# CODEBOTS

Field Trials Report

Round 1
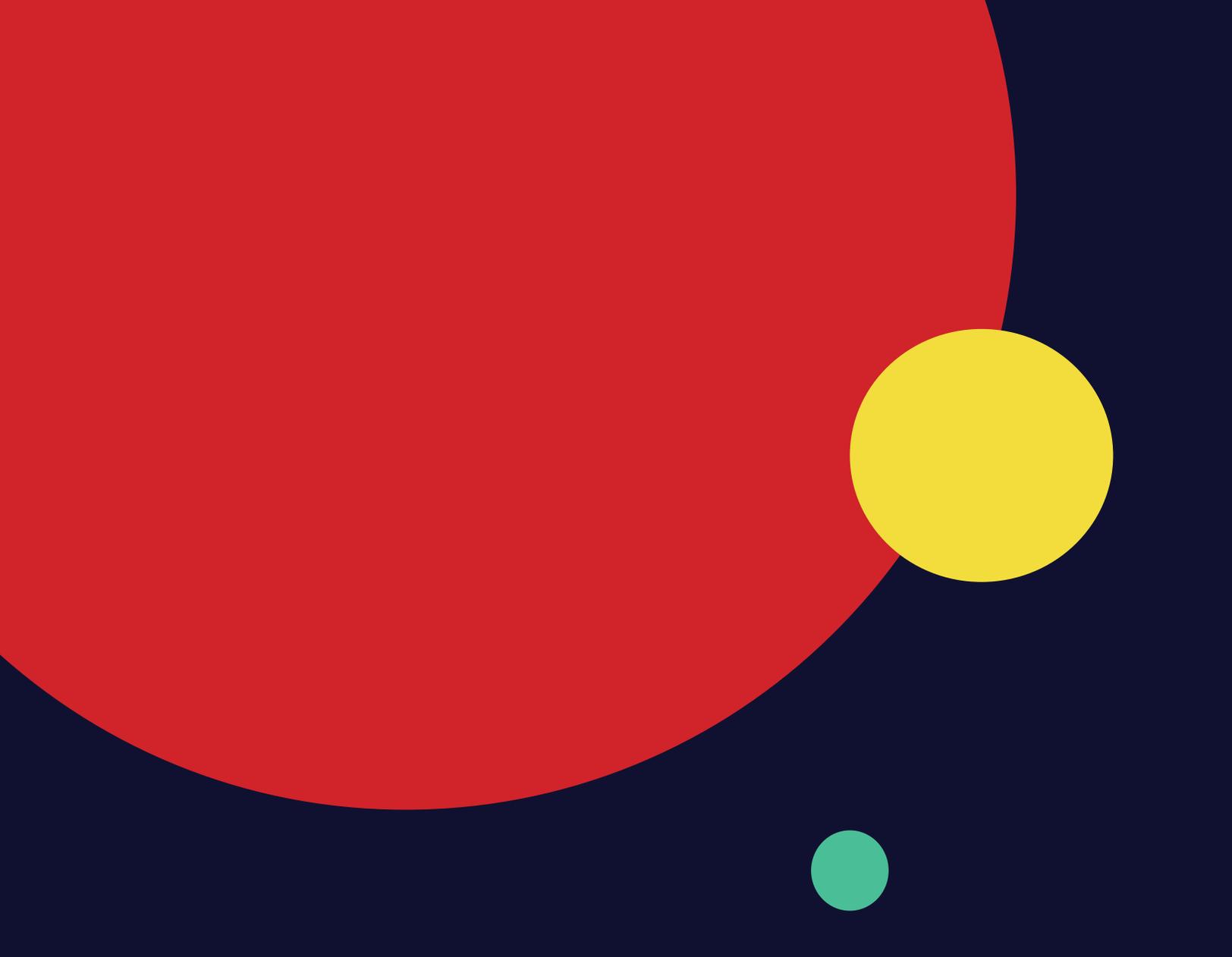
CODEBOTS

Introduction.

Codebots work together with developers to change the traditional software development process.

A codebot works by reading a model of the application. It is a visual representation of the entities, attributes and relationships of the software. Through this visual representation, the codebots can write on average 92% of the code base. Currently, there are a number of different codebots with each codebot writing to its own tech stack.

We know that Codebots adds value to a software project. The question that remains is a matter of quantification. Exactly how much value does a codebot add?

