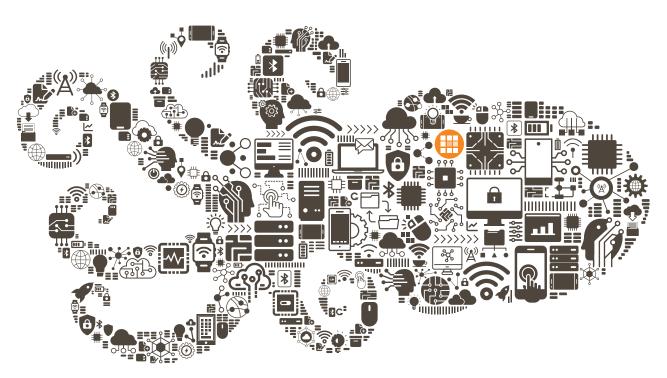
CIONET COOKBOOK No.2

EXECUTIVE **SUMMARY**







MENU

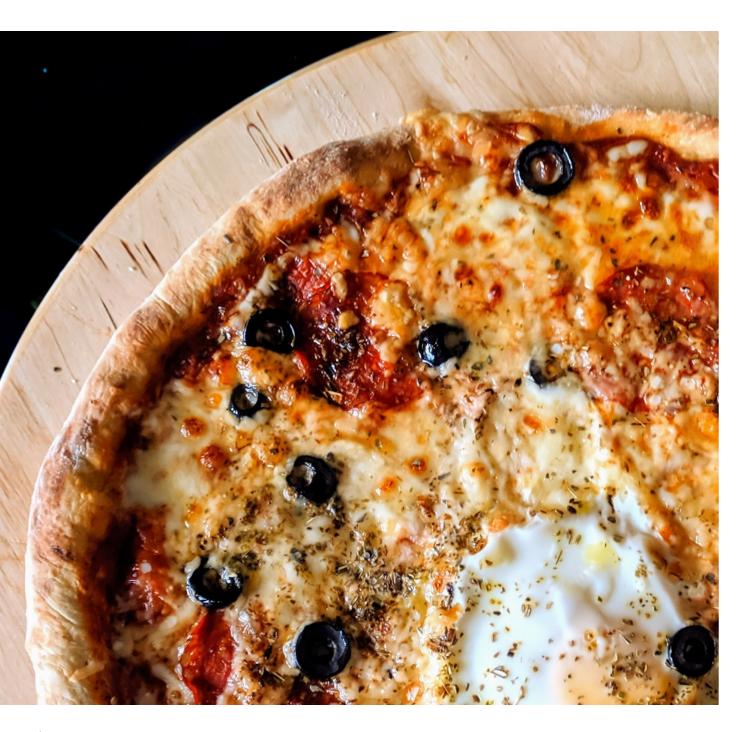
Master Chefs of the Digital Kitchen:		Section 4:	18
Six characteristics that define successful CIOs	5	Authentic	
Section 1:	8	Section 5:	21
Curious		Dynamic	
Section 2:	11	Section 6:	24
Imaginative		Adaptability	
Section 3:	14	Conclusion	29
Purposeful			

Photo credits

page 2 by Edgar Castrejon on Unsplash	page 17 by Madmaxon on Unsplash
page 4 by Masimo Grabar on Unsplash	page 19 by Patrick Browneon Unsplash
page 7 by Jeff Siepman on Unsplash	page 20 by Volkan Vardar Unsplash
page 10 by Svitlana Pimenov on Shutterstock	page 23 by Karpenkov Denis on Shutterstock
page 13 by Albuquerque on iStock	page 26 by IzikMd on iStock
page 16 by Stockcreation on Shutterstock	page 28 by UliAb on Shutterstock

Copyright © CIONET, 2023

The right of CIONET to be identified as the author of the Executive Summary of the CIONET Cookbook: Recipes for Digital Success has been asserted in accordance with the Copyright, Designs and Patents Act 1988.



MASTER CHEFS OF THE DIGITAL KITCHEN

Six Characteristics that define successful CIOs

Outstanding IT leadership is more critical than ever before. As the pace of digital transformation continues to quicken, the best CIOs rely on six key characteristics that help them turn the threat of disruption into an opportunity. They use these traits to lead the creation of new technology-enabled business models that generate a lasting competitive advantage.

