueprint FAQs to the About page on the ICM Blueprint SharePoint site	Ryan, Tony, Peter	Bruce	N/A	
2020-09-09	ICM leadership team	Email	Ryan	Heads up one week in advance re: ICM-wide promotional announcements on various channels reintroducing ICM Blueprint	Ryan, Peter	Bruce	N/A	
2020-09-15	ICM global	Email (icm_global@fb.com)	Ryan	**OFFICIAL KICKOFF OF ICM BLUEPRINT (REINTRODUCATION & REBRANDING)** **COMMUNICATION OBJECTIVES:** 1. Grab the attention of ICM employees. 2. Announce the reintroduction of ICM Blueprint. 3. Tell them what's new and what's changing. 4. Tell them where they can go to get their questions answered. 5. Tell them when they can expect the next update. **DELIVERABLES PACKAGE FOR BRUCE'S REVIEW:** 1. Heads up to the leadership team 2. FAQs 3. Email message to global ICM workforce 4. Post to ICM OneTeam Workplace Group 5. Post to ICM Peeps Workplace Group 6. Post to The ICM Lounge	Ryan, Peter	Bruce	Monique	Distribution list consists of 381 global members
2020-09-15	ICM global	ICM OneTeam Workplace Group	Ryan		Ryan, Peter	Bruce	Eve	Monthly updates are anticipated
2020-09-15	ICM FTEs	ICM Workplace Peeps Group	Ryan		Ryan, Peter	Bruce	Eve	Monthly updates are anticipated
10/1/2020 (ICM Lounge launch date)	Restricted to ICM employees	The ICM Lounge	Ryan		Ryan, Peter	Ryan	Eve	Monthly updates are anticipated
Mid-September through mid-October	More deliberate conversations with smaller groups	Pillar meetings	Ryan		Ryan, Peter	Ryan	N/A	As scheduled by the respective Pillar leaders
Late September	More deliberate conversations with smaller groups	Jamie's Operations meeting	Ryan		Ryan, Peter	Ryan	Jamie	Jamie's biweekly Operations meeting includes 25 team members

SUSTAINMENT COMMUNICATIONS (mid-October 2020)

Date of Communication	Stakeholders	Delivery Methods (Channel)	Content Owner, Sender	Message or Topic	Responsibility for Creating Content	Responsibility for Approving Content	Channel Owner	Notes/Frequency/Status/Next Steps
2020-10-01	N/A	N/A	N/A	Send draft content for mid-October update to Tony for first review and comment	Peter	Tony	N/A	
2020-10-06	N/A	N/A	N/A	Iterate on status narrative and health indicator updates	Peter, Tony	Ryan	N/A	
2020-10-19	ICM global	Email (icm_global@fb.com)	Ryan	Publish October update	Ryan, Peter	Ryan	Monique	Establishes the cadence of monthly updates until project completion
2020-10-19	ICM global	ICM OneTeam Workplace Group	Ryan	Publish October update	Ryan, Peter	Ryan	Eve	Establishes the cadence of monthly updates until project completion
2020-10-19	Restricted to ICM employees	The ICM Lounge	Ryan	Publish October update	Ryan, Peter	Ryan	Eve	Establishes the cadence of monthly updates until project completion

SUSTAINMENT COMMUNICATIONS (mid-November 2020)

Henceforth, the following predictable monthly cadence of activities will take place throughout the program:

1a. In the first days of each new month, Peter will give draft content for monthly updates to Tony for first review and content.

1b. Tony and Peter will call out milestone achievements, iterate on the status narrative, and update health indicators.

1c. Ryan approves content for publication.

2. Eve will push relevant, appropriate biweekly updates to The ICM Lounge.

3. At the end of each month, Eve will assess channel metrics will be conducted and report the results to the core team.

Date of Communication	Stakeholders	Delivery Methods (Channel)	Content Owner, Sender	Message or Topic	Responsibility for Creating Content	Responsibility for Approving Content	Channel Owner	Notes/Frequency/Status/Next Steps
2020-11-04	N/A	N/A	N/A	Meeting to brainstorm ideas for Dec. 3 All Hands meeting (Ryan, Tony, Peter)	Peter	Ryan	N/A	After a strong draft is created, this group with reconvene with Eve to finish the presentation
2020-11-09	N/A	Email	N/A	All Hands go/no go	Eve	Eve	Eve	Eve will email the group
2020-11-17	ICM global	Email (icm_global@fb.com)	Ryan	Publish November update	Ryan, Peter	Ryan	Monique	
2020-11-17	ICM global	ICM OneTeam Workplace Group	Ryan	Publish November update	Ryan, Peter	Ryan	Eve	
2020-11-17	Restricted to ICM employees	The ICM Lounge	Ryan	Publish November update	Ryan, Peter	Ryan	Eve	
2020-11-18	Pillar leads	Email	Ryan	Heads up to pillar leads regarding business usability reviews	Ryan, Tony	Ryan	Ryan	**LANDMARK**
2020-11-23	N/A	N/A	N/A	Rehearsal meeting for Dec. 3 All Hands (Ryan, Tony, Peter, Eve)	N/A	Ryan	Ryan	

SUSTAINMENT COMMUNICATIONS (mid-December 2020)

Date of Communication	Stakeholders	Delivery Methods (Channel)	Content Owner, Sender	Message or Topic	Responsibility for Creating Content	Responsibility for Approving Content	Channel Owner	Notes/Frequency/Status/Next Steps
2020-12-03	ICM global	ICM All Hands meeting	Ryan	First live-by-videoconference update and promotion of ICM Blueprint at an event that draws a substantial audience across ICM	Peter	Ryan	Darin, Eve	**LANDMARK** Ryan's slot on the agenda will consist of 8 minutes
2020-12-08	ICM global	Virtual Office Hours	Ryan	Two hours set aside to answer questions, draw out ICM employees and their ideas that don't come out in formal meetings, and understand what excites them about ICM Blueprint and what's not getting through	Peter, Tony	Ryan	Ryan	**LANDMARK** Office Hours / Ask Us Anything / Learn the Platform
2020-12-09	ICM global	SurveyMonkey	Eve	Survey to assess the effectiveness of communications, identify gaps, and remedy shortcomings	Eve, Peter	Eve	Eve	**LANDMARK**
2020-12-15	ICM global	Email (icm_global@fb.com)	Ryan	Publish December update Promote: ICM Blueprint platform goes live	Ryan, Peter	Ryan	Monique	
2020-12-15	ICM global	ICM OneTeam Workplace Group	Ryan	Publish December update Promote: ICM Blueprint platform goes live	Ryan, Peter	Ryan	Eve	
2020-12-15	Restricted to ICM employees	The ICM Lounge	Ryan	Publish December update Promote: ICM Blueprint platform goes live	Ryan, Peter	Ryan	Eve	
2020-12-17	ICM global	ICM Blueprint platform	Ryan	Go-live date for ICM Blueprint platform	Ryan, Peter	Ryan	Ryan	**LANDMARK**