To test the variable of time, we decided to record observations from participants. We contacted enterprises in the Queensland Region and assessed the problems they faced. We reached out to staff within these businesses and organisations who managed or had contact with Information Technology and software development. These participants brought with them knowledge of the amount of time it takes to develop a solution to a particular business problem.

Hypothesis.

"We predict a team with a Codebot
will provide more value to a software
development project than a team without a
Codebot in the same amount of time."

With a survey as a measurement instrument,
we can obtain data that either proves or
disproves the hypothesis.

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Methodology

Plan	Dev	Review

Timeboxed Trial

Planning	1 Week Development	Review, interview & surveys

DEV LOCAL

Meeting	Phone Call (possible clarification)	Phone Call (possible clarification)	Presentation	Survey

Week 1 | **Week 2** | **Week 3**
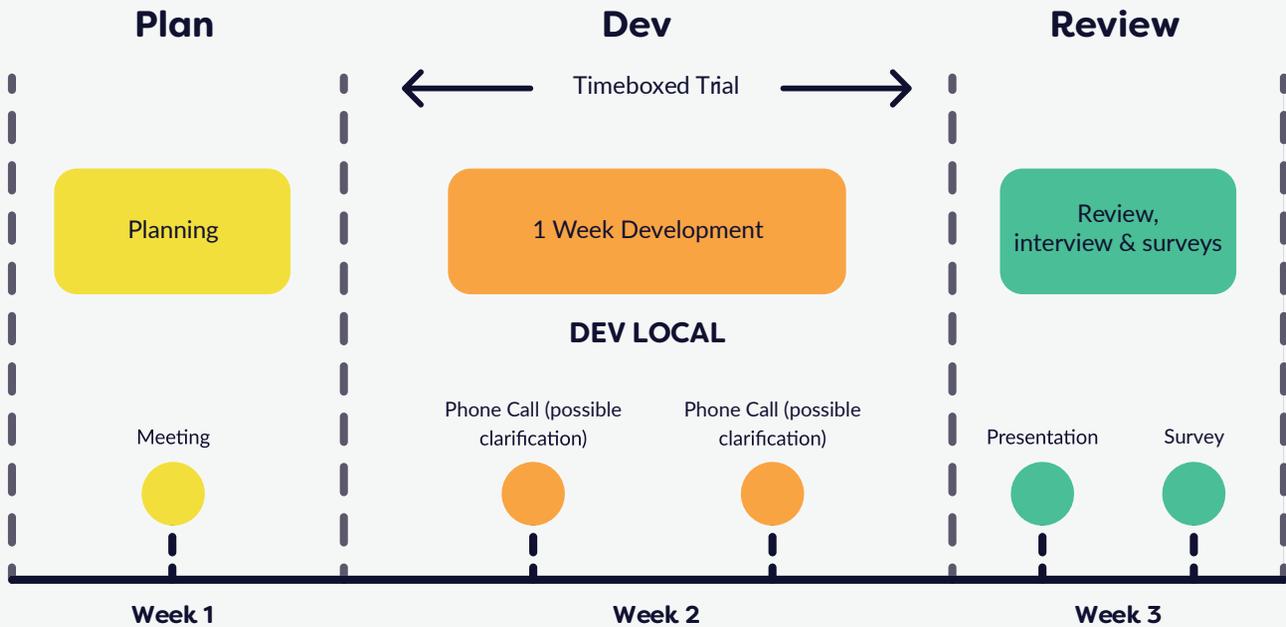
As part of the field trials, there was a planning phase, development period and review session. Before development started we ensured we had access to:

1. **A roadmap,**
2. **A product owner from the field trial participant,**
3. **A timeboxed period (5 business days).**

Showcasing the results and collecting data was critical – this third phase in the field trials targeted results and data gathering. A survey developed with scientific discipline provided an information gathering instrument.

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Participants.

There were six field trials participants including the following businesses and organisations.

Use cases.

Project X: The Codebots forms behaviour was linked to a chat interface. That interface had an API linking to the participants CRM in order to verify a users identity. Upon verification, the user could request information relating to their account. This was wrapped in an iframe ready to be deployed on any web page.

Project Y: The wizard and geolocation behaviours were used to create an application that performs business specific calculations. That application was deployed to iOS, Android, mobile web and as a progressive web app. The data was persisted and historical data could be exported as a CSV.

Results.

