# TOP 10 REASONS TO DEVELOP WITH



# **#1 GREAT UX**

An awesome user experience creates dedicated customers and can elevate your company into a cult-like brand.

Qt's cross-platform framework and tools make development teams more productive and lets them focus on what makes your product stand out from the rest:

- Stable, high-performance software that runs optimally on any platform
- Modern, responsive 2D and 3D user interfaces that exceed user expectations
- Consistent branded or native look and feel across target devices

'Qt was definitely the right choice in the development of Radeon Software Crimson Edition, in terms of ultimate experience, performance, and features.'

# AMD

'MBUX is the new user experience inside Mercedes Benz cars. We used Qt to implement most of the UI experience and software: Screen animations, transitions between the screens, widgets. Qt enables us to prototype rapidly, is cross-platform, and runs everywhere.'



'The ability to iterate Quickly with Qt allowed us to deliver the best possible UX for our customers'

formlabs 😿



# **#2 COST SAVINGS**

Did you know Qt can save you precious development and maintenance resources on supporting multiple platforms and save you hardware costs at the same time?

With Qt, one code stack and one development team can support all your target platforms at the same time.

Qt's C++ applications are also highly efficient and require lower-cost hardware to run smoothly, which can drastically reduce your bill of materials.

# **DEVELOPMENT COST**

'On average, customers saved 30% of their software development costs by using Qt. In addition, the single development environment simplifies the device creation process as a whole.'

FORRESTER

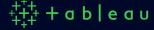
### **HARDWARE COST**

'A Web solution requires a considerably more powerful and more expensive system-on-chip than a Qt solution to achieve an iPhone-like user experience Qt could save one of the largest home appliance manufacturers around 53% in hardware costs!'

### **Embedded Use**

# **MAINTENANCE COST**

'When we can write once and run everywhere we were able to cut down our maintenance costs to below of what we had for one platform in the past.'





# #3 TIME TO MARKET

Qt streamlines your workflows at every stage of your project. With Qt, Designers create and iterate prototypes to productiongrade, on real hardware and without the developer's help.

Developers have a lot of their work already done thanks to Qt's libraries, premade UI elements and the automatically generated code from the designer's prototypes. And since you develop crossplatform, the more different devices your software runs on, the more time you save!

And if you need a boost, **Qt Professional Services** are there to help.

## REUSABLE CODE

We are developing components in C++ that and reuse them for numerous projects. We're building our own modules and reskin them using Qt QML, so we don't have to develop the whole system from scratch every time, but just make another UI.



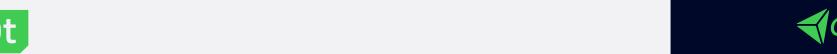
## **EFFICIENT WORKFLOWS**

'We are able to create protoypes very quickly. The only problem is that the customer thinks it's not a prototype, because it looks so good! Qt lets us reuse previous projects very quickly and very customer-focused for multiple platforms.'

# OMRON

# **CONSULTING, TRAINING AND SUPPORT**

'We only work with the best and most reputable partners. The technical support that Qt has provided has been of indispensable value for us during the whole development cycle, shortening out time-to-market significantly.'





# **RESPONSIVE INTERACTIONS**

'Qt helps us achieve very high performance, high frame rate, which is very important for the user experience, and very nice graphics at the same time'

# DAIMLER

'One developer created the same application for an embedded system with both Qt & QML and HTML5 in 160 hours each. The Qt-based application was generally faster, more responsive, and easier to implement.'



# #4 FAST APPLICATIONS

Today's consumers expect more of their devices. With more alternatives for them to choose between, the small details in user experience will make you stand out from your competitors.

Thanks to C++, Qt software facilitates hardware integration with less memory overhead. This leads to more responsive human-machine interactions, faster startup times, smoother animations, and better performance on anything from a high-end multi-screen systems down to a microcontroller.

## **HIGHER PERFORMANCE**

'We needed to show both 2D and 3D content on a single screen and Qt helped immensely with that. With the Mini Cooper, we pushed the boundaries in terms of rendering AR onto 2D screens. We also run Qt on a very lean single SoC and being able to do that is very important.'





# #5 DEVELOPER EXPERIENCE

A happy developer is a productive developer.

Qt is the **fastest, easiest and most fun experience** a C++ developer could wish for.

Its **simple and intuitive development environment** features a code editor with syntax highlighting and auto-completion, drag-and-design UI creation, visual debugging & profiling and many other tools.

Qt is also renowned for the quality of its documentation and examples which you can use as inspiration or simply as a time-saver.