SUSTAINMENT COMMUNICATIONS (January 2021 and beyond)

Date of Communication	Stakeholders	Delivery Methods (Channel)	Content Owner, Sender	Message or Topic	Responsibility for Creating Content	Responsibility for Approving Content	Channel Owner	Notes/Frequency/Status/Next Steps
2021-01-07	Bruce	Formal report, delivered in person by Eve	Eve	Formal report-out, including remediation actions, to Bruce regarding the effectiveness of ICM Blueprint communications	Eve, Peter	Eve	Eve	**LANDMARK**

BEGIN THE COMMUNICATIONS PLANNING PROCESS FOR EXPANDING THE REACH OF ICM BLUEPRINT TO OUR CROSS-FUNCTIONAL PARTNERS

UPDATED OBJECTIVE:
Continue engagement among ICM audiences and expand the reach of ICM Blueprint communications strategies and their accompanying tactics to our cross-functional partners in IDC and DEC

BROADENING THE PLAN:
1. ICM Blueprint tactics were purposely open-ended and identified as ongoing, with no firm end dates so they could be adjusted when future phases were undertaken.
2. In Phase 1, we focused on creating and implementing the tools and messaging that would expand support for, and enable the adoption of, ICM Blueprint within the ICM organization.
3. Our Phase 2 plan expansion will build on our earlier successes to develop outreach tactics focused raising awareness among IDC and DEC audiences.
4. Our implementation schedule will benefit from lessons learned in the New Builds rollout of ICM Blueprint.

2021-01-19	ICM global	Email (icm_global@fb.com)	Ryan	Publish January update	Ryan, Peter	Ryan	Monique	
2021-01-19	ICM global	ICM OneTeam Workplace Group	Ryan	Publish January update	Ryan, Peter	Ryan	Eve	
2021-01-19	Restricted to ICM employees	The ICM Lounge	Ryan	Publish January update	Ryan, Peter	Ryan	Eve	

FACEBOOK

ICM Blueprint
Monthly Operating Review
(Finalized One-Page Template)

ICM Blueprint | Monthly Operating Review

ICM

Presented to: Bruce Berardi
Presented by: Ryan Loomis
(date)

Project Zorro Status Overall		🟢
01	Business Case	🟡
02	Design	🔴
03	Schedule	⚪
04	Estimating	🟠
05	Cost Control	🟢
06	Contracts	🟡
07	OFCI	🔴
08	QA/QC & Cx	⚪
09	Loss Control	🟠
10	Document Control	🟢
11	Construction Plan & Execute	🟡
12	Change Management	🔴
13	Risk Control	🟠

Legend

🟢	We are where we expected to be or ahead of schedule.
🟡	We are slightly behind schedule.
🔴	We are behind schedule and need help.
⚪	We haven't started.
🟠	We have completed this requirement.

Milestones Since Last Reporting Period
- Milestone1
- Milestone2

Deliverables in Next Reporting Period
- Next1
- Next2

Key Decisions Required
- Decision1
- Decision2

Key Team Interdependencies
- Interdependency1
- Interdependency2

Critical Risks for Immediate Attention
- Risk1
- Risk2

ICM Blueprint Monthly Update

Project Owners: Ryan Loomis and Tony Herbert
Update for October 20, 2020

The program health indicator below shows which milestones are complete, which are in progress, and which are coming up next. All is well and on track with the ICM Blueprint program overall. In addition to the overall indication of program health, which, by itself, might be misleading, our health report incorporates appropriate context and transparency regarding review and publish phases. This report, updated monthly, will continue to evolve as the program progresses.

Milestones Reached Since Last Status Report – Previous Month

- Recruited a robust team of subject matter experts across ICM to review the developed content.
- ICM functional pillar reps have Identified cross-functional process involvement across the project lifecycle and the 13 **New Build** business processes. This has been captured in the ICM Blueprint Cross-Functional Stakeholder Matrix.
- The Business Case was preliminarily published and transitioned into the review phase.
- Kicked off Phase 3 process-map development for Loss Control, Change Control, Document Control, and Risk Control.
- Introduced the organization to the rebranded ICM Blueprint initiative and developed an About page containing program information and FAQs.
- Kicked off the collaboration and integration of ICM Blueprint with Data Center Design processes to ensure cross-functional content alignment.

Next Steps, Deliverables, and Milestones – Upcoming Month

- Complete Phase 6 Vet & Review with business and Phase 7a Content updates for seven Wave 1 processes.
- Kick off the Phase 6 Vet & Review with business for Wave 2 processes.
- Identify the information structure and develop process maps for Wave 3 processes.
- Kick off development of the Operations & Maintenance (O&M) plan, leveraging the ICM Blueprint Cross-Functional Stakeholder Matrix that has been developed.
- Kick off the discovery and planning phase for scoping **Retrofit** process mapping and content consolidation.
- Kick off planning for Europe content review and update integration.

ICM Blueprint New Build Status Overall	

	Wave 1							Wave 2		Wave 3			
	03 Schedule	04 Estimating	05 Cost Control	06 Contracts	07 OFCI	08 QA/QC & Cx	11 Construction Plan & Execute	01 Business Case	02 Design	09 Loss Control	10 Document Control	12 Change Control	13 Risk Control
1. Kick Off Discovery Phase	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete
2. Develop Information Structure	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	October 2020	October 2020	October 2020	October 2020
3. Identify Steps & Map	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	November 2020	November 2020	November 2020	November 2020
4. Create Document Containing All Processes & Content, including Embedded Links	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	October 2020	December 2020	December 2020	December 2020	December 2020
5. Ready for Review	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	October 2020	December 2020	December 2020	December 2020	December 2020
6. Vet & Review with Business	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	December 2020	December 2020	Q1 2021	Q1 2021	Q1 2021	Q1 2021
7a. Content Updates Complete	11/13/20	11/13/20	11/13/20	11/13/20	11/13/20	11/13/20	11/17/20	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021
7b. Release on Platform	12/18/20	12/18/20	12/18/20	12/18/20	12/18/20	12/18/20	12/18/20	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021
8. Oversee Archive of Deprecated Information	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q2 2021	Q2 2021	Q2 2021	Q2 2021	Q2 2021	Q2 2021
9. Conduct First Revision	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q1 2021	Q2 2021	Q2 2021	Q2 2021	Q2 2021	Q2 2021	Q2 2021

Completed	
In Progress – On Schedule	
Not Started	
In Progress – Slightly Behind Schedule	
There Is a Risk to Meeting Target Date	

Search this site

The ICM Blueprint

+ New ⌄   ⚙ Page details

Published 12/1/2020   ✎ Edit

Welcome to ICM Blueprint!
We're glad you're here with us.

The challenge we faced was that there was no centralized repository of knowledge and information within ICM, no single source of truth for data center construction. Instead, our construction teams were put at a disadvantage and had to work from folders on shared drives and search through endless folders to track down data center processes issues that had never been mainstreamed, all while ICM was scaling and aligning quickly to move to an optimized environment. Projects are currently executed based on an individual's experiences without a common process and documentation which has led to an inconsistent project delivery with unoptimized results. Therefore, ICM Blueprint was created to develop a project delivery framework that would help guide our project teams through end-to-end project execution.