Lines of bot-written code

143,453
93%

Lines of human-written code

10,864
7%

Round 1 Bot

Lampbot

New bots ready to go

C#bot   **Springbot**   **Angularbot**

Day by day breakdown

Total lines of code written

- Bot written
- Human written
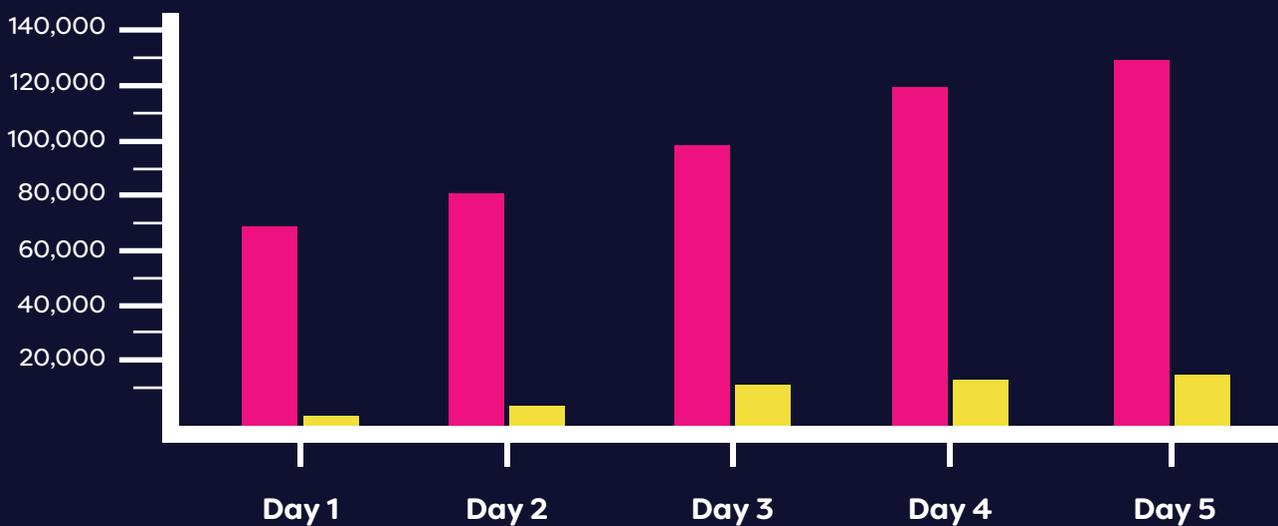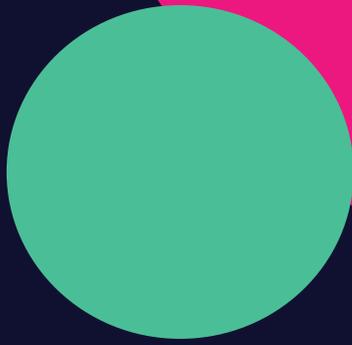
Estimated time
without a codebot

Codebots vs. regular
development speed

Average experience
rating out of 10

8.3 weeks

Much faster (45%)
Faster (55%)
Similar (0%)

9.23

Most popular behaviours

Forms

Workflows

Dashboards

Mobile Apps

Developer API

The results show a significant boost in the speed of development with a codebot. The other noticeable metric that while not a core focus of these field trials, is worth mentioning refers to satisfaction levels. Through the processes outlined in the Way of Working we were able to achieve an experience rating of 9.23/10. Enterprise participants have the greatest need for the forms and workflow behaviours.

Conclusion.

We can say with confidence that the Codebots technology speeds up development.

By selecting participants that have internal development teams, we believe the data collected at the conclusion of each field trial is accurate.

Where to from here?

Now that we've proved the value of our codebots, we're applying that technology to help enterprises digitally transform. A key competency of the bots is their ability to transform an offline database to a full stack application with API documentation.

We're in the midst of conducting proof of concepts with a range of Government departments and enterprise organisations demonstrating the value of the bots for digital transformations.

Participant comments

"The functionality is clean and sharp in its presentation which is a positive from a customer experience perspective. The speed to market of the solution and high usage of the bot versus human input was impressive which supports confidence in the bot functionality."

"Team was very responsive and understood the problem and how we wanted to resolve it."

"Very polished outcome. Extremely surprised at what has been achieved in 4 days."

"Excellent work. Impressive deliverables in such a short timeframe. Good to see what is achievable."

Get in contact

Interested in learning more about Codebots or think it might be a good fit for your organisation?

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