

Software development & outsourcing



Let's win the race together!

Desktop, Mobile & Cloud Development



2016

Contents

Captain's Journal / CEO's Thoughts	2
Ship Technical Details / Codespring Facts	3
Flag State / Romania & Cluj Facts	4
On Board Services / The Business	5
Sailing Together / The Big Picture	6
Experienced Crew Operating the Ship / Software Development	7
Known Seas / Industry Expertise	9
Crew Expertise / Technology Expertise	10
Growing the Crew / Codespring Excellence Plan	11
Expanding Your Fleet / Outsourcing	12
In The Shipyard / Codespring Products	13
Get Your Sailing Licence / Best Practices and How Tos	14
Sea Journeys / Success Stories	15
Set Sail! / Heading to the Future	17
estimonials	18

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Captain's Journal



CEO's Thoughts

Dear Partners and Friends,

In 2016 we are about to face some of the most audacious technological realities that the industry was developing and implementing in the last years. The IoT (Internet of Things) universe is spreading across the modern society and is rapidly expanding into cyber-physical systems that contain smart homes, smart grid, intelligent transportation and smart cities technologies.

With 18 years of complex software systems development experience on board, Codespring has welcomed the challenges of the new industrial, home, vehicle and public systems automations. In these times of hyper connectedness and major transformations the main feature for a software engineering team should be adaptability. That is why Codespring has centered its working model around fine-tuning.

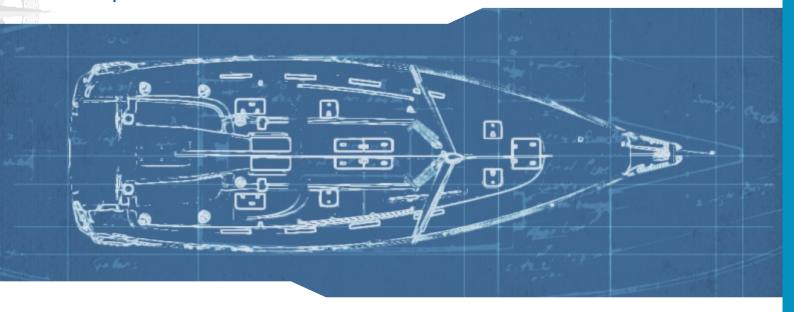
Genuinely different, Codespring stands apart from the Cluj IT community as a team of experts and software engineering enthusiasts able to responsibly tune in complex projects.

Cluj-Napoca, as one of the leading R&D and innovation poles of Romania, supports the IT community's efforts to emphasize the potential of this picture sque city from Transylvania, Romania.

Holding in high regard those who trusted us for years, we are ready to put our expertise at your service.

Yours sincerely, Levente Szélyes CEO

Ship Technical Details



Codespring Facts

Vision:	to build great strategic partnerships
Mission:	to provide high quality expertise and efficiency for full software development life cycle
Core Business:	software development and outsourcing
Ownership:	private
Headquarters:	Cluj – Napoca, Romania (member of the European Union)
Working Experience:	18 years
Working Facilities:	2 (located in Transylvania, Romania)
Team:	+55 employees
Engagement Models:	on-site, near shore and offshore
Languages:	English, Romanian, Hungarian and German
Infrastructure:	virtualization, redundant internet VPN and VOIP connections
Technology Expertise:	desktop, mobile and cloud technologies
Methodology:	Agile, V model, Extreme Programming
Team Education:	Professional academic degree: BScIT, MScIT, MCP, MCTS and SUN certified Java developers ISTQB Certified Testers ISO 9001:2001 Certified Internal Auditors
Certificates:	Microsoft Gold Certified Partner ISO/IEC 27001 Information Security Management System in progress ISO 9001:2008 Quality Assurance Certification
Memberships:	Cluj IT Innovation Cluster (founding member) Romanian Association for Electronics and Software (ARIES) Employer's Association of the Software and Services Industry (ANIS)

Codespring Statistics:

Share of strategic partners in total portfolio:	85 %
Customer retention rate:	90%
Industries of expertise:	9 main industries + other
Employee retention rate:	95%

Flag State



Accession to EU:	2007
Location:	CEE
Population:	19,511,000 ¹
GDP growth rate in 2015:	3.7% ²
ICT % to GDP in 2015:	6% ³
ICT activity growth in 2015:	14% ⁴
ICT turnover structure 2015:	Telecom: 58.4 %
	Software & IT
	services: 41.6 %
ICT export /turnover 2015:	65%
ICT Government tax facilities:	no income tax
COUNTRY RANI	
Deloitte's CEE Technology Top 50 2014:	3 th place
2012 Jones Lang LaSelle Top 1 Outsourcing Destinations Glob	
A.T.Kearney Global Services	13 th place
LUCATION MINEX 2010.	