New to this site?

Navigating ICM Blueprint is easy and intuitive. But, if you're looking for a high-level guide to site navigation, click below.

How to navigate this site...

WHAT IS ICM BLUEPRINT?

ICM Blueprint was launched to address process variability in data center construction projects. Blueprint will deliver a platform that enables clarity and alignment across ICM. The efficiencies gained by streamlining processes and embedding data center construction knowledge and expertise in our day-to-day processes can speed up nOOb onboarding by reducing the tribal knowledge transfer cycle time, bring clarity of information, and bring transparency of process change.

LEARN MORE >

We have 13 business processes that span five life cycle phases as described below. These five phases outline an intricate map of how we leverage our team's knowledge, talent, and insights to continue to deliver excellence across our program's portfolio.

The 5 Life Cycle Phases   **The Blueprint Map**   **The 13 Business Processes**

NEW BUILD LIFE CYCLE

Strategic Planning — 1

Concept Development — 2

Design Development & Construction Plan — 3

Construction Execution — 4

Close-out — 5

BREAK GROUND

PROJECT INCEPTION

PROJECT KICK-OFF

SD COMPLETE

DD COMPLETE

IFC

GMP AGREED

SUBSTANTIAL COMPLETION

PROVISION READY

COO

New Project QSP Start

Site Selection

GC On-Boarding

QSP Locked

Budget Approved

DCC Ready

The 5 Life Cycle Phases:

1. Strategic Planning

This first phase matches data center capacity to corporate demand and establishes the initial data center construction roadmap.

2. Concept Development

At the second phase, a feasibility analysis is conducted to define selection requirements, determine viable locations, and define building-specific scope requirements.

3. Design Development & Construction Plan

The third phase consists of the kickoff of design development through IFC (issue for construction) and the development of the construction plan to enable break ground.

4. Construction Execution

The fourth phase is the execution of the construction plan and consists of construction activities from break ground through the GMP (guaranteed maximum price) agreement.

5. Closeout

The fifth phase is the formal turnover of the constructed data center for operations.

The 13 Business Processes:

01 - BUSINESS CASE:

Business case refers to the process initiated when the need for a new datacenter is identified and construction requirements (scope, cost and schedule) must be determined and approved. The process is managed via the quarterly strategic plan (QSP).

Requirements for new datacenters are identified by Strategic Planning and Analytics (SP&A). Initial construction requirements are then determined by ICM using scope, cost and schedule standards and benchmarks. During the site selection and design process, these benchmarks are adjusted for the project site and updated in the QSP. In the quarter prior to break ground for any given project, scope, cost and schedule are 'locked'. The final budget for each project is formally approved in the quarter it will break ground.

02 - DESIGN:

Design details the process of designing new build datacenters at Facebook. The global reference design (GRD) and master design document (MDD) are used as the basis for design for each new datacenter. Doing so accelerates the completion of the standard design phases from kickoff to issue for construction.

During the site selection process, chosen sites are vetted to ensure they meet datacenter operational requirements. Site specific design requirements not captured in the GRD/MDD are also identified and subsequently incorporated into the design. Changes that impact design are managed and controlled via the biannual metronome change management process.

03 - SCHEDULE:

The ICM data center new build schedule is developed in four phases, with each phase corresponding to a specific phase of the data center new build life cycle. The ICM Owners Schedule spans the build and is updated during each life cycle phase to reflect the fully developed project specific plan to achieve Provision Ready and Substantial Completion of the build. In support of the overarching ICM Owners Schedule, the general contractor develops detailed construction schedules in the three later phases.

04 - ESTIMATING:

ICM's data center new build estimating process includes a defined set of strategies, standards, and specifications. Leveraging historical build information and real time industry information, the estimation process provides upfront ROMs and detailed comparative estimates to assist in contractor contract and change negotiation.

05 - COST CONTROL:

The cost control processes include project budget control, forecasting and cashflows, and risk quantification to provide both the project team with proactive insights on project performance and the business with reliable information upon which the CFO's message on Facebook's fiscal performance is build.

06 - CONTRACTS:

ICM's Contracts team is responsible for drafting all forms of contracts, with the exception of equipment, related to the design and construction of data center globally. The Contracts team manages the end workflow of contracts from the project team requestor through executed agreements and purchase orders.

07 - OFCI:

OFCI (Owner Furnished Contractor Installed) equipment is largely mandated by the Sourcing and Operations Engineering (SOE) group. SOE manages the purchase of equipment, works with the ICM and general contractor teams to coordinate delivery of the equipment, and manages the cost and delivery schedule.

08 - QA/QC/Cx:

ICM's quality assurance and quality control program is designed to improve construction quality and reduce rework by identifying ICM's new build QAQC and commissioning planning execution strategies, processes, and standards in order to manage the critical program requirements and activities for building data centers.

09 - LOSS CONTROL / SAFETY

The loss control/safety business process details the planning execution strategies, processes and standards used by ICM to drive towards an incident and injury free project execution when building new datacenters. The process involves the provision of safety, insurance, regulatory agency compliance and risk management oversight over ICM projects. Loss control/safety performance is measured using defined metrics. Learnings from past program successes and failures drive continual improvement.

10 - DOCUMENT CONTROL

The document control business process details the systems and methods used by ICM to manage all information created for new build data center projects. It applies to documents developed by ICM and all cross-functional (XFN) partners. The process describes ICM's established standards for document control, storage, security and transmission. It specifies how those standards are applied to ensure key information is properly version controlled, correctly and securely stored and appropriately transmitted to stakeholders over the course of a construction project. It also describes how final versions of all information generated should be stored and transmitted so they are available to support facility operations and any future retrofit projects.

11 - CONSTRUCTION MANAGEMENT

The Construction Management team identifies ICM's new build construction planning and execution strategies, processes, and standards to manage critical program requirements and activities for building data centers, enabling predictable and consistent results across the ICM network.

12 - CHANGE CONTROL

Change refers to modifications to the originally approved project scope that have the potential to impact project schedule, cost or quality. The ICM change control process describes the process used by ICM to capture, assess, approve or reject potential changes at every stage of the datacenter build from initial strategic planning, through design development, execution and closeout. Standardizing this process enables the ICM team to understand and manage change, and ultimately capture its impact on project cost and schedule.

13 - RISK CONTROL

Risk control is the process of identifying, tracking and managing risks throughout the datacenter construction lifecycle. It includes a collaborative process of capturing key program risks at the strategic planning phase and tracking those risks as the project evolves, as well as adding any new risks as they emerge. All risks are quantified, scored and ranked in terms of their potential impact. Each risk is assigned an owner who is responsible for its management and mitigation.