That's one of the critical findings from our first two CIONET Cookbooks: comprehensive best-practice analyses highlighting successful CIOs' characteristics in an age of constant digital transformation.

These Cookbooks showcase the very best of European IT leadership: the 'Master Chefs'. They present the techniques of the Master Chefs as a set of recipes for long-term success. These talented CIOs run technology organisations like five-star restaurants, providing all the IT ingredients for digitally enabled business transformation.

Crucially, Master Chefs are more than leaders of their own domains. As well as leading agile and adept technology organisations, these Master Chefs create the conditions for a Digital Kitchen. Quite unlike the IT environment that has predominated before, this outward-facing department exposes its methods to diners who relish its first-class experiences.

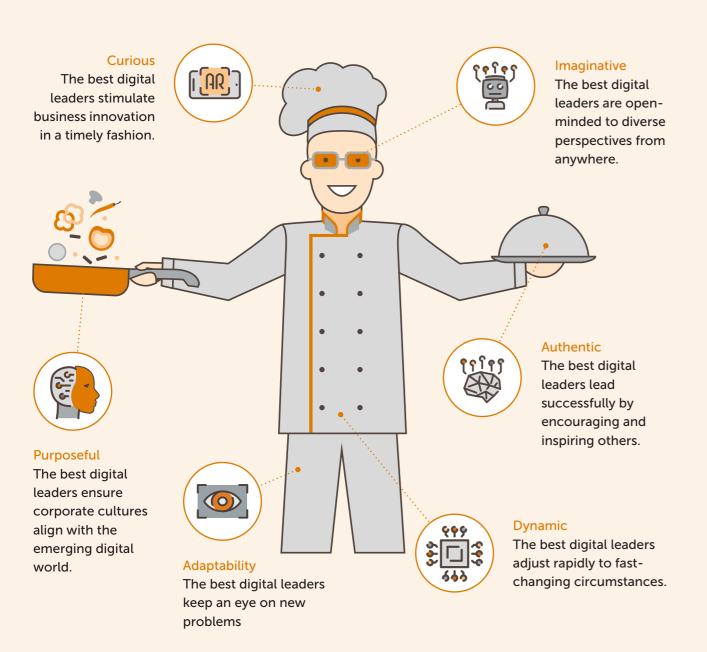
Our analysis suggests that Master Chefs of the Digital Kitchen excel across six traits: they exude curiosity, imagination, purposefulness, authenticity, dynamism, and adaptability.

These six traits are distinct, yet they interlink regarding leadership style. Master Chefs display all these traits, but they adopt and adapt them in a way that creates great results for them as individuals and for the people they lead, the businesses they work for, and the customers they serve.

Today, traditional enterprises face a new challenge: surviving and thriving in the digital age. CIOs must deal effectively with a complex mix of fast-changing conditions, whether it's embracing new ways of working, dealing with wider macroeconomic change, or exploring emerging technologies and staving off disruption.

The Cookbooks show how Master Chefs of the Digital Kitchen go beyond delivering IT operational excellence and serve up innovation for customers, whether external clients or internal employees. Here are more details on the six characteristics that we believe define successful ClOs.

Six characteristics that define successful CIOs





ONE CURIOUS

The best digital leaders stimulate business innovation in a timely fashion

	Demonstrated by	The knowledge and hard skills required	The soft power required
A.	Spotting weak signals internally and externally	Finger on the 'pulse'The emergence of tech and trends	Create connected ecosystemsBe widely networkedC-Suite credibility
В.	Awareness and understanding of business models for digital	Business AcumenAssess the business modelRefresh business model	Engage and Influence Stakeholders and Staff
C.	Complete understanding of the user experience	 Systems/process/hardware / Al/software/apps Data Exploitation Machine learning 	 Empathy re 'Voice of Customer Understanding Build trusted partnerships
D.	Generating new ideas	Sprints	Inspiration

The best CIOs have a curiosity and a passion for everything new. Master Chefs are constantly searching for weak signals, whether in terms of emerging technologies or fresh business trends. As Sanjay Patel, Group CIO at Tate ϑ Lyle, suggests, curiosity is now an essential trait for effective digital leadership.

