Supply Chain Digital Transformation Hackathon

"Where Supply Chain Meets Innovation"

AUGUST 5th- 6TH, 2017

USC Fertitta Hall
665 Exposition Blvd
Los Angeles, CA 90089
United States

Event Agenda

SAT/AUG 5 – Day 1: *Hackathon (Competition), USC Fertitta Hall*

8:00 am   **Team check in / Continental Breakfast**

8:30 am   **Team Formation/Networking Activity/Submitting Team Information Sheets**

9:00 am   **Welcome Remarks by Nick Vyas**
Intro to Hackathon by Jeff Musson
Tech Tools: Justine Cocchi of Microsoft

9:30 am   **Hackathon: Intro to Problem Statements - Intro to Mentors/SMEs**

10:00 am   **Hacking Begins**

12:30 pm   **Lunch Service**

6:00 pm   **Dinner Service**

12:00 am   **Midnight Snack**

SUN/AUG 6 – Day 2: *Hackathon (Competition and Judging), USC Fertitta Hall*

6:00 am   **Breakfast Service**

9:30 am   **30 minute Warning to End of Competition**

10:00 am   **End of Hackathon**

10:30 am   **Team Presentations/Demos Begin**

12:00 pm   **Lunch Service**

12:30 pm   **Team Presentation/Demos**

1:00 pm   **Judges Deliberations**

2:00 pm   **Announcement of Competition Results / Award Ceremony**

2:30 pm   **Closing Remarks / End of Event**

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HASHTAG
#uscsupplychain
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#digitizetheport

PROBLEM STATEMENTS

Welcome to the 2017 **Supply Chain Digital Transformation Hackathon**.

The purpose of this event is to bring together both the supply chain industry and tech industries to brainstorm and develop tech solutions for the global supply chain. The goal is to develop technology to improve productivity both for exports and imports.

In this hackathon, participants will have to create solutions for problems that the supply chain faces.

Here are the problem statements that the participants will be challenged with:

#1. Create a smart application which can seamlessly integrate a shipper's inventory and order management system with warehouse and transportation management systems. The app should be secure, system vendor agnostic and have a user friendly interface

Background: Warehouses today operate using one of many Warehouse Management Systems (WMS). Customers operate using Enterprise Resource Planning tools (ERP). In order to operate efficiently the ERP and WMS systems must operate seamlessly. When a customer brings on a new warehouse operator the integration timeframe is usually between 60-90 days. That integration, if accomplished on an automated basis, would reducing switching costs, increase warehouse productivity, and facilitate a global warehouse digital marketplace. Without automated instantaneous integration, the system will continue to bog down.

The challenge for the hackers is to devise an automated instantaneous integration process.

#2. Develop an appointment system that notifies truckers with a specific time window to drop off and pickup cargo efficiently. The appointment system should also be able to spread out traffic in two 8-hour windows in order to ease congestion at the port.

Background: Truck congestion that can exist at the Port is not caused by a lack of resources or infrastructure, but by the absence of planning tools and data. The Port believes that a Port-wide appointment or reservation system needs to be implemented to allow for the coordination of activities between Marine Terminal Operators (MTOS') and the drayage trucking companies. The movement of containers into and out of the Port is not a series of linear transactions, but rather a complex set challenges that involve many different actors and variables.

Containers enter or leave each MTO by either Ocean, Road or Rail, for this problem we are focused only on road moves. The appointment system must allow for truckers to schedule moves that involve dropping off a container (for export or empty) at one MTO and then picking an import container at the same or another MTO within a window of time that is both practical and efficient. This process is continuous, so the next move is also the return of a container. There are currently 13 MTO's across the Ports and each requires a minimum of 24 hours' notice for import pickups to schedule resources and plan to position container. There is a finite number of containers that can be handled per hour at each MTO and to ensure that bottlenecks and resulting congesting do not occur, the appointment system need to take into account the optimal time for each move to take place. The appointment system also needs to allow for changing external variables such as road conditions outside of the Port, MTO closure and changes in location for the return of container after the appointment has been made. The appointments will be made by the truckers for their customer's containers, but MTO's need to be able to alter moves that affect their terminal.

RULES & REGULATIONS

1) All teams are required to sign the team sheet. Suggested team size is 4-5 people max and cross-functional. No additional names shall be added after Saturday Aug 5, 2017 at 09:00 am PST. Exceptions will be allowed only in extreme cases and at the discretion of the Competition Director.

2) Teams, with all team members, must be present at the venue on Saturday, August 5, 2017. Failure to appear shall result in disqualification. Winning teams must be present at the venue for all proceedings on Sunday, August 6.