PHASE OF THE LIFECYCLE

11.20.01

BUSINESS
PROCESS

STEPS WITHIN
EACH PHASE

HOW TO NAVIGATE THE LIFECYCLE NUMBERING INDEX:

Within the five phases of the lifecycle, there are 13 Business Processes that have been identified and indexed as follows:
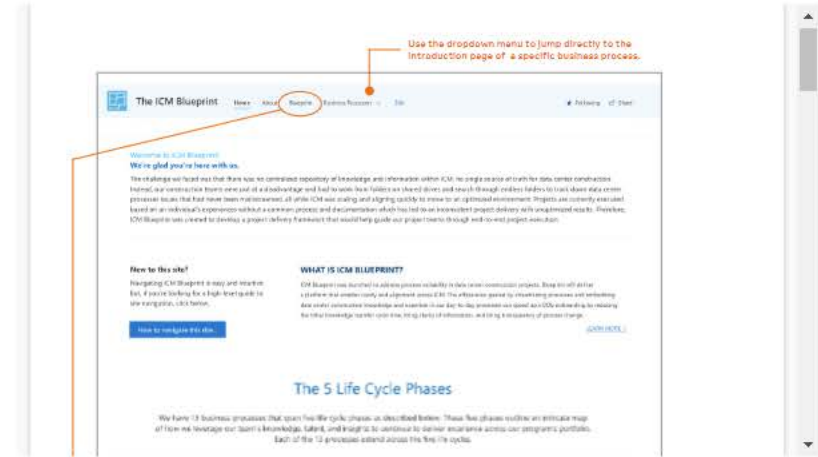
- The first number in the sequence is indicates the business process.
- The middle number identifies the phase of the lifecycle.
- The last number indicates the following steps within the process.

< This number index(11.20.01) indicates **Step One** in the **Concept Development** phase of the **Construction Management** business process.

How to Navigate The Blueprint Map:

Go to The Blueprint Map >

Placeholder: Space to add some narrative here on final navigation tips on how to use this site....
The below PDF will be updated for launch.

Use the dropdown menu to jump directly to the
Introduction page of a specific business process.

THE BLUEPRINT MAP*

PHASE:	1	2	3	4	5
	Strategic Planning	Concept Development	Design Development & Construction Plan	Construction Execution	Closeout
1.0	1.10 URPVD6* Corporate	1.20	1.30	1.40 Updated with URP	1.50

THE BLUEPRINT MAP*

PHASE:	1	2	3	4	5
	Strategic Planning	Concept Development	Design Development & Construction Plan	Construction Execution	Closeout
1.0 BUSINESS CASE >	1.10	1.20	1.30	1.40	1.50
2.0 DESIGN >	TBD	TBD	TBD	TBD	TBD
3.0 SCHEDULE >	3.10	3.20	3.11 / 3.12 / 3.13	3.40	3.50
4.0 ESTIMATING >	4.10	4.20	4.31 / 4.32 / 4.33	4.40	4.50
5.0 COST CONTROL >	TBD	TBD	TBD	TBD	TBD
6.0 CONTRACTS >	6.10	6.20	6.30	6.40	6.50
7.0 OFCI >	7.10	7.20	7.30	7.40	7.50
8.0 QA/QC & Cx >	8.10	8.20	8.31 / 8.32 / 8.33	8.40	8.50
9.0 LOSS CONTROL/ SAFETY >		TBD	TBD	TBD	TBD
10.0 DOCUMENT CONTROL >	TBD	TBD	TBD	TBD	TBD
11.0 CONSTRUCTION MANAGEMENT >	11.10	11.20	11.31 / 11.32 / 11.33	11.40	11.50
12.0 CHANGE CONTROL >	TBD	TBD	TBD	TBD	TBD
13.0 RISK CONTROL >	TBD	TBD	TBD	TBD	TBD

*Mapping of the businesses processes is currently in progress.

Resources:

Glossary of Terms & Acronyms

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The ICM Blueprint

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About The Blueprint

Published 12/1/2020

WHAT IS THE BLUEPRINT?

ICM Blueprint was launched to address process variability in data center construction projects. Blueprint will deliver a platform that enables clarity and alignment across ICM. The efficiencies gained by streamlining processes and embedding data center construction knowledge and expertise in our day-to-day processes can speed up nOOb onboarding by reducing the tribal knowledge transfer cycle time, bring clarity of information, and bring transparency of process change.

The Blueprint will:

- Create a one-stop shop for accessing all processes and documents, establishing clarity, trust, and continuity across our construction initiatives

- Develop an end-to-end project planning and execution process map with swim lanes

- Reduce nOOb onboarding's reliance on tribal knowledge transfers for individual contributors and Geographical regional leaders alike

- Give cross-functional partners further visibility into the ICM process and life cycle within and outside of ICM

- Support ICM leadership's strategic decision-making by providing visibility into current state processes and downstream areas impacted by change

For more info and details on the current status of this ongoing initiative, check out the <u>About ICM Blueprint</u> page.

HOW WE BUILD OUR DATA CENTERS

Building or upgrading a data center is a complex undertaking, with far more stringent and rigorous code requirements than office buildings, requiring specialized industrial design and engineering expertise to meet the needs for layout, fire protection, power provision, standby power, cooling, and physical security.

Each data center project is unique, so extensive upfront planning and clear project scoping is required to efficiently meet organizational objectives and deliver customer capacity, on time and within budget. Careful and well-researched evaluation and selection, accurate estimates of facility requirements that are in line with capital investment objectives, power and cooling installations that accommodate future growth and avoid unwarranted costs, fire protection systems that address local safety mandates, hiring general contractors with specialized expertise to avoid costly retrofits are all addressed by ICM's delivery process life cycle model, as illustrated immediately below.

How to Navigate this Site...

Use the dropdown menu to jump directly to the introduction page of a specific business process.

The ICM Blueprint   Home   About   Blueprint   Business Processes ⌄   Edit   ★ Following   ⇪ Share
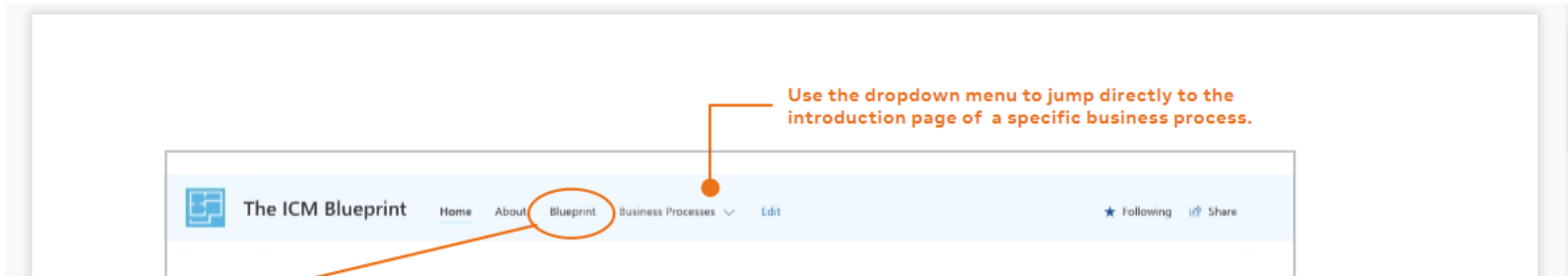
About ICM Blueprint

☆ Not following   ⤴ Share

+ New ∨   ⚙ Page details   ✏ Edit   Published 11/18/2020   ✏ Edit

What is ICM Blueprint?