CLUJ-NAPOCA.FACTS.

Ranking:	2 nd city in Romania
Location:	NW, Heart of Transylvania
Population:	324,576 + cca. 100.000 students
Accessibility:	International airport (38 EU and pan-EU
	destinations)
Academic center:	11 universities (UBB, UTCN)
IT Hub:	+ 300 IT companies
IT Center:	1 st IT export hub of Romania
	(78% of Romanian IT exports)
Software engineers:	+ 10000 (active)
ICT graduates:	~ 1000 students / year
R&D centers:	~ 200 research units and laboratories
Technology parks:	Tetarom I, II, III, IV
Innovation parks:	Cluj Innovation City (240 ha)
	Regional Center of Excellence for Creative
	Industries – CREIC
Multiculturality:	Romanian, Hungarian, German, Dutch, Italian,
	Serbian and Jewish communities
Multilingual education:	Romanian, Hungarian, German, French, English
	languages study lines for humanities and STEM
Major Investors in ITC:	DE, UK, USA, NL, A, F, FI, SE
Foreign business clubs:	Dutch, German, British, French, Italian
Economy engines:	Energy, IT&C, Business Services, Medical
	Services, Tertiary Education

CLUJ-NAPOCA AWARDS

Forbes Romania	2rd rank in Best Cities for Business 2016
European Youth Forum	Cluj-Napoca, European Youth Capital in 2015
Eurostat	Cluj-Napoca, the Capital of Tolerance, 2014
	Cluj-Napoca, the Friendliest City in Europe, 2014
"Respire" Association in partnership with "We Demain"	Cluj-Napoca, the City with the Cleanest Air in Europe
magazine	
Huffington Post	Cluj-Napoca, the City that will Shake Up the Art World in the 21st Century
Forbes Romania	Cluj-Napoca, Economic Capital of Transylvania, 2014
KPMG and the Management Authority for the Regional	Cluj-Napoca, the most attractive growth pole in Romania
operational Programme (AM POR)	

^{1, 2, 3, 4} National Institute of Statistics of Romania.

Fitch Sovereign Rating 2015:

Moody's Credit Rating 2015:

Standard & Poor's Foreign Rating:

www.codespring.ro 4

BBB

BBB-

Baa3, stable

On Board Services



The Business



 $Founded in {\it Cluj-Napoca}, Transylvania\ region, Romania, Codespring\ is\ about\ providing\ expertise\ in\ software\ development.$

As a Romanian software company, we develop custom solutions and add-ons covering the entire life cycle of a complex software development project.

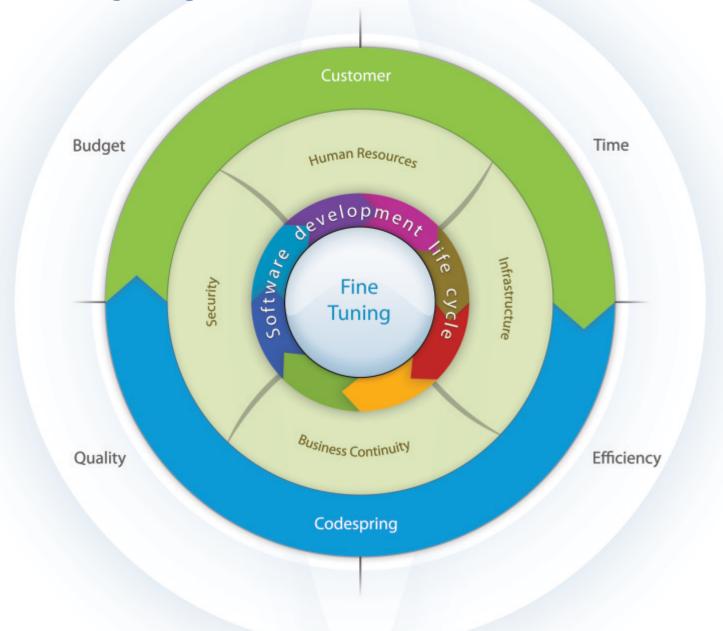
In the process of building strategic partnerships with our customers we strive to be flexible and creative. Should you be a software company, a software department or another industry specific business, Codespring will always look after your expectations and needs in relation with a software based solution.