### **FAST TO LEARN**

'It didn't take us long to get up and running with Qt. It was actually very easy to learn and to get started.' 'Qt was a natural fit for this project and accelerated development right out of the gate, we plugged it in and were ready to go in just a couple of days.'

navico





The wow-effect was there when you program with QML. It keeps on astonishing with it's ease-of-use and efficiency. QML has provided a solid base for our software.'



# RICH WITH DOCUMENTATION AND EXAMPLES

'We think it's really fun to use Qt to develop our UI, the main reason being that it's well documented.'





# #6 LIBRARIES AND TOOLS

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Building an application based on libraries and toolsets from different frameworks can cause instabilities and complications – just ask Dr. Frankenstein.

Qt is the **single most complete C++ software development kit**. There's every tool and building block you need to build software: From start to finish, from frontend to backend. No dependencies to worry about, no time wasted searching for the best tool for the job – it's right there.

# **COMPLETE TOOLKIT**

'Qt has the tools you'd expect as a developer, but it also has a large set of libraries that are constantly evolving.



# **COMPREHENSIVE LIBRARIES**

'I don't think everyone knows how powerful Qt's libraries are. Our development process is much easier than before. It can easily take 1000 to 1300 hours to develop a big automation system. Thanks to Qt, this project has been reduced to 50 hours.' 'Qt provides an incredible number of tools and support classes that help you build well-structured software in a meaningful way.'







# **#7 COMMUNITY**

Did you know a framework's ecosystem can future-proof your project? Qt has a dedicated user base over one million strong. Thanks to its roots in the Open-Source community, Qt constantly evolves through contributions from helpful developers around the world. Service and technology partners also provide complementary tooling, industry solutions, platform support, and more. Qt has been around for over 25 years and will continue to be your reliable partner for the future.

# **OPEN-SOURCE CONTRIBUTIONS**

"What was amazing was that there was already a body of work done by the Qt Community. I was able to tap its resources, code, and partnerships which helped us set out on a good

footing with our product. Had that open source community not been there we would have taken a much longer time to deliver.



# >1M DEVELOPERS



# **PARTNER NETWORKS IN**



Technology

Service





**Training** 

Distributo





Community



# CROSS-PLATFORM CAPABILITY

"Code once, deploy everywhere" is what Qt is about. Cross-platform development not only saves time, it is a strategy enabler.

It keeps the look and feel of your software consistent across all devices and future-proofs it for potential markets. Always be ready for the next big thing: Once you have your base code, expanding to other target platforms, be it a high-end multi-screen system or an MCU, requires minimal effort.

Single codebase















### Scalable & extendable

'We have hand-held devices, monitor device, tablet devices, and in the future, we have a lot of different device architectures. Want to develop once and show that wow-factor on everything. Qt has the performance that allows us to do that.'

# **Panasonic**

### Consistent look & feel

'Our current project is to make our iOS code available for Android as well. You should feel like you are using an Android application and not an iOS application running on Android. One of the reasons why we choose Qt is to to be able that native look-and-feel of a native UI.'





# **#9 LANGUAGES**

### **DEVELOPMENT LANGUAGES**

'We chose Qt because it is simply the best C++ toolkit with excellent Ul capabilities available – nothing can really compete with Qt for multi-OS applications.'



'Larger companies would usually have a big team of developers working on these apps. Creating a version for another platform with QML is easy – almost like a magic trick.'



We don't believe in language barriers.

Qt supports different development languages. C++ is efficient, powerful, and versatile. QML, Qt's declarative UI markup language, makes it easy to create UIs at blinding speed. And everything you can do in Qt with C++, you can also do in Python!

Want your product to go international? Qt's localization and internationalization tools can save you countless headaches associated with language translations, currency conversions, calendar formats, and more.

# INTERNATIONALISATION / LOCALIZATION

'If we didn't have the Qt Linguist tool we would have to hire someone externally. It saved us one or two people for the entire duration of our project.'





# #10 FLEXIBLE FRAMEWORK

Design your UI assets by importing them from 3rd party graphic design tools, applying Qt's premade widgets and controls, or using QML.

Write your software in Qt's own IDE, add plugins, or use Qt's libraries with another IDE. Pick exactly the modules you need for your target platform and deploy your software on your device via board support packages, via WebAssembly running a browser, or via WebGL for headless devices.

'There are a lot things we want to do, we want to try out and experiment. With Qt, there are no technical limitations to what we can and can't do.'



'Qt allowed user interface developers who traditionally created a mockup for embedded developers to implement to work directly on the product. This removed an often complex and time-consuming back and forth process between designer and programmer by connecting the designer directly to the product.'

'The user experience inside the car will become more and more important, even more than it is already today. And we are very happy to work together with the Qt company, who is a big supporter of our design process. The unlimited freedom the designer has with your software to create things is incredible.'

- Murat Günak (Automotive Designer)





# THE FUTURE IS WRITTEN WITH