ICM Blueprint was launched to address process variability in data center construction projects. ICM Blueprint will deliver a platform that enables clarity and alignment across ICM. The efficiencies gained by streamlining processes and embedding data center construction knowledge and expertise in our day-to-day processes can speed up new-hire onboarding by reducing the tribal knowledge transfer cycle time, ensuring clarity of information, and establishing transparency of process change.

ICM Blueprint will:

1. Create a one-stop shop for accessing all processes and documents, establishing clarity, trust, and continuity across our construction initiatives
2. Develop an end-to-end project planning and execution process map with swim lanes
3. Reduce new-hire onboarding's reliance on tribal knowledge transfers for individual contributors and Geographical regional leaders alike
4. Give cross-functional partners further visibility into the ICM process and life cycle within and outside of ICM
5. Support ICM leadership's strategic decision-making by providing visibility into current state processes and downstream areas impacted by change

What are we not doing?

ICM Blueprint is documenting processes and workflows that already exist today and that teams are using.

ICM Blueprint is not:

- Creating new ICM processes
- Creating new ways of performing work
- Documenting processes without key stakeholder buy-in from each team

Why are we doing this?

Historically, ICM new-hire onboarding has consisted of transferring tribal knowledge from regional and Geo managers to site-based new hires. This process is not scalable as Facebook continues to grow at a hyperscale pace. ICM also lacks a clear source of truth upon which to clearly understand the downstream impacts of process change in addition to not being able to provide a baseline to manage organizational process changes methodically.

To solve for this, ICM Blueprint established the following goals:

- **Common cadence.** Establish a common project life cycle across all functions.
- **Single view of the full business process.** Develop an end-to-end project planning and execution process map with swim lanes.
- **Find what you need when you need it.** Create a one-stop shop for accessing all processes and supporting documents.

Frequently Asked Questions:

How are we measuring success?

ICM Blueprint success criteria are as follows:

- The platform developed shall be accessible, accurate, and comprehensive.
- The solution shall cover the ICM project life cycle of planning and delivering both new builds and retrofit work.
- The developed product shall be embedded in the ICM culture and day-to-day activities, with processes established to prevent obsolescence.

Is the ICM Blueprint program mandatory?

ICM Blueprint is a long-term strategic initiative that is supported by the ICM leadership team. ICM Blueprint is a program everyone across the organization should support.

When will retrofit processes be incorporated into ICM Blueprint?

We will begin the ICM Blueprint retrofits planning process in Q4.

How do I support the development of ICM Blueprint?

ICM Blueprint is a strategic initiative that will result in living process documentation where feedback is always welcome in order to support the ongoing continuous improvement of ICM processes while Facebook continues to scale, grow, innovate, and change. You can support this initiative by providing feedback as you use the documentation in your day-to-day tasks.

Please reach out to the functional champions listed below to get involved in content review. For anything else, please reach out to Ryan Loomis at rloomis@fb.com.

How will we keep documentation relevant/usable given our rate of innovation and change?

Once ICM Blueprint has transitioned out of the development phase into operations and maintenance (O&M), each of the 13 established process owners (dubbed the "Lucky 13") is responsible for ensuring that established change management processes are followed and adhered to and that each process is updated to reflect the current state of ICM processes at Facebook.

Is ICM Blueprint a global program?

Yes. ICM Blueprint is a global program. Some global processes are captured today, and we will be doing content reviews in 2021 Q1 to ensure ICM Blueprint becomes a comprehensive, global source of truth.

Is ICM Blueprint aligned with the DCD process playbooks?

Yes. The ICM Blueprint team is working closely with the DCD team to develop and align on the tactical plan and determine the appropriate path forward.

Optimized Content Review and Approvals Process

ICM Communications and Design Department
Peter P. Speliopoulos
September 2020

ICM

Objectives

An optimized and standardized communications approval process creates a reliable and predictable system that can be easily repeated and replicated while creating communications in a complex, matrix environment. Think of it as quality control. Everything produced must pass through defined checkpoints before publication, thus ensuring that everything is exactly the way you want it to be. An optimized approval process that incorporates predictable points of review will:

- Build trust with project sponsors by bringing them into the creation process at the very start and keeping them informed and involved throughout the execution

- Increase productivity by moving the review process along more quickly and efficiently

- Reduce cycle times, greatly reducing the back and forth that kills timelines

- Ensure that all deliverables meet the elevated style and design standards of ICM and Facebook

- Ensure that the assigned creative team understands precisely what is required of them, so they stay on track without going in unproductive directions

- Eliminate the proverbial mad dash to meet publication deadlines

- Fix mistakes before they go live

- Ensure that there is a single working version, a source of truth

- Ensure that project, content, and visual design strategies stay on point throughout the creation process