Our technically skilled team of software engineers can undertake projects at any stage of development, from requirement analysis & specifications, architecture design, or implementation, to testing, validation and support.

Choose your ticket and the journey for developing quality software may begin!



Sailing Together



The Big Picture

Codespring's proposition to all its stakeholders is a common journey with a common agenda.

By this logic, any software development project starts with mapping together the conditions of running the processes. Requirements of time, budget, quality and efficiency will be coupled with given infrastructure, human resources, security and business continuity features.

Fine tuning all these variables of a complex equation is the key success factor of state-of-the-art software and service. Codespring understands the diversity of situations that each customer and each industry may have, which is why we are open to combine resources and processes in the optimal way.

Correct business analysis and appropriate requirement specifications will set the tone of any new software development endeavour. Mutual trust opens communication and enhances creativity. Often, software innovations occur when all parties focus on the final outcome: to serve well the end-users (individual or corporate).

 $Sailing \, together \, is \, the \, art \, of \, cooperation.$

Experienced Crew Operating the Ship



Software Development

Keen on achieving highest performances in full software development life cycle, Codespring has a specific approach towards software development.

Business Requirements

In order to guide the design of a future system, documenting business requirements is critical. This step will help the team to understand what needs to be done in order to deliver value.

Use Case Analysis

Understanding how interactions with a system will or should occur has a deep impact on the design of the system. Defining usability prepares the terrain for the entire development.

Estimation

The overall efforts of developing software must be estimated as accurate as possible. Several estimations techniques serve this process and all parties are aware of potential variations.

Architecture Design

Planning the actual software development process starts with setting the structures of the system. Next, low-level components and algorithms will take over.

Development

The core activity of any software development process is coding. Quality of code may be guaranteed by coding standards and code analysis system.

Integration

Integrating software components, units, subsystems has as objective the setup of a functional system. The better the integration, the faster the system may be used.

Testing

Potential errors or deviations may be solved by: unit testing, integration testing, system testing, user acceptance testing, etc. The objective is to make sure that the system runs as expected.

Maintenance

Software Maintenance may focus either on adapting and perfecting the systems in use, either on correcting and preventing errors. Once this activity is planned, the team is ready for action.

Be Agile. Adjust The Sails!



Known Seas



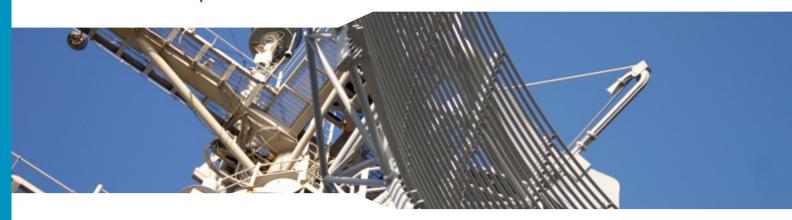
Industry Expertise

 $Codes pring \ has \ built sound \ working \ experience \ in \ a set \ of \ 9 \ major \ specific \ industries. We have been \ delivering \ both \ long-term \ customized \ software \ development \ projects \ and \ short \ term \ standard \ projects.$

Our main asset consists in having a well prepared Business Analysis Team, capable of delivering state of the art Process Break Down Charts as starting point for any software development in any industry sector.

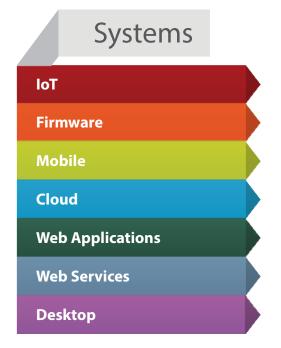
INDUSTRY	Special notes
Banking & Finance	online banking system, ATM, self-service banking system
Building & Construction	5D model, CAD
B2B Logistics	world #1B2B communication system
Color Management	global leader in colour management solutions
Media & Entertainment	professional video streaming
Education	research management system
Energy & Power Supply	solar power and heating systems, smart home
Travel	latest mobile technology
Event management	Tradeshow management

