# Examples of Valued Features in Safety Related Applications Used by Cargo Handlers



photo Markus Spiski - Pexels

#### introduction

ICHCA is an active member of the United Nations Economic Commission for Europe Informal Working Group on the Code of Practice for Packing of Cargo Transport Units. One of this group's workstreams is the potential development of a CTU Code<sup>1</sup> App.

We were asked to survey members for cases studies of cargo handling safety related applications. Understanding functions and features valued by users in existing applications could then feed into design considerations of a future CTU Code app.

ICHCA members were asked "If you are using an App for a safety-related activity - it does not have to be CTU or packing related - please share your experience and insight".

The following summarises the findings from four application case studies: Incy.io, iAuditor, APMT Vessel Inspection App and Hazcheck DGL Lite. It shows some of the user identified benefits for each. The paper concludes with 18 features that were particularly valued by users such as: ease of input, accepts photos, no network connection required universally accessible, one set of simplified questions for standardised working, real-time reporting, analytics/dashboards. These criteria are also presented in a more detailed checklist format at the end of this briefing.

 $<sup>^{1}</sup>$  IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code) 2014

examples of safety related software packages and their user-valued features



## **APMT Vessel Inspection App**

https://www.apmterminals.com/en/news/new-releases/2021/210211-vessel-safety

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- learning from previous incidents, compiling inspection reports and escalating defects
- conduct vessel inspections using own mobile devices to record critical safety defects, share photos and escalate issues for repair
- · download PDF report- share it with the shipping line
- one set of simplified questions for all vessel inspections, standardised way of working across all terminals globally

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## **Hazcheck DGL Lite**

https://existec.com/product/hazcheckdgl-lite/ © 2020 Exis Technologies Limited. All rights reserved.

- quick and easy access to IMDG Code classification information in the Dangerous Goods List
- provides details on class, subhazard(s), variations, packing group, marine pollutants and labels
- no network connection required universally accessible
- · android and iPhone devices



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## **iAuditor**

https://safetyculture.com/iauditor/

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- inspection, issue capture and corrective action
- convert existing checklists/spreadsheets- drag and drop form builder
- · show/hide fields depending the user input- efficiency
- on the spot corrective actions, date, priority, owner
- instant shareable reports,auto sync between mobile devices and desktop; real-time analytics/dashboards
- · connect to sensors/data feeds; realtime monitoring

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# Incy.io

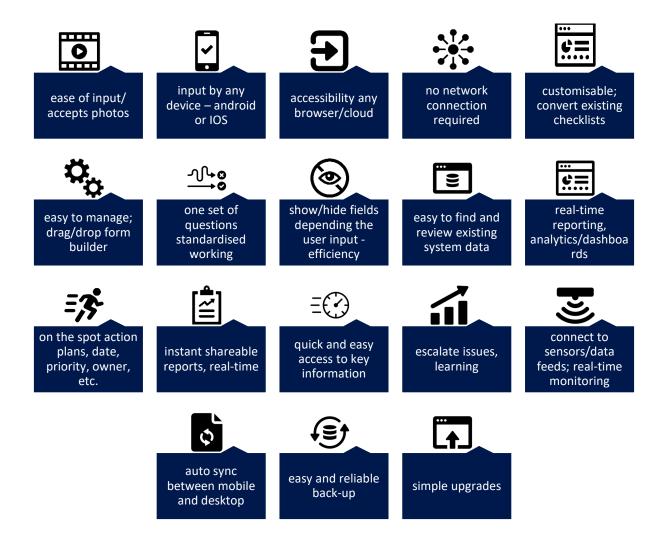
https://www.planbrothers.io/products/incy © 2021 Plan Brothers, Helsinki, Finland

- report and follow up QHSE related observations
- · 'easy to manage', 'easily adjust it to our needs'
- main purpose a reporting tool, but also easy to find and review old reports and observations
- does not require a separate app, can be accessed with any browser, cloud based, dashboard
- any device, accepts photos, realtime statistics, cloud based, free upgrades, auto backup, customisable

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### what users liked about the software systems



## opinions and copyright

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#### transparency

The APMT Vessel Inspection App and Hazcheck DGL Lite - were developed by ICHCA members.

# **Appendix 1 – Checklist of Valued Features in Safety Related Apps**

	Functionality	YES	NO	N/A
1	Is it quick and easy to input data? (e.g. without going to multiple screens/switching many pages, repeated entry of same data,)			
1.1	Does it use well-functioning auto-fill/drop down lists			
1.2	Does it accept photo and video inputs			
2	Can it be used on any mobile device platform e.g. android, IOS?			
3	Is it accessible on any browser/cloud?			
4	Can it work when there is no network connection (universally accessible)?			
5	Is it customisable to your needs;			
5.1	Can you easily convert existing checklists?			
5.2	Does it have a drag and drop form builder?			
6	Is it easy to set up and manage?			
6.1	Is there one set of simplified questions for standardised working?			
6.2	Can you show/hide fields depending on user input (efficient form filling)?			
7	Is it easy to find and review existing data on the system?			
7.1	Is there quick and easy access to key information?			
8	Can you do real-time reporting, analytics/dashboards?			
8.1	Can you create instant shareable reports, real-time?			
9	Can it create on the spot action plans, (date, priority, owner, etc.)?			
9.1	Can it be used to escalate issues and learning?			
9.2	Does it have a closeout/feedback loop?			
10	Can you connect to sensors/data feeds for real-time monitoring?			
11	Can it automatically sync between mobile and desktop devices?			
12	Does it provide easy and reliable back-up			
13	Is maintenance simple and handled with minimum disruption?			
14	Is it simple to upgrade?			