- Optimize and improve content to its fullest potential

Scope of Engagement

ICM Communications is a full-service department, offering support ranging from strategic communications planning to tactical execution to content planning and development to visual design and finally to channel creation on SharePoint, Wiki, and Workplace. However, in order to manage our workload and serve our internal clients most effectively, our scope of engagement is focused on complex, high-visibility initiatives and tasks targeting multiple stakeholder groups, as outlined here:
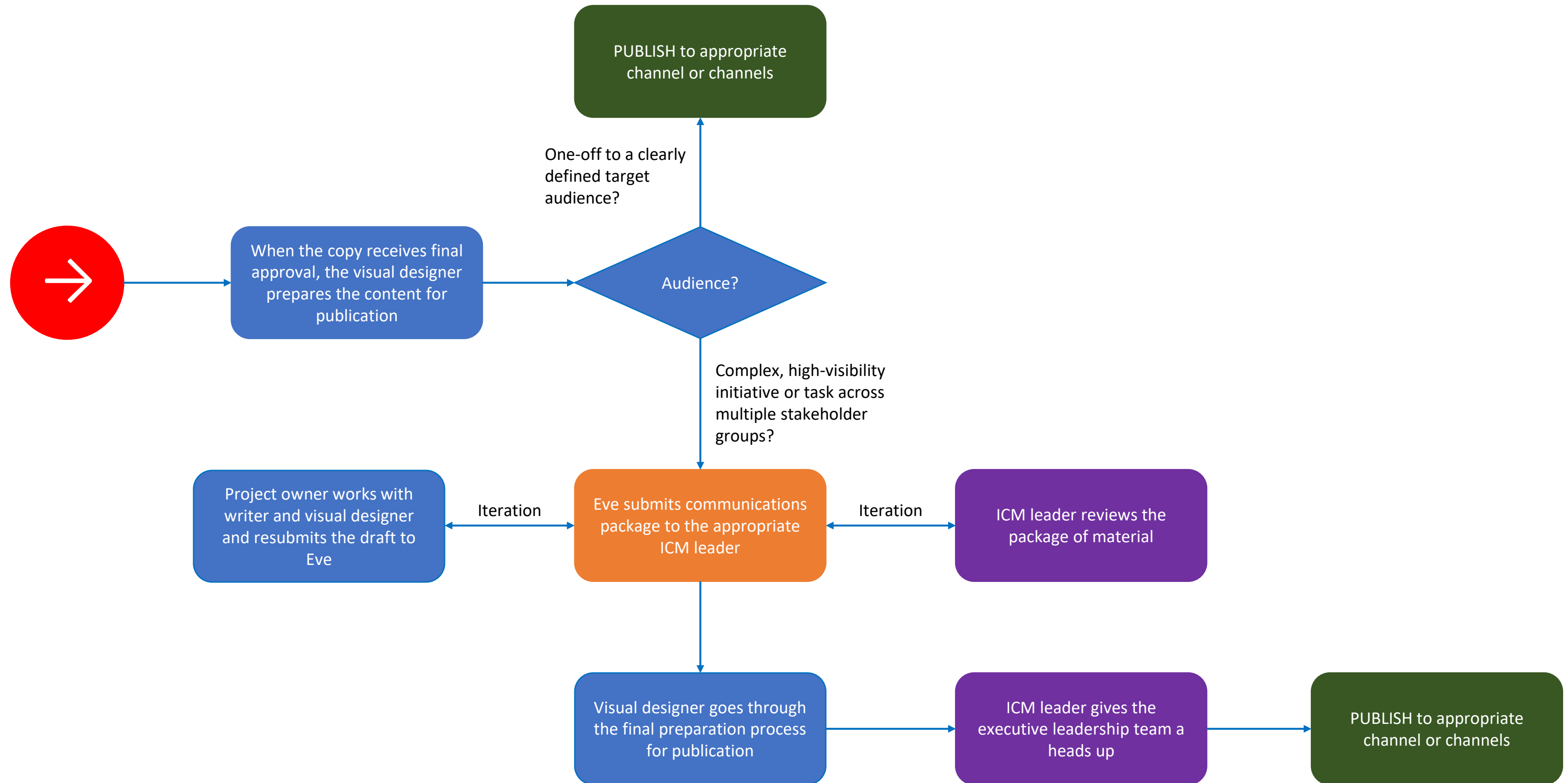
1. Strategic communications targeting general contractors and building partners

2. 2020 goals and workstreams

3. Leadership communications
   - Alex Johnson
   - Darin Daskarolis and his directs

4. Initiatives generated by the ICM Communications Council

5. Creating new SharePoint and Wiki platforms and Workplace Groups

6. ICM Wiki updates, navigation, and design

7. Large, multiyear programs requiring corporate internal communications and crisis communications to help drive organizational change (i.e., Project Blueprint, Project Lego)

8. Public relations/external presentations

Content Approval Workflow (1 of 2)

A content approval workflow is a map of the review process that content goes through between conceptualization and publication. It maps the distinct stages in the content creation, review, and publication processes, as well as specifying the person responsible for each step in the process. This is the process through which complex, high-visibility initiatives and tasks that target multiple stakeholders proceed.

Royal purple denotes members of the **ICM leadership team** who, depending upon the task or initiative, approve plans and content before being published

Content Approval Workflow (2 of 2)

PUBLISH to appropriate channel or channels

One-off to a clearly defined target audience?

When the copy receives final approval, the visual designer prepares the content for publication

Audience?

Complex, high-visibility initiative or task across multiple stakeholder groups?

Project owner works with writer and visual designer and resubmits the draft to Eve

Iteration

Eve submits communications package to the appropriate ICM leader

Iteration

ICM leader reviews the package of material

Visual designer goes through the final preparation process for publication

ICM leader gives the executive leadership team a heads up

PUBLISH to appropriate channel or channels

Royal purple denotes members of the **ICM leadership team** who, depending upon the task or initiative, approve plans and content before being published

FACEBOOK Infrastructure

ICM Careers: No Boundaries

Message from Bruce Berardi, ICM Business Operations Director

It gives me great pleasure to introduce our September 2020 No Boundaries honoree, Brian Muvuti, a QA/QC Program Engineer in Dublin, Ireland.

Specifically, I would like to highlight Brian's outstanding ability to lead and influence the program globally as an individual contributor. I encourage everyone within ICM to take up the challenge of leading with influence. Let us not get too hung up on titles. Each one of us can make a meaningful contribution to ICM.

Bruce

Learn about Brian Muvuti

How long have you been with Facebook?
Two year, nine months

What is your job title?
QA/QC Program Engineer

What is your organization?
ICM in Dublin, Ireland

What are your current major areas of focus?
- CLN3 Day 2 works handover
    - IAC scavenger fans, pumps changeout and installation of opto-coupler
    - BMS renaming works and commissioning
- CLN5 & 6 Quality and Commissioning program
- CLN Substation Quality and Commissioning program
- CLN1/2 Retrofit Projects Quality and Commissioning program (e.g., CLN1 F16 Project)
- EU Contact Tracing technology trials and tech implementation
- EMEA QA/QC, SME and CFM Partnership during construction

I joined Facebook on January 22, 2018 as the QA/QC Program Engineer for the Clonee Data Center in Ireland. The first six months were quite hectic, but I received tremendous support from the Clonee ICM team and my manager. I met people I had worked with on other projects across Europe, which also made my onboarding manageable and productive. One highlight from my first six months was developing the "Be Proud of Your Work" campaign. This campaign was well received at the time, and it has now reached wide and far globally. We even made a short video about the campaign with the general contractors and trade partners (see below). It is said that "Pride of performance does not represent ego. It represents pleasure with humility." So, ultimately, "The quality of the work and the quality of the worker are inseparable."

> Clonee "Be "Proud of Your Work" video

> Facebook General Contractor Summit "Be Proud of Your Work" video

I followed this up by developing a series of quality handbooks which have been adopted across numerous sites in the program. My role has now also extended to supporting my counterparts in Odense and Lulea, partnering with the FacOps construction-facing teams across the European Union and looking after the retrofits projects in the live data center. Recently, I was selected to lead the research into COVID-19 contact-tracing technologies. I led the development of the performance specification, which has now been issued to general contractors. During the research and development of this specification, I got the opportunity to liaise with the various Facebook teams dealing with various legal issues (e.g., Data Protection Counsel, Labor & Employment Counsel, HR, Design & Construction Counsel). It has been an incredible journey for me so far in terms of what I have learned, the people I have met, my responsibilities, and my contributions.

I offer my heartfelt gratitude to the Clonee ICM team (the best team in the program), the ICM Global QA/QC team, and my manager, Fearghal Scanlon, all of whom continue to contribute to the success of ICM and provide me with valuable career guidance.