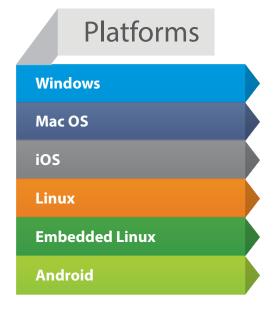
Crew Expertise

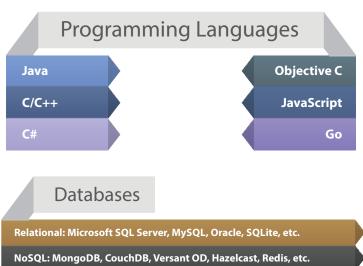


Technology Expertise

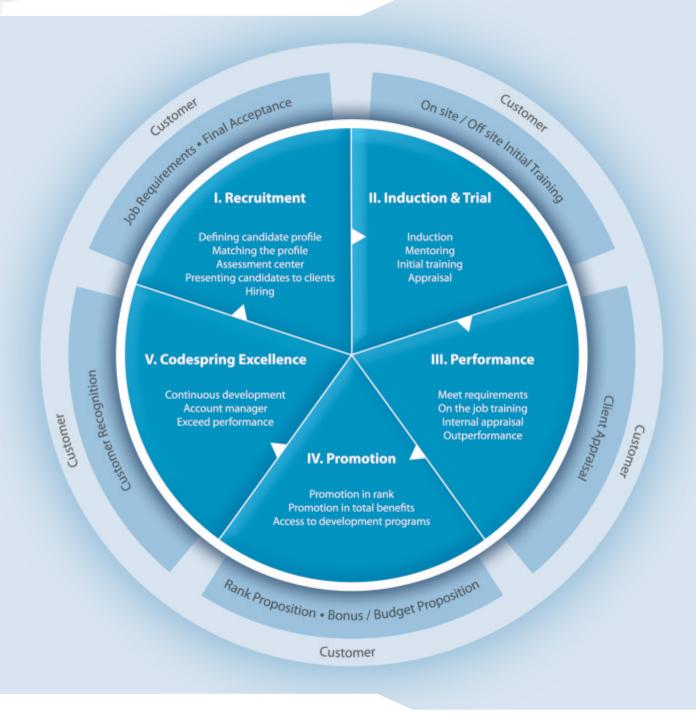
Over the last 18 years of work in full software development life cycle, Codespring has shown outstanding performance ability to deliver top notch solutions developed on various platforms:







Growing the Crew



Codespring Excellence Plan

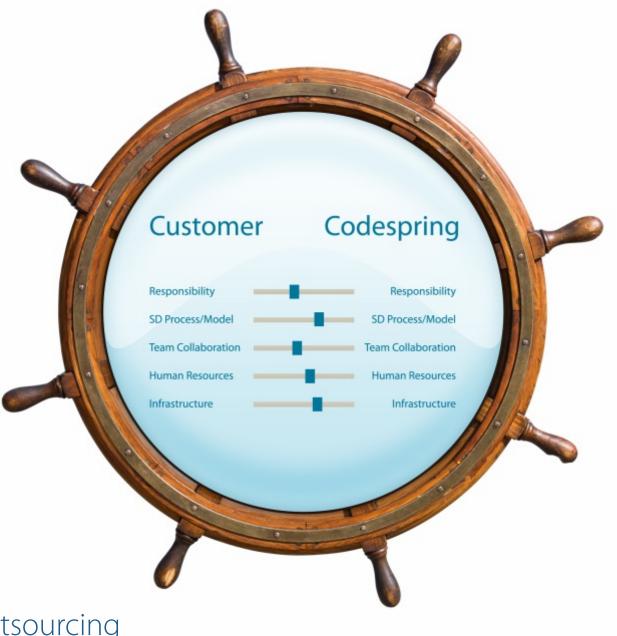
As a performance oriented company, we consider our colleagues' career as important as they do. In order to achieve excellence in work, the HR team has developed the Codespring Career Management Plan.

Codespringers are generally dynamic, well skilled, experienced software developers. People who do really well at Codespring have specific strengths in specific areas. Leaders, architects, experts and junior software engineers find here a place to upgrade themselves.

As we have rather long journeys to handle, a skilled and motivated crew is essential for major software development success stories.