3) All teams must abide by the disqualification notice:

   i)   Your team's Submission may be disqualified if the Organizer has reason to believe, in the Organizer's sole discretion, that your Submission
   (a) contains any element that is malicious, corrupt, damaged,incomplete, inappropriate,or offensive;
   (b) violates the terms of use of any social media service, website, mobile application or any other platform used in connection with your Submission;
   (c) infringes any third party intellectual property rights;
   (d) violates any applicable law or
   (e) violates or does not comply with any section of this Participation Agreement.

   ii)   You and/or your entire team may be disqualified for any of the following actions, with or without warning, in The Organizer's sole discretion:
   (i) verbal abuse of another participant or Hackathon staff;
   (ii) inappropriate touching or harming of another participant or Hackathon staff;
   (iii) breach of the Hackathon Participant Agreement or any other agreement entered into in connection with the Hackathon;
   (iv) violation of or non-compliance with any section of this Participation Agreement or
   (v) violating the spirit of the Hackathon.

iii) If the Organizer has reason to believe that you or your team has compromised the integrity or the legitimate operation of this Hackathon, or has attempted to compromise the integrity or the legitimate operation of this Hackathon, including, without limitation, by cheating, hacking, creating a malicious bot or other automated programs, or by committing fraud in any way, your If during the Hackathon, any Hackathon staff has reason to believe that your health is in danger, you may be required to discontinue your participation in the Hackathon and asked to seek immediate medical assistance. Your teammates, if any, may continue participating in the Hackathon if they so choose.

iv) All disqualification decisions are final and not subject to appeal.

4) Final projects/presentations must be submitted by 10:00 am PST on Sunday, August 6, 2017. The submission must include a description and screenshots. All teams shall submit as a PDF or a PPT Deck to digitalsc@marshall.usc.edu. In the subject line, note the team name.

5) We will provide the names and contact information for designated volunteer supply chain experts who will be available to provide technical assistance and answer questions during the hackathon.

6) On Sunday, August 6, 2017 you must be at the venue by 10:00 am PST in order to set up for the judging.

7) Judges will go around to each team (Science Fair – Style). Teams will present and demonstrate their projects to the judges only.

8) Each group of Judges will select 2 finalists in their group. The finalists from all judging groups will present to the entire group later in the afternoon on Sunday. Four finalists (2 from each problem set) will be selected to present in front of the attendees and judges of the Global Supply Chain Excellence Summit on August 9 at 1:30pm at the USC Ronald Tutor Campus Center, Los Angeles

9) There will be prizes awarded to the 1st winner for each problem statement with an ultimate winner being declared. All prize details will be determined by The Organizer in its sole discretion. The Organizer reserves the right to substitute a similar prize (or prize element) of comparable or greater value. All taxes and other expenses, costs, or fees associated with the acceptance and/or use of any Prize are the sole responsibility of winners. Prizes cannot be transferred or substituted by winner. If a prize is unclaimed within a reasonable time after notification from The Sponsor, as determined by The Organizer in its sole discretion, it will be forfeited, and time permitting, an alternate winner may be selected from the other Entries at The Organizer's sole discretion.

10) All decisions by the judges are final.

JUDGING CRITERIA

Functionality of the Solution (33%)

The teams should be able to clearly answer the following basic questions:
a) What does your software solution do?
b) What makes it innovative?
c) What is your target market?
d) Who is your customer?

Originality of the Idea (33%)

a) Is the idea presented original? Have you heard of this idea before? If yes, is this presented idea better, more creative and innovative?
b) Would future customers support and reinforce their assumptions?
c) What problem does the idea solve in the legal industry?

Technically Challenging Implementation (33%)

a) The overall idea development and execution of their solution solve a technically challenging problem?
b) Are they able to demonstrate what the final software product will function and look like?
c) Can they show you a prototype working?

RESOURCE SHEET

Communication	How to use
Slack	Invitation Link for signing up for the Slack Channel: https://tinyurl.com/ybhcwul4 Here is the login link once you create a SLACK account: https://slack.com/signin (Note: the Slack account name is ***usc-movethegoods.slack.com***) Once you are logged in, follow the channel #usc-hackathon: a) You can post anything related to the hackathon. b) Want to add someone to your team? Looking for a team? Etc. c) Follow this channel for any useful information that we will post during the event including updates. **Note:** if you are new to SLACK, after you sign up, you can click on "Explore Slack" if you want to review the tutorial.

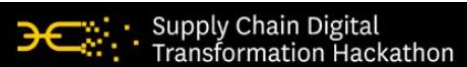| Data sets	
Google Drive	Data sets for the problem statements are found here: URL: https://drive.google.com/drive/folders/0B9rvXoZyLy2BVmFvUlY1bk4zLTg

Microsoft	
Microsoft Tools	Here are some links for the Cognitive Services and the Bot Framework to get attendees started: • https://dev.botframework.com/ • https://github.com/Microsoft/BotBuilder-Samples • https://microsoft.com/cognitive • https://github.com/Microsoft/Cognitive-Samples-IntelligentKiosk

Submission	
Projects Due: **10:00am Sunday, Aug 6th**	Submit projects to: PDF and a PPT Deck to digitalsc@marshall.usc.edu

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DYNAMITE NETWORK.COM

Microsoft

LA
THE PORT OF LOS ANGELES

SAYBROOK

Supply Chain Digital
Transformation Hackathon

Final Notes:

All team members have read this participant package, understand and agree to abide by the rules and regulations for the supply chain digital transformation hackathon.

Name: _____   Date: _____

Name: _____   Date: _____

Name: _____   Date: _____

Name: _____   Date: _____

Name: _____   Date: _____

TEAM SHEET

TEAM NAME: _____

ATTENDED SATURDAY: _____

NAME	EMAIL ADDRESS	TWITTER HANDLE