In terms of career growth at Facebook, what resources have been most helpful to you?
I have been able to set goals and create a plan to achieve them with the help of my manager. I have also been able to modify my approach to my day-to-day work more easily by focusing on impact in everything I do, while keeping an eye on the bigger picture. My career path is a constant discussion at our weekly meetings with my manager. I have proactively determined what I want from work, then, from those discussions, I developed a timeline, including milestones. The company programs like the virtual Learning & Development resources and courses have also been most helpful. To me, my career path is a written plan that helps me take charge of what is most important to my fulfillment and success. I feel that, without a plan, I would feel rudderless. We all need benchmarks against which we measure our progress.

What career advice would you give to your younger self or someone newly hired in ICM?
You need to be a lifelong learner, no matter what stage you are in your career. I keep this quote in mind: "The more you learn, the less you fear." Listen more and seek advice because many people have been there and done that. In a world where you can be anything, be kind. Invest your

money wisely and see it grow over time as your career progresses. Lastly, and most importantly, take care of your health. Eat well, sleep well, and exercise regularly. Your health is your wealth, as is said, and, when you feel good about yourself, any work challenges become much easier to manage. The ability to maintain the work-and-life balance is extremely important. It is good to establish good habits for life in every area. No matter how hard, it is worth it.

What do you like best about working in ICM?

I am proud to be part of the team and proud of what the team accomplishes while dealing with so many external variables. I am fully engaged in each step of the project, from the time that we take over a green field to the time that we hand over the data center to the FacOps team. The whole process, from start to end, is truly rewarding.

Did you always know you would be in the construction industry?

Growing up in Zimbabwe, I always thought I would end up as an electrical engineer working at a powerplant. However, I was fascinated by electronics and ended up doing an apprenticeship in auto-electrics for Costain Africa, a large construction company then in Harare, the capital city of Zimbabwe, from 1999 to 2002. I worked on electronics, electrics, and electro-pneumatics for cars, trucks, and various construction equipment like loaders, graders, bulldozers, rollers etc. I was exposed to construction sites while attending to the service breakdown of this equipment as an auto-electrician. My second apprenticeship was in electrical industrial installations with Jones Engineering Group in Ireland, starting in 2003, which cemented my experience working in the construction industry as an electrician. From there, I attained my electrical services engineering undergraduate degree at Technological University Dublin and post-graduate diploma in electrical power systems at the University of Bath in England. I studied part-time, while working fulltime on mostly data center construction projects.

Please tell us about a challenging time in your career that you had to pull yourself up by the bootstraps.

This was during a data center construction project in The Netherlands. I worked away from home for almost a year, leaving my wife and our young son, then five years old, back home in Ireland. The project was quite challenging and being so far away from my family made things even worse. I not only had to step back and strategically assess the situation from the standpoint of what would work for the organization, but I then had to influence my manager to add additional resources and delegate some of my workload. With those meaningful and productive discussions with my manager, I was able to slowly reduce the constant travel while still supporting the project remotely and being at home in Ireland with my family.

Please share a career success with us.

When I led the development of quality and commissioning software at Jones Engineering Group, we engaged independent software engineers whom I worked with to develop a unique system for recording and tracking progress. The company is still using this software with additional features and updates, which continues to make me proud. In addition, the handover of the data center to the FacOps team still remains an important achievement (e.g., CLN2 and CLN3).

Throughout your career, have you tended to "fall into" positions or have you been "assigned" to new roles?

It has been a mixture for me, and I have often jumped at opportunities to advance my career. My training, skills, education, and experience have led to opportunities opening for me. I started with Costain Africa in Harare, Zimbabwe, then moved to Jones Engineering Group in Dublin, Ireland, and now I have the good fortune for working with Facebook's infrastructure construction professionals.

What is the biggest difference between working for Facebook relative to your previous companies?
It is the mission, culture, and values of the organization. Facebook's mission to give people the power to build community and bring the world closer together is unique. I consider my work now to be affiliated with a greater purpose and impact across the world. Everything we do helps us to connect the world, and no other company can say that.

Who has been or was an inspiration or mentor to you at some point in your career?
My parents have been an inspiration to me in my career by showing me how important it is in life to be a lifelong learner. They have always placed education at the forefront and, even now, are still interested in what I am learning. As they say, "When was the last time you did something for the first time?" My wife has also been a pillar of support and inspiration. My wife, Marzia, and I have been together for 14 years and she has supported me throughout my career. She has always paved the way by consistently exceeding expectations in her own work and, also, in furthering her education. Just when I thought I had caught up with her with my post-graduate studies, she went and completed an MBA. Lastly, everything we do is for our nine-year-old son, James, who keeps us grounded and focused at all times.

Brian Muvuti

QA/QC Program Engineer

2 YEARS, 9 MONTHS @ FACEBOOK

Joined on _____

TEAM:
QA/QC

LOCATION:
Dublin, Ireland

CURRENT MAJOR AREA OF FOCUS:
Need a simple one-line version of this to add in this section....

ICM CAREERS

NO BOUNDARIES

Tell us about your career journey at Facebook...

I joined Facebook on January 22, 2018 as the QA/QC Program Engineer for the Clonee Data Center in Ireland. The first six months were quite hectic, but I received tremendous support from the Clonee ICM team and my manager. I met people I had worked with on other projects across Europe, which also made my onboarding manageable and productive.

One highlight from my first six months was developing the "Be Proud of Your Work" campaign. This campaign was well received at the time, and it has now reached wide and far globally. We even made a **short video** about the campaign with the general contractors and trade partners.

I developed the script and each contractor identified the work that they were most proud of. It is said that "Pride of performance does not represent ego. It represents pleasure with humility." So, ultimately, "The quality of the work and the quality of the worker are inseparable."

I followed this up by developing a series of quality handbooks which have been adopted across numerous sites in the program. I am currently developing another handbook that details the "white glove inspections" process and expectations. My role has now also extended to supporting my counterparts in Odense and Lulea, partnering with the FacOps construction-facing teams across the European Union and looking after the retrofits projects in the live data center. Recently, I was selected to lead the research into COVID-19 contact-tracing technologies. I led the development of the performance specification, which has now been issued to general contractors. During the research and development of this specification, I got the opportunity to liaise with the various Facebook teams dealing with various legal issues (e.g., Data Protection Counsel, Labor & Employment Counsel, HR, Design & Construction Counsel). It has been an incredible journey for me so far in terms of what I have learned, the people I have met, my responsibilities, and my contributions.

I offer my heartfelt gratitude to the Clonee ICM team (the best team in the program), the ICM Global QA/QC team, and my manager, Fearghal Scanlon, all of whom continue to contribute to the success of ICM and provide me with valuable career guidance.

In terms of career growth at FB, what resources have been most helpful to you?