Expanding Your Fleet



Outsourcing

Codespring has cumulated 18 years of experience in undertaking outsourcing agreements. The reason why some of our contracts are as old as our company is fine-tuning.

Fine-tuning outsourcing is a key concept that governs our delivery model. There are five major elements that must be finetuned when setting the foundation of any project:

- **Responsibility** what will each party be accountable for?
- Software Development Process / Model which will be the best method?
- **Team Collaboration** how will provider and customer team work together?
- **Human Resources** how will provider and customer set up the team? What roles?
- **Infrastructure** what can each party bring to the project's infrastructure?

When all these elements are well coordinated, the project will reach its maximum effectiveness, disregarding if the engagement is near shore, offshore or on site.

In The Shipyard





Codespring Products

iSpeedCam

Safe at high speed!

Target audience:	Smartphone owners (iOS, Android)
Focus:	Avoiding speed tickets
Main Purpose:	Traffic safety camera warning system
Launched:	2009
Web:	www.ispeedcam.info

iSpeedCam aims to protect drivers from costly speeding tickets and to improve careless and inattentive driving habits.

The application alerts for most traffic cameras (fixed speed cameras, mobile cameras, police spots and red light cameras) and has an editable world-wide camera database.

The iSpeedCam App features online and offline graphical GPS tracking and Google map integration, calculates statistics related to track distance, total time, maximum speed and works both with metric and imperial unit system.

Productis

Built to yield!

Target audience:	Food industry (manufacturing &
	processing units)
Focus:	Dairy & meat industry
Main Purpose:	Production control and traceability
Launched:	2008
Web:	www.codespring.ro/products/productis

Productis is a solution for production control and traceability.

The application covers the complete value chain of production and handles purchase orders, reception of goods, raw material inventory, processing, packaging, storage, inventory, deliveries and invoices.

The software is customizable to meet specific requirements and features real time entries via Smart Phones.

Productis puts a clear and secure document and data management system to your disposition and allows work with remote teams.



Get Your Sailing Licence



Best Practices and How Tos

1. Define your project:

- Outline your idea and try to make a list of priorities;
- Analyse the way you want to undertake remote work: nearshore or offshore;
- If the project is unclear and will be subject to consistent changes, try the agile method and ask for prototyping;
- $\blacksquare \ \ Use the same document when asking for software development outsourcing offers.$

2. Select the right outsourcing partner:

- Make a list with all essential selection criteria (industry/technology/consultancy capability/communication language/required HR/interview availability/team continuity, etc.);
- Request for quotes, ask for references, plan a visit and make a trial project;
- Set a post-trial project analysis and highlight lessons learnt;
- Take a decision.

3. Fine tune the cooperation:

- Set clear responsibilities;
- Choose the software development method that suits you best;
- Draw the way for team collaboration;
- Specify how the teams will be formed;
- Set each party's contribution to the project's infrastructure.

4. Control the process:

- Set and follow the development plan;
- Set stand-up meetings, weekly status reports and set a permanent contact person;
- Point out potential issues and communicate them in order to get them solved.

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Sea Journeys



Success Stories

P92 It Solutions, Hungary

- **Customer Type:** Application development and knowledge management service provider, with special impetus on e-commerce and web portal development.
- **Collaboration:** outsourcing partnership in small to medium size projects for over 9 years. Main projects: gas distribution management software for consumers; customer lifecycle management platform for handling web content management, e-mail marketing, digital marketing, customer acquisition, retention and loyalty programs for BMW.

Graphisoft, Hungary

- **Customer Type:** innovator and industry leader in architecture and building & construction industry. Provider of the industry's first BIM Software for architects, provider of the world's 1st real-time BIM collaboration environment and the world's 1st fully integrated building energy modeling application.
- **Collaboration:** architecture design, implementation, unit test, maintenance of various versions of ArchiCAD, Graphisoft's flagship product. Our team has been working on the ArchiCAD engine, on developer support tools and on various add-ons (MEP Modeller for modeling of ductworks and plumbing).

Campana & Schott, Germany

- **Customer Type:** project and process management service provider, with focus on management and technology consulting. The company has long-term, successful business relationships with well-known customers from all branches.
- **Collaboration:** full life-cycle software development of specific employee time accounting information software module. The short-term project aimed to host holiday and sickness management for corporate customers.

Wind River, USA

- **Customer Type:** world leader in embedded and mobile software. Wind River has been pioneering computing inside embedded devices since 1981 and its technology is found in more than 1 billion products.
- **Collaboration:** full life-cycle software development of an advanced FM Radio application for a car radio system on Android. It's capabilities include background running, RDS data processing, TA/PTY/EMERGENCY interruptions and others. It uses an Android NDK library to interact with the Radio Tuner on the hardware platform.



Sea Journeys



Success Stories

Datacolor, USA

- **Customer Type:** global leader in colour management solutions and colour communication technology. The company has provided innovative solutions for over 40 years for the world's leading brands enabling them to calibrate cameras, monitors, printers, HD TVs, iPads and iPhones.
- **Collaboration:** full life-cycle software development and full life-cycle testing of Datacolor's flagship software products for over 7 years. The Codespring Team is responsible for complete computerized systems for color measuring, matching, quality control, and communication to industries who must manage color accurately from design throughout production to marketing. Design, documentation, implementation, testing, bug fixing, quality assessment activities were delivered.

Teracue, Germany

- **Customer Type:** pioneer of video broadcasting IP networks in the 90s, today well-known manufacturer of hardware and software products for IPTV solutions and video networking, distributor of video measuring equipment, signal monitoring and analysis devices and fibre optics transmission technology.
- **Collaboration:** full life-cycle software development in IPTV solutions for over 12 years. Codespring has been developing an iCue Streaming System for intranet IPTV, performing real time encoding and digital distribution, management and recording of TV channels and camera signals(encoding, live streaming, on-demand streaming).

Seeburger, Germany

- **Customer Type:** market leader in business-to business integration, long standing SAP partner, having 19 subsidiaries in Europe, Asia and North America, winner of Information Technology Industry's 2012 World's Best Awards for SEE FX.
- **Collaboration:** full life-cycle software development in order management and logistics for over 7 years. The Codespring Team is working on an automated ordering and delivery system and an online order management system for the automobile supply sector.

Vico Software, USA

- Customer Type: software Service Provider for the building and construction industry. Vico's 5D Virtual ConstructionTM solutions pioneered the category of BIM for Construction, and they remain the industry's most integrated approach to coordination, quantity takeoff, cost estimation, project scheduling, and production control.
- **Collaboration:** full life-cycle software development of Vico Software's flagship virtual construction products for over 10 years. Add-ons, building design modules, product functionalities and support tools of the Vico Office Package have been developed by our team.

Set Sail!



Heading for the Future

As a final note, the Codespring team of experts is willing to share with you, our potential partner, some of its future plans and commitments.

Firstly, **Codespring** is devoted to its vision of building great strategic partnerships with specialized software development companies and teams, contributing to the evolution of IT&C industry.

Secondly, **Codespring** as a consolidated company with a performing team is dedicated to become one of the most challenging software development teams in South-Eastern and Central Europe, using state of the art technologies.

Last, but not least, **Codespring** aims to engage its creativity and intellectual potential in developing software products and systems of the finest quality, always keeping an eye on the social responsibility and ethics of any endeavour.

Looking forward to meeting you and learning more about the huge potential within our possible collaboration,

Codespring Team.



Testimonials



Brian Levey Vice President, Datacolor

We have always been very satisfied with the services Codespring provided in the last 10 years since we started working together. Their developers are knowledgeable pros you can rely on.

Attila Bárdos Director R&D, Vico Software

We are glad to have discovered this team. Agile and fast learners, they implement all technical requirements. They promised to deliver high quality and efficiency, and they Do It day by day!

Boros László Department Manager, P92 It Solutions

Over our 11 years of collaboration for developing professional video applications, mutual trust and respect were the fundaments of our partnership. Technically skilled, receptive and prompt, they continuously uplift their knowledge and expertise.

Lorenz Zoltán Product Manager, inPhase

The Codespring team is a self-motivated partner, with good time and task management skills, who takes initiatives in their projects, and with whom we can communicate efficiently without language or geographical boundaries. Their professionalism makes them our reliable partner.

Hajnal Schwerdtfeger Product Manager, Seeburger



- SOFTWARE DEVELOPMENT
- **SOFTWARE OUTSOURCING**
- SOFTWARE TESTING
- CUSTOMER ASSISTANCE
- WEB & MOBILE DEVELOPMENT

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