Curiosity isn't a solo activity. Successful CIOs engage closely with people and parties across and beyond the IT department. They explore and research weak signals internally and externally with colleagues and customers. By spotting these signals quickly and testing their viability, CIOs stimulate business innovation promptly.

Master Chefs focus their attention on the user experience, whether that's in terms of the end customer or the employee. They work with line-of-business managers to understand internal requirements and deliver great products and services that meet customer demands.

Great CIOs exploit information. They use data to elucidate trends and inform their decision-making processes. They also use data analytics, machine learning and artificial intelligence to personalise customer experiences across online and offline channels.

Master Chefs are always cooking up new ideas. As Massimo Rosso, ICT Director at RAI, suggests, the future still needs to be written, so curiosity is crucial for a successful technology career. It's a sentiment that chimes with Christa Koenen, CIO and CDO at DB Schenker, who says IT chiefs must have the vision and passion for driving digital-led growth.

The best CIOs are rewarded for their curiosity. Digital leaders who build credibility through the rapid delivery of value earn the right to be equal partners at the boardroom table. Successful CIOs are often asked to take responsibility for other activities, such as procurement and risk management:



Charlie Forte
CIO, MoD

"Getting stuff done and making things happen is all about connecting people and ideas."



Phil Jordan
CIO, Sainsbury's Group
"Combining great
technologies with great
people is the recipe for great
customer experiences."



Tarun Kohli
ex-CTO, Prudential; MD, Swiss Re
"We don't need a digital
strategy for business, we
need a business strategy
for a digital future."

Nik Puri



Senior Vice President IT, FedEx
"The most important
ingredients for a successful
transformation are people
and culture rather than
process and technology."



Javier Cabrerizo Barrera
Group Managing Director, Prosegur
"The best ideas derive from
employees who know what
is going on."



TWO IMAGINATIVE

The best digital leaders are open-minded to diverse perspectives from anywhere

	Demonstrated by	The knowledge and hard skills required	The soft power required
A.	'New' versus 'Improved' thinking	Emerging tech hardware/ softwareCurrent gap analysis	• Forward-thinker
В.	Business practise know-how	New toolsDigital platformsNew skillsCurrent Org Design structures	Open CultureExperimentation mindset practises
C.	Application of tactical imagination, e.g. Hackathons, Innovation Units	Collaboration tools	Engagement of Staff and CustomersCommunication

Master Chefs are always open to new ideas. Gone are the days when successful IT leader was defined by their ability to keep technology systems up and running. The best CIOs look far beyond the enterprise firewall and are open-minded to diverse perspectives and views across a broad ecosystem of peers and partners.

The Cookbooks exemplify how IT can enable and accelerate business innovation by providing new tools, digital platforms and skills. The imaginative use of innovation can involve entire shifts in business models. It might also affect the more tactical use of imagination, such as creating a dedicated innovation unit within an existing business, such as at Munich Re, or using hackathons to develop new customer services.

Erwin Verstraelen, CDIO at the Port of Antwerp, says creating an innovative culture is not a one-time task. Imaginative CIOs look to enable experimentation continually. Master Chefs know that fostering an innovation culture means focusing on the funding, expertise and technological capabilities for long-term success.

Continual experimentation takes on many forms, yet imagination always relies on openness. Red Hat CDO Margaret Dawson has fostered an open culture encouraging collaboration across organisational silos. Koen Vermeulen, group CIO at Orange Group, has adopted open sourcing and processes to support a culture of constant collaboration.

Being imaginative also requires a range of approaches. At Prosegur, Managing Director Javier Cabrerizo says "creating the new" requires a separate team that experiments with emerging technologies. At Żabka Group, Executive Vice President Tomasz Blicharski has created a new digital team implementing breakthrough concepts.

One thing is sure: ongoing digital transformation means the pressure is on CIOs to evaluate emerging technologies quickly and inform their boards about how these advances will push dramatic change this decade and beyond. Corporate survival will depend on creative interventions to embrace these advances and fend off newcomers:



Koen Vermeulen
Group CIO, Orange Group

"The best way to innovate is to use open technology, have open processes and create an open culture."



Erwin VerstraelenCDIO, Port of Antwerp

"Innovation should be everywhere, but we must give it an opportunity to surface and blossom."



Geert Standaert

CTO, Proximus

"Always look forward, never look back."



Åshild Hanne Larsen

Vice President of Subsurface Excellence and Digital, Equinor

"The best way to predict the future is to create it."



Barbara Poli

CIO, Grandi Navi Veloci
"If you can dream it,
you can do it."



THREE PURPOSEFUL

The best digital leaders ensure corporate cultures align with the emerging digital world

	Demonstrated by	The knowledge and hard skills required	The soft power required
A.	Having clear business outcomes	Business acumen In-house ethnography	Clear communicationClear articulation ofOrganisational Strategy
В.	Sustainable outcomes	Environmental, Social and Governance (ESG) expertise	Storytelling and clear communications skills
C.	Being able to deliver change and transformation	 Processes to easily engage with Customers Change management 	Courage, InspirationVision, EngagementStakeholder managementC-Suite credibility
D.	Accelerating new business solutions	AgileLeanShort sprints	AutonomyMotivationDiversity
E.	Delivering on promises	 Relevantly skilled people Appropriate tools and resources Appropriate Org Structure 	Focus and commitment Accountability and Trust

Organisational culture is one of the most critical differentiating factors separating successful digital transformations from unsuccessful ones. The CIOs from around the globe featured in our Cookbooks make it clear that the traditional IT structures and methods of the past are not fit for the fast-developing business requirements of tomorrow.

The watchword is purpose: Master Chefs identify clear business outcomes and create a purposeful IT organisation where they, their teams and their ecosystem partners understand clearly what needs to be achieved. Moreover, reaching these targets is satisfying for the people who meet them and sustainable in terms of their environmental impact.

David Jack, CTO at dunnhumby, says there are better formulas for orchestrating large-scale change than top-down intervention. Instead, CIOs need teams of trusted experts with large amounts of autonomy, creative licence and accountability for delivering change. Smart CIOs enable this shift through automation: let machines do the repetitive work and let talented employees focus on high-value activities.

Perhaps the most visible development in modern IT practices is to employ Agile methods to accelerate the delivery of new business solutions. Take Kristin Lindmark, CIO at SPP, who says Agile helps to accelerate change, and Michal Paprocki, Group CTO at Euroclear, who already delivers over a third of all Agile projects and plans to accelerate adoption further.

By applying lean thinking and Agile methods, such as short sprints, Master Chefs are baking success into the digital projects they undertake on behalf of the business. This new Agile way of working must be adopted cross-business and with solid forms of governance so that everyone works to agreed standards.

Maersk, for example, has developed a mission and set of processes that enable staff to engage more actively with end customers, backed up by Agile methods and a clear focus on business outcomes. For Breno Gentil, Senior Director of Digital and Technology Europe at Heineken, Agile is a mindset that can be applied to any business area.

What's clear is that purposeful CIOs develop a strong internal culture. Master Chefs foster organisational approaches to diversity, inclusivity, flexibility and sustainability that extend across individual characteristics, values, beliefs and backgrounds to ensure corporate cultures align with the emerging digital world.



Sanjay Patel Group CIO, Tate & Lyle

"Our purpose of improving lives for generations guides every action we take and every decision we make."



Melanie Kehr CIO and COO, KfW

"It's about starting an agile movement bottom up, letting employees participate in defining the setup."



Margaret Dawson
Vice president and chief digital officer,
Red Hat

"I am passionate about inspiring teams and colleagues to change the world for good. What is needed is courageous leadership and a shared vision."



Marco Moretti Group CIO, A2A "Delivery must t

"Delivery must take place bottom-up rather than top-down to ensure inclusivity across the workforce."



Carsten TrappGroup CIO, Carl Zeiss AG

"Successful CIOs and their teams deliver on their promises."





FOUR AUTHENTIC

The best digital leaders lead successfully by encouraging and inspiring others

	Demonstrated by	The knowledge and hard skills required	The soft power required
A.	Having a clear vision	Organisational IQSector IQGlobal trends	OpennessPassion
В.	Leadership	 Understand the 'rhythm' of the business Flat structures Meritocracy system for advancement Collaboration and knowledge share tools and processes 	 Humility Inspiring Being a 'conductor' Connector Sensitive to impact Communicator
C.	Digital Talent attraction, development and retention	Benefits of DiversityOrganisations diversity goalsHiring practises	 Inspiring leadership Role modelling Being a sponsor, mentor and coach



The best digital leaders clearly envision where the organisation should be heading and can bring others on that journey. When new challenges arise, people within the IT department and across other lines of business look to these CIOs for guidance.

So, why do people trust these leaders to make the right decisions? Because they're authentic – and their passion for their role and desire to make the business more successful shines through. Nik Puri, Senior Vice President of IT at FedEx, believes personal authenticity is critical for any successful leader.

Crucially, authentic leaders don't dictate the direction of travel. The best CIOs show humility. They lead successfully by encouraging and inspiring others, working across silos to eliminate obstacles that block change. The Master Chefs in our Cookbooks use terms like conductor, orchestrator and connector to describe this proactive and supportive approach.

Javier Cabrerizo, Managing Director at Prosegur, says leadership is something people give you rather than from hierarchical authority structures. Great leaders connect with the rhythm of the business and understand how fast it can move. Pushing the pedal too hard creates resistance. Authentic leaders are always sensitive to the impact of change.

Master Chefs also recognise the importance of communication. They understand that the correct language is crucial to gaining organisational responsibility and influence. Digital transformation is often about implementing systems and services, but the board is interested in outcomes, not bits and bytes.

Successful CIOs explain the impact of digital transformation in terms the rest of the business understands. People think of you as an authentic leader when they know what you're saying. So, instead of talking about technology stacks, Kensington Mortgages COO Mark Foulsham focuses on business terms, such as earnings and customer impact.

Master Chefs celebrate their success and use storytelling to engage the organisation. Still, they do so in a way that shows how the actions they intend to pursue are best for the company rather than the CIO as an individual. They are, in short, always authentic.





Adam Marciniak
CTO and CDO of CCC Group,
former CIO of PKO BP

"Humility is about listening, observing, finding the best values and demonstrating the best behaviours."



Angel Valero

Corporate CIO, Telefónica

"I give each team 100% independence, but I give 100% personal dedication to helping them solve a problem."



Cindy Hoots

CDO and CIO, AstraZeneca

"When you focus on the people, you will get the results."



Sven Egyedy

CDO, Federal Foreign Office of Germany

"Take full responsibility for your leadership role – don't delegate this duty."



Guido Lemiere

CIO, SNCB

"Great responsibility brings great accountability."

FIVE DYNAMIC

The best digital leaders adjust rapidly to fast-changing circumstances

	Demonstrated by	The knowledge and hard skills required	The soft power required
Α.	Being a Change Agent	Automation toolsOpen AIPublic Cloud	 Courage, Inspiration and Vision Persistence Stakeholder management and C-Suite credibility
В.	Partnering with externals	How to bring systems and services together	Building trusted partners
C.	Being a rapid responder	 Open source Agile development Problem-solving Distinguish 'urgent' from 'important' 	 'Love the problem, not the solution mindset' 'Experiment and fail fast' mindset

 20

One of the key messages in our Cookbooks is that modern CIOs are dynamic. If change is now the overriding constant in business, whether responding to crises, adopting digital services or switching business models, then adopting flexible business structures and IT systems based on open-sourcing and Agile development methods must be the way forward.

However, this work is complicated. Legacy technology is a universal problem that all CIOs must tackle. Master Chefs are replacing legacy systems with web-based applications that flex to meet fast-changing external demands. While it's a huge task, it brings big rewards.

Natasha Davydova, Head of Infrastructure and Information Security at Allianz Technology, is accelerating digital transformation by decommissioning legacy systems and adopting cloud technologies. At SPP, CIO Kristin Lindmark has helped migrate 95% of the firm's legacy platforms to the cloud and created yearly savings of €5 million.

CIOs that break free from the old world of legacy systems and waterfall techniques create the dynamic IT department that a modern business requires. Instead of a proliferation of discrete systems and silos of data, Master Chefs bring systems and services together on modern, cloud-based platforms. They help the business procure its own solutions safely and securely.

Effective CIOs work with external partners tactically to develop flexible platforms for change. With trusted partners developing cloud-based solutions to business problems, internal teams focus on strategic issues that generate value for the enterprise. For example, open-source standards and scalable cloud platforms have enabled dunnhumby's 3,000 staff to employ standard tools and share vital data resources.

New challenges continue to emerge and often from unexpected places. AstraZeneca CIO Cindy Hoots and her team had to support the development of a coronavirus vaccine in months rather than years. Automation tools, such as robotic process automation and artificial intelligence, provided a practical way of amplifying the contribution of human talent to meet stretched business goals.

Incredible results in such extreme circumstances show the value of a dynamic approach to business technology. CIOs will continue to face new challenges, but they must love the problem rather than the solution. Technology is simply the conduit to reaching business objectives – and the more flexible the platforms, the better for all concerned:



Martin Bellamy

CIO, Houses of Parliament Restoration and Renewal Authority

"Seek out the big challenges and plan for success."



Dr Bijna Kotak Dasani

Executive Director, Morgan Stanley

"If you don't understand the problem, you will never reach a satisfactory solution."



Mark Foulsham

COO, Kensington Mortgages

"Leaders of the future will be able to adjust rapidly to changing circumstances."



Melissa Evers

Vice President at Intel

"Becoming a successful manager is like breaking out of the chrysalis. It requires a change of behaviour from rigidity to flexibility."



Thomas MannmeuselGroup CIO, Webasto Group

"My greatest fear in business is to become irrelevant."



SIX ADAPTABILITY

The best digital leaders keep an eye on new problems

	Demonstrated by	The knowledge and hard skills required	The soft power required
Α.	Escaping your comfort zone	Risk AnalysisScenarioPlanningTech-led solutions	'Can do' attitudeLearning Mindset
В.	Being chameleon-like	Options for handling intractable challenges Problem-solving	FlexibleDiverseOpen
C.	Being a 'sponge' for knowledge	Comprehensive understanding of the environment	Continuous learning mindset
D.	Driving exponential growth	• Intrapreneur	Growth mindset

Finally, digital leaders are adaptable in an era of almost constant change. They recognise that flexibility is an essential ingredient for a successful technology career. They can adapt, almost chameleon-like, to any conditions they encounter and excel at delivering innovative solutions to what might seem like intractable challenges.

The speed of technological change continues to quicken. In 2021, digital leaders were consumed by efforts to embrace new ways of working in response to the pandemic. In 2022, they started exploring how their businesses might deal with the nascent metaverse. Today, new generative AI technologies threaten an overhaul of businesses and occupations.

CIOs cannot afford to sit back and wait. Pioneering digital leaders keep an attentive eye on new problems to solve and harness innovative solutions from an ecosystem of people and partners. They work with the business to develop technology-led solutions to their peers' challenges. They are always ready for the following significant change.

In many ways, adaptable digital leaders act like sponges. They seek out new knowledge and approaches, surrounding themselves with trusted experts. CIOs' ability to adapt to exponential change and work with a broad church of partners and technologies is vital.

Take the example of Sam Kini at Unilever, who believes innovation can help her company solve its business challenges and streamline its structure, with technologies such as Al and the metaverse bringing further opportunities for improvements to products and processes.

The rapid pace of change has become the new normal in our digital world. One thing we know for sure, however, is that great digital leaders adapt to whatever comes their way. Master Chefs apply a 'can-do' attitude. They always move forwards and look to escape their comfort zones whenever they can:



Massimo Rosso
ICT Director, RAI
"Curiosity and adaptability
are essential ingredients for
a successful technology
career."



Breno Gentil
Senior Director Digital &
Technology Europe, Heineken
"Our thoughts make up
our lives."

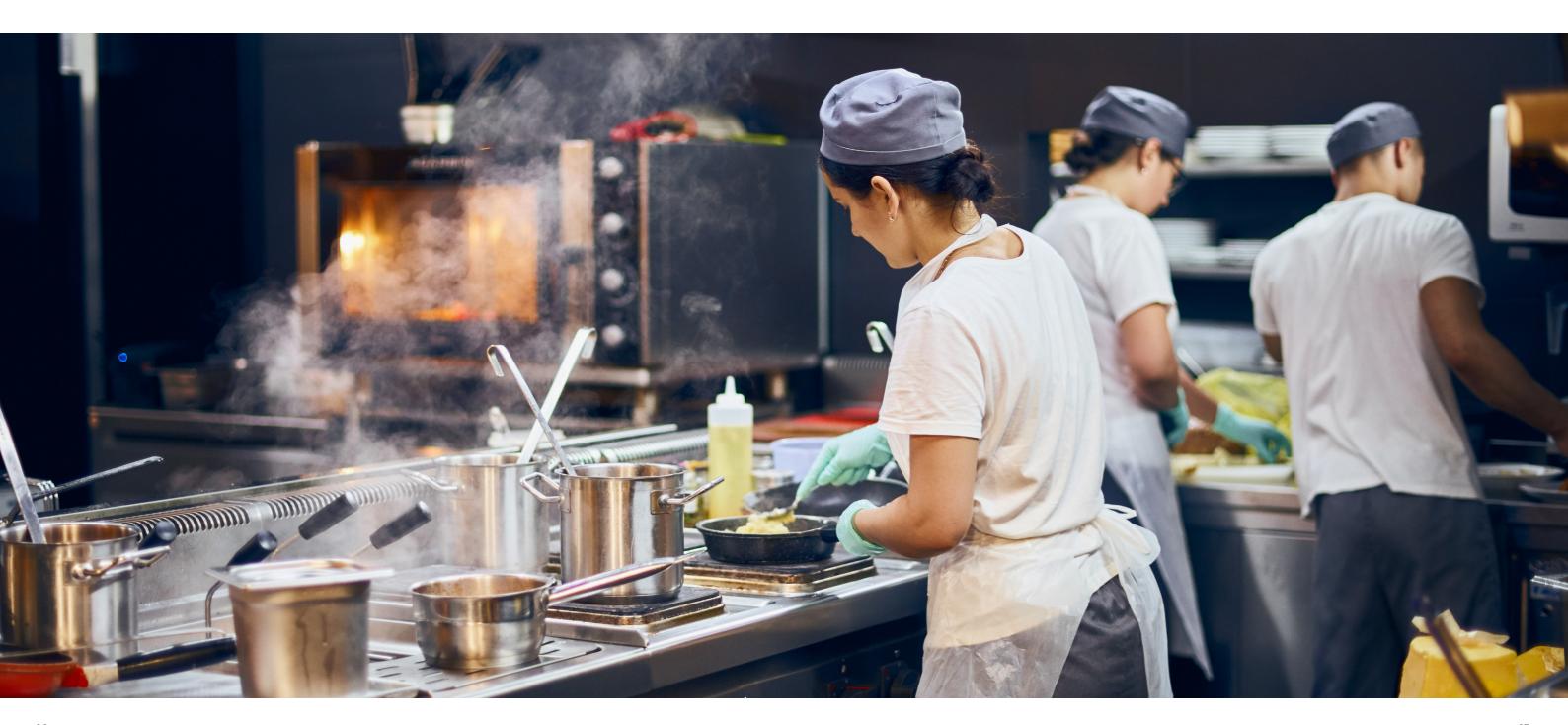


Stuart Birrell
CDO and CIO, EasyJet
"Management maturity
is about stepping out of
your comfort zone while
staying close to your best
qualities."



Kristin Lindmark
CIO, SPP

"A career is a marathon,
not a sprint."





CONCLUSION

Our Cookbooks clarify that the best CIOs aren't just experts within their domain but also capable business leaders who help their organisations embrace the challenges that define the modern world.

While a strong awareness of digital transformation is one of their essential qualities, the most successful IT leaders – or the Master Chefs, as we refer to them – excel above and beyond the technology department. These leaders possess characteristics that help them change their businesses for the better.

For traditional IT managers, the characteristics that we identify – curiosity, imagination, purposefulness, authenticity, dynamism, and adaptability – might seem far removed from the focus on operational excellence that once defined a successful technology chief. However, our research exemplifies how these six traits comprise the DNA of modern digital leaders.

What's more, there's good news for IT leaders who feel they're not yet ready to reach the heights of the Master Chefs – you too can create a high-quality Digital Kitchen. Ministry of Defence CIO Charlie Forte makes clear that any leader can successfully transform an organisation with persistence and patience.

CIOs continue to be uniquely positioned to help businesses navigate our digital world. While many IT leaders still run company infrastructures and applications, their transformative work during the past few years has pushed technology to the forefront.

New challenges abound. CIOs will have fresh opportunities to bring the best offerings from their Digital Kitchen to the boardroom table. We'll track and trace these challenges at CIONET as part of our ongoing research efforts and record and emphasise digital leaders' successful responses in further editions of our Cookbook.

Now is the time to be a Master Chef and help the business apply technology to deliver new competitive advantages.

 \sim 28

AUTHOR

ABOUT THE SPONSORS



Roger Camrass
Researcher director

A pioneer of today's Internet as an ARPA research fellow at MIT in the seventies, Roger has spent over forty five years helping corporations harness the power of new technologies such as cloud, mobile communications, e-commerce, voice recognition and satellite. He was a partner at EY responsible for e-commerce during the dot.com boom. He is a graduate of Cambridge University and MIT, and a visiting professor at the University of Surrey.

See rogercamrass.com



About Intel

Intel (Nasdaq: INTC) is an industry leader, creating world-changing technology that enables global progress and enriches lives. Inspired by Moore's Law, we continuously work to advance the design and manufacturing of semiconductors to help address our customers' greatest challenges. By embedding intelligence in the cloud, network, edge and every kind of computing device, we unleash the potential of data to transform business and society for the better. To learn more about Intel's innovations, go to newsroom.intel.com and intel.com.



About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Awardwinning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organisations prepare for the digital future.

To request a copy of the CIONET Cookbook, visit our website: **cionet.com/cookbook**

The technologies available to business are becoming ever more sophisticated. The development of the IT landscape has been accelerated by the pandemic, as corporations realise the importance of digital solutions in creating the virtual office, bringing together supplier and customer and ensuring the continuing success of their businesses.

The CIONET Cookbook uses the analogy of a five-star restaurant to explain the importance of optimally integrated technology, with the CIO as Master Chef. In order to provide the best service to its customers, a top restaurant must have the right atmosphere, an inviting menu, a well-equipped kitchen, talented and committed front-of-house and kitchen staff and smooth-running processes that ensure an enjoyable experience for diners. The Master Chef brings all these elements together. Likewise, businesses need to be able to offer great service to customers and business partners, an upto-date menu of IT solutions, access to the best technology and a great team to implement those systems, all under the leadership of a CIO with vision and energy.

The CIONET Cookbook comprises recipes for success from 25 of today's most influential and dynamic information technology leaders, across all sectors of business. In it, readers will discover:

- How David Jack transformed dunnhumby's data analytics services by putting the customers first;
- Why Ángel Valero is competing with the robots of the future to upgrade Telefónica's telecommunications business;
- How Margaret Dawson of open-source software company Red Hat has extended the idea of openness into all aspects of business function to promote a culture of innovation and exchange;
- Why Charlie Forte, CIO of the UK's Ministry of Defence, put transformational technologies on the front line to create a cohesive, integrated and adaptable IT framework.

The CIONET Cookbook is an invaluable tool for IT executives at all levels, in businesses of all sizes and across all sectors.

CIONET's mission is to help IT executives become both more at ease and more successful in their jobs. With the largest membership of corporate digital leaders across Europe, Latin America, US and Australia, CIONET has the expertise and pioneering vision to address any IT management challenge. CIONET opens up a whole new universe of opportunities in IT management, helping its members not just to keep up with change but ultimately define it.