I have been able to set goals and create a plan to achieve them with the help of my manager and IDC leadership's North Star guidance, as measured by the Optimized Delivery Goals (formerly known as the ICM North Star Metrics), which was announced by Hal Rolnick on August 27, 2020. (The Optimized Delivery Goals are made up of five high-level metrics that measure the performance of execution across the ICM portfolio, representing safety, quality, schedule, cost variance, and GMP accuracy, the latter of which will be introduced soon.) I have also been able to modify my approach to my day-to-day work more easily by focusing on impact in everything I do, while keeping an eye on the bigger picture and North Star. My career path is a constant discussion at our weekly meetings with my manager. I have proactively determined what I want from work, then, from those discussions, I developed a timeline, including milestones. The company programs like the virtual Learning & Development resources and courses have also been most helpful. I am also a trained Jedi interviewer, instruction I received from my colleague here in Dublin, Joe McCracken, which further helped me to appreciate the quality and caliber of people we hire at Facebook. To me, my career path is a written plan that helps me take charge of what is most important to my fulfillment and success. I feel that, without a plan, I would feel rudderless. We all need benchmarks against which we measure our progress.

You need to be a lifelong learner, no matter what stage you are in your career. I keep this quote in mind: "The more you learn, the less you fear."

What career advice would you give to your younger self or someone newly hired in ICM?

You need to be a lifelong learner, no matter what stage you are in your career. I keep this quote in mind: "The more you learn, the less you fear." Listen more and seek advice because many people have been there and done that. In a world where you can be anything, be kind. Invest your money wisely and see it grow over time as your career progresses. Lastly, and most importantly, take care of your health. Eat well, sleep well, and exercise regularly. Your health is your wealth, as is said, and, when you feel good about yourself, any work challenges become much easier to manage. The ability to maintain the work-and-life balance is extremely important. It is good to establish good habits for life in every area. No matter how hard, it is worth it.

What do you like best about working in ICM?

I am proud to be part of the team and proud of what the team accomplishes while dealing with so many external variables. I am fully engaged in each step of the project, from the time that we take over a green field to the time that we hand over the data center to the FacOps team. The whole process, from start to end, is truly rewarding.

Please tell us how did you come to Facebook in the first place?

Well, my journey started with a screening phone call from a Facebook recruiter. I remember taking that call during a lunch break in my car and praying that the network or my phone battery would not let me down. Prior to the recruiter reaching out, I worked across Europe at other data centers for U.S. technology companies, and I felt that I had acquired enough knowledge and experience to make the jump to the client side. I worked for Jones Engineering Group in Dublin for 14 years, holding various roles prior to joining Facebook. I wanted to "spread my wings" to see how far my career would take me. And it is equally important that I mention my wife, who served as a great inspiration to me because of her own determined career growth. I aspired to achieve the same.

Did you always know you would be in the construction industry?

Growing up in Zimbabwe, I always thought I would end up as an electrical engineer working at a powerplant. However, I was fascinated by electronics and ended up doing an apprenticeship in auto-electrics for Costain Africa, a large construction company then in Harare, the capital city of Zimbabwe, from 1999 to 2002. I worked on electronics, electrics, and electro-pneumatics for cars, trucks, and various construction equipment like loaders, graders, bulldozers, rollers etc. I was exposed to construction sites while attending to the service breakdown of this equipment as an auto-electrician. My second apprenticeship was in electrical industrial installations with Jones Engineering Group in Ireland, starting in 2003, which cemented my experience working in the construction industry as an electrician. From there, I attained my electrical services engineering undergraduate degree at Technological University Dublin and post-graduate diploma in electrical power systems at the University of Bath in England. I studied part-time, while working fulltime on mostly data center construction projects.

Please tell us about a challenging time in your career that you had to pull yourself up by the bootstraps.

This was during a data center construction project in The Netherlands. I worked away from home for almost a year, leaving my wife and our young son, then five years old, back home in Ireland. The project was quite challenging and being so far away from my family made things even worse. I not only had to step back and strategically assess the situation from the standpoint of what would work for the organization, but I then had to influence my manager to add additional resources and delegate some of my workload. With those meaningful and productive discussions with my manager, I was able to slowly reduce the constant travel while still supporting the project remotely and being at home in Ireland with my family.

Please share a career success with us.

When I led the development of quality and commissioning software at Jones Engineering Group, we engaged independent software engineers whom I worked with to develop a unique system for recording and tracking progress. The company is still using this software with additional features and updates, which continues to make me proud. The handover of the data center to the FacOps team still remains an important achievement (e.g., CLN2 and CLN3).

How do you feel about construction people fitting into a social media company?

Construction touches all industries, and, for me, I am well adjusted to that. However, when I started my career in construction, the data center construction for social media companies was not very common back then. Even now, when I tell people that I work for

Facebook's construction team, they are immediately intrigued. The good thing is, almost everyone I know or meet uses Facebook apps, so it is easy to explain (and proudly) to them that all that data is stored in data centers. The fact that data center construction projects, by their very nature, are usually in secluded and not so obvious places makes them less common to the average person in the street.

Throughout your career, have you tended to "fall into" positions or have you been "assigned" to new roles?

It has been a mixture for me, and I have often jumped at opportunities to advance my career. My training, skills, education, and experience have led to opportunities opening for me. I started with Costain Africa in Harare, Zimbabwe, then moved to Jones Engineering Group in Dublin, Ireland, and now I have the good fortune for working with Facebook's infrastructure construction professionals.

What is the biggest difference between working for Facebook relative to your previous companies?

It is the mission, culture, and values of the organization. Facebook's mission to give people the power to build community and bring the world closer together is unique. I consider my work now to be affiliated with a greater purpose and impact across the world. Everything we do helps us to connect the world, and no other company can say that.

Who has been or was an inspiration or mentor to you at some point in your career?

My parents have been an inspiration to me in my career by showing me how important it is in life to be a lifelong learner. They have always placed

education at the forefront and, even now, are still interested in what I am learning. As they say, "When was the last time you did something for the first time?" My wife has also been a pillar of support and inspiration. My wife, Marzia, and I have been together for 14 years and she has supported me throughout my career. She has always paved the way by consistently exceeding expectations in her own work and, also, in furthering her education. Just when I thought I had caught up with her with my post-graduate studies, she went and completed an MBA. Lastly, everything we do is for our nine-year-old son, James, who keeps us grounded and focused at all times.

We will highlight the career of an ICM staff member each month. Please reach out to them for a deeper dive on their experience!

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Darin's Thanksgiving 2020 Message

While the Thanksgiving tradition is a national holiday celebrated on various dates in the United States, Canada, and a handful of other places across the globe, the beliefs we embrace are universal.

Thanksgiving is a time for sharing joy and gratitude. Our calming and stabilizing daily routines were shattered at the outset of the pandemic, but we, each of us, firmly planted our feet and created new, more productive routines. Our cherished connections with loved ones, friends, and colleagues took a hit in those early days, too, but we found fun new ways to connect, assisted, of course, by technology, appropriate distancing, and face coverings.

Our strong and adaptive individual spirits that coalesce as ICM OneTeam have never been more potent. Grievance is not part of the ICM mindset. Without your commitment, creativity, and high standards, ICM would not have continued to thrive and, indeed, ICM leadership team would not have had the unshakeable confidence to push a more demanding growth agenda. Thank you!

I wish each of you a Thanksgiving filled with abundance and bright moments. I urge you to celebrate Thanksgiving Day with cheer and optimism. I hope, too, that the joyous holiday season just ahead of us brings you peace, health, and happiness throughout the